

Report on Data Re-Assessment for Rezoning

Port Kembla Primary School Lot 1 Military Road, Port Kembla

> Prepared for Mr Olly Vujic

Project 78564.02 September 2016





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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 reassessment 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.



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

1. Introduction

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

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

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

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

2. Background

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

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

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

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



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

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

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

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

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

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

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



3. Scope of Works

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

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

4. Site Information

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

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	ea 2.19 hectares		

Table 1: Summary of Site Details

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

		HIL - A and	HSI	- A
	Contaminants	HSL - A Direct Contact	Vapour I	ntrusion ⁴
		HOL - A Direct Contact	Sand	Clay
	Arsenic	100	-	-
	Cadmium	20	-	-
	Chromium (VI)	100	-	-
Motole	Copper	6000	-	-
IVIEIDIS	Lead	300	-	-
	Mercury (inorganic)	40	-	-
	Nickel	400	-	-
	Zinc	7400	-	-
	Benzo(a)pyrene TEQ ¹	3	-	-
PAH	Naphthalene	1400	3	5
	Total PAH	300	-	-
	C6 – C10 (less BTEX) [F1]	4400	45	50
трц	>C10-C16 (less Naphthalene) [F2]	3300	110	280
	>C16-C34 [F3]	4500	-	-
	>C34-C40 [F4]	6300	-	-
	Benzene	100	0.5	0.7
DTEV	Toluene	14000	160	480
DIEA	Ethylbenzene	4500	55	NL ³
	Xylenes	12000	40	110
Phenol	Pentachlorophenol (used as an initial screen)	100	-	-
	Aldrin + Dieldrin	6	-	-
	Chlordane	50	-	-
	DDT+DDE+DDD	240	-	-
000	ContaminantsArsenicCadmiumChromium (VI)CopperLeadLeadMercury (inorganic)NickelZincBenzo(a)pyrene TEQ1AHMaphthaleneTotal PAHC6 - C10 (less BTEX) [F1]>C10-C16 (less Naphthalene) [F2]PEXC6 - C10 (less Naphthalene) [F2]>C10-C16 (less Naphthalene) [F2]>C10-C16 (less Naphthalene) [F2]PEXDT-C16 (less Naphthalene) [F2]AHC6 - C10 (less Naphthalene) [F2]>C10-C16 (less Naphthalene) [F2]>C10-C16 (less Naphthalene) [F2]>C10-C16 (less Naphthalene) [F2]PEXBenzeneTolueneYelnesenolPentachlorophenol (used as an initial screen)Aldrin + DieldrinChlordaneDDT+DDE+DDDEndosulfanCPEndrinHeptachlorHCBMethoxychlorPPChlorpyrifosPCB 2	270	-	-
UCF		10	-	-
	Heptachlor	6	-	-
	HCB	10	-	-
	Methoxychlor	300	-	-
OPP	Chlorpyrifos	160	-	-
	PCB ²	1	-	-

Notes:

1. sum of carcinogenic PAH

4. The vapour intrusion HSL have been calculated for a clay and sand soil based on both soil types encountered during (Golder 2013) and an assumed depth to contamination 0 m to <1 m. The appropriate criteria will be selected based on material type of each sample</p>

^{2.} non dioxin-like PCBs only.

^{3.} The soil saturation concentration (Csat) is defined as the soil concentration at which the porewater phase cannot dissolve any more of an individual chemical. The soil vapour that is in equilibrium with the porewater will be at its maximum. If the derived soil HSL exceeds Csat, a soil vapour source concentration for a petroleum mixture could not exceed a level that would results in the maximum allowable vapour risk for the given scenario. For these scenarios, no HSL is presented for these chemicals and the HSL is shown as 'not limiting' or 'NL'.]



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 (<u>http://www.scew.gov.au/node/941</u>)) 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.

	Analyte	EIL - Coarse	EIL - Fine	Comments
Metals	Arsenic	100	100	Adopted parameters from Golder (2013)
	Copper	170	190	
	Nickel	160	280	pH = for sand 5.59 and for clay 5.83;
	Chromium III	520	660	CEC = for sand 9.78 cmol ₀ /kg and for clay 20.83 cmol ₀ /kg;
	Lead	1100	1100	clay content = for sand 20.50% and for clay 43.57%;
	Zinc	410	430	"Aged" (>2 years) source of contamination
PAH	Naphthalene	170	170	high for traffic volumes in NSW
OCP	DDT	180	180	

Table 3: EIL in mg/kg

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.

Analyte		ESL - Coarse	ESL - Fine	Comments
TRH	C6 – C10 (less BTEX) [F1]	180*	180*	All ESLs are low reliability apart
	>C10-C16 (less Naphthalene) [F2]	120*	120*	from those marked with * which
	>C16-C34 [F3]	300	1300	are moderate reliability
	>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	

Table 4: ESL in mg/kg

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



5.3 Management Limits – Petroleum Hydrocarbons

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

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

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

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

Table 6: Management Limits in mg/kg

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;

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- 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 (> C_{16} - C_{34}) were either less than the laboratory PQL or SAC apart from the following sample which exceeded the ESL for fine soils of 1300 mg/kg:

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

Benzo(a)pyrene

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

Asbestos

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

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

7. Discussion

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

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

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

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



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

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

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

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

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

8. Conclusion and Recommendations

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

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

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

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

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

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



9. Limitations

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

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

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

Douglas Partners Pty Ltd

Appendix A

About This Report

About this Report

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



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Appendix C

Golder (2013) Laboratory Certificates of Analysis





Environmental Division

	CE	RTIFICATE OF ANALYSIS	
Work Onter	EW1301886	Page	1 of 70
Client Contact Address	PORT KEMBLA COPPER MS CAROLINA OLMOS SYDNEY	Laboratory Contact Address	Environmental Division NSW South Coast Client Services 99 Kenny Street, Wollongong 2500 Unit 4 / 13 Geary Place, PO Box 3105, North Nowra 2541
E-mail Telephone Facsimile Project	oolmos@golder.com.au 137623028	E-mail Telephone Facsonie QC Level	Nuo I NALLA sydney@ailaglobal.com +612-28784 8555 +612-8784 8500 NEPM 1999 Schedule B(3) and ALS QCS3 requirement
C-O-C number Sampler Site	KE YE PKC-PRIMARY SCHOOL	Date Samples Received Issue Date	27-JUN-2013 10-JUL-2013
Quote number	-	No. of samples received No. of samples analysed	103 64

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

This Certificate of Analysis contains the following information:

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

	Advance 3th Genry Street Multingting 2500 Environmental Division NSW/Bduit/Stanzy 7three/70/Street 20/Street 20/Street 20/Street	
Churchmentel 🔊	www.alsglobal.com	
	HIGHT SOLUTIONS INCAST PARTIER	



General Comments

The shelf/cal procedures used by the Environmental Division trave laker advolved from established internationally recignized procedures such as those published by the USEPA. APIA AS and NEPA, to house growtpot procedures are employed in the eatence of documents standards for (doct in public).

Where musiture 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 LDR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

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

Viay CAS Number = CAS registry number from database mentained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society. LOR = Limit of reporting

* = This result is computed from individual analyte detections at or above the level of reporting

- · EA200 Legend
- · EA200 'Am' Amosite (brown asbestos)
- · EA200 'Ch' Chrysotile (white asbestos)
- · EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' Asbestos fibres detected at levels below 0.1g/kg. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: "UMF" Unknown Mineral Fibres. "." Indicates fibres detected may or may not be asbestos fibres. Confirmation by atternative 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.
- EA200C: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with A64864-2004 and the requirements of the 2011 NEPM for Assessment of Site Contamination
- EA3002 Estimations of Aduestos weight and generatages are not covered under the Scope of NATA Accretation.
 Weights and percentages of Aduestos are approximate estimates only. Weights are based on extracted flars boundes and ACM, and percentages are estimated based on the NEPM detail. Aduestos content in ACM. All numerical results under this method are approximate and should be used as a guide only.
- EG005T: Poor precision and poor spike recovery was obtained for some elements on sample EW1301886 1. Results have been confirmed by re-extraction and reanalysis.
- EG005T: Poor precision was obtained for Lead on sample EW1301886 1, Results have been confirmed by re-extraction and reanalysis.
- · EK057G/EK059G:LOR raised for Nitrite/NOx analysis on various samples due to sample matrix.
- EK067G: Poor duplicate precision due to sample heterogeneity. Confirmed by re-extraction and re-analysis.

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Accredited for compliance with

Signatories

NATA Accredited Laboratory 625 ISO/IEC 17025.

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	Pasilion	Accreditation Category
Ankit Jostii	Inorganic Chemist	Sydney Inorganics
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics Sydney Inorganics
Christopher Owler	Team Leader - Asbestos	Newcastle - Asbestos
Di-An Deo		Sydney Inorganics
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics
Hamish Murray	Supervisor - Soils	Newcastle - Inorganics
Hos Nguyan	Senior Inorganic Chemist	Sydney Inorganics
Pabi Subba	Senier Organic Chemist	Sydney Inorganics Sydney Organics Sydney Organics
Phalak Inthaksone	Laboratory Manager - Organics	Sydney Organics Sydney Organics



Sub-Matrix: SOIL (Matrix: SOIL)		CI	ient 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
	Cli	ent sampl	ing date / time	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 15:00
Compound	CAS Number LOR Unit			EW1301886-001	EW1301886-002	EW1301886-005	EW1301886-007	EW1301886-008
EA002 : pH (Soils)	and the			Contraction of the second				
pH Value		0.1	pH Unit			6.3		
EA055: Moisture Content		-				1 100		
Moisture Content (dried @ 103°C)		1.0	%	33.4	35.9	21.3	25.1	30.5
EA150: Soil Classification based on Pa	rticle Size							
Clay (<2 µm)		1	%			11		
ED008: Exchangeable Cations		Sec. and					State of the second	
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	and the second	and as have						
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	and the second							
Ammonia as N	7664-41-7	20	mg/kg	<20		<20		
EP004: Organic Matter	12.01	and and						
Organic Matter		0.5	%			2.5		
Total Organic Carbon		0.5	%			1.4		
EP068A: Organochlorine Pesticides (O	C)	- Second		and the second second				
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		

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	0	ient sampli	ng date / time	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 15:00
Compound	CAS Number	LOR	Lint	EW1301886-001	EW1301886-002	EW1301886-005	EW1301885-007	EW1301886-008
EP068A: Organochlorine Pesticio	les (OC) - Continued							
gamma-BHC	58-89-9	0.05	mg/kg	<0.05		<0.05	-	-
delta-BHC	319-88-8	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	mpkg	<0.05	-	≪0.05	-	-
Heptachlor epoxide	1024-57-3	0.05	mg/kg	+0.05	-	-40.05	-	-
Total Chlordane (sum)		0.05	mg/kg	+0.05		<0.05	-	
trans-Chiordane	5103-74-2	0.05	marka	+0.05	-	<0.05		-
sipha-Endosulfan	959-98-8	0.05	mg/kg	+0.05		<0.05	-	-
cis-Chlordane	5103-71-8	0.05	mg/kg	<0.05	-	=0.05		
Dieldrin	80-57-1	0.05	mpilig	<0.05	-	<0.05	-	-
4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	-	<0.05	-	-
Endrin	72-20-8	0.05	mpikg	+0.05	-	<0.05	-	-
beta-Endosulfan	33213-65-9	0.05	mp/kg	+0.05	-	<0.05		-
Endosulfan (sum)	115-29-7	0.05	markip	<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	mp/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	mpika	<0.05		<0.05	_	-
Methoxychlor	72-43-5	0.2	mp/kg	<0.2	-	<0.2		-
Sum of Aldrin = Diektrin	309-00-2/60-57-1	0.05	mp/kg	<0.05	-	<0.05	-	-
Sum of DDD + DDE + DDT		0.05	malkg	<0.05	-	×0.05		-
EP0688 Ornanonhosphorus Pes	ticides (OP)							
Dichlorvos	62-73-7	0.05	molika	<0.05	-	<0.05	-	
Demeton-S-methyl	919-86-8	0.05	mp/kg	<0.05		<0.05	-	
Monocrotophos	6923-22-4	0.2	molkg	<0.2	_	<0.2	_	-
Dimethoate	60-51-5	0.05	maka	<0.05	-	<0.05		
Diazinon	332.41.5	0.05	moka	<0.05	_	×0.05	-	
Chlorpyrifos-methyl	5598-13-0	0.05	mpikg	<0.05		<0.05		
Parathion-methyl	298-00-0	0.2	marka	<0.2	_	-0.2	-	
Malathion	121.75.5	0.05	maika	<0.05	_	<0.05	-	
Fenthion	55-38-0	0.05	malka	<0.05	-	<0.05	-	-
Chlorpyrifes	2921-88-2	0.05	marka	<0.05	-	<0.05		

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	C	ent sample	g date / time					25-JUN-2013 15:00
Compound C/	CAS Number LOR Unit			EW1301886-001	EW1301586-002	EW1301886-005	EW1301886-007	EW1301886-008
EP068B: Organophosphorus Pesticides (OP)	Continued			and the second second				
Parathion	56-38-2	0,2	mgiky	<0.2	-	<0.2	-	-
Pirimphos-ethyl	23505-41-1	0.05	maika	<0,05	-	<0.05		
Chlorfenvinphos	470-90-6	0.05	mgikg	<0.05	-	<0.05		
Bromophos-ethyl	4824-78-5	0.05	mg/kg	<0.05	-	<0.05	-	
Fenamiphos	22224-92-6	0.05	mgikg	<0.05	-	<0.05	-	-
Prothisfos	14643-46-4	0.05	mgikg	<0.05	-	<0.05	_	-
Ethion	563-12-2	0.05	mgiku	<0.05	-	<0.05	-	-
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	-	<0.05	-	-
Azinphos Methyl	86-50-0	0.05	malka	<0.05		<0.05	-	-
EP075(SIMIA: Phenolic Compounds			1121					
Phenol	108-95-2	0.5	mgikg	<0.5		<2.5	-	
2-Chlorophenol	95-57-8	0.5	mgikg	<0.5		<0.5		-
2-Methylphenol	95-48-7	0.5	mp/kg	<0.5	-	<0.5	-	
3- & 4-Mathylphenol	1319-77-3	1	mg/kg	<1	-	. 41	_	-
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	maika	<0.5	-	<0.5	-	-
4-Chioro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5		<0.5	-	ander
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5		<0.5		-
2.4.6-Trichlorophenol	95-95-4	0.5	mg/kg	40.5		<0.5	-	
Pentachlorophenol	87-88-5	2	mg/kg	<2		12		
EP075(SIM)B: Polynuclear Aromatic Hydrocart	bons							
Naphthalene	91-20-3	0.5	mgikg	<0.5	-	<0.5	-	
Acenaphthylene	208-96-8	0.5	mgikg	<0.5	-	<0.5	-	
Acenaphthene	83-32-9	0,5	mgikg	<0.5	-	<0.5	-	-
Fluorene	86-73-7	0.5	mg/kg	<0.5	-	<0.5	-	-
Phonanthrone	85-01-8	0.5	marka	<0.5	-	<0.5	-	-
Anthracene	120-12-7	0.5	mgikg	=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	-	-

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	C	ent sampli	ng date / time	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 15:00
Compound	CAS Number	LOR UNE		EW1301886-001	EW1301885-002	EW1301886-005	EW1301886-007	EW1301886-008
EP075(SIM)B: Polynuclear Aromatic Hyp	drocarbons - Cont	Inved						
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	-	<3.5	-	-
Dibenz(a.h)anthraceee	53-70-3	0.5	mg/kg	<0.5		<0.5	-	-
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<9,5		<0.5		
Sum of polycyclic aromatic hydrocarbons		0,5	mg/kg	1.8	-	<0.5		-
Benzo(a)pyrene TEQ (WHO)	-	0.5	mgikg	<0.5	-	<0.5	iner (-
EP080/071: Total Petroleum Hydrocarbo	ns			1 1 1 1 1 1 1				
C6 - C9 Fraction	-	10	mg/kg	<10	-	<10	-	-
C10 - C14 Fraction		50	mg/kg	<50	-	<50		-
C15 - C28 Fraction	-	100	mp/kg	<100	-	<100	-	-
C29 - C36 Fraction	-	100	mg/kg	<100	-	<100	-	-
C10 - C36 Fraction (sum)	-	50	mg/kg	<50	-	<50	-	-
EP080/071: Total Recoverable Hydrocari	bons - NEPM 201	0 Draft						
C6 - C10 Fraction		10	mg/kg	=10		<10	+	
CE - C10 Fraction minus BTEX (F1)	-	10	mpika	<10	-	<10	-	-
>C10 - C16 Fraction	-	50	mp/kg	<50	-	<50	-	-
>C18 - C34 Fraction		100	mp/kg	<100	-	<100	-	-
>C34 - C40 Fraction	-	100	mgikg	<100	-	. <100	-	-
>C10 - C40 Fraction (sum)		50	mg/kg	<50	-	<50		
EPORO: 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	08-38-3 105-42-3	0.5	mgikg	<0,5	-	<0.5		-
ortho-Xylene	95-47-5	0.5	mpikg	<0.5	-	<0,5	-	-
EP080: BTEXN								
Total Xyleries	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	mgikg	<1		<1	-	-
EP068S: Organochlorine Pesticide Surro	gate	-	-					
Dibromo-DDE	21655-73-2	0.1	5	81.7	-	74.0	-	-

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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
	Clie	wil sample	ng date / lime	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 15:00
Compound	CAS Number	LOR	Unit	EW1301886-001	EW1301886-002	EW1301886-005	EW1301885-007	EW1301886-008
EP068T: Organophosphorus Pesticide Surro	gate					Second Second		
DEF	78-48-8	0.1	5	93.0	-	87.8	-	-
EP075(SIM)S: Phenolic Compound Surrogate	181	-	-					
Phenol-d6	13127-88-3	0.1	5	82.0	-	83.6	-	-
2-Chlorophenol-D4	93951-73-6	0.1	55	90.0	-	88.4	-	-
2.4.6-Tribromophenol	118-79-6	0.1	5	92.2		90.4	-	
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	\$8.8	-	95.9	-	
Anthracene-d10	1719-06-8	0.1	%.	95.4	-	95.8	-	
4-Terphenyl-d14	1718-51-0	0.1	- %	82.3		94.0	-	
EP080S: TPH(V)/BTEX Surrogates		-						
1.2-Dichloroethane-D4	17060-07-0	0,1	55	95.9		93.6	-	-
Toluene-D8	2037-26-6	0.1	%	\$9.4		99.0	-	
4-Bromofluorobenzene	450-00-4	0.1	. %	92.6		97.2	-	-

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Sub-Matrix: SOIL (Matrix: SOIL)		0	lént sample (D	TP27_0.5-0.6_25/06/1 3	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
	G	ien! samp	Ving Bate / Nime	25-JUN-2013 15:00 EW1301886-809				
Compound	CAS Number	LOR	Linit		EW1301886-012	EW1301886-014	EW1301886-017	EW1301886-019
EA002 pH (Solls)							-	
pH Value	-	0,1	pH Unit	-	-	7.0	-	
EA055: Moisture Content		-	-					
Moisture Content (dried @ 103*C)		1.0	- 16	29.2	41.3	30.2	25.9	22.3
EA150: Soil Classification based on P	article Size	-	-		and the second division of the second divisio			
Clay (<2 µm)	-	1	5.			48	_	-
ED008: Exchangeable Cations	-							
Exchangeable Calcium		0,1	meg/100g			16.1	-	
Exchangeable Magnesium	-	0.1	meg/100g	-	-	9.7	-	
Exchangeable Potassium	-	0.1	meq/100g		-	0.2	-	
Exchangeable Sodium		0,1	meq/100g	-	-	0.8		-
Cation Exchange Capacity	-	0.1	meg/100g	-	-	25.9	-	-
EG005T: Total Metals by ICP-AES		-			the second s			
Arsenic	7440-38-2	5	mgikg	35	26	-5	9	22
Cadmium	7440-43-9	1	molks.	8	2	41	<1	2
Chromium	7440-47-3	2	mgikg	12	9	14	22	17
Copper	7440-50-8	5	maika	479	2240	72	132	923
Iron	7439-89-6	50	malkg	-	-	42200	-	-
Lead	7439-92-1	5	maika	155	397	22	66	156
Manganese	7439-96-5	5	mgikg	89	442	142	121	334
Nickel	7440-02-0	2	mgikg	13	12	6	6	22
Selenium	7782-49-2	5	mgikg	<5	<5	<5	<5	<5
Zinc	7440-66-6	5	mgikg	404	176	107	154	179
EG035T: Total Recoverable Mercury I	by FIMS							
Mercury	7439-97-6	0.1	mg/kg	0.2	0.4	<0.1	0.1	0.1
EK055: Ammonia as N								
Ammonia as N	7664-41-7	20	mgikg	<20	<20	-	<20	<20
EK057G: Nitrite as N by Discrete Anal	yser							
Nitrite as N (Sol.)		0,1	mgikg	-		-	≪1.0	+0.1
EK058G: Nitrate as N by Discrete Ana	lyser							
Nitrate as N (Sol.)		0.1	mgikg		-		<1.0	<0.1
EK059G: Nitrite plus Nitrate as N (NO	x) by Discrete Ana	vser						
Nitrite + Nitrate as N (Sol.)		0,1	mgikg	-		-	<1.0	+0.1
EK061G: Total Kjeldahl Nitrogen By D	iscrete Analyser		-					

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	CA	ent sample	ng date / time	25-JUN-2013 15:00	25-JUN-2013 16:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00
Compound	CAS Number	LOR	Unit.	EW1301886-009	EW1301886-012	EW1301886-014	EW1301886-017	EW1301886-019
EK061G: Total Kjeldahl Nitrogen By Discrete	Analyser - C	ontinued						
Total Kjeldahl Nitrogen as N	-	20	malkt				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	mgikg	-	-	-	261	885
EP004: Organic Matter	-							
Organic Matter	-	0,5	16	-		1.0		- 1
Total Organic Carbon	-	0.5	56	-	-	0.6	-	
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mgikg	<0.05	<0.05	-	-	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	malkg	<0.05	<0.05	-	-	<0.05
beta-BHC	319-85-7	0.05	malkg	<0.05	<0.05	-	-	<0.05
gamma-BHC	58-89-9	0.05	malka	<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	mgikg	<0.05	<0,05	-	-	<0.05
alpha-Endosulfan	959-98-8	0.05	mgikg	×0.05	<0,05	-	-	<0.05
cis-Chlordane	5103-71-9	0.05	maika	≪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	mgRg	<0.2	<0.2	-	-	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05		-	≪0.05
Methoxychior	72-43-5	0.2	mg/kg	<0.2	<0.2	-	-	<0.2
5um of Aldrin + Dieldrin 309-	00-2/80-57-1	0.05	mg/kg	<0.05	<0.05			+0.05

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	0	lent sampli	ng date / time	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00
Compound	CAS Number	LOR	Unt	EW1301886-009	EW1301885-012	EW1301885-014	EW1301886-017	EW1301886-019
EP068A: Organochlorine Pesticides	(OC) - Continued	-						
Sum of DDD + DDE + DDT	_	0.05	mg/kg	<0.05	<0.05	-	-	<0.05
EP0688: Organophosphorus Pestic	Idea (OP)			and the second se				
Dichlorves	62-73-7	0.05	mp/kg.	+0.05	*0.05		-	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	≪0,05	-	-	<0:05
Monocrotophos	0923-22-4	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	353-41-5	0.05	marka	~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	ingikg	<0.2	*0.2	-	100	<0.2
Malathion	121-75-5	0.05	regikg	+0.05	<0.05	-	-	<0.05
Fenthion	55-38-9	0.05	mgikg	+0.05	40.05		-	<0.05
Chlorpyrifes	2921-88-2	0.05	mg/kg	#0.05	40.05	-	-	<0.05
Parathion	56-38-2	6.2	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	mp/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	mp/kg	<0.05	<0.05	-	-	<0.05
Carbophenothion	786-19-6	0.05	mp/kg	<0.05	<0.05	-		<0.05
Azinphos Methyl	86-50-0	0.05	mpikg	<0.05	<0.05	-	-	<0.05
EP075(SIM)A: Phenolic Compounds	and the second second							
Phenol	108-95-2	0.5	mgikig	<0.5	<0.5	-	-	+0.5
2-Chlorophenol	95-57-8	0.5	mg/kig	<0.5	<0.5	-	-	<0.5
2-Methylphenol	95-48-7	0.5	mp/kg	<0.5	40.5	_		×D.5
3- & 4-Methylphenol	1319-77-3	3	mg/kg	<1	<1	-		<1
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	-	-	<0.5
Z.4-Dimethylphenol	105-87-9	0.5	maika	<0.5	<0.5	-		<0.5
2.4-Dichlorophenol	120-83-2	0.5	maika	<0.5	<0.5	-	-	<0.5
2.6-Dichlorophenal	87-85-0	0.5	mgikg	<0.5	<0.5	-		×0.5
4-Chloro-J-Methylphenol	59-50-7	0.5	mg/kg	<0,5	<0,5	-	-	<0.8
2.4.5-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	-	-	×0.8
2.4.5-Trichlorophenol	95-95-4	0.5	maikg	<0.5	<0.5		-	<0.5

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Sub-Matrix: SOIL (Matrix: SOIL)		Client sample ID		TP27_0.5-0.6_25/06/1 3	TP28_0.0-0.1_25/06/1	TP28_0.9-1.0_25/06/1	TP26_0.5-0.6_25/06/1	TP26_1.5-1.6_25/06/1
	CA	ent sample	ng date / time	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00
Compound	CAS Number	A LOR UNIT		EW1301886-009	EW1301886-012	EW1301886-014	EW1301886-017	EW1301886-019
EP075(SIM)A: Phenolic Compounds - Cor	tinued							
Pentachlorophenol	87-86-5	2	mg/kg	*2	4			4
EP075(SIM)B: Polynuclear Aromatic Hyd	rocarbons							
Naphthalene	91-20-3	0.5	mg/kg	=0.5	0.8	-	-	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	-	-	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	≪0.5	<0.5	-	-	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5			<0.5
Phenanthrone	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	205-44-0	0.5	mg/kg	<0.5	1.6	-	-	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	2.7	-	+	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	1.7	-	-	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	4.3	-	-	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mgikg	<0.5	1.1	-	-	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mgikg	<0.5	*0.5	-	-	<0.5
Benzo(a)pyrane	50-32-8	0.5	malka	<0.5	0.7	-	-	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	9.5	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 Hydrocarbor	16		-					
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 Hydrocarb	ons - NEPM 201	0 Draft	-					
C6 - C10 Fraction		10	mg/kg	*10	<10	-		<10
G6 - C10 Fraction minus BTEX (F1)	-	10	mg/kg	*10	<10	-	-	<10
>C10 - C16 Fraction		50	mgikg	<50	70	-	-	<50
>C16 - C34 Fraction	-	100	mgikg	#100	1330	-	-	<100
>C34 - C40 Fraction		100	mg/kg	<100	220	-	-	<100
>C10 - C40 Fraction (sum)		50	mgikg	+50	1620	-	-	<\$0
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Work Order	EW1301886							
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Sub-Matrix: SOIL (Matrix: SOIL)		Cli	ent sample ID	TP27_0.5-0.6_25/06/1 3	TP28_0.0-0.1_25/06/1 3	TP28_0.9-1.0_25/06/1 3	TP26_0.5-0.6_25/06/1	TP26_1.5-1.6_25/06/1 3
	Ch	ent sampli	ng date / time	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00
Compound	CAS Number	LOR	Linit	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	maika	<0,5	0.6	-	-	<0.5
Ethylbenzone	100-41-4	0.5	mgikg	<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	95-47-0	0.5	malka	<0.5	<0.5	-	-	×0.5
EP080: BTEXN	Statement of the second se	-		Contraction of the local division of the loc	and the second se			
* Total Xylenes	1330-20-7	0.5	mgikg	<0.5	0.5	-	-	<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
EP068S: Organochlorine Pesticide	Surrogate		-					
Dibromo-DDE	21655-73-2	0.1		80.7	110			89.9
EP068T: Organophosphorus Pestic	Ide Surrogate							
DEF	78-48-8	0,1	56	91.5	95.2		-	88.6
EP075(SIM)S: Phenolic Compound	Surrogates	-	-					
Phenol-d6	13127-88-3	0,1	5	76.0	82.9	-	-	83.4
2-Chlorophenol-D4	03951-73-6	0.1	%	69.5	90.2	-		88.9
2.4.6-Tribromophenol	118-79-6	0,1	5	43.4	86,4	-	-	92.5
EP075(SIM)T: PAH Surrogatos	and the second second	-	-					
2-Fluorobiphenyl	321-60-8	0.1	%	98.4	103	-		99.4
Anthracene-d10	1719-05-8	0.1	5	87.0	92.3	-	-	98.4
4-Terphenyl-d14	1718-51-0	0,1	-96	91,4	85.9	-		86.7
EP080S: TPH(V)/BTEX Surrogates		-						
1.2-Dichloroethane-D4	17050-07-0	0.1	35	97.7	86.2	-	-	102
Toluene-D8	2037-26-5	0.1	16	\$8.3	91.0	-	-	116
4-Bromofluorobenzene	460-00-4	0.1	56	80.5	76.8	-	-	106



Sub-Matrix: SOIL (Matrix: SOIL)		Ci	lient sample ID	QC400_25/06/13 25-JUN-2013 15:00	TP25_0.0-0.1_26/06/1 3 26-JUN-2013 10 00	TP25_0.9-1.0_26/06/1 3 26-11/N-2013 10:00	QC100_26/06/13	TP24_0.0-0.1_26/06/1 3 26-JUN-2013 10:00
Contractional	CAS Alumber	LOR	Ling	EW1301885-023	EW1301886-024	EW1301886-026	EW1301886-029	EW1301886-030
FA002 oH (Solis)	Grieffender 1			and the second s				
pH Value	-	0.1	pH Unit		5.6	- 1	-	1 -
EA055: Moisture Content			and the second second					-
Moisture Content (dried @ 103°C)	-	1,0	N	21.6	34.8	23.0	33.0	31.3
EA150: Soil Classification based on P	article Size		-					
Clay (<2 µm)	-	1	5	-	12	-	-	-
ED008: Exchangeable Cations			-					
Exchangeable Calcium	-	0,1	meg/100g		2.6	-	-	-
Exchangeable Magnesium	-	0.1	meg/100g	-	0.8		-	
Exchangeable Potassium	-	0.1	meq/100g	-	0.1	-	-	-
Exchangeable Sodium	_	0.1	meg/100g	-	0.1	-	-	-
Cation Exchange Capacity	-	0.1	meg/100g	-	3.6	-	-	-
EG005T: Total Metals by ICP-AES	-		-					
Arsenic	7440-38-2	5	mg/kg	<5	10	209	7	16
Cadmium	7440-43-9	1	mg/kg	<1	3	4	2	4
Chromium	7440-47-3	2	mg/kg	<2	9	11	6	13
Copper	7440-50-8	5	mg/kg	<5	791	1060	521	1480
Iron	7439-89-6	50	mg/kg		12000	-		-
Lead	7439-92-1	5	mg/kg	<5	243	253	124	191
Manganese	7439-96-5	5	mg/kg	10	296	154	319	475
Nickel	7440-02-0	2	mg/kg	+2	12	6	10	
Selenium	7782-49-2	5	mg/kg	*5	<5	<5	<5	6
Zinc	7440-66-6	5	mg/kg	-+5	514	200	190	286
EG035T: Total Recoverable Mercury	by FIMS							
Mercury	7439-97-6	0.1	mg/kg	<0,1	0.2	0.4	0.1	0.5
EK055: Ammonia as N								
Ammonia as N	7664-41-7	20	mg/kg	<20	<20	-	<20	-
EP004: Organic Matter								
Organic Matter	-	0.5	5		5.8	· · · · · · · · · · · · · · · · · · ·	-	· · · · · ·
Total Organic Carbon		0.5			3.4	-	-	-
EP068A: Organochlorine Pesticides (0C)							
alpha-BHC	319-84-5	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	-

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Work Order	EW1301886
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Sub-Matrix: SOIL (Matrix: SOIL)		CI	ent sample ID	QC400_25/06/13	TP25_0.0-0.1_26/06/1	TP25_0.9-1.0_26/06/1 3	QC100_26/06/13	TP24_0.0-0.1_26/06/1
	C	ient sampli	ng 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	Lint	EW1301886-023	EW1301886-024	EW1301886-026	EW1301886-029	EW1301886-030
EP068A: Organochlorine Pasticic	les (OC) - Continued		and the second second	and the second se	Contraction of the local division of the loc			
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	-	<0.05	-
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	-	<0.05	-
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	-	<0.05	41
Aldrin	309-00-2	0.05	maikg	<0.05	<0.05	-	<0.05	2
Heptachlor epoxide	1024-57-3	0,05	maika	<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	markg	<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	-
Disidrin	80-57-1	0.05	mailing	<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	marka	<0.05	<0.05	-	<0.05	-
beta-Endosultan	33213-65-9	0.05	molkg	<0.05	<0.05	-	<0.05	-
Endosulfan (sum)	115-29-7	0.05	ma/kg	<0.05	×0.05	here'	<0.05	-
4.4°-000	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		<0.0E	-
4.4°-DD7	50-29-3	0.2	malka	+0.2	+0,2	-	<0.2	-
Endrin ketone	53494-70-5	0.05	mg/kg	=10,05	+0.05		<0.05	-
Methosychlar	72-43-5	0.2	mgikg	*0.2	<0.2	-	<0.2	-
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mpikg	+0,05	(0.05		<0.05	-
Sum of DDD + DDE + DDT		0.05	marka	-48.05	<0.05	-	<0.05	
EP068B: Organophosphorus Pes	ticides (OP)							
Dichlorvos	62-73-7	0.05	mgikg	<0.05	<0.05		<0.05	
Demeton-S-methyl	919-86-8	0.05	marka	40.05	40.05	-	<0.05	
Monocrotophos	6923-22-4	0.2	malka	<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	maika	<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	9.2	maika	<0.2	<0.2		<0.2	-
Malathion	121-75-5	0.05	migikg	<0.05	<0.05	-	<0.05	-
Ferthion	55-38-9	0.05	mg/kg	<0.05	<0.05	-	-10.05	
Chlorpyrifes	2921-88-2	0.05	mpikg	<0.05	<0.05	-	<0.05	-



Sub-Matrix: SOIL (Matrix: SOIL)		Cie	ent sample ID	QC400_25/06/13	TP25_0.0-0.1_26/06/1	TP25_0.9-1.0_26/06/1 3	QC100_26/06/13	TP24_0.0-0.1_26/06/1 3
	Cirent 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
Compared	CAS Number	LOR	Lind	EW1301886-023	EW1301886-024	EW1201886-026	EW1301886-029	EW1301886-030
EP068B: Organophosphorus Pastici	des (OP) - Continued			-	and the second se			
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	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	-
Carbophenothian	785-19-5	0.05	mg/kg	<0.05	<0.05	-	<0.05	-
Azinphos Methyl	86-50-0	0.05	ing/kg	<0.05	<0.05	-	×0.05	-
EP075(SIMIA: Phenolic Compounds			-	and the second se				
Phenol	108-95-2	0,5	mg/kg	<0.5	<0,5	-	<0.5	-
2-Chlorophenol	95-57-8	0.5	img/kg	<0.5	<0.5	-	<0,5	1-0
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	41	-	<1	-
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	-	<0.5	-
2.4-Dimethylphenol	105-67-0	0.5	mg/kg	<0.5	<0.6	-	<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	\$9-50-7	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	35-05-4	0.5	mg/kg	<0.5	<0.5	-	<q.5< td=""><td>-</td></q.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	208-95-8	0.5	mg/kg	<0.5	<0.5	-	<0.5	-
Acenaphthene	83-32-9	0.6	mg/kg	<0.5	<0,5	-	<0.5	-
Fluorene	86-73-7	0.5	mg/kg	×0.5	<0.5	-	<0.5	-
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	1.8	-	3.2	-
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	-	<0.5	-
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	0.6	-	0.9	-
Pyrene	129-00-0	0.5	mg/kg	<0.5	8.0		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	-

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Sub-Matrix: SOIL (Matrix: SOIL)		Ca	ent samplé ID	QC400_25/06/13	TP25_0.0-0.1_26/06/1 3	TP25_0.9-1.0_26/06/1 3	QC100_26/06/13	TP24_0.0-0.1_26/06/1 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	Unt	EW1301886-023	EW1301886-024	EW1301886-026	EW1301886-029	EW1301886-030
EP075(SIM)B: Polynuclear Aromatic Hys	drocarbons - Cont	Inued						
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	*0.5	-	0.5	-
Benzo(k)fluoranthene	207-08-9	0.5	malkg	<0.5	+0.5	-	<0.5	-
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	40.5		<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	
Benzoig.h.i)perylene	191-24-2	0.5	marka	<0.5	<0.5	-	<0.5	-
Sum of polycyclic aromatic hydrocarbons	-	0.5	ma/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 Hydrocarbo	115		-					
C6 - C9 Fraction	-	10	mg/kg	<10	*10		<10	-
C10 - C14 Fraction		50	mg/kg	×50	<50		+50	-
C15 - C28 Fraction		100	mg/kg	<100	360	-	550	-
C29 - C36 Fraction	-	100	mg/kg	<100	180	-	240	-
C10 - C36 Fraction (sum)	_	50	mg/kg	≺50	540	-	790	-
EP080/071: Total Recoverable Hydrocar	bons - NEPM 201	0 Draft		and the second second				
C6 - C10 Fraction	-	10	malkg	~10	×10	-	<10	
C6 - C10 Fraction minus BTEX (F1)	-	10	mpikg	<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			and the second s		A COLUMN TWO IS NOT			
Benzéne	71-43-2	0.2	maika	<0.2	<0.2	-	+0.2	
Toluene	108-88-3	0.5	malkg	<0.5	<0.5	-	<0.5	-
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	-	<0,5	
meta-& para-Xylene	08-38-3 105-42-3	0.5	mg/kg	<0.5	<0.5	-	<0.5	-
artho-Xylene	95-47-6	0.5	maka	<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	maika	~t	<f< td=""><td>-</td><td>-<1</td><td>-</td></f<>	-	-<1	-
EP068S: Organochlorine Pesticide Surro	ogate		-					
Dibromo-DDE	21655-73-2	0.1	N	78.8	90.8		99.7	1 -

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Sub-Matrix: SOIL (Matrix: SOIL)		Client sample ID			TP25_0.0-0.1_26/06/1 3	TP25_0.9-1.0_26/06/1 3	QC100_26/06/13	TP24_0.0-0.1_26/06/1 3
	CI	ent sample	ng date / time	25-JUN-2013 15:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit	EW1301886-023	EW1301886-024	EW1301886-025	EW1301886-029	EW1301886-030
EP068T: Organophosphorus Pestici	de Surrogate							
DEF	78-48-8	0.1	%.	82.7	80.9		80.1	-
EP075(SIM)S: Phenolic Compound S	Surrogates	-						
Phenol-d6	13127-85-3	0.1	16	86,4	92.4		78.4	
2-Chlorophenol-D4	93951-73-6	0.1	16	91.4	90.4	-	85,9	-
2.4.5-Tribromophenol	118-79-8	0.1	16	86.5	85.8		85.5	-
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-80-8	0.1	16	96.7	97.0	-	103	-
Anthracene-d10	1719-08-8	0.1	76	89.6	90.0	_	92.8	
4-Terphenyl-d14	1718-51-0	0.1	16	88.5	87.5	-	88.7	-
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	16	97.3	93.8	-	88.9	-
Toluene-D8	2037-26-5	0.1	16	100	97.1	-	93,8	-
4-Bromofluorobenzene	460-00-4	0.1	%	94.3	87.9	-	82.0	

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Sub-Matrix: SOIL (Matrix: SOIL)		C	ent sample ID	TP24_0.5-0.6_26/06/1 TP20_0.5-0.6_2 3 3	TP20_0.5-0.6_26/06/1 3	TP20_0.9-1.0_26/06/1 3	TP16A_0.2-0.3_26/06/ 13	TP16A_0.5-0.6_26/06/ 13
	Client sampling date / time			26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit	EW1301886-031	EW1301886-034	EW1301886-035	EW1301886-038	EW1301886-039
EA002 : pH (Soils)								
pH Value		0.1	pH Unit	5.0	4.8		-	-
EA055: Moisture Content	and the second second	-	-					
Moisture Content (dried @ 103*C)	-	1.0	- 16	27.1	29.8	32.8	44.0	35.3
EA150: Soil Classification based on F	article Size	-	-	Contraction of the second				
Clay (<2 µm)	-	1	5	47	29	-	-	-
EA200: AS 4964 - 2004 Identification	Asbestos in bulk	samples		And Statements of Concession, Name				
Asbestos Detected	1332-21-4	0.1	gRg		Yes		-	-
Asbestos Type	1332-21-4	- 5	-	-	Ch	-	-	-
Sample weight (dry)		0.01	g	-	7840		-	-
APPROVED IDENTIFIER:	_	T		-	C.OWLER	-	-	-
EA2000: Asbestos Quantification (no	D-NATAL	-	-	and the second se				
Weight Used for % Calculation		0.0001	kg	-	7.84	-	-	-
Asbestos Containing Material	1332-21-4	0.1	9	-	<0.1	-	-	-
Fibrous Asbestos		0.002	o	-	0.023	-	-	-
Asbestos Fines	1332-21-4	-	-	-	Yes	_	-	-
Asbestos Containing Material (ACM >7mm)	1332-21-4	0.01	5	-	<0.01	-	-	-
Asbestos Fines and Fibrous Asbestos (<7mm)	1332-21-4	0.001	16	-	0.001	-	-	-
ED008: Exchangeable Cations								
Exchangeable Calcium		0,1	meg/100g	3.8	7.7	-	-	-
Exchangeable Magnesium		0.1	meg/100g	8.3	2.1	-		-
Exchangeable Potassium		0.1	meg/100g	0.1	0.3		-	-
Exchangeable Sodium	-	0,1	meg/100g	1.1	0.2	-	-	
Cation Exchange Capacity		0.1	maq/100g	13.3	10.4			-
EG005T: Total Metals by ICP-AES		_		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
Arsenic	7440-38-2	5	mg/kg	<5	166	-45	11	33
Cadmium	7440-43-9	1	mgikg	<1	4		10	5
Chromium	7440-47-3	2	markg	29	19	27	12	13
Copper	7440-50-8	5	malka	123	1330	110	320	316
Iron	7439-89-6	50	marka	56900	31700	-	_	_
Lead	7439-92-1	5	maika	70	489	7	48	61
Manganese	7439-96-5	5	malka	61	164	50	1680	122



Sub-Matrix: SOIL (Matrix: SOIL)	Client sample ID			TP24_0.5-0.6_26/06/1 3	TP20_0.5-0.6_26/06/1 3	TP20_0.9-1.0_26/06/1 3	TP16A_0.2-0.3_26/06/ 13	TP16A_0.5-0.6_26/06/ 13
	CN	ent sample	ng date / time	28-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	AS 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
Zine	7440-66-6	5	mg/kg	258	237	76	369	145
EG035T: Total Recoverable Mercury by FIMS	1							
Mercury	7439-97-6	0,1	mig/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 D	iscrete Ana	lyser						
Nitrite + Nitrate as N (Sol.)	-	0.1	.mg/kg	-	<1.0	-		-
EK061G: Total Kieldahl Nitrogen By Discrete	Analyser			1				
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	-		100
EP004: Organic Matter								
Organic Matter		0.5	16.	1.3	2.7		-	
Total Organic Carbon		0,5	16	0.8	1.6	-	-	
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05		<0,05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	-	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	-	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0,05	<0.05		<0.05	<0.05
delta-BHC	319-85-8	0.05	mg/kg	<0.05	<0.05		<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	-	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05		<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	-	<0.05	<0.05
Total Chlordane (sum)		0.05	mg/kg	<0.05	<0.06	-	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	-	<0.05	<0.05

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Work Order	EW1301886
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Sub-Matrix: SOIL (Matrix: SOIL)		Cir	eni sample ID	TP24_0.5-0.6_26/06/1 3 26-JUN-2013 10:00	TP20_0.5-0.6_26/06/1	TP20_0.9-1.0_28/06/1 3 26-JUN-2013 10:00	TP16A_0.2-0.3_26/06/ 13 26-JUN-2013 10:00	TP16A_0.5-0.6_26/06/ 13 26-JUN-2013 10:00
	C	lent sampli	ng date / time		28-JUN-2013 10:00			
Compound	CAS Number	LOR	Unit	EW1301885-031	EW1301886-034	EW1301888-035	EW1301886-038	EW1301886-039
EP068A: Organochlorine Pesticid	es (OC) - Continued							
alpha-Endosuifan	959-98-8	0.95	mg/kg	<0.05	<0.05	-	<0.05	<0.05
cis-Chlordane	5103-71-9	0,05	mg/kg	<0.05	<0.05	-	<0.05	×0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	-	<0.05	<0.05
4,4"-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	-	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	-	<0.05	=0.05
beta-Endosulfan	33213-85-9	0.05	mg/kg	<0.05	<6.05	-	<0.05	<0.05
* Endesulfan (sum)	115-29-7	0.05	molkg	<0.05	<0.05	-	<0.05	<0.05
4.4'-000	72-54-8	0.05	mgikg	<0.05	<0.05		=0.05	+0.05
Endrin aldehyde	7421-03-4	0.05	mg/kg	<0.05	<0.05	-	<0.05	<0.05
Endosulfon sulfate	1031-07-8	0.05	maika	<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	mpikg	<0.05	<0.05		<0.05	<0.05
Methoxychior	72-43-5	0.2	mg/kg	<0.2	-0.2		+0,2	-0.2
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg kg	<0.05	<0.05	-	<0.05	<0.05
Sum of DDD + DDE + DDT	-	0.05	mg/kg	<0.05	<0.05	-	<0.05	<0.05
EP0688: Organophosphorus Pest	icides (OP)	-		And I wanted				
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	-	<0.05	<0.05
Demoton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	-	<0.05	<0.05
Menocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	-	<0.2	<0.2
Dimethoate	60-51-5	0.05	mgikg	<0.05	<0.05		<0.05	<0.05
Diszinon	333-41-5	0.05	markg	<0.05	+0.05	-	<0.05	<0.05
Chlorpyrilos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	-	<0.05	<0.05
Parathion-methyl	298-00-0	0,2	mg/kg	<0.2	<0.2	-	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	-	<0.05	<0.05
Fenthion	55-38-9	0,05	mg/kg	<0.05	<0.05	-	<0.05	<0.05
Chlorpytifos	2921-88-2	0.05	mgikg	<0.05	<0.05		<0.05	<0.05
Parathion	56+38-2	0.2	mgikg	<0.2	<0.2	++	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	-	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05		<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	malka	<0.05	<0.05		<0.05	<0.05
Fenamiphos	22224-92-5	0.05	maika.	+0.05	<0.05	-	<0.05	<3.05
Prothiolas	34643-46-4	0.05	mg/kg	#0.05	<0.05	-	-=0.05	*0.05
Ethion	563-12-2	0.05	maika	<0.05	40.05	-	<0.05	<0.05

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Gub-Mamer SOIL (Matrix: SOIL)	Client sample ID			TP24_0.5-0.6_26/06/1 3	TP20_0.5-0.6_26/06/1 3	TP20_0.9-1.0_26/06/1 3	TP16A_0.2-0.3_26/06/ 13	TP16A_0.5-0.6_26/06/ 13
	CI	ent sample	ng date / time	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit	EW1301886-031	EW1301886-034	EW1301885-035	EW1301886-038	EW1301886-039
EP068B: Organophosphorus Pesticides (C	P) - Continued	1						
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/SIMIA: Phenolic Compounds		-						
Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	-	<0,5	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	-	<0.5	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	-	<0.5	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	*1	-	1>	*1
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	-	<0,5	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	-	<0,5	<0.5
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5		<0.5	<0.5
2.5-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	88-05-2	0.5	mg/kg	<0.5	<0.5	-	<0.5	<0.5
2.4.5-Trichlorophenol	95-95-4	8.0	mg/kg.	<0.5	<0.5	-	<0.5	<0.5
Pentachlorophenol	87-86-5	2	mg/kg	4	4		4	~2
EP075(SIM)8: Polynuclear Aromatic Hydro	carbons	1	-					
Naphthalene	91-20-3	0.5	mg/kg	<0,5	<0.5	-	<0.5	\$2.5
Acenaphthylene	208-96-8	0.5	mg/kg	\$0.5	<0,5	-	<0.5	<0.5
Acenaphthese	83-32-9	0.5	mg/kg	<0.5	<0.5	-	<0.5	<0.5
Fluorene	86-73-7	0,5	mg/kg	<0.5	<0.5	-	<0.5	<0.5
Phenanthrene	85-01-8	0.5	ing/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	42.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5		<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	+0.5		<0.5	<0,5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	≤0,5		<0.5	<0,5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<q.5< td=""><td><0.5</td><td>-</td><td>*0,5</td><td><0.5</td></q.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	0,6	mg/kg	<0.5	<0.5	-	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	40.5	<0.5		<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0,5	mg/kg	<0.5	<0.5	-	<0.5	<0.5
Sum of polycyclic aromatic hydrocarbons	-	0.5	mg/kg	<0.5	<0.5	÷	<0.5	<0.5

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Sub-Matrix: SOIL (Matrix: SOIL)		DIN	int sample ID	TP24_0.5-0.6_26/06/1 3 26-JUN-2013 10:00	TP20_0.5-0.6_26/06/1 3	TP20_0.9-1.0_26/06/1 3 26-JUN-2013 10:00	TP16A_0.2-0.3_26/06/ 13 26-JUN-2013 10:00	TP16A_0.5-0.6_26/06/ 13 26-JUN-2013 10:00
	CA	ent sampli	ng date / tyne		26-JUN-2013 10:00			
Compound	CAS Number	LOR	Unit	EW1301886-031	EW1301886-034	EW1301886-035	EW1301886-038	EW1301886-039
EP075(SIM)B: Polynuclear Aromatic	c Hydrocarbons - Cont	inued						
Benzo(a)pyrene TEQ (WHO)	-	0,5	mg/kg	<0.5	<0.5		<0.5	*0.5
EP080/071: Total Petroleum Hydroc	arbons							
C5 - C9 Fraction	-	10	mgikg	+10	*10	-	<10	<10
C10 - C14 Fraction		50	mg/kg	~50	<50		<50	<50
C15 - C28 Fraction	-	100	mgikg	<100	<100	-	<100	<100
C29 - C36 Fraction	-	100	mg/kg	<100	<100	-	<100	×100
C10 - C36 Fraction (sum)	-	50	mgikg	<50	<50		<50	<50
EP080/071: Total Recoverable Hydr	ocarbons - NEPM 201	0 Draft	-					
C6 - C10 Fraction	-	10	mgikg	<10	=10	\rightarrow	<10	<10
C6 - C10 Fraction minus BTEX (F1)	-	10	mgikg	<10	<10	-	<10	<10
>C10 - C16 Fraction	_	50	mg/kg	<50	<50		<50	<50
>C16 - C34 Fraction	-	100	marka	<100	<100	-	<100	<100
>C34 - C40 Fraction	-	100	mgikg	<100	<100	-	<100	<100
>C10 - C40 Fraction (sum)	-	50	mgikg	<50	<50		<50	<50
EP080: BTEX	- L - L - L - L - L - L - L - L - L - L							
Benzene	71-43-2	0,2	mgikg	<0.2	40.2		<0.2	<0.2
Toluene	108-88-3	0.5	mgikg	<0.5	<0.5	-	<0.5	<0.5
Ethylbenzone	100-41-4	0.5	mgikg	<0.5	<0.5	-	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	markg	<0.5	<0.5	-	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mgikg	<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	malka	<0.2	<0.2		×0.2	<0.2
Naphthalene	91-20-3	1	mgikg	<1	4	-	<1	<1
EP068S: Organochlorine Pesticide	Surrogate			and the second				
Dibromo-DDE	21655-73-2	0.1	5	86.1	77.9		73.2	85.8
EP068T: Organophosphorus Pestic	ide Surrogate		-			Contract of the local division of the local		
DEF	78-48-8	0.1	5	102	83.0	-	80.3	96.4
EP075(SIM)S: Phenolic Compound	Surrogates	-	-	Contraction of the local division of the loc				
Phenol-d6	13127-88-3	0.1	5	83.9	87.4	-	73.8	91.1
2-Chlorophenol-D4	93951-73-6	0.1	46	87,9	91.1	-	76.9	\$7.8
2.4.6-Tribromophenol	118-79-6	0.1	%	90.4	\$2.1		70.0	92.2
EP075(SIM)T: PAH Surrogates								

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Sub-Matrix: SOIL (Matrix: SOIL)		Cile	nt sample ID	TP24_0.5-0.6_26/06/1 3	TP20_0.5-0.6_26/06/1	TP20_0.9-1.0_26/06/1 3	TP16A_0.2-0.3_26/06/	TP16A_0.5-0.6_26/06/ 13
	0	venit samplin	g date / time	25-JUN-2013 10:00	26-JUN-2013 10:00	25-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit	EW1301885-031	EW1301886-034	EW1301886-035	EW1301886-038	EW1301886-039
EP075(SIM)T: PAH Surrogates - Con	tinued							
2-Fluorobiphenyl	321-00-0	0.1	36	97.0	99.8	-	96.7	97.4
Anthracene-d10	1719-06-8	0,1	76.	96.6	94.3	-	90.3	97.4
4-Terphenyl-d14	1718-51-0	0.1	16	90.0	83.2	-	88.1	85.8
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	16	99.7	84.5		91.4	99.5
Toluene-D8	2037-26-5	0.1	16	106	87.2	-	90.6	104
4-Bromofluorobenzene	460-00-4	0,1	16	97.1	85.1	-	72.6	98.6

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Sub-Matrix: SOIL (Matrix: SOIL)	Client sample ID			TP16A_0.9-1.0_26/06/ 13	TP168_0.1-0.2_26/06/ 13	TP15_0.0-0.1_26/06/1 3	TP15_0.9-1.0_26/06/1	TP14_0.0-0.1_26/06/1
	0	Nent sampl	ing date / time	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2015 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Gompound	CAS Number	LOR Unit		EW1301885-040	EW1301886-041	EW1301886-042	EW1301886-044	EW1301886-045
EA002 : pH (Soils)	and the second		-					
pH Value	-	0.1	pH Unit	-	-	-	6.1	4.4
EA055: Moisture Content	10 A	-	-	and the second se				
Moiature Content (dried @ 103*C)	-	1.0	- 9.	-	-	31.0	12.4	21.4
EA150: Soil Classification based on i	Particle Size	-	1000 C	A DECISION OF THE OWNER OWNER OF THE OWNER OWNER OWNER OWNER OWNE OWNER				
Clay (<2 µm)		· *	- 15	-	-	-	18	10
EA200: AS 4964 - 2004 Identification	of Asbestos in bulk	samples		the second s				
Asbestos Detected	1332-21-4	0.1	gkg	Yes	Yes	Yes	-	
Asbestos Type	1332-21-4	0.1	-	Ch + Am	Ch + Am + Cr	_	_	-
Ashestos 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 (no	n-NATA)	-						
Weight Used for % Calculation		0.0001	kg	-	-	6.39	-	
Asbestos Containing Material	1332-21-4	0,1	0	-		<0.1	-	-
Fibrous Asbestos	-	0.002	0		-	0.004		-
Asbestos Fines	1332-21-4	-	-			Yes	-	-
Asbestos Containing Material (ACM >7mm)	1332-21-4	0,01		-	-	<0.01	-	
Asbestos Fines and Fibrous Asbestos (<7mm)	1332-21-4	0.001		-	-	<0.001	-	_
ED008: Exchangeable Cations	100 C			and the second second				
Exchangeable Calcium		0.1	meg/100g		-	-	1.2	0.8
Exchangeable Magnesium		0.1	meq/100g	·,	-	-	11.7	6.2
Exchangeable Potassium	-	0.1	mera/100g	-	-	-	0.2	<0.1
Exchangeable Sodium	÷+	0.1	meg/100g	-	-		0.6	<0.1
Cation Exchange Capacity		0.1	meg/100g	-	-	-	13.7	1.1
EG005T: Total Metals by ICP-AES		-						
Arsenic	7440-38-2	5	mg/kg	-	-	8	-5	11
Cadmium	7440-43-8		mg/kg	-		4	<1	4
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

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Sub-Matrix: SOIL (Matrix: SOIL)		Chi	ent 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	TP14_0.0-0.1_26/06/1 3
	CA	ent sampli	ng date / time	26-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2015 10:00	25-JUN-2013 10:00	26-JUN-2013 10:00
Campound	CAS Number	LOR	Unit	EW1301885-040	EW1301886-041	EW1301885-042	EW1301885-044	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	7440-86-6	5	mg/kg	-	-	231	96	85
EG035T: Total Recoverable Mercur	ty 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	1	<20
EP004: Organic Matter		-						
Organic Matter	-	0.5	%	-	-	-	<0.5	1.6
Total Organic Carbon	-	0.5	76	-			<0.5	0.9
EP068A: Organochlorine Pesticides	(00)	-	-	and the second s				
alpha-BHC	319-84-6	0.05	mg/kg	-	-	<0.05	-	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kp	-	-	<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
Hoptachlor 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	959-96-8	0.05	mg/kg	-	<u></u>	<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	ing/kg	-	-	<0.05	-	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	-	-	<0.05		<0.05

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Sub-Matrix: SOIL (Matrix: SOIL)		Ch	ent 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	TP14_0.0-0.1_26/06/1
	0	ient sampil	ng 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	Linit	EW1301886-040	EW1301886-041	EW1301886-042	EW1301886-044	EW1301886-045
EP068A: Organochlorine Posticid	es (OC) - Continued							
4.4'-DDT	50-29-3	0,2	mgikg	-	-	40.2		+0.2
Endrin ketone	53494-70-5	0.05	mgikg			<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	migikg	-	-	<0.05		<0.05
Sum of DDD + DDE + DDT	-	0.05	mgikg	-	-	<0.05	-	-<0.05
EP068B: Organophosphorus Pest	cides (OP)	-	-					
Dichlorvos	62-73-7	0.05	mg/kg	-		<0.05		+0.05
Demeton-S-methyl	919-86-8	0.05	mgikg	-	-	<0.05	-	<0.05
Monotrotophos	6923-22-4	0.2	mgikg	-	-	<0.2		<0.2
Dimethoate	60-51-5	0.05	malkg	-	-	<0.05	-	<0.05
Diazinon	333-41-5	0.05	mg/kg	-		<0.05		<0.05
Chlorpyrifon-methyl	5598-13-0	0.05	mgikg	-	-	<0.05	-	<0.05
Parathion-methyl	298-00-0	0.2	malkg	-	-	<0.2	-	<0.2
Malathion	121-75-5	0.05	marka	-	_	<0.05	-	<0.05
Fenthion	55-38-9	0.05	mg/kg	-	-	<0.05	-	<0.05
Chiorpyrifos	2921-88-2	0.05	mg/kg	-	-	<0.05		<0.05
Parathion	56-38-2	0.2	maika	-	_	<0.2	-	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg.	-	-	+0.05	-	<0.05
Chlorfenvinphos	470-90-8	0.05	mg/kg	-	-	<0.05	-	<0.05
Bromophos-ethyl	4824-78-5	0.05	mg/kg	-	-	<0.05	-	<0.05
Fenamiphos	22224-92-6	0.05	marka	-		<0.05	-	<0.05
Prothiofos	34643-46-4	0.05	morkg	-		<0.05	-	<0.05
Ethion	563-12-2	0.05	ma/kg			<0.05	-	<0.05
Carbophenothion	785-19-6	0.05	mg/kg	-	-	<0.05	-	<0.05
Azinphos Methyl	86-50-0	0.05	marka			<0.05	-	<0.05
EP075(SIM)A: Phenolic Compound	in .							
Phenol	108-95-2	0,5	malka	-		<0.5	-	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	-		<0.5	-	<0.5
2-Methylphonal	95-48-7	0.5	mg/kg	+	-	<0.5	-	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg	-	_	-<1	+	- 12
2-Nitrophenol	88-75-5	0.5	mg/kg	-	-	-92.5	-	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mphg	-	_	<0.5	-	<0.5
2.4-Dichlorophenel	120-83-2	0.5	pi/am	-	_	+0.5		<0.5

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Sub-Matrix: SOIL (Matrix: SOIL)		Civ	wit 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	TP18_0.9-1.0_26/06/1 3	TP14_0.0-0.1_26/06/1 3
	CA	ent sampli	ng clate / time	26-JUN-2013 10:00	26-JUN-2013 10:00	25-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit	EW1301886-040	EW1301886-041	EW1301886-042	EW1301886-044	EW1301886-045
EP075(SIMIA: Phenolic Compounds - Con	tinued							
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	88-05-2	0,5	mg/kg	-		*0.5	-	<0.5
2.4.5-Trichlorophenol	95-95-4	0.5	-mg/kg	-		40.5		<0.5
Pentachlorophenol	87-85-5	2	mg/kg	-	-	~2	-	<2
EP075(SIM)B: Polynuclear Aromatic Hydr	rocarbons							
Naphthalene	91-20-3	0.5	mg/kg	-	-	<0.5	-	<0.5
Acenaphthylene	208-95-8	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
Phonanthrone	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
Bunz(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		(m)	<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	-	(and	<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	53-76-3	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 Hydrocarbor	15							
C6 - C9 Fraction	-	10	mg/kg	-	-	<10		<10
C10 - C14 Fraction		50	rog/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 Hydrocarb	ons - NEPM 201	0 Draft						
C6 - C10 Fraction	-	10	mg/kg	-		<10		<10
C6 - C10 Fraction minus BTEX (F1)		10	mg/kg		-	<10	-	<10

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Sub-Matrix: SOIL (Matrix: SOIL)		CB	ent sample ID	TP16A_0.9-1.0_26/06/ TP16B_0.1-0.2_26 13 13	TP16B_0.1-0.2_26/06/ 13	TP15_0.0-0.1_26/06/1 3 26-JUN-2013 10:00	TP16_0.9-1.0_26/06/1 3 26-JUN-2013 10:00	TP14_0.0-0.1_26/06/1 3 26-JUN-2013 10:00
	CI	ent sample	ng date / time	28-JUN-2013 10:00	26-JUN-2013 10:00			
Compound	CAS Number	LOR	Linit	EW1301886-040	EW1301886-041	EW1301886-042	EW1301886-044	EW1301886-045
EP080/071: Total Recoverable Hy	drocarbons - NEPM 201	0 Draft - 0	Continued					
>C10 - C16 Fraction	-	50	mgikg			<50	-	<50
>C16 - C34 Fraction		100	maika	-	-	<100	-	<100
>C34 - C40 Fraction	_	100	mgikg	-	, mail	<100	-	<100
>C10 - C40 Fraction (sum)		50	mg/kg	-	-	<50		<50
EP080: BTEX								
Benzene	71-43-2	0.2	mgikg			<0.2	-	+0.2
Toluene	108-88-3	0.5	mg/kg	-	-	<0.5		<0.5
Ethylbenzone	100-41-4	0.5	mg/kg	-		<0.5	-	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	-	-	<0.5	-	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		-	<0.5	-	=0.5
EP080: BTEXN		-						
Total Xylenes	1330-20-7	0.5	mgikg	-	-	*0.5	-	<0.5
Sum of BTEX		0.2	mg/kg	-	-	=0.2	-	*0.2
Naphthalene	91-20-3	1	mg/kg	+	-	<t< td=""><td>-</td><td><1</td></t<>	-	<1
EP068S: Organochlorine Pesticid	le Surrogate	-	-					
Dibromo-DDE	21655-73-2	0.1				76.8	-	85.6
EP068T: Organophosphorus Pes	ticide Surrogate		-	and the second				
DEF	78-48-8	0.1	5	-		86.1	-	93.9
EP075(SIM)S: Phenolic Compound	d Surrogates	-	-					
Phenol-d6	13127-88-3	0.1	55		-	82.6	-	68.4
2-Chlorophenol-D4	93951-73-6	0.1	%	-		86.4		78.6
2.4.6-Tribromophenol	118-79-6	7,0	16	-	-	73.8	-	67.5
EP075(SIM)T: PAH Surrogates				and the second se				
2-Fluorobiphenyl	321-60-8	0.1	*			\$9.5	-	77.7
Anthracene-d10	1719-06-8	0.1	16	-	-	92.7	-	75.0
4-Terphenyl-d14	1718-51-0	0.1	5	-	-	86.2	-	67.1
EP080S: TPH(V)/BTEX Surrogates		-						
1.2-Dichloroethane-D4	17050-07-0	0.1	96	-		97.6	-	93.9
Toluene-D8	2037-26-5	0,1	16	+	-	108	-	91.8
4-Bromofluorobenzene	460-00-4	0.1	96	-	+	98.8	-	86.5

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	ĊN	ent samp	ing 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	GAS Number	LOR	Unit	EW1301886-045	EW1301886-050	EW1301886-052	EW1301886-054	EW1301886-055
EA002 : pH (Soils)								
pH Value	-	0,1	pH Unit				-	5.1
EA055: Moisture Content			-					
Moisture Content (dried @ 103*C)		1.0	75	28.5	24.1	29.0	26.1	30.1
EA150: Soil Classification based on Pa	article Size			-				
Ctay (<2 µm)	-	- 1	5	-		-		60
ED008: Exchangeable Cations	and the second second		-					
Exchangeable Calcium	-	0.1	meg/100g		-	-	-	11.2
Exchangeable Magnesium	-	0.1	meg/100g		-			12.2
Exchangeable Potassium	-	0.1	meg/100g	-		-	-	0.3
Exchangeable Sodium	_	0.1	meg/100g		-	-	-	1.8
Cation Exchange Capacity	-	0.1	meg/100g	-	-	-	-	25.4
EG005T: Total Metals by ICP-AES		-						
Arsenic	7440-38-2	5	mg/kg	<5	17	<5	36	<5
Cadmium	7440-43-9	1	mg/kg	-<1	<1	<1	11	<1
Chromium	7440-47-3	2	mg/kg	18	10	16	21	21
Copper	7440-50-8	5	mg/kg	60	171	63	1020	82
Iron	7439-89-8	50	mg/kg	-	-	-	-	42400
Lead	7439-92-1	5	mg/kg	6	38	6	192	10
Manganese	7439-95-5	5	mg/kg	6	72	36	111	3
Nickel	7440-02-0	2	mg/kg	2	4	2	9	2
Selenium	7782-49-2	5	mg/kg	×5	<5	<5	<5	<5
Zinc	7440-66-6	5	mg/kg	13	35	21	443	17
EG035T: Total Recoverable Mercury t	y FIMS	-						
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	40.1	0.3	<0.1
EK055: Ammonia as N	and the second se							
Ammonia as N	7664-41-7	20	mg/kg	-	<20		<20	-
EP004: Organic Matter								
Organic Matter		0.5	16	-		-	-	1.2
Total Organic Carbon	-	0.5	46	-	-	-	-	0.7
EP068A: Organochlorine Pesticides (C	DC)							
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	-

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Sub-Matrix: SOIL (Matrix: SOIL)		CA	ent sample ID	TP14_0.5-0.6_25/06/1 3	TP13_0.5-0.6_26/06/1 3	TP13_1.5-1.6_26/06/1 3	TP9_0.3-0.4_26/06/13	TP9_0.5-0.6_26/06/13
	0	ient sampli	ng date / lime	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 15:00	26-JUN-2013 18:00
Compound	CAS Number	LOR	Und	EW1301886-046	EW1301886-050	EW1301886-052	EW1301886-054	EW1301886-055
EP068A: Organochiorine Pesticio	des (OC) - Continued							
gamma-BHC	58-89-9	0.05	mgikg		<0.05	· · · · · · · · · · · · · · · · · · ·	<0,05	-
delta-BHC	319-88-8	0.05	mpika	-	<0.05	-	<0.05	-
Heptachlor	76-44-8	0,05	marka	-	<0.05	-	<0.05	-
Akirin	309-00-2	0.05	mg/kg	-	<0.05		<0.05	
Heptachlor epoxide	1024-57-3	0,05	mpikg	-	×0.05	-	<0.05	1
Total Chlordane (sum)		0,05	mgikg	-	<0.05		<0.05	-
trans-Chiordane	5103-74-2	0.05	mpikg	-	<0.05	-	<0.05	-
alpha-Endosulfan	959-95-8	0.05	mpikg	-	<0.05	-	=0.05	-
cis-Chlordane	5103-71-8	0.05	mp/kg	-	<0.05	-	<0.05	-
Dieldrin	60-57-1	0.05	mgikg	-	<0.05	-	<0.05	-
4.4'-DDE	72-55-9	0.05	mpika	-	*0.05	-	<0.05	-
Endrin	72-20-8	0.05	mgikg	-	<0.05	-	<0.05	-
beta-Endosulfan	33213-65-9	0.05	mgikg	-	<0.05	-	<0.05	-
Endosulfan (sum)	115-29-7	0.05	mg/kg	_	<0.05	-	<0.05	1
4.4'-ODD	72-54-8	0.05	mgikg	-	×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	50-29-5	0.2	mgikg	-	+0.2	-	<0.2	-
Endrin ketone	53494-70-5	0.05	mgikg	-	<0.05	-	<0.05	-
Methoxychlor	72-43-5	0,2	maika	-	+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	mgikg	-	+0.05	-	<0.05	_
EP0688: Organophosphorus Pes	ticides (OP)							
Dichlorvos	62-73-7	0.05	mgikg	-	<0.05		<0.05	-
Demoton-S-methyl	919-86-8	0.05	malka	-	<0.05	-	<0.05	-
Monocrotophos	8923-22-4	0.2	mgikg	-	≺0.2	-	+0.2	-
Dimethoate	60-51-5	0.05	malkg	_	<0.05	-	<0.05	
Diazinon	333-41-5	0.05	mgikg	-	<0.05	-	<0.05	-
Chiorpyrifos-methyl	5598-13-0	0.05	maika	-	<0.05	-	<0.05	
Parathion-methyl	298-00-0	0.2	morkig		<0.2		+0.2	_
Mafathion	121-75-5	0.05	mg/kg	-	<0.05	-	<0.05	-
Fenthion	55-38-9	0.05	molkg	-	<0.05	-	<0.05	and a
Chiorpyrifos	2921-88-2	0.05	malkg.		<0.05	_	<0.05	-

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Sub-Matrix: SOIL (Matrix: SOIL)		CN	ent sample ID	TP14_0.5-0.6_26/06/1 3	TP13_0.5-0.6_26/06/1 3	TP13_1.5-1.6_26/06/1 3	TP9_0.3-0.4_26/06/13	TP9_0.5-0.6_26/06/13
	CA	ent sample	ng date / time	25-JUN-2013 10:00	26-JUN-2013 10:00	25-JUN-2013 10:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number	LOR	Unit	EW1301886-046	EW1301886-050	EW1201886-052	EW1301886-064	EW1301886-055
EP068B: Organophosphorus Pestic	ides (OP) - Continued					-		
Parathion	56-38-2	0.2	mg/kg		<0.2	-	<0.2	-
Pirimphos-ethyl	23505-41-1	0.05	markg	-	<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	-	<0.85	-	<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	marka	-	<0.05		<0.05	-
Carbophenothion	785-19-5	0.05	ma/ka	-	<0.05	-	<0.05	-
Azinphos Methyl	86-50-0	0.05	mg/kg	-	<0.05	-	<0,05	-
EP075(SIM)A: Phenolic Compounds								
Phenol	108-05-2	9.5	mg/kg	-	<0.5	-	<0.5	-
2-Chlorophenol	95-57-8	0.5	mg/kg	-	<0.5	-	<0.5	
3-Methylphenol	95-48-7	0,5	maika	-	<0.5	-	<0.5	-
3- & 4-Mathylphenol	1310-77-3	1	mg/kg	-	<1	-	<1	-
2-Nitrophenol	88-75-5	0.5	mpkg	-	<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	markg	-	40.5	-	<0.5	-
Pentachlorophenol	87-86-5	2	mg/kg		<2	-	4	-
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	mpikg	+	+0.5	-	<0.5	-
Fluorene	86-73-7	D.5	mgikg	-	+0.5	-	<0.5	-
Phenanthrene	85-01-8	0.5	mgRg	-	+0.5	-	<0.5	-
Anthracene	120-12-7	0.5	mg/kg		×0.5	-	<0,5	-
Fluoranthene	208-44-0	0.5	mg/kg	-	40.5	-	<0.5	+
Pyrene	129-00-0	0.5	mgikg	-	<0.5	-	<0.5	-
Benz(a)anthracene	56-55-3	0.5	malkg	-	×0.5	-	<0.5	-
Chrysene	218-01-9	0.5	mg/kg	-	<0.5	-	<0.5	-

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Sub-Matrix: SOIL (Matrix: SOIL)	Glient sample ID			TP14_0.5-0.6_26/06/1 3	TP13_0.5-0.6_26/06/1 3	TP13_1.5-1.6_26/06/1 3	TP9_0.3-0.4_26/06/13	TP9_0.5-0.6_26/06/13
	Cá	ent sampli	sg date / timé	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 C	S Number	LOR	Unit	EW1301886-046	EW1301886-050	EW1301886-052	EW1301886-054	EW1301886-055
EP076(SIM)B: Polynuclear Aromatic Hydrocart	bons - Conti	nued						
Benzo(b)fluoranthene	205-99-2	0,5	mgkg		<0.5	-	<0,5	
Benzo(k)fluoranthene	207-08-9	0.5	marka	-	<0.5	-	<0,5	-
Benzo(a)pyrene	50-32-8	0.5	mgkg	-	<0,5	+++-	<0,5	-
Indeno(1.2.3.cd)pyrene	193-38-5	0.5	mg/kg	1000	<0.5	-	<0.5	
Dibenz(a,h)anthracene	53-70-3	0,5	mpika	-	<0.5		<0.5	_
Benzo(g.h.i)perylene	191-24-2	0.5	mpikg	-	<0.5	-	<0.5	-
Sum of polycyclic aromatic hydrocarbons	-	0.5	maika		<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	mgikg	-	<10		<10	-
C10 - C14 Fraction		50	maika	-	<50	-	-150	
C15 - C28 Fraction	-	100	mgikg	1000	<100		<100	-
C29 - C36 Fraction		100	mg/kg	-	<100	-	<100	-
C10 - C36 Fraction (sum)		50	mg/kg		<50	5mm	#50	-
EP080/071: Total Recoverable Hydrocarbons -	NEPM 2010	Dreft	-	and the second s	And and a second se			
C6 - C10 Fraction	-	10	mg/kg	-	410	-	*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	(and)
>C34 - C48 Fraction		100	mg/kg	-	<100	-	<100	
>C10 - C40 Fraction (sum)	-	50	mg/kg		<50		<50	-
EP080: BTEX		-	-		and the second se			
Benzene	71-43-2	0.2	mg/kg	-	<0.2	-	<0.2	-
Toluene	108-88-3	0.5	mgikg		<0.5		<0.5	
Ethylbenzene	100-41-4	0.5	maikg		≪0.5	-	<0.5	-
meta- & para-Xylene 108-38-7	3 106-42-3	0.5	maika	-	<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	markg	-	<0.2	-	<0.2	-
Naphthalene	81-20-3	1	mg/kg		41	-	57	-
EP068S: Organochlorine Pesticide Surrogate			-					
Dibromo-DDE 2	1655-73-2	0.1	- 5%	-	88.4	-	84.7	

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Sub-Matrix: SOIL (Matrix: SOIL)		Client sample ID			TP13_0.5-0.6_26/06/1 3	TP13_1.5-1.6_26/06/1 3	TP9_0.3-0.4_26/06/13	TP9_0.5-0.6_26/06/13
	Cá	int sample	ng 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 Pesticio	le Surrogate							
DEF	78-48-8	0,1	. %		84.6		96.4	-
EP075(SIM)S: Phenolic Compound S	urrogates	-						
Phenol-d6	13127-88-3	0.1	55		79.6		86.6	
2-Chlorophenol-D4	93951-73-6	0.1	- Nr.	-	82.9		88.7	-
2.4.5-Tribromophenol	118-79-8	0.1	- 56		77.0	-	91.0	
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	5	-	86.2	-	93.9	-
Anthracene-d10	1719-06-8	0.1	76		89.8	-	98.2	-
4-Terphenyl-d14	1718-51-0	0,1	16		78.8	-	89.8	-
EP080S: TPH(V)/BTEX Surrogates	and the second	-						
1.2-Dichloroethane-D4	17060-07-0	0.1	5		89.0		86.4	-
Toluene-D8	2037-26-5	0.1	16	-	85.5	-	87.2	
4-BromoBuorobenzene	460-00-4	0.1	5		83.9	-	83.0	-

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Sub-Matrix: SOIL (Matrix: SOIL)	Client sample ID			TP10_0.0-0.1_26/06/1 3	TP10_0.5-0.6_26/06/1 3	TP11_0.1-0.2_26/06/1 3	TP11_0.9-1.0_26/06/1	TP12A_0.1-0.2_26/06/ 13
	0	lent sampl	ing date / time	26-JUN-2013 15:00	26-JUN-2013 15:00	28-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15.00
Compound	CAS Number	LOR Unit		EW1301886-056	EW1301886-057	EW1301886-059	EW1301886-061	EW1301886-063
EA002 : pH (Solls)				And the second second	Conception of the local division of the loca			1
pH Value		0,1	pH Unit	6.8			6.2	-
EA055: Moisture Content	-		-					
Moisture Content (dried @ 103*C)		1,0	56	31.2	29.7	27.1	13.9	-
EA150: Soil Classification based on F	article Size	-			and the second s			
Clay (<2 µm)	-	1		24	-	-	22	(Anna)
EA200: AS 4964 - 2004 Identification e	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 (no	n-NATA)	-	-					
Weight Used for % Calculation	-	0.0001	kg	5.29	-	9.04		-
Asbestos Containing Material	1332-21-4	0.1	g	64.6	-	<0,1	-	-
Fibrous Asbestos	_	0.002	g	0.008	-	0.007		-
Asbestos Fines	1332-21-4	-	· ·	Yes		Yes	-	-
Asbestos Containing Material (ACM >7mm)	1332-21-4	0.01	56	-	+	<0.01		
Asbestos Containing Material (ACM >7mm)	1332-21-4	0.01	16	0.10	-	-	-	
Ashestos Fines and Fibrous Ashestos (<7mm)	1332-21-4	0.001	.%	<0.001	-	<0.001		-
ED008: Exchangeable Cations			-					
Exchangeable Calcium		Q.1	meg/100g	21.7	-	-	0.7	-
Exchangeable Magnesium	_	0.1	meg/100g	1.7		-	12.6	-
Exchangeable Potassium		0.1	meg/100g	0.7	-	-	<0.1	
Exchangeable Sodium		0.1	meg/100g	0.2	-	-	6.3	-
Cation Exchange Capacity		0.1	meg/100g	24.3	-	-	19.7	
EG005T: Total Metals by ICP-AES		-	-					
Arsenic	7440-38-2	5	mg/kg	31	-45	18	<5	
Cadmium	7440-43-9	1	mg/kg	3	×1	41	41	-
Chromium	7440-47-3	2	mg/kg	16	24	15	14	-
Copper	7440-50-8	5	mg/kg	422	88	201	73	-

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	0	ent sample	ng date / time	25-JUN-2013 15:00	26-JUN-2013 15:00	28-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number	LOR	Une	EW1301886-056	EW1301886-067	EW1301886-059	EW1301886-061	EW1301886-063
EG005T: Total Metals by ICP-AES - C	ontinued							
Iron	7439-89-6	50	mg/kg	34800			22800	-
Lead	7439-92-1	5	mp/kg	124	9	21	6	-
Manganese	7439-98-5	5	mg/kg	88	15	39	21	-
Nickel	7440-02-0	z	mg/kg	6	4	6	5	-
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	-
Zinc	7440-66-6	5	mp/kg	256	27	92	38	
EG035T: Total Recoverable Mercury	by FIMS							
Mercury	7439-97-6	0.1	mp/kg	0.2	×0,1	+0.1	<0,1	
EK055: Ammonia as N		-	-					
Ammonia as N	7664-41-7	20	mg/kg	420	-	<20	-	-
EP004: Organic Matter		-	-		and the second se			
Organic Matter	-	0.5	56	5.6		-	0.6	-
Total Organic Carbon	_	0.5	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-T	0.05	mp/kg	<0.05	-	<0.05	-	-
beta-BHC	319-85-7	0.05	mp/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	mp/kg.	<0.05	-	<0.05	()	-
Heptachlor epoxide	1024-57-3	0.05	mp/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	mp/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		-

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Sub-Matrix: SOIL (Matrix: SOIL)		Cli	ent sample ID	TP10_0.0-0.1_26/06/1 TP10_0.5-0.6_26/06/ 3 3	TP10_0.5-0.6_26/06/1 3	TP11_0.1-0.2_26/06/1 3 26-JUN-2013 15:00	TP11_0.9-1.0_26/06/1 3 26-JUN-2013 15:00	TP12A_0.1-0.2_26/06/ 13 26-JUN-2013 15:00
	0	Admas Irvei	ng date / time	25-JUN-2013 15:00	26-JUN-2013 15:00			
Compound	CAS Number	LOR	Lint	EW1301886-056	EW1301886-057	EW1301885-059	EW1301886-061	EW1301886-063
EP068A: Organochlorine Pesticid	tes (OC) - Continued		-					
Endosulfan sulfate	1031-07-8	0.05	mg9g	<8.05	-	<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		-
Methoxychior	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	144	-
Sum of DDD + DDE + DDT	-	0.05	mg/kg	<0.05	-	<0.05		-
EP0888: Organophosphorus Pest	ticides (OP)			-				
Dichlorves	62-73-7	0.05	mg/kg	<0.05		<0.05	-	-
Demeton-S-methy)	919-88-8	0.05	maka	+0.05	-	<0.05	-	-
Manocrotophos	6923-22-4	0.2	mg/kg	<0.2	-	<0.2	- 140	
Dimethoate	60-51-5	0.05	marka	+0.05	-	<0.05		
Diazinon	333-41-5	0.05	morke	<0.05	-	<0.05	-	-
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	-	=0.05		-
Parathion-methyl	298-00-0	0.2	mpikg	<0.2	-	=0.2	-	-
Malathion	121-75-5	0.05	mg/kg	~0.05	-	<0.05		
Fenthion	55-38-6	0.05	mg/kg	40,D5	-	+0.05	-	
Chiorpyrifos	2921-88-2	0.05	mpikg	<0.05	-	+0.05		
Parathion	56-38-2	0.2	mg/kg	<0.2	-	<0.2	-	-
Pirimphos-ethyl	23505-41-1	0.05	mgikg	<0.05	-	<0.05	144	-
Chlorfenvinphos	470-90-6	0.05	malka	<0.05		≺0.05	-	
Bromophos-ethyl	4824-78-8	0.05	morka	<0.05	-	<0.05	-	-
Fenamiphos	22224-92-6	0,05	mg/kg	<0.05		<0.05	-	-
Prothiotos	34643-46-4	0.05	mp/kg	<0.05		<0.05	-	-
Ethion	563-12-2	0.05	mp/kg	<0.05	-	<0.05		
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	-	<0.05	-	-
Azinphos Methyl	0-00-08	0.05	mg/kg	<0.05	-	<0.05		-
EP075(SIM)A: Phenolic Compound	ds	-						
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	-	~
Z-Methylphenol	95-48-7	0.5	mg/kg	<0.5		<0.5	-	-
3-& 4-Methylphenol	1319-77-3	1	mg/kg	<1	-	51	-	-
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5		<0,5	_	-
2.4-Dimethylphenal	105-57-5	0.5	maika	<0.5		<0.5	-	

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Sub-Matrix: SOIL (Matrix: SOIL)	Client sample ID			TP10_0.0-0.1_26/06/1 3	TP10_0.5-0.6_26/06/1 3	TP11_0.1-0.2_26/06/1 3	TP11_0.9-1.0_26/06/1 3	TP12A_0.1-0.2_26/06/ 13
	Ch	nt sampii	ig date / time	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number LOR Unit			EW1301888-056	EW1301888-057	EW1301886-059	EW1301885-061	EW1301886-063
EP075(SIM)A: Phenolic Compounds - Con	tinued							
2.4-Dichlorophenol	120-83-2	0.5	maika	<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	mgikg	<0.5	-	<0.5		-
2.4.5-Trichlorophenol	95-95-4	0.5	markg	<0.5	-	<0.5	-	-
Pentachlorophenol	87-86-5	2	mg/kg	4		4		-
EP075(SIM)B: Polynuclear Aromatic Hydr	ocarbons							
Naphthalene	91-20-3	0.5	mg/kg	<0.5		<0.5		-
Acenaphthylene	208-96-8	0.5	mgikg	<0.5	-	<0.5	-	
Aconaphthone	83-32-9	0.5	mg/kg	<0.5	-	<0.5		-
Fluorene	66-73-7	0.5	mg/kg	<0.5		<0.5		-
Phonanthrone	85-01-8	0.5	mgikg	<0.5		+0.5		
Anthracene	120-12-7	0.5	mgikg	<0.5		<0.5	-	-
Fluoranthene	205-44-0	0.5	mg/kg	0.9	-	+0.5	-	-
Pyrene	129-00-0	0.5	mg/kg	1.1	-	<0.5		-
Benz(a)anthracene	58-55-3	0.5	mgikg	<0.5	-	<0.5		-
Chrysene	218-01-9	0.5	mgikg	0.5		+0.5	-	-
Benzo(b)fluoranthene	205-99-2	0.5	mgikg	0.8	<u> </u>	<0.5	-	-
Benzo(k)fluoranthene	207-08-9	0.5	mgikg	<0.5		+0.5	-	-
Benzo(a)pyrene	50-32-8	0.5	mg/kg	0.5	-	<0.5	-	-
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	-	<0.5	-	-
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	-	<0.5	-	
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	0.6		<0.5	-	-
5um of polycyclic aromatic hydrocarbons		0,5	mg/kg	4,5	-	×0.5	-	-
Benzo(a)pyrene TEQ (WHO)	-	0.5	malkg	0.7	-	<0.5	-	-
EP080/071: Total Petroleum Hydrocarbon								
C8 - C9 Fraction	_	10	mg/kg	<10	-	=10	-	-
C10 - C14 Fraction	-	50	mg/kg	<50	-	<50	-	-
C15 - C28 Fraction	-	100	mgikg	<100	-	<100	-	
C29 - C36 Fraction		100	mg/kg	<100	· · · · · · · · · · · · · · · · · · ·	<100	-	-
C10 - C36 Fraction (sum)	_	50	mg/kg	<50	-	<50	-	-
EP080/071: Total Recoverable Hydrocarb	ons - NEPM 201	Draft	-					
C6 - C10 Fraction	-	10	mg/kg	<10		<10	-	

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Sub-Matrix: SOIL (Matrix: SOIL)		Ch	ent sample ID	TP10_0.0-0.1_26/06/1 3	TP10_0.5-0.6_26/06/1 3	TP11_0.1-0.2_26/06/1	TP11_0.9-1.0_26/06/1	TP12A_0.1-0.2_26/06/ 13
	CI	ent sample	ng date / time	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	28-JUN-2013 15:00
Compound	CAS Number	LOR	Unit	EW1301885-056	EW1301886-057	EW1301886-059	EW1301885-061	EW1301886-063
EP080/071: Total Recoverable Hydro	ocarbons - NEPM 201	0 Draft - 0	ontinued					
C6 - C10 Fraction minus BTEX (F1)	- inter	10	mp/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								
Benzone	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	mp/kg	<0.5	-	<0.5	-	
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	-	<0.5	-	-
ortho-Xylene	95-47-8	0.5	mg/kg	<0.5		<0.5	-	-
EP080: BTEXN				and the second s				
* Total Xylenes	1330-20-7	0.5	mp/kg	<0.5		<0.5	+	-
Sum of BTEX	-	0.2	mg/kg	<0.2		<0.2	-	-
Naphthalene	91-20-3	1	mg/kg	<1		st	-	-
EP068S: Organochlorine Pesticide !	Surrogate							
Dibromo-DDE	21855-73-2	0,1	5	94.5	-	72.5	-	-
EP0687: Organophosphorus Pestici	ide Surrogate							
DEF	78-48-8	0.1	5	91.8		76.5	-	
EP075(SIM)S: Phenolic Compound !	Surrogates							
Phenol-d6	13127-88-3	0.1		85.4		78.7		-
2-Chiorophenol-D4	93951-73-5	0.1	5	92.3		91.9	-	-
2.4.6-Tribromophenol	118-79-8	0,1	16	97.8	-	92.4		-
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	5	99.0		98.4	-	-
Anthracene-d10	1719-06-8	0.1	55	102	-	97.4		
4-Terphenyl-d14	1718-51-0	0.1	5	94.2	-	89.7		-
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	5	96,1	-	89.4	-	-
Toluene-D8	2037-26-5	0.1	5	99.0	-	89.8		
4-Bromofluorobenzene	460-00-4	0.1	.15	91.3	-	88.0		-

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Work Order	EW1301885
Client	PORT KEMBLA COPPER
Project	137623028



Sub-Matrix: SOIL (Matrix: SOIL)		ci	ent sample ID	TP12_0.0. -0.1_26/06/13	TP12_0.9-1.0_26/06/1 3	TP8_0.0-0.1_26/06/13	TP8_0.9-1.0_26/06/13	QC101_26/06/13
	64	vent samp	ng date / time	26-JUN-2013 15:00	26-JUN-2013 15:00	25-JUN-2013 15:00	25-3014-2013 15:00 EW1101886-069	EW1301886-070
Compound	CAS Number	LOR	Unit	E.441301885-094	EW1301880-000	EW1301000-007	EW1301000-009	ENTSCIENCIO
EA002 : pH (Soils)								
pH Value	-	0.1	pH Unit	-	-	\$,7	-	
EA055: Moisture Content		_			and the second second			
Moisture Content (dried @ 103°C)		1.0	19	39.0	19.2	26.6	21.6	32.8
EA150: Soil Classification based on F	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	9	7660	-	-	-	-
APPROVED IDENTIFIER:		1		C.OWLER	-	-	-	-
EA200Q: Asbestos Quantification (no	n-NATA)	-	-					
Weight Used for % Calculation	-	0.0001	kg	7.66			-	-
Asbestos Containing Material	1332-21-4	0.1	9	<0.1	-	-	-	-
Fibrous Asbestos	_	0.002	9	<0.002	-	-	-	-
Asbestos Fines	1332-21-4			No	-	-	-	-
Asbestos Containing Material (ACM >7mm)	1332-21-4	0.01	-56	<0.01	-	-	-	-
Asbestos Fines and Fibrous Asbestos (<7mm)	1332-21-4	0.001	56.	<0.001	-	-	-	-
ED008: Exchangeable Cations		-		And in case of the local division of the loc				
Exchangeable Calcium		0,1	meg/100g			7,2	-	, 4
Exchangeable Magnesium	-	0.1	meg/100g	-	-	2.0	-	-
Exchangeable Potassium		0.1	meg/100g	\rightarrow	-	0.4	-	-
Exchangeable Sodium		0,1	meg/100g		-	0.3	-	-
Cation Exchange Capacity		0,1	meg/100g	-		10.0	-	-
EG005T: Total Metals by ICP-AES	-	-	1					
Arsenic	7440-38-2	5	mgikg	10	<5	-41	<5	-44
Cadmium	7440-43-9	1	maka	3	41	10	51	14
Chromium	7440-47-3	2	malka	10	19	22	12	23
Copper	7440-56-8	5	marka	961	116	2280	76	1760
Iron	7439-89-8	50	marka			38500	-	-
Lead	7430-02-1	5	malka	173	6	677	<5	628
Mangangang	7430.06.5	5	maka	456	64	609	28	492

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Sub-Matrix: SOIL (Matrix: SOIL)		Client sample ID Client sampling døte / time			TP12_0.9-1.0_26/06/1 3	TP8_0.0-0.1_26/06/13	TP8_0.9-1.0_26/06/13	QC101_26/06/13
	0				28-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number	LOR	Lint	EW1301885-064	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	6	<5	<5	<5	<5
Zinc	7440-66-6	\$	mg/kg	187	88	397	31	529
EG035T: Total Recoverable Mercur	y by FIMS							
Mercury	7439-97-6	0.1	mg/kg	8.3	<0,1	0.3	×0.1	0.4
EK055: Ammonia as N								
Ammonia as N	7664-41-7	20	mg/kg	<20		<20	-	<20
EP004: Organic Matter								
Organic Matter	-	0.5	N-	-	-	5.1	-	-
Total Organic Carbon		0.5	5	-	-	3.0	-	-
EP068A: Organochlorine Pesticides	(OC)			-	and the second se			
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	-	40.05	-	40.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mp/iig	~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	≈8.05		<0.05	-	×0.05
delta-BHC	319-86-8	0.05	mp/kg	=0.05	-	<0.05		<0.05
Heptachior	76-44-8	0.05	mp/kg	<0.05		<0.05	-	<0.05
Aldrin	309-00-2	0.05	mg/kg	=0.05	-	+0.05	-	<0.05
Haptachlor opoxide	1024-57-3	0.05	mg/kg	<0.05		<0.05	-	<0.05
Total Chlordane (sum)	-	0.05	mp/kg	<0.05		<0.05	-	<0.05
trans-Chlordane	5103-74-2	0.05	ma/kg.	+0.05	-	<0.05	-	<0.05
alpha-Endosullan	959-98-8	0.05	mp/kg	~0.05	-	<0.05		<0.05
cis-Chlordane	5103-71-9	0.05	ng/ign	<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
Endrín	72-20-8	0.05	ing/kg	<0.05	-	<0.65	-	<0.05
beta-Endosulfan	33213-65-9	0.05	marka	<0.05	-	<0.05		<0.05
Endosulfan (sum)	115-29-7	0.05	maika	<0.05	-	<0.95	-	<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	mp/kg	<0.05	-	<0.05	-	<0.05
Endosulfan sulfate	1031-07-8	0.05	mp/kg	<0.05	-	<0.05		<0.05
4.4'-DDT	50-29-3	0.2	marka	<0.2	-	<0.2	-	<0.2
Endrin ketone	53494-70-5	0.05	mpika	<0.05	-	<0.05	-	<0.05

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Sub-Matrix: SOIL (Matrix: SOIL)		Client sample ID Client sampling date / time			TP12_0.9-1.0_26/06/1 3	TP8_0.0-0.1_26/06/13	TP8_0.9-1.0_26/06/13	QC101_26/06/13
	Ch				25-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	EW1301586-067	EW1301886-069	EW1301886-070
EP068A: Organochlorine Pesticid	es (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	mgikg	<0.05	-	<0.05	-	<0.05
Sum of DDD + DDE + DOT	-	0.05	maika	<0.05	-	<0.05	-	<0.05
EP068B: Organophosphorus Pes	licides (OP)							
Dichlorvos	62-73-7	0.05	mgikg	<0.05	-	<0.05	-	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05		<0.05	-	<0.05
Monocrotophos	6823-22-4	0,2	mgikg	<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	mgikg	<0.05		<0.05	-	<0.05
Chlorpyrifos-methyl	5508-13-0	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
Matathion	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	9.2	marka	<0.2	-	×0.2	-	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	-	<0.05	-	<0.05
Chlorlenvinphos	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	22224-92-8	0.05	mgikg	<0.05	-	<0.05	-	<0.05
Prothiolos	34643-46-4	0.05	mgikg	<0.05		<0.Q5	-	<0.05
Ethion	563-12-2	0.05	marka	<0.05	-	<0.05	-	<0.05
Carbophenothion	786-19-8	0.05	mgikg	<0.05	-	<0.05	-	<0,05
Azinphos Methyl	86-50-0	0.05	mgikg	+0.05		<0.05	-	<0,05
EP075(SIM)A: Phenolic Compoun	de							
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	-	<t< td=""><td>-</td><td><1</td></t<>	-	<1
2-Nitrophenol	88-75-5	0.5	mgikg	<0.5	-	<0.5	-	<0.5
2.4-Dimethylphenol	105-67-9	0.5	maika	<0.5		<0.5	-	<0.5
2.4-Dichlorophenol	120-83-2	0,5	mgikg	<0.5	-	<0.5	-	<0.5
2.6-Dichlorophenol	87-65-0	0,5	mgikg	<0.5	-	×0.5	-	≥0.5
4-Chloro-J-Methylphenol	59-50-7	0.5	maika	<0.5	-	<0.5	-	<0.5

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Chert	PORT KEMBLA COPPER
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Sub-Matric: SOIL (Matric: SOIL)		Ch	ent sample ID	TP12_0.0. -0.1_26/06/13	TP12_0.9-1.0_26/06/1 3	TP8_0.0-0.1_26/06/13	TP8_0.9-1.0_26/06/13	QC101_26/06/13
	0	ent samph	ng date / time	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number	LOR	Und	EW1301886-064	EW1301886-066	EW1301886-067	EW1301886-069	EW1301885-070
EP075(SIM)A: Phenolic Compounds - Cor	stimued							
2.4.5-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	H	<0.5	-	<0.5
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	-	<0,5		<0.5
Pentachlorophenol	87-86-5	2	mg/kg	2	-	2		<2
EP075(SIM)B: Polynuclear Aromatic Hydr	rocarbonn							
Naphthalerie	91-20-3	0.5	mg/kg	<0.5		<0.5	-	<0.5
Acenaphthylene	205-95-8	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	malkg	<0.5	-	<0.5	-	<0.5
Phenanthrone	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	mgikg	<0.5	-	*0.5	-	\$0.5
Pyrene	129-00-0	0.5	maika	<0.5		<0.5	-	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kig	<0.5	-	<0.5	-	<0.5
Chrysene	218-01-9	0.5	mpikg	<0.5		<0,5	-	×0.5
Benzo(b)fluoranthene	205-99-2	0.5	mgikg	<0.5	-	<0.5	-	<0.5
Benzo(k)Ruoranthene	207-08-9	0.5	mpikg	< 0.5	-	+0.5	-	40.5
Benzo(a)pyrene	50-32-8	0.5	majka	<0,5	-	×0.5	-	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mpikg	+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	mgikig	<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 Hydrocarbor	15		-	a second s				
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	marka	<\$0	-	<50	-	<50
EP080/071: Total Recoverable Hydrocarb	ons - NEPM 201	0 Draft						
C6 - C10 Fraction	-	10	migikg	<10	-	<10	-	<10
C6 - C10 Fraction minus BTEX (F1)	-	10	mg/kg	<10	-	<10	-	<10
>C10 - C16 Fraction		50	mg/kg	<50		<50	-	<50
>C15 - C34 Fraction	1.1	100	mg/kg	<100	-	<100	-	<100

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Sub-Matrix: SOIL (Matrix: SOIL)		Ch ent sampli	ent sample ID	TP12_0.0. -0.1_26/06/13 26-JUN-2013 15:00	TP12_0.9-1.0_26/06/1 3 26-JUN-2013 15:00	TP8_0.0-0.1_26/06/13	TP8_0.9-1.0_26/06/13 26-JUN-2013 15:00	QC101_26/06/13
Compound	CAS Number	LOR	Unt	EW1301886-064	EW1301885-066	EW1301886-067	EW1301886-069	EW1301886-070
EP080/071: Total Recoverable Hy	drocarbons - NEPM 201	Draft-	Continued					
>C34 - C40 Fraction	-	100	mg/kg	<100	-	<100	-	<100
>C10 - C40 Fraction (sum)	-	50	mg/kg	<50	-	<50	-	<50
EP080: BTEX				Statement of the local division of the local				
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	mp/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	mp/kg	<0.2	-	<0.2	-	<0.2
Naphthalene	91-20-3	1	mg/kg	<1	-	<1	-	<1
EP0685: Oroanochiorine Pesticia	te Surropate			-				
Dibromo-DDE	21655-73-2	0.1	- %	86.6	-	80.9	-	94.2
EP068T: Organophosphorus Pes	ticide Surrogate							
DEF	78-48-8	0.1	76	107		88.0	-	98.9
EP075(SIM)S: Phenolic Compour	nd Surrogates	-						
Phenol-d6	13127-88-3	0.1	26	102	-	87.5	-	96.4
2-Chlorophenol-D4	93951-73-6	0.1	15	96.9	-	87.4	-	97.8
2.4.6-Tribromophenol	118-79-8	0.1	76	95.0	-	93.2	-	100
EP075(SIM)T: PAH Surrogates		-						
2-Fluorobiphenyl	321-60-8	0,1	56	102	-	103	-	103
Anthracene-d10	1719-06-8	0.1	15	100	-	98.4	-	104
4-Terphenyl-d14	1718-51-0	0.1	%	92.5	-	88.0	-	94.6
EP080S: TPH(V)/BTEX Surrogate		-			1000			
1.2-Dichloroethane-D4	17050-07-0	0,1		92.1		89.0	-	98.7
Toluene-D8	2037-26-5	0.1	56	91.5	-	89.2	-	101
4-Bromofluorobenzene	460-00-4	0.1	%	85.4	-	85.5	-	100

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Sub-Matrix: SOIL (Matrix: SOIL)		CA	ient 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	Unt	EW1301886-071	EW1301885-074	EW1301886-075	EW1301886-078	EW1301886-079
EA002 : pH (Soils)								
pH Value	-	0.1	pH Unit	-	-	6.9	-	-
EA055: Moisture Content	1	-	And the owner of the					
Moisture Content (dried @ 103*C)		1.0	5	5.5	21.2	33.8	37.3	28.8
EA150: Soil Classification based on Pa	rticle Size		1					
Clay (<2 µm)	-		5.			60		
EA200: AS 4954 - 2004 Identification of	Asbestos in bull	samples	the second second					
Asbestos Detected	1332-21-4	0.1	oka	H+	No	-	-	-
Asbestos Type	1332-21-4	3	-	-		-		-
Sample weight (dry)		0.01	0	-	7320	-	-	
APPROVED IDENTIFIER:	-	1	-		C.OWLER			-
EA2000: Asbestos Quantification (non	NATA	-	and the second second					
Weight Used for % Calculation	-	0.0001	RG	-	7.32			-
Asbestos Containing Material	1332-21-4	0.1	0	-	<0.1	-		-
Fibrous Asbestos	_	0.002	g		<0.002	-	August 1	-
Asbestos Fines	1332-21-4	1	-	-	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	meg/100g	-	-	17.5	-	-
Exchangeable Magnesium	-	0.1	meg/100g	-	-	10.5	12	-
Exchangeable Potassium	_	0.1	meg/100g	-	1.7-6	0,1	-	-
Exchangeable Sodium	-	0.1	meg/100g	-	-	1,7		
Cation Exchange Capacity		0.1	meg/100g	(-	29.5	-	
EG005T: Total Metals by ICP-AES	2000	-	and the second se					
Arsenic	7440-38-2	5	maika	<5	7	<5	37	+5
Cadmium	7440-43-8	1	mg/kg	<1	<1	<1	27	<1
Chromium	7440-47-3	. 2	mg/kg	<2	20	24	6	22
Copper	7440-50-8	5	mg/kg	<5	66	77	2740	61
Iron	7439-89-8	50	mg/kg.		-	59200	-	
Lead	7439-92-1	.5	mg/kg	<5	19	9	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

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Work Order	EW1301886
Client	PORT KEMBLA COPPER
Picjett	137623028



Sub-Matrix: SOIL (Matrix: SOIL)		Cite	ent 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
	Ch	Client sampling date / line			27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00 EW1301885-078	27-JUN-2013 10:00
Conservation of	CAT Munches	047.1 mm 108 1ml			EW1301886-074	EW1301886-075		EW1301886-079
EG005T Total Metals by ICP-AES - C	Continued	Elon (UTR.					
Salanium	7782-49-2	5	malka	<5	4	-45	- 45	<5
Zinc	7440-68-6	5	mg/kg	<5	41	24	500	9
EG035T- Total Recoverable Mercuro	why FIMS							
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0,1	<0.1	<0.1
EX055: Ammonia as N								
Ammonia as N	7684-41-7	20	malkg	<20	<20	-	<20	-
EB004: Organic Matter		-		Concession in the local division in the loca	And and a second se			
Organic Matter		0.5	%	-	-	1.8	-	- 1
Total Organic Carbon	_	0.5	%			1.1	-	-
EPAGEA: Orospochlorine Pasticidas	(00)	-		and the second se	-			
alpha-BHG	319-84-6	0.05	mg/kg	<0.05	<0.05	-	<0.05	
Hexachlorobenzene (HCB)	118-74-1	0.05	malkg	<0.05	<0.05		<0.05	-
beta-BHC	319-85-7	0.05	malka	<0.05	<0.05	-	<2.05	-
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	-	<0.05	-
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	-	<0.05	
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	-	<0.05	-
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	-	<0.05	-
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	-	<0.05	-
Total Chlordane (sum)	-	0.05	mg/kg	<0.05	<0.05	-	<0,05	-
trans-Chlordane	5103-74-2	0.05	mgikg	<0.05	<0.05	-	<0.05	-
alpha-Endosulfan	8-59-929	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	mgikg	<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	markg	<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	7421-93-4	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	mgikg	<0.05	+0.05		<0,05	-
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	-	<0.2	-

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Work Order	EW1301886
Client	PORT KEMBLA COPPER
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Sub-Matric SOIL (Matric SOIL)		CB	int 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
	0	Client sampling date / time			27. 113. 2013 10.00	27-8/N-2013 10:00	27-0.04-2013 10:00	27. 8 MJ. 2013 40 mm.
Companyed	CAO Alumber	108	Linit	EW1301886-071	EW1301886-074	EW1201886-075	EW1301886-078	EW1301886-079
ERIERA: Oroznochlorina Restinid	los (OC) - Continued	2011	Cont I					
Sum of Aldrin + Dieldrin	309-00-2890-57-1	0.05	maika	<0.05	<0.05	-	<0.05	-
Sum of DDD + DDE + DDT		0.05	molikia	<0.05	<0.05	-	<0.05	_
EPOSER: Organophanphanus Part	tioldes (OR)							
Dichlorvos	62,73,7	0.05	m9%a	<0.05	<0.05	-	<0.05	-
Demeton-S-methyl	D19-R/L.B	0.05	ma%a	<0.05	<0.05	_	<0.05	-
Monocrotophos	6923-22-4	0.2	mp/kg	<0.2	<0.2	_	+0.2	_
Dimethoate	60-51-5	0.05	malka	<0.05	<0.05	-	<0.05	-
Diazinos	333-41-5	0.05	molkg	<0.05	<0.05	-	<0.05	-
Chlorpyrifos-methyl	5508-13-0	0.05	malkg	<0.05	<0.05	-	<0.05	-
Parathion-methyl	298-00-0	0.2	malka	<0.2	<0.2	-	<0.2	-
Malathion	121-75-5	0.05	mgikg	<0.05	×0.05	-	<0.05	-
Fenthion	55-38-9	0.05	molkg	<0.05	<0.05	-	<0.05	
Chlorpyrifos.	2921-88-2	0.05	mg/kg	<0.05	<0.05	-	<0.05	-
Parathion	55-38-2	0.2	morka	<0.2	<0,2	-	<0.2	
Pirimphos-sthyl	23505-41-1	0.05	mg/kg	<0.05	×0.05	-	<0.D5	-
Chlorfenvinphos	470-90-6	0.05	marka	<0.05	+0.05	-	<0.05	
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	-	<0.05	-
Fenamiphos	22224-02-6	0.05	mg/kg	×0.05	<0.05	-	+0.05	-
Prothiofos	34643-46-4	0,05	ingikg	<0.05	<0.05	-	<0.05	
Ethion	563-12-2	0.05	mgilig	+0.05	<0.05	-	=0,05	-
Carbophenothion	785-19-6	0.05	rngikg	≠0.05	<0.05		<0.05	
Azinphos Methyl	80-50-0	0.05	mg/kg	<0.05	<0.05	-	<0.05	
EP075(SIM)A: Phenolic Compound	ds							
Phenol	108-95-2	0,5	mgikg	<0.5	<0.5	-	<0.5	-
2-Chlorophenol	95-57-8	0.5	marka	<0.5	≪0,5		<0.5	-
2-Methylphenol	95-48-7	0.5	mg%g	+0.5	<0,5	\rightarrow	<0,5	-
3- & 4-Methylphenol	1319-77-3		malkg	K1	<1	-	-<1	-
2-Nitrophenol	88-75-5	0.5	mgikg	×0.5	×0.5		<0.5	-
2.4-Dimethylphenol	105-67-9	0,5	mgikg	40.5	40.5	-	~0.5	
2.4-Dichlorophenol	120-83-2	0.5	mgikg	+0.5	<0.5		<0.5	-
2.6-Dichlorophenol	87-85-0	0.5	mgikg	<0.5	≺0.5	-	≪0.5	-
4-Chloro-3-Methylphenol	59-50-7	0.5	mgikg	<0.5	<0.5		+0.5	-
2,4.6-Trichlorophenol	88-06-2	0,5	maika	<0.5	<0.5	-	<0.5	

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Sub-Matrix: SOIL (Matrix: SOIL)		Ch	nt 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
	Ch	ent sample	ng 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			EW1301885-071	EW1301886-074	EW1301886-075	EW1301885-078	EW1301886-079
EP075(SIMIA: Phenolic Compounds - Con	tinued							
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	-	+0.5	-
Pentachlorophenol	87-86-5	2	mgikg	<2.	12	-	+2	-
EP075(SIM)B: Polynuclear Aromatic Hyd	rocarbons	-						
Naphthalene	91-20-5	0.5	mgikg	+0.5	<0.5		<0.5	-
Acenaphthylene	208-96-8	0.5	malka	<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	40.5	-	<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	125-00-0	0.5	mgikg	<0,5	*0.5	-	+0.5	-
Benz(a)anthracone	56-55-3	0,5	malka	<0.5	×0.5	-	<0.5	-
Chrysene	218-01-9	0.5	mg/kg	<0.5	40.5	-	<0.5	-
Benzo(b)fluoranthiene	205-99-2	0.5	mg/kg	<0.5	40.5	-	<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	mgikg	<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	mgikg	<0,5	<0.5	-	+0.5	-
Benzo(a)pyrene TEQ (WHO)	-	0.5	mgikg	<0.5	<0,5	-	-0.5	-
EP080/071: Total Petroleum Hydrocarbor	15							
C6 - C9 Fraction		10	malka	<10	<10		<10	-
C10 - C14 Fraction		50	mgikg	<50	<50	+	<50	-
C15 - C28 Fraction		100	maika	<100	<100	-	<100	-
C29 - C36 Fraction		100	mg/kg	<100	<100	-	<100	-
C10 - C36 Fraction (sum)		50	ma/kg	<50	<50		<50	-
EP080/0711 Total Recoverable Hydrocarb	ons - NEPM 201	0 Draft						
C6 - C10 Fraction	-	10	malka	<10	<10	-	<10	-
C6 - C10 Fraction minus BTEX (F1)		10	mgikg	<10	<10	÷.	<10	-
>C10 - C16 Fraction		50	mgikg	<50	<50	-	<50	-
>C16 - C34 Fraction	_	100	mg/kg	<100	<100	-	<100	-
>C34 - C40 Fraction		T00	mgikg	<100	<100	-	<100	-
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Work Order	EW1301686							
Client	PORT KEMBLA COPPER							
Project	137623028							



Sub-Matrix: SOIL (Matrix: SOIL)		Cli	ent 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
	C	ent sampl	ng 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	EW1301885-078	EW1301886-079
EP080/071: Total Recoverable Hy	drocarbons - NEPM 201	0 Draft -	Continued					
>C10 - C40 Fraction (sum)	-	50	mg/kg	<50	<50	-	<50	
EP080: BTEX		-						
Benzene	71-43-2	0,2	mpikg	<0.2	<0.2	-	<0.2	1000
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	-	<0.5	
Ethylhenzene	100-41-4	0,5	mpikg	<0.5	<0.5	-	<0.5	-
meta- & para-Xylene	108-38-3 106-42-3	0,5	mgikg	<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	mpikg	<0.5	<0.5	-	<0.5	
Sum of BTEX	-	0.2	mp%g	<0.2	<0,2	-	<0.2	inter.
Naphthalene	91-20-3	1	mg/kg	<1	<1	-	<1	
EP068S: Organochlorine Pesticid	le Surrogate	-	-					
Dibromo-DDE	21655-73-2	0.1	5	100	95.4		105	
EP058T: Organophosphorus Pes	ticide Surrogate		-					
DEF	78-48-8	0,1	5	108	106	-	108	-
EP075(SIM)S: Phenolic Compour	d Surrogates		and the second second					
Phenol-d6	13127-88-3	0.1	5	86.2	90.0	-	69.2	-
2-Chlorophenol-D4	93951-73-6	0.1	16	93.8	94.1	-	81.9	-
2.4.6-Tribromophenol	118-79-6	0,1	N	93.2	93.4	-	77.2	-
EP075(SIM)T: PAH Surrogates	and the second se	-	and the second distance in the					
2-Fluorobiphenyl	321-80-8	0,1	56	100	98.6	-	99.0	-
Anthracene-d10	\$719-06-8	0.1	- 16	99.1	101		96.2	-
4-Terphenyl-d14	1718-51-0	0.1	16	91.7	93.8	-	91.3	-
EP080S: TPH(V)/BTEX Surrogate	5		-					
1.2-Dichloroethane-D4	17060-07-0	0.1	56	110	96.6	-	81.1	-
Toluene-D8	2037-26-5	0,1	. 16	87.7	87.3	-	89.6	-
4-Bromofluorobenzene	450-00-4	0,†	-94	89.7	85.0		86.0	-

Work Order	EW1301886	
Client	PORT KEMBLA COPPER	
Project	137623026	(ALS

Sub-Matrix: SOIL (Matrix: SOIL)		CI	ient 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
	CH	ent samp	ing 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	EW1301885-082	EW1301886-083	EW1301886-084	EW1301885-086	EW1301885-088
FA002 : pH (Soils)	Grid Thimps		-	-				
pH Value	-	0.1	pH Unit	-	inter 1	5.3	6.1	
FA055: Moisture Content			-					
Moisture Content (dried @ 103*C)	-	3.0	5	26.1	26.1	25.2	26.0	9.6
EA150: Soil Classification based on F	article Size			and the second s	and the second s			
Clay (<2 µm)	-	1	76	-	-	43	13	-
ED008: Exchangeable Cations			-					
Exchangeable Calcium		0.1	meg/100g	-	-	2.5	9.9	-
Exchangeable Magnesium		0.1	meg/100g	-	-	11.6	2.6	
Exchangeable Potassium		0.1	meg/100g	-	-	0.2	0.3	-
Exchangeable Sodium		0.1	meg/100g	-	-	1.1	0.2	-
Cation Exchange Capacity	-	0.1	meg/100g			15.4	13.0	
EG005T: Total Metals by ICP-AES			-					
Arsenic	7440-38-2	5	mg/kg	33	<5	-6	6	4
Cadmium	7440-43-9	1	mg/kg	4	4	*1	<t< td=""><td><1</td></t<>	<1
Chromium	7440-47-3	2	mg/kg	13	12	17	13	14
Copper	7440-50-8	5	marka	467	59	69	140	87
Iron	7439-89-6	50	mg/kg	-	-	33500	20300	-
Lead	7439-92-1	5	maika	71	9	<5	29	<5
Manganese	7439-96-5	5	malka	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	7440-66-5	5	mg/kg	112	104	15	68	33
EG035T: Total Recoverable Mercury	by FIMS	-						
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0,1	<0.1
EK055: Ammonia as N								
Ammonia as N	7664-41-7	20	mgikg	<20	<20	-	<20	-
EP004: Organic Matter		-	And Personne in case of the					
Organic Matter	-	0.5	16	-	-	1.0	3.8	-
Total Organic Carbon	-	0.5	5	-	-	0.6	2.2	-
EP068A: Organochlorine Pesticides (OC)				114			
alpha-BHC	319-84-6	0.05	mgikg	<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	maika	<0.05	<0.05	-	<0.05	-

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Work Order	EW1301886
Client	PORT KEMBLA COPPER
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Sub-Matrix: SOIL (Matrix: SOIL)		Ca	ent sample ID	TP5_0.5-0.6_27/06/13	QC102_27/06/13	TP5_0.9-1.0_27/06/13 27-JUN-2013 10:00	TP1_0.0-0.1_27/06/13	TP1_0.9-1.0_27/06/13
	CA	ient sampli	ng date I time					
Compound	CAS Number	LOR	Unit	EW1301886-082	EW1301886-083	EW1301886-084	EW1301886-086	EW1301886-088
EP068A: Organochlorine Pesticides (C	C) - Continued				and the second second			
gamma-BHC	58-89-9	0.05	marka	<0.05	<0.05	-	<0.05	
delta-BHC	319-86-8	0.05	mg/kg	<5.05	<0.05	-	<0.05	-
Heptachior	76-44-8	0.05	mg/kp	<0.05	<0.05	-	<0.05	
Aldrin	309-00-2	0.05	mp/vg	<0.05	<0.05	-	<0.05	-
Heptachinr epoxide	1024-57-3	0.05	mpkp	<0.05	<0.05	-	<0.05	
Total Chlordane (sum)	-	0.05	mg/kg	<0.05	<0.05	-	<0.05	-
trans-Chloritane	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	ma/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	malkg	<0.05	<0,05	-	<0.05	-
Endrin	72-20-8	0.05	mgikg	<0.05	<0.05		<0.05	-
beta-Endosullan	33213-65-9	0.05	mg/kg	<0.05	<0.05	-	<0.05	-
Endosulfan (sum)	115-29-7	0.05	marka	<0.05	<0.05	-	<0.05	-
4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	-	<0.05	-
Endrin aldahyste	7421-93-4	0.05	mp/kg	<0.05	<0.05	-	≈0.05	-
Endosulfan sulfate	1031-07-8	0.05	ingkg	<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	mgAg	<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 Pesticide	IS (OP)							
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	-	<0.05	-
Demeton-S-methyl	919-86-8	P.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	mpikg	<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-melliyl	298-00-0	0.2	mp/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	
Chlorpyritos	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	-

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Client	PORT KEMBLA COPPER
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Sub-Matric: SOIL (Matric: SOIL)		CR	ent 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
	0	ent sampli	ng date / lime	27-11/N-2013 10-00	27-JUN-2013 10:00	27. HIN. 2013 10:00	27- JUN-2013 10:00	27. JUN-2013 10:00
Controvend	CAS Mumber	CAR Markey 100 Hore		EW1301886-082	EW1301885-083	EW1301886-084	EW1301886-086	EW1301886-088
EP075(SIM)B: Polynuclear Aromatic H	vdrocarbons - Cont	intend				1		
Benzo(k)fluoranthene	207-08-9	0.5	mpika	<0.5	<0.5	-	<0.5	-
Benzo(a)pyrene	50-32-8	0.5	maikg	<0.5	<0.5	-	<0.5	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	marka	<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	mpikg	<0.5	<0.5	-	<0,6	
Sum of polycyclic aromatic hydrocarbons	. <u> </u>	0.5	mpikg	<0.5	<0.5	-	<0,5	-
Benzo(a)pyrene TEQ (WHO)	_	0,5	marka	<0,5	<0,5		<0.5	-
EP080/071: Total Petroleum Hydrocarb	ons	-		-				
C6 - C9 Fraction	-	10	mgikg	<10	<10	-	=10	-
C10 - C14 Fraction	-	50	mgikg	<50	<50	-	<50	-
C15 - C28 Fraction	-	100	mgikg	<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 Hydroca	rbons - NEPM 201	Draft						
C6 - C10 Fraction		10	mgikg	<10	<10	-	= 10	-
C6 - C10 Fraction minus BTEX (F1)		10	migikg	<10	+10	-	<10	-
>C10 - C16 Fraction	-	50	mgikg	<50	<50	-	<50	
>C16 - C34 Fraction		100	mg/kg	<100	<100	-	+100	-
>C34 - C40 Fraction	-	100	mgikg	<100	<100	-	<100	-
>C10 - C40 Fraction (sum)	-	50	maika	<\$0	~50		<50	-
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	40.2		<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	mpika	40,5	40.5	-	<0,5	-
ortho-Xylene	95-47-6	0.5	mgikg	+0.5	<0.5	_	<0.5	-
EP060: BTEXN								
Total Xylenes	1330-20-7	0.5	maika	<0.5	<0.5	-	<0.5	-
Sum of BTEX	-	0.2	mg/kg	<0.2	≺0.2		<6.2	-
Naphthalene	81-20-3	1	mpikg	<1	4	-	<1	-
EP068S: Organochlorine Pesticide Sur	rogate							
Dibromo-DDE	21655-73-2	0.1	- 56	97.3	30.6		86.0	-
EP068T: Organophosphorus Pesticide	Surrogate	-	-			-		

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Client	PORT KEMBLA COPPER	
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Sub-Matrix: SOIL (Matrix: SOIL)		Ch	ent 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
	Cit	ent sampli	ng 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	Linit	EW1301886-082	EW1301886-083	EW1301886-084	EW1301886-086	EW1301886-086
EP068T: Organophosphorus Pesticide	Surrogate - Continu	ed.						
DEF	78-48-8	0.1	56	104	97.8		92.3	-
EP075(SIM)S: Phenolic Compound Su	rrogates	-						
Phenol-d6	13127-88-3	0,1	. %	92.6	91,6		99.0	
2-Chlorophenol-D4	93951-73-6	0.1	16	95.4	97.9		107	-
2.4.6-Tribromophenol	118-79-8	0.1	56	96,3	96.1	-	106	
EP075(SIM)T: PAH Surrogates		25						
2-Fluorobiphenyl	321-60-8	0.1	16	103	105	-	117	-
Anthracene-d10	1719-08-8	0,1	56	99.8	95.7	-	116	
4-Terphenyl-d14	1718-51-0	0.1	%	92.5	86.9	÷+	108	÷
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17050-07-0	0.1	%	92.0	92.3		112	→
Toluene-D8	2037-28-5	0.1	%	102	86.1	-	90.6	-
4-Bromofluorobenzene	450-00-4	0.1	%	98.4	80.7	-	84.4	-

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Sub-Matric: SOIL (Matrix: SOIL)		CI	ient 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
	0	Sent sampl	no date / time	27-JUN-2013 10:00	27, 808, 2013 10:00	27-JUN-2013 10:00	27.JUN-2013 10:00	27-JUN-2013 10:00
Contraction	100 June 100 June			EW1301886-089	EW1301886-090	EW1301886-092	EWIJAIEBE-393	FW1301886-085
EA002 - pH (Solite)	CAS Number	Con	(mag					
pH Value		0.1	pH Unit	-	-	-	5.2	-
EA065: Mointure Contont		-						
Moisture Content (dried @ 103*C)	-	1.0	- 5	17.1	31.6	30.6	30.9	26.5
EA150: Soil Classification based on 5	Darticla Cias							1
Clay (<2 pm)	-	1.	5				54	-
FA200: AS 4954 - 2004 Identification	of Ashestos in hulk	samples	-	and the second				
Asbestos Detected	1332.21.4	0.1.	aka			No	-	-
Asbestos Type	1332-21-4	1	-	-			-	_
Sample weight (dry)		0.01	0	-	-	695	-	-
APPROVED IDENTIFIER:		1	-	+	-	C.OWLER	~	-
EA2000: Asbestos Quantification (no	m-NATA)		-					
Weight Used for % Calculation	-	0.0001	kg	-		6.00	-	-
Asbestos Containing Material	1332-21-4	0.1	9			<0.1	-	-
Fibrous Asbestos	_	0.002	12		-	<0.002	-	-
Ashestos Fines	1332-21-8	-	-			No	-	-
Asbestos Containing Material (ACM >7mm)	1332-21-4	0.01	- 55	-	-	-#0.01	-	-
Asbestos Fines and Fibrous Asbestos (<7mm)	1232-21-4	0.001	5			×0.001	-	-
ED008: Exchangeable Cations	-	-	-					
Exchangeable Calcium	-	0,1	meg/100g	-	-	-	3.6	-
Exchangeable Magnesium	-	0,1	meg/100g	-	-	-	9.1	-
Exchangeable Potassium	-	0.1	meg/100g	-	-	-	0.2	-
Exchangeable Sodium	-	0.1	meg/100g			-	2.9	_
Cation Exchange Capacity	-	0.1	meg/100g	-	-	-	16.8	-
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mp/kg	<5	-5	1	<5	-13
Cadmium	7440-43-9	7	mg/kg	<t< td=""><td>-</td><td>3</td><td><1</td><td><1</td></t<>	-	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	7439-69-6	50	mg/kg		-	-	59000	-
Lead	7439-92-1	5	mg/kg		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	5	.4	2

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Sub-Matrix: SOIL (Matrix: SOIL)		Cit	ent 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
	C	ent sample	ng 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	CAR Number	LOR	Linit	EW1301886-089	EW1301886-090	EW1301886-092	EW1301886-093	EW1301886-095
EG005T: Total Metals by ICP-AES-C	cotinued			Contract for				
Selenium	7782-49-2	5	marka	<5	4	<5	<5	
Zinc	7440-66-6	5	mg/kg	18	12	162	25	32
EG035T: Total Recoverable Merrius	by FIMS							
Mercury	7439-97-6	12.1	mgikg	<0.1	<q;1< td=""><td><0.1</td><td>*0.1</td><td><0,1</td></q;1<>	<0.1	*0.1	<0,1
EK055: Ammonia as N		-		And in case of the local division of the loc				
Ammonia as N	7654-41-7	20	marka	-	<20	<20	-	<20
EP004: Organic Matter								
Organic Matter	-	0.5	%		-	-	1.9	-
Total Organic Carbon	_	0.5	5	-	-	-	1.1	-
EPOCRA: Organochlosing Pastisides	(00)		-					1
alpha-BHC	319,84,6	0.05	malka	-	<0.05	<0.05	-	<0.05
Hexachlorobenzene (HCB)	118.74.1	0.05	malka		<0.05	<0.05	-	<0.05
heta-BHC	319-85-7	0.05	mg/kg	-	<0.05	<0.05	-	<0.05
gamma-BHC	58-89-9	0.05	marka	-	<0.05	<0.05	-	<0.05
delta-BHC	319-86-8	0.05	malka	-	< 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	mgikg	-	<0.05	<0.05	-	<0.05
Total Chlordane (sum)		0.05	mgikg		<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	iner.	<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	marka	-	<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	markg		<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	marka	-	<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	<2.05	-	<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	mgikg	-	<0.05	<0.05	-	<0.05
Methoxychlor	72-43-5	0,2	mg/kg	-	<0.2	<0.2	-	<0.2

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Sub-Matric: SOIL (Matrix: SOIL)		Cak	ent sample /D	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 10.05	27. 8/81.2012 10:00	27-11/0-2015 10:00	27. 1104-2015 10:00
Commission	CAR Munther	100	Ling	EW1201886-089	EW1301886-090	EW1301886-092	FW1301886-093	FW1301885-095
CROCKA, Organizablering Besticid	GAS hilliber	Light	- Deall					
Sum of Aldrin + Dieldrin	305-00-280-57-1	0.05	molitid	-	<0.05	<0.05		+0.05
Sum of ODD + DDF + DDT	an 10.000 01-1	0.05	marka	-	<0.05	<0.05		10.05
CRACER Oversenhaustern Real	Holdes (DD)	-						
Dichlorvos	62,73,7	0.05	mpika	-	<0.05	<0.05	-	+0.05
Demeton-S-methyl	910-85-8	0.05	ing/kg	-	<0.05	<0.05	-	+0.05
Monocrotophos	6923-22-4	0.2	mo/kg	-	<0.7	<0.2	-	<0.2
Dimethoate	60-51-5	0.05	mo/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	ma/kg	-	<0.05	<0.05		+0.05
Parathion-methyl	298-00-0	0.2	mo/kg	-	<0.2	<0.2	-	<0.2
Matathion	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	malkg	-	<0.2	<0.2	_	<0.2
Pirimphos-athyl	23505-41-1	0.05	mp/kg	-	<0.05	<0.05	-	<0.05
Chlorfenvinphos	470-90-6	9,05	marka		<0.05	<0.05		~0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	-	<0.05	<0.05	-	<0.05
Fenamiphos	22224-02-6	0.05	molkg	-	40.05	<0.05	-	-0.05
Prothiofos	34643-46-4	0.05	mg/kg	-	<0.05	×0.05	-	<0.05
Ethion	563-12-2	D.05	mpikg	-	=0.05	<0.05	-	=0.05
Carbophenothion	786-19-6	0.05	mg%g	-	<0.05	<0.05	-	~0.05
Azinphos Methyl	86-50-0	0.05	mgikg	1 1 m	<0.05	+0.05	_	<0.05
EP075(SIM)A: Phenolic Compoun	ds							
Phenol	108-95-2	0.5	mgäg	-	*0.5	<0.5	-	<0.5
2-Chlorophenol	95-57-8	0.5	mphp	-	×0,5	<0,5	-	<0.5
2-Methylphenol	95-48-7	0.5	ngkg	-	<0,5	<0,5		<0.5
3- & 4-Methylphenol	1319-77-3	4.1	mpkg			41	-	<1
2-Nitrophenol	88-75-5	0.5	mg/kg	-	<0,5	<0.5	-	<0.5
2.4-Dimethylphanol	105-87-8	0.5	marka	-	<0.5	<0.5	-	<0.5
2.4-Dichlorophenol	120-83-2	0.5	mgikg	-	<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	mgikg	-	<0.5	+0.5		<0.5
2.4.6-Trichlorophenol	88-06-2	0.5	marka		<0.5	<0.5	-	<0.5

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Sub-Matrix: SOIL (Matrix: SOIL)		Client sa	mple 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 da	te / 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
Contround C48 M	mber	OR	Unit	EW1301886-089	EW1301886-090	EW1301886-092	EW1301885-093	EW1301886-095
EP075(SIM)A: Phenolic Compounds - Continued			-					
2.4.5-Trichlorophenol 95	-95-4	0.5 r	ng/kg	-	<0.5	<0.5	-	<0.5
Pentachlorophenol	-86-5	2 3	ng/kg	-	~2	-2	-	4
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	-							
Naphthalene 91	-20-3	0.5 r	ng/kg	-	-0.5	<0.5	-	<0.5
Acenaphthylene 208	-96-8	0.5 /	ng/kg	-	<0.5	<0.5		<0.5
Aconaphthone 83	-32-9	0.5 r	ng/kg	-	<0.5	<0.5	-	<0.5
Fluorene 86	-73-7	0.5 /	ng/kg		+0.5	<q.5< td=""><td>-</td><td><0.5</td></q.5<>	-	<0.5
Phenanthrene 85	-01-8	0.5 1	ng/kg	-	<0.5	<0.5	-	<0.5
Anthracene 120	-12-7	0.5 1	ng/kg		<0.5	<0.5	-	<0.5
Fluoranthana 206	-44-0	0.5 ¢	ngikg	-	+0.5	<0.5	-	<0.5
Pyrene 125	0-00-0	0.5 /	ng/kg	-	×0.5	<0.5	-	<0.5
Benz(a)anthracene 55	-65-3	0.5 r	ng/kg	-	*0.5	<0.5	-	<0.5
Chrysend 218	-01-9	0,5 (ng/kg	-	<0.5	<0.5	-	<0.5
Benzo(b)fluoranthene 205	-99-2	0.5 1	ngikg	-	<0.5	<0.5	-	<0,5
Benzo(k)fluoranthene 207	-08-9	0.5 r	ngikg	-	<0.5	<0.5	-	<0.5
Benzo(a)pyrene 50	-32-8	0.5 1	ngikg	-	<0.5	<0.5		<0.5
Indeno(1.2.3.cd)pyrene 193	-39-5	0.5 1	ngikg	-	<0.5	<0.5	-	<0.5
Dibenz(a.h)anthracane 53	-70-3	0.5 /	ngikg	-	<0.5	<0.5	-	<0.5
Benzo(g.h.i)perylene 19	-24-2	0.5 /	ngikg	-	<0.5	<0.5	+	×0.5
Sum of polycyclic aromatic hydrocarbons		0.5 1	ngikg	-	<0.5	<0.5	-	<0.5
Benzo(a)pyrene TEQ (WHQ)		0.5 1	ngikg	-	<0,5	<0.5	-	<0.5
EP080/071: Total Petroleum Hydrocarbons	-							
C6 - C9 Fraction	-1	10 1	ngikg	-	<10	<10	-	<10
C10 - C14 Fraction		50 r	ngikg	-	<50	<50	-	<50
C15 - C28 Fraction	-	100 /	ngikg	-	<100	<100	-	<100
C29 - C36 Fraction	_	100 1	ng/kg	÷	<100	<100	-	<100
C10 - C36 Fraction (sum)	-	50 1	ng/kg	-	<50	<50	-	<50
EP080/071: Total Recoverable Hydrocarbons - NEF	M 2010 D	Draft						
C6 - C10 Fraction	-	10 0	ngika	-	<10	<10		<10
C6 - C10 Fraction minus BTEX (F1)	_	10 1	ngikg		*10	<10		<10
>C10 - C16 Fraction	-	50 0	ng/kg	-	<50	<50	-	<50
>C16 - C34 Fraction	-	100 1	ngikg	-	<100	<100	-	<100
>C34 - C40 Fraction		100 1	ng/kg	-	<100	<100	-	<100

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	CA	ent sample (D	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
CA	Client sampling date / time			27-JUN-2013 10:00	27-JUN-2013 10.00	27-JUN-2013 10:00	27-JUN-2013 10:00
CAS Number	LOR Unit		EW1301886-089	EW1301888-090	EW1301886-092	EW1301886-093	EW1301886-095
drocarbons - NEPM 201	0 Draft - 0	Continued					
-	50	mpikg		<50	<50	-	<50
71-43-2	0.2	maika	· · · · · · · · · · · · · · · · · · ·	<0.2	<0.2	-	<0.2
108-88-3	0.5	mgikg	-	<0.5	<0.5	-	<0.5
100-41-4	0.5	mpikg		<0.5	<0.5	-	<0.5
105-38-3 105-42-3	0.5	maikg	-	<0.5	<0.5	-	<0.5
95-47-6	0.5	maika	-	<0.5	<0.5		<0.5
1330-26-7	0.5	malkg	-	<0.5	<0.5	-	<0.5
	0.2	malkg		<0.2	<0.2	-	<0.2
91-20-3	1	malka	-	41	-41	-	<1
a Surrogate	-	-					
21655-73-2	0,1	- N	-	106	94.3	-	92.0
Icide Surrogate			the second s				
78-48-8	0.1	-	-	110	100	-	99.5
d Surrogates							
13127-88-5	0.1	5	-	91.7	88.0	-	95.1
93951-73-6	0.1	16		92.4	97.6	-	103
118-79-6	0,1	- 10	-	98.1	109		100
and the second se	-	-					
321-60-8	1.0	5		110	106	-	112
1719-08-8	0.1	46	-	99.7	105	_	102
1718-51-0	0.1	5	-	86.7	98.0	-	96.5
	-						
17080-07-0	0.1			90.9	91.3	-	91.0
2037-26-5	0.1	%	_	84.3	82.8		83.5
460-00-4	0.1	4		80.2	70.6	-	76.3
	CAS Number CAS Number CrossRooms - NEPH/CSS 1998-85 1998-85 1998-85 1998-95 1998-95 1998-75 1998-75 1998-75 1998-75 1978-85 1	Construction C	Celta assets // Celta assets // CAStandard Celt Celta CAStandard Celta Celta Celta CAStandard Celta Celta Celta CAStandard Celta Celta Celta CAStandard Celta Celta Celta Tri-LaSta 0.5 mg/lag mg/lag 108-65-3 0.5 mg/lag mg/lag 108-65-3 0.5 mg/lag mg/lag 68-67-60 0.5 mg/lag mg/lag 68-67-60 0.5 mg/lag mg/lag 1302-657 0.5 mg/lag mg/lag 1302-657 0.5 mg/lag mg/lag 20105724 0.5 % % 20105724 0.5 % % 1302-657 0.5 % % 2010-66 0.5 % % 2010-754 0.5 % % 2010-754 0.5 <td>Client assegner JO TP2_0.0.6.1_27764713 Client assegner gets for the second sec</td> <td>Citeri sample /D TP2_0.8.3.4_2776473 TP2_0.8.2.4_2776473 CAS Number COR Cont Service / Serv</td> <td>Citeri sample /0 TP2_0.8.6.1_27764713 TP2_0.8.6.1_27764713 TP2_0.8.6.1_27764713 Color sample rate / rate Color sample rate / rate TP2_0.8.6.1_27764713 TP2_0.8.6.1_27764713 Color sample rate / rate Color sample rate Color sample rate TP3_0.8.6.1_27764713 TP3_0.8.6.1_27764713 Color sample rate Color sample rate Color sample rate EW1391884-02 EW1391884-02 EW1391884-02 Color sample rate Color sample rate Color sample rate Color sample rate EW1391884-02 Color sample rate EW1391884-02 Color sample rate EW1391884-02 Color sample rate EW1391884-02 Color sample rate Color sample ra</td> <td>Unit Sample /D TP2_0.8.6.1_2776471 TP2_0.8.6.1_2776471</td>	Client assegner JO TP2_0.0.6.1_27764713 Client assegner gets for the second sec	Citeri sample /D TP2_0.8.3.4_2776473 TP2_0.8.2.4_2776473 CAS Number COR Cont Service / Serv	Citeri sample /0 TP2_0.8.6.1_27764713 TP2_0.8.6.1_27764713 TP2_0.8.6.1_27764713 Color sample rate / rate Color sample rate / rate TP2_0.8.6.1_27764713 TP2_0.8.6.1_27764713 Color sample rate / rate Color sample rate Color sample rate TP3_0.8.6.1_27764713 TP3_0.8.6.1_27764713 Color sample rate Color sample rate Color sample rate EW1391884-02 EW1391884-02 EW1391884-02 Color sample rate Color sample rate Color sample rate Color sample rate EW1391884-02 Color sample rate EW1391884-02 Color sample rate EW1391884-02 Color sample rate EW1391884-02 Color sample rate Color sample ra	Unit Sample /D TP2_0.8.6.1_2776471 TP2_0.8.6.1_2776471



Sub-Matrix: SOIL (Matrix: SOIL)		Chi	int 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
	Ch	ent sample	ng 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	Linit	EW1301886-096	EW1301886-098	EW1301886-100	EW1301886-101	EW1301886-102
EA055: Moisture Content	Conto Hamilton		-					
Moisture Content (dried @ 103°C)	-	1.0	16	17.9	2.8	23.3	25.0	21.9
EG005T: Total Metals by ICP-AES		-						
Amenic	7440-38-2	5	malka	9	<5		<5	32
Cadmium	7440-43-9	1	mg/kg	<t td="" <=""><td></td><td>4</td><td><1</td><td>8</td></t>		4	<1	8
Chromium	7440-47-3	2	mg/kg	16	42	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		381
Manganese	7439-96-5	5	mg/kg	21	8	24.	12	148
Nickel	7440-02-0	2	mg/kg	3	42	3	5	12
Selenium	7782-49-2	5	mg/kg	*5	<5	-6	<5	<5
Zinc	7440-66-6	5	mg/kg	16	45	13	20	498
EG035T: Total Recoverable Mercury b	FIMS							
Mercury	7438-97-6	0.1	mg/kg	<0.1	+0.1	s0.1	<0,1	0.2
EK055: Ammonia as N	-	-						
Ammonia as N	7664-41-7	20	mg/kg	+	<20	-	-	-
EP068A: Organochlorine Pesticides (O	C)	-	-					
elpha-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	315-86-8	0.05	mg/kg	-	<0.05	-	-	-
Heptachlor	76-44-8	0.05	mg/kg	-	<0.05	-	-	_
Aldrin	309-00-2	0.05	malka	-	<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	malka	-	<0.05	-	-	-
cis-Chlordane	5103-71-9	0.05	mg/kg	-	<0.05	-	-	-
Dieldrin	60-57-1	0.05	mg/kg	-	<0.05	-	-	-
4.4'-DDE	72-55-9	0.05	mg/kg	-	<0.05	-	-	
Endrin	72-20-8	0.05	mg/kg	-	<0.05	-	-	-
beta-Endosulfan	33213-65-9	0.05	mg/kg	-	<0.05	-	-	-
Endosulfan (sum)	115-29-7	0.05	mg/kg	-	<0.05	-	-	-

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Sub-Matrix: SOIL (Matrix: SOIL)		Ch	ant 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
	- (1)	ind spend	no date / time	27-JUN-2013 10:00	27. HIN 2013 10:00	27,818,2013 15:00	27-1110-2012 15-00	27. 1111.2013 15:00
Commenced	CAT Howkey	108	lint		EW1301886-098	EW1301886-100	FW1301885-101	FW1301886-102
EP0584: Organochlorine Pasticid	an (OC) - Continued							
4.4*-DDD	72-54-8	0.05	malka	-	<0.05	-		-
Endrin aldehyde	7421-93-4	0.05	malka	-	<0.05	-	-	-
Endosulfan sulfate	1031-07-8	0.05	malkg	-	<0.05	-	-	-
4.4'-DDT	50-29-3	0.2	ma/kg	-	40.2	-	-	-
Endrin katone	53494-70-5	0.05	mp/kg	-	<0.05	-	-	-
Methosychlor	72-43-5	0.2	marka	-	<0.2	-	-	-
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	-	<0.05	-	-	-
Sum of DDD + DDE + DDT	-	0.05	ma/kg	-	<0.05	-	-	-
EP0688: Organophosphorus Pest	icides (OP)							
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	-	-	-
Demeton-S-methyl	919-86-8	0.05	mp/kg	-	<0.05		_	
Monocrotophes	6923-22-4	0.2	ma/ko	-	<0.2	-	-	
Dimethoate	60-51-5	0.05	mg/kg	-	<0.05	-	-	-
Diazinon	333-41-5	0.05	mg/kg	-	<0.05	-	-	
Chlorpyrifos-methyl	5598-13-0	0.05	ma/kg	-	<0.05	-	-	-
Parathion-methyl	298-00-0	0.2	mg/kg	-	<0.2	-	-	-
Malathion	121-75-5	0.05	mg/kg	-	<0,05	-	-	-
Fenthion	55-38-9	0.05	mp/kg	-	<0.05	-	-	
Chlorpyrifes	2921-88-2	0.05	maika		<0.05	-	-	-
Parathion	56-38-2	0.2	mp/kp	-	<0.2	-	-	-
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	-	<0.05	-	-	-
Chlorfenvinphos	470-90-6	0.05	marka	-	<0.05	-	-	-
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	-	-	-
Fenamiphos	22224-92-8	0.05	mg/kg		<0.05		-	_
Prothiofos	34543-46-4	0.05	mp/kg	-	<0.05	-	-	-
Ethion	563-12-2	0.05	mg/kg	-	<0.05	-	-	-
Carbophenothion	788-19-6	0.05	mg/kg	-	×0,05	-	-	-
Azinphos Methyl	86-50-0	9.05	mg/kg	-	<0.05	-	-	
EP075(SIM)A: Phenolic Compound	18.							
Phenol	108-95-2	0,5	mg/kg	-	<0.5	-	-	-
2-Chlorophenol	95-67-8	0.5	mg/kg	-	<0.5	-	-	-
2-Mathylphenol	95-48-7	0.5	mg/kg	-	<0.5	-	÷	-
3- & 4-Methylphenol	1315-77-3	.1	mg/kg.	-	<1	-	-	-

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Sub-Matric: SOIL (Matrix: SOIL)		0	nt 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
	Ch	ent sample	ng 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 Munhar	LOR	Unit	EW1301886-096	EW1301886-098	EW1301886-100	EW1301886-101	EW1301886-102
EP075(SIM)A: Phenolic Compounds - Con	tinued							
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	88-05-2	0.5	mg/kg	-	<0.5	-	-	-
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	-	-	-
Pentachlorophenol	87-86-5	z	mg/kg	-	<2	-	-	-
EP075(SIM)B: Polynuclear Aromatic Hyd	rocarbons							
Naphthalene	91-20-3	0,5	mg/kg	-	40.5	-	-	-
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	-	-	-
Acenaphthène	83-32-9	10.5	mg/kg		<0.5	-		-
Fluorene	86-73-7	0.5	mg/kg	-	<0.5	-	-	-
Phonanthrene	85-01-8	0.5	mgikg	-	×0.5	-	-	-
Anthracene	120-12-7	0.5	mg/kg	÷.	<0.5	-	-	-
Fluoranthene	206-44-0	0.5	mg/kg	-	×0.5	-	-	-
Pyrens	129-00-0	0.5	mg/kg		<0.5		-	-
Benz(a)anthracene	56-55-3	0.5	mg/kg	-	<0.5	-	-	-
Chrysene	218-01-9	0.5	mg/kg		<0.5	-	-	-
Benzo(b)fluoranthene	205-89-2	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	mgikg	-	<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 Hydrocarbon	15							
C6 - C9 Fraction	-	10	mgikg	-	<10	-	-	-
C10 - C14 Fraction	-	50	mg/kg	· · · · · · · · · · · · · · · · · · ·	<50	-		
C15 - C28 Fraction	-	100	mgikg	-	<100		-	-
C29 - C36 Fraction		100	mg/kg	-	<100	-	-	-
C10 - C36 Fraction (sum)		50	mg/kg	-	<50	-		-

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Chrome Chrome	Sub-Matrix: SOIL (Matrix: SOIL)		CN	ent 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
ConstantCAS modeCorePerto 1984-640Perto		.0	ient sampl	ing date / time	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 15:00	27-JUN-2015 15:00	27-JUN-2013 15:00
EP2020711 State Secondable Mydring actions - NEP02 2010 Dark	Compound	CAS Number	LOR	Une	EW1201886-096	EW1301886-098	EW1301886-100	EW1301885-101	EW1301886-102
C4 - C1 Praction -	EP080/071: Total Recoverable Hydr	ocarbons - NEPM 201	0 Draft						
0 - 0.5 Fraction minus BTX (P) - 10 -	C6 - C10 Fraction		10	mg/kg		<10	-		-
x103 c. C16 Faction -	C6 - C10 Fraction minus BTEX (F1)	-	10	mpikg	-	<10	-		
x13: x21 Arackion - 100 1000 - 4100 - </td <td>>C10 - C16 Fraction</td> <td></td> <td>50</td> <td>mp/kg</td> <td>-</td> <td><50</td> <td>-</td> <td></td> <td>-</td>	>C10 - C16 Fraction		50	mp/kg	-	<50	-		-
CALL Col Francion - 100 - 4100 -	>C16 - C34 Fraction	-	100	mg/kg		<100	-	1.44	-
2-03 - Cartelion jum - 0 -	>C34 - C40 Fraction		100	mp/kg		<100	-	-	-
CPADD: District District District District Televise 10444-0 25 mplay 40.5	>C10 - C40 Fraction (sum)		50	mg/kg		<50	-		-
Banses 71.4-2 2 2 mp/g 42 Edware 104.4-1 0.5 1090g 40.5	EP080: BTEX								
Takine 10.84 0.8 0.9 -0.3 Brubensen 10.444 0.5 moly -0.3	Benzene	71-43-2	0.2	mg/kg		<0.2	-	-	
Ethylesenen 100-144 0.5 mong 4-0.5	Toluene	108-88-3	0.5	marka		<0.5	-		
metter & Barzy Sylpen 1098 Barzy Sylpen 0.98 Barzy Sylpen	Ethylbenzene	100-41-4	0.5	mg/kg	_	<0,5	-	-	-
optio Affinition 94-04 9.5 mong 4.0.5	meta- & para-Xylene	108-38-3 106-42-3	0.5	mp/kg	-	<0.5	-	- · ·	
BERNI BERNI Som of BTEX	ortho-Xylene	95-47-6	0,5	mg/kg	_	<0.5	-	-	-
Total Kylensk 1332-0-7 0.8 molug 4-0.5	EPOSO: BTEXN					and the second			
Same of FEX. - <t< td=""><td>Total Xylenes</td><td>1330-20-7</td><td>0.5</td><td>maika</td><td>-</td><td><0.5</td><td>-</td><td>-</td><td>-</td></t<>	Total Xylenes	1330-20-7	0.5	maika	-	<0.5	-	-	-
Naphthains 91-20-3 1 mp/g -11 DR30msODC 2160-7-2 0.3 % 194 DR30msODC 2160-7-2 0.3 % 194 DR30msODC 74-48 0.1 % 192 DR30mS0162: Democil Surrogates 74-48 0.1 % 182 DR30mS0162: Democil Surrogates 74-48 0.1 % 182 DR30mS0162: Democil Surrogates 132/24-3 0.1 % 18.4 2Classroghtenet G4 132/74-3 0.1 % 18.2	Sum of BTEX	-	0.2	mpilip	-	<0.2	-	-	-
EPODDS / Construction Particular Subscripts Particular Subscripts EPOLITY Capanophosphorus Particular Surrogats EPOLITY Capanophosphorus Surrogats EPOLITY Capanophorus Surrogats EPOLITY Capanophorus Surrogats EPOLITY Capanophorus Surrogats EPOLITY Capanophorus Surrogats EPOLITY Capano	Naphthalene	91-20-3	1	morka	-	<1		-	-
Denome-ODE 2165/7-22 0.1 % 194 DEF TOTAL Compound Surrogates TX-44 0.1 % 192	EP0685: Organochlorine Pesticide I	Surrogate			and the second division of the second divisio				
DEPOLIT Company Despilors Particle Surrogates DEP 724-84 0.1 % 192 Perz/LSMIKS: Phenolic Compound Surrogates 77.4 - - Perz/LSMIKS: Phenolic Compound Surrogates 97.4 - - - Perz/LSMIKS: Phenolic Compound Surrogates 97.4 - 97.4 - - 2-Charophaned 1932/26-3 0.1 % - 98.2 - - - 2-Charophaned 115/70-6 0.1 % - 93.2 -	Dibromo-DDE	21655-73-2	0.1	- 16	-	104	-	-	
DPF 102 E3272/EM/INFS Phanolic Scorpound Suirogates 1322/48.3 0.1 % 97.8 2 Obserghend A 1932/48.3 0.1 % 97.8	EP058T: Ornanophosphorus Pestic	ide Surrogate	-	-					1
BP2/15/01/5: Phanola Surrogatas BP2/15/01/5: Phanola Surrogatas 0.1 0.1 0.1 Phanola Surrogatas 0.1 0.	DEF	78-48-8	0.1	5	-	102	-	-	-
Preside 132724-3 0.1 % — 07.4 — …	EP075(SIMIS: Phenolic Compound)	Surrogates	-	-					
2-Chargehenet 64 0351.724 0.1 % BLA	Phenol-d5	13127-88-3	0.1	- 5	- 1	87.6	-	-	-
2.4.5 "Riseosphanel 116-76-9 0.1 % — 93.7 — — — E3212(EMIT): 52A1 Surrogets - - 162 -	2-Chlorophenol-D4	93951-73-6	0.1	15	-	98.8	-	-	1
DEPOZEGIONE PAR Surrogets DEPOZEGIONE PAR Surrogets 24Floadbahman Additactione 40 1779-054 1799-054 <	2.4.6-Tribromophenal	118-79-6	0.1	5	-	93.7	-	-	-
24FloreGolphongl. 321-06-3 0.1 % — 102 — — — — — — Addressed … … 102 …	EP075(SIM)T: PAH Surrogates	-	-						
Additionset80 1719-05-0 0.1 % 98.8	2-Fluorobiphenyl	321-80-8	0,1	15	-	102	-	_	-
4-TerghenyH44 1716-51-0 0.1 % — 94.8 — =	Anthracene-d10	1719-06-8	0.1	. 5		99.6	-	-	-
ESENSES_FEMUNITIEX_64 comparise 1709x0-01-0 0.1 % 116	4-Terphenyl-d14	1718-51-0	0.1	15		94.5	-	-	_
L2:0et/development/d4 1700e07-0 0.1 %	EP080S: TPH/V/BTEX Surrogates		-	-	and the second se	-			
Teluane-DB 2037-26-5 0.1 % 192	1.2-Dichloroethane-D4	17060-07-0	0.1	- 16	-	116		-	
4-BromoBuoroberzene 4/0.00-4 0.1 % - 95.8 -	Toluene-D8	2037-26-5	0.1	5	-	102	-	-	-
	4-Bromofluorobenzene	400-00-4	0.1	16	-	95.8	-	_	-

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Sub-Matrix: SOIL (Matrix: SOIL)		Cie	ent sample ID	OL2_0.3-0.5_27/06/13		-	-	-
	CA	ent sample	ng date / time	27-JUN-2013 15:00	-	-	-	-
Compound	GAS Number	LOR	Linit	EW1301886-103	-	-		-
EA055: Moisture Content								
Moisture Content (dried @ 103°C)		1.0	%	30.8	-	-	-	-
EG005T: Total Metals by ICP-AES			-					
Arsonic	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	markg	<5	-	-	-	-
Zinc	7440-66-6	5	mg/kg	78	-	-	-	-
EG035T: Total Recoverable Mercury t	V FIMS	-	-					
Mercury	7439-97-8	0.1	mg/kg	<0.1	-	-	-	-

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Sub-Matrix: WATER (Matrix: WATER)		C/H	nt sample ID	QC300_25/06/13	QC301_26/06/13	QC302_27/06/13	-	
	0	Sent sample	ng date / time	25-JUN-2013 15:00	28-JUN-2013 15:00	27-JUN-2013 10:00		-
Compound	CAS Number LOR Unit		UNE	EW1301686-022	EW1301686-072	EW1301886-099	-	
EG020T: Total Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	<0.001	-	-
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	-	
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	-	-
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	100	100
Lead	7439-92-1	0.001	mp/L	<0.001	<0,001	<0.001	-	-
Manganese	7439-06-5	0.001	mp/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	mp/L	<0.01	<0.01	<0.01		-
Zinc	7440-66-6	0,005	mg/L	<0.005	<0.005	<0.005		-
EG0357: Total Recoverable Mercury b	y FIMS	-						
Mercury	7439-97-6	0.0001	mp/L	<0.0001	<0.0001	<0.0001	-	-
EP068A: Organochlorine Pesticides (C)C)							
alpha-BHC	319-84-5	0.5	Jeu	<0.5	<0.5	<0.5	-	-
Hexachlorobenzene (HCB)	118-74-1	0.5	HQ1.	<0.5	<0,5	<0.5	-	
beta-BHC	319-85-7	0.5	Hg/L	<0,5	<0,5	<0,5	-	
gemma-BHC	58-89-9	0.5	ND/L	<0,5	<0,5	<0,5	-	
delta-BHC	319-86-8	0.5	HO/L	<0,5	<0,5	<0,5	-	
Heptachlor	76-44-8	0.5	HOL	<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	Jugit	<0.5	<0.5	<0.5	-	-
trans-Chiordane	5103-74-2	0.5	JOH	<0.5	<0.5	<0.5	-	-
alpha-Endosulfan	059-08-8	0.5	HOL	<0.5	40.5	<0.5	-	iner.
cis-Chlordane	5103-71-9	0.5	Light.	<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	up/L	<0,5	<0.5	<0.5	_	
Endrin	72-20-8	0.5	ug/L	*0,5	≺0.5	×0.5	-	-
beta-Endosulfan	33213-65-0	0.5	HD/L	<0.5	+0.5	*0.5	-	-
4.4'-DDD	72-54-8	0,5	Jey	<0.5	<0.5	+0.5	-	-
Endrin aldehyde	7421-93-4	0.5	40/L	+0,5	<0.5	+0.5	-	-
Endosulfan sulfate	1031-07-8	0.5	UQ1	<0.5	<0.5	<0,5		-
4.4'-DDT	50-29-3	2.0	Hg/L	×2.0	<2.0	+2.0	-	-
Endrin ketone	53494-70-5	0.5	Ug/L	<0.5	-\$0.5	+0.5		
Methoxychlor	72-43-5	2.0	Jou	~2.0	<2.0	<2.0	-	-

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Sub-Matrix: WATER (Matrix: WATER)		Cie	nt sample ID	QC300_25/06/13	QC301_26/06/13	QC302_27/06/13		-
	CA.	ent sample	g date / time	25-JUN-2013 15:00	26-JUN-2013 15:00	27. ILIN. 2013 10:00	-	-
Compound	CAR Mumber	LOR	Unit	EW1301886-022	EW1301885-072	EW1301886-099		
EP068A: Ornanochlorina Pesticides	(OC) - Continued							
Total Chlordane (sum)		0.5	Hg1	<0.5	+0.5	<0.5	-	-
Sum of DDD + DDE + DDT	_	0.5	µg1	<0,5	<0.5	<0.5	-	-
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	Hg/L	<0.5	+0.5	<0.5	-	-
EP068B: Organophosphorus Pestici	ides (OP)							
Dichlorvos	62-73-7	0.5	µg/L	<0.5	+0.5	<0.5	-	-
Demeton-S-methyl	919-66-8	0.5	µg1L	<0.5	+0.5	<0.5	-	-
Monocrotophos	6923-22-4	2.0	HOL	<2.0	<2.0	<2.0	-	-
Dimethoate	60-51-5	0.5	ugit	<0.5	40.5	<0.5	-	-
Diazinon	333-41-5	0.5	HO/L	<0.5	<0.5	<0,5	-	-
Chlorpyrifos-methyl	5598-13-0	0.5	ug/L	<0.5	<0.5	<0.5	-	-
Parathion-methyl	298-00-0	2.0	Jai	<2.0	<2.0	<2.0	-	-
Malathion	121-75-5	0,5	ugit	<0.5	<0.5	<0.5	-	-
Fenthion	55-38-9	0.5	LOL	<0.5	<0.5	<0.5	÷.	
Chlorpyrifos	2921-88-2	0.5	POL	<0,5	<0.5	<0.5	-	
Parathion	56-38-2	2.0	LO/L	<2.0	<2.0	<2.0	-	-
Pirimphos-ethyl	23505-41-1	0.5	µ91.	<0.5	<0.5	<0.5	-	-
Chlorfenvinphos	470-90-6	0.5	JUGL.	<0.5	<0.5	<0.5	-	-
Bromophos-ethyl	4824-78-6	0.5	pg/L	<0.5	<0.5	<0.5	-	-
Fenamiphos	22224-92-6	0.5	HOL.	<0.5	<0.5	<0.5	-	-
Prothiofos	34643-46-4	0.5	µg L	<0.5	<0.5	<0.5	-	-
Ethion	563-12-2	0.5	LOU	<0.5	<0.5	<0.5	-	-
Carbophenothion	786-19-6	0.5	Jgi.	<0.5	*0.5	<0.5	-	-
Azinphos Methyl	86-50-0	0.5	LOL	<0.5	*0.5	<0.5	-	-
EP075(SIM)A: Phenolic Compounds								
Phanol	108-95-2	1.0	JQL	<1.0	<1.0	<1.0	-	-
2-Chiorophenol	95-57-8	1.0	ugit	<1.0	<1.0	*1.0	-	-
2-Mothylphenol	95-48-7	1.0	HOL.	<1.0	<1.0	<1.0	-	-
2- & 4-Methylphenol	1319-77-3	2.0	LOL	<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	LOL	≈1.0	<1.0	41.0	-	-
2.4-Dichlorophenol	120-83-2	1.0	µg1_	<1,0	<1.0	<1.0	-	-
2.6-Dichlorophenol	87-65-0	1.0	Lot	<1.0	<1,0	<1/0	-	-
4-Chloro-3-Methylphenol	59-50-7	1.0	HgL	s1.0	<1.0	<1.0	-	-

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Sub-Matrix: WATER (Matrix: WATER)	Client sample ID Client sampling date / time			QC300_25/06/13	QC301_26/06/13	QC302_27/06/13	-	-
				25-JUN-2013 15:00	26-JUN-2013 15:00			-
Composind	CAS Mumber	LOR	Unt	EW1301885-022	EW1301886-072	EW1301886-099	-	-
EP075/SIMIA: Phenolic Compounds - Co	ritimued		-					
2.4.6-Trichlorophenol	88-06-2	1.0	Jgt	<1.0	<1.0	<1.0	-	-
2.4.5-Trichlorophenol	95-95-4	1.0	Hgit	<1.0	<1.0	<1.0	-	-
Pentachlorophenol	87-86-5	2.0	HOL	<2.0	<2.0	<2.0	+	-
P075(SIM)B: Polynuclear Aromatic Hyd	rocarbons		-					
Naphthalene	91-20-3	1.0	Hgt	<1.0	<1.0	<1.0		-
Acenaphthylene	208-96-8	1.0	HPL	<1.0	<1.0	<1.0	-	
Acenaphthene	83-32-9	1.0	HOL	<1.0	<1.0	<1.0	-	-
Fluorene	86-73-7	1,0	Lot Lot	<1.0	<1.0	<1.0	<u></u>	-
Phenanthrene	85-01-8	1.0	Hg/L	<1.0	<1.0	<1.0		-
Anthracene	120-12-7	1.0	HPL	<1.0	<1.0	<1.0	-	-
Fluoranthene	205-44-0	1.0	Light.	<1,0	<1.0	<1.0		
Pyrene	129-00-0	1.0	JQL	<1.0	<1.0	<1.0	-	-
Benz(a)anthracene	55-55-3	1.0	HQ1.	<1.0	<1.0	<1.0	_	-
Chrysene	218-01-9	1.0	101	<1.0	<1.0	<1.0	-	-
Benzo(b)fluoranthene	205-99-2	1.0	JOL	<1.0	<1.0	<1.0		
Benzo(k)fluoranthene	207-08-9	1.0	HOL.	<1.0	<1.0	<1.0	-	-
Benzo(a)pyrene	50-32-8	0.5	H9L	<0.5	<0.5	<0.5	-	-
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	Halt	<1.0	<1.0	<1.0	-	-
Dibenz(a.h)anthracena	53-70-3	1.0	HOL	<1.0	<1.0	<1.0	+	-
Benzo(g.h.i)perylene	191-24-2	1,0	HOL	<1.0	<1.0	*1.0	1	_
Sum of polycyclic aromatic hydrocarbons	_	0.5	1/g4	<0.5	<0.5	<0.5	-	-
Benzo(a)pyrene TEQ (WHO)		Q.5	Jou	<0.5	<0.5	<0.5		-
P080/071: Total Petroleum Hydrocarbo	ns							
C6 - C9 Fraction	-	20	Hg/L	<20	<20	<20	-	-
Ct0 - Ct4 Fraction		50	49/L	<50	<50	<50		_
C15 - C28 Fraction		100	HOL	*100	<100	#100	-	-
C29 - C36 Fraction	+	50	HD/L	<5Q	<50	<50	-	-
C10 - C36 Fraction (sum)	-	50	HØ/L	<50	<50	<50	-	-
P080/071: Total Recoverable Hydrocart	ons - NEPM 201	0 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	L/Q/L	<100	<100	<100	-	-
>C16 - C34 Fraction	-	100	HO/L	<100	<100	<100	_	-

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Sub-Matrix: WATER (Matrix: WATER)		Chi	ent sample ID	QC300_25/06/13	QC301_26/06/13	QC302_27/06/13	-	-
	C	ent sample	ng date / time	25-JUN-2013 15:00	26-JUN-2013 15:00	27-JUN-2013 10:00	-	
Compound	CAS Number	LOR	Unit	EW1301886-022	EW1301886-072	EW1301886-099	-	-
EP080/071: Total Recoverable Hyd	rocarbons - NEPM 201	0 Draft - C	ontinued					
>C34 - C40 Fraction		100	µg/L	<100	<100	<100	-	-
>C10 - C40 Fraction (sum)		100	Hg/L	<100	<100	<100		
EPOBO: BTEXN			-					
Benzene	71-43-2		µg/L	<1	<1	<1	-	-
Toluene	108-88-3	2	49/L	<2	*2	<2		
Ethylbenzene	100-41-4	2	Hg/L	<2	~2	<2	-	
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	*2	<2	<2		
ortho-Xylene	95-47-5	2	HQ/L	<2	<2	<2	-	-
Total Xylenes	1330-20-7	2	µg/L	<2	<2	<2		-
Sum of BTEX		1	µg/L	<t< td=""><td><1</td><td><1</td><td>-</td><td></td></t<>	<1	<1	-	
Naphthalene	91-20-3	5	ug/L	<5	<5	<5	-	-
EP058S: Organochlorine Pesticide	Surrocata	-	-	And in case of the local division of the loc				
Dibromo-DDE	21655-73-2	0,1	5	106	58.9	90,0		-
EP068T: Organophosphorus Pestie	cide Surrogate		-	and the second se				
DEF	78-48-8	0,1	5	78.8	57.5	85.5	-	-
P075(SIM)S: Phenolic Compound	Surrogates	-	-					
Phenol-d6	13127-88-3	0.1	- 16	40.3	41.7	40.2		
2-Chlorophenol-D4	93951-73-6	0,1		63.7	81.2	78.2	-	-
2.4.6-Tribromophenol	118-79-6	0.1	- 5	80.0	89.2	79.4	-	
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	5	75.6	85.7	76.5	-	
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	\$7.9	-	
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17050-07-0	0.1	%	80.6	82,4	82,1		
Toluene-D8	2037-26-5	0.1	5	85.9	89.8	87.1	-	-
4-Bromofluorobenzene	460-00-4	0.1	55	93.9	103	54.3		



Descriptive Results

Sub-Matric: SOIL

Method: Compound	Citent sample ID - Citent sampling date / time	Analytical Heduits
EA200: A5 4964 - 2004 Identificati	on 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 ernall 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 anbestos cement sheeting approx 118 x 40 x 5mm
EA200 Description	TP168_0.1-0.2_26/08/13 - 26-JUN-2015 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 - 28-JUN-2013 10:00	Mid brown ctay soil with some stag grains plus plenty of vegetation and one small piece of degraded and trable asbestos fibre board approx 6 x 5 x 3mm
EA200: Description	TP10_0.0-0.1_28/06/13 + 28-JUN-2013 15:00	Mid brown clay soil with some grey rocks plus some concrete debia and planty of please of bondad wabestos viny title like maternal approx 40 x 25 x 3mm and several email finable accessos 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 fregments of bonded autoestos coment streeting approx it x 4 x 3mm
EA200 Description	TP12A_0.1-0.2_26/06/13 - 26-JUN-2013 15:00	One piece of bonded asbestos curtent sheeting approx 90 x 39 x 5mm
EA200: Description	TP12_0.00.1_26/06/13 - 26-JUN-2013 15:00	Mid grey-brown day soil with some quartz and slag grains and plenty of vegetation.
EA2011 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

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Surrogate Control Limits

Sub-Matrix: SOIL		Recovery	Limits (%)
Compound	CAS Number	Low	Nigh
EP068S: Organochlorine Pesticide	Surrogate		
Dibromo-DDE	21655-73-2	49	145
EP068T: Organophosphorus Pestic	de Surrogate		
DEF	78-48-8	32	142
FP075(SIM)S: Phenolic Compound	Surrogates		
Phenol-d6	13127-88-3	63	127
2-Chlorophenol-D4	93951-73-6	84	126
2.4.6-Tribromophenol	118-79-6	36	136
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	64	130
Anthracene-d10	1719-05-8	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	T	Recovery	Liesis (%)
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide I	Surrogate		
Dibromo-DDE	21655-73-2	30	120
EP068T: Organophosphorus Pestin	de Surrogate		
DEF	78-48-8	26.8	129
EP075(SIM)S: Phenolic Compound	Surrogatus		
Phenol-d6	13127-88-3	10.0	44
2-Chlorophenol-D4	93951-73-6	15.9	102
2.4.5-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20.4	112
Anthracene-d10	1719-05-8	29.6	118
4-Terphenyl-d14	1718-51-0	21.5	126
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	.79	131
4.Bromoffuornhenzena	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 2065	Address	277-289 Woodpark Road Smithfield NSW Australia 2164			
E-mail	colmos@golder.com.au	E-mail	-loren.schiavon@alsglobal.com			
Telephone	+61 02 9478 3900	Telephone	+61 2 8784 8503			
Facsimile	+61 02 9478 3901	Facsimile	+61 2 8784 8500			
Project	137623028	DC Level	NEPM 2013 Schedule B(3) and ALS QCS3 requirement			
Order number	1					
C-O-C number	-	Date Samples Received	10-OCT-2013			
Sampler	KY	Issue Date	17-OCT-2013			
Site	PKC - PRIMARY SCHOOL					
		No. of samples received	: 28			
Quote number	SY/493/13	No, of samples analysed	- 12			

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Surrogate Control Limits



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HIGHT SOLUTIONS CONTENT

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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 tocale developed procedures are employed in the absence of documented alarcharts or by client request.

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

Where a reported less than (<) result in higher than the LOR, this may be due to primary sample extract/digestate division 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 weigh) 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 ES1322003 2. Results have been confirmed by re-extraction and reanalysis.
- EG005T: Poor precision was obtained for Manganese on sample ES1322093 9 due to sample heterogeneity. Results have been confirmed by re-extraction and reanalysis.
- EK057G/EK058G/EK058G:LOR raised for Nitrite/NOx and Nitrate analysis on various samples due to sample matrix.
- · EK667G: Spike failed for Total P analysis due to matrix interferences(Confirmed by re-digestion and re-analysis)

~	NATA Accredited Laboratory 825	Signatories This document has been electronically	signed by the authorized signatories	indicated below. Electronic signing has been carried out in
NATA	Accredited for compliance with ISC/IEC 17025	compliance with procedures specified in 21 C Signatories	FR Part 11. Position	Accreditation Category
		Alex Rossi	Organic Chemist	Sydney Organics
NAMES OF TAXABLE PARTY.		Ankit Joshi	Inorganic Chemist	Sydney Inorganics
ACCREDITATION		Celine Conceicao	Senior Spectroscopist	Sydney Inorganics
		Hoa Nguyen	Senior Inorganic Chemist	Sydney Inorganics
		Pabi Subba	Senior Organic Chemist	Sydney Organics

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Work Order	ES1322093
Client	GOLDER ASSOCIATES
Project	137623028



Sub-Matrix: SOIL (Matrix: SOIL)		Cite	int 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
	C	ent samplik	ng clate / 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
Comparied	CASAbumbar	LOR	Unit	ES1322093-002	ES1322093-004	ES1322093-007	ES1322093-009	ES1322093-012
EA055: Moleture Contect	CHS Nonder		-	and the second se				
Moistum Content (dried @ 103*C)	-	1.0	56	19.6	20.1	11.5	20.9	12.1
ECORET, Total Metals by ICR ACE	100 March 100							
Manganese	7439-96-5	5	mg/kg	248	75	161	103	\$50
Selenium	7782-49-2	5	mg/kg	#5	<5	-15	<5	<5
Arsenic	7440-38-2	5	mg/kg	73	<5	5	11	<5
Cadmium	7440-43-9		mg/kg	6	- 19	1	- <t< td=""><td><1</td></t<>	<1
Chromium	7440-47-3	2	mg/kg	26	31	6	26	32
Copper	7440-50-8	5	mg/kg	717	79	574	83	130
Load	7439-92-1	5	mg/kg	404	14	92	44	10
Nickel	7440-02-0	2	mg/kg	24	9	3	7	30
Zinc	7440-66-6	5	mg/kg	798	76	190	31	111
EG035T: Total Recoverable Marcury by	FIMS		-	and the second se	-			
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	mp/kg	<20	30	<20	-	<20
EK057G: Nitrite as N by Discrete Analy	Sec.			and the second se				
Nitrite as N (Sol.)	-	0.1	mg/kg	<1.0	<1.0		-	-
EK058G: Nitrate as N by Discrete Analy	vser.			and the second				
Nitrate as N (Sol.)		0.1	mg/kg	<1.0	<1.0			-
EK059G: Nitrite plus Nitrate as N (NOx)	by Discrete Ana	lyser	-					
Nitrite + Nitrate as N (Sol.)	-	0.1	mg/kg	<1.0	<1.0			1.000
EK051G: Total Kieldahl Nitrogen By Dis	crete Analyser			and the second sec				
Total Kjeldahl Nitrogen as N	-	20	mg/kg	120	880			-
EK052: Total Nitrogen as N (TKN + NOx	d.			-				
Total Nitrogen as N	-	20	mg/kg	120	880			
EK067G: Total Phosphorus as P by Dis	crete Analyser							
Total Phosphorus as P	-	2	mg/kg	338	186		-	-
EP058A: Organochlorine Pesticides (O	C)		-		and the second se			
atpha-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

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Work Order	E51322093
Chent	GOLDER ASSOCIATES
Present.	137623028



Sub-Matrix: SOIL (Matrix: SOIL)		Ca	mi 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
	ci	ioni zampi	ng date / time	09-OCT-2013 15:00 ES1322093-002	09-OCT-2013 15:00	09-DCT-2013 15:00	09-OCT-2013 15:00	D9-DC7-2013 15-00
Compound	CAS Number	LOR	Line		ES1322093-004	ES1322093-007	E\$1322893-009	E51322093-012
EP068A: Organochlorine Pesticid	es (OC) - Continued				-			
Heptachior	76-44-8	0.05	mg/kg	<0.05	-	<0.05	-	<0.05
Aldrin	309-00-2	0.05	map/kg	~0.05	-	<0.06	-	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	-	<0.05	-	<0.05
Total Chlordane (sum)	-	0.05	mp/kg	<0.05	-	<0.05	-	<0.05
trans-Chlordane	5103-74-2	0,05	mg/kg	-0,05	-	<0.05	-	<0.05
alpha-Endosulfan	959-95-8	0.05	ing/kg	<0.05		<0.05	-	<0.05
cis-Chlordane	5103-71-9	0.05	ma/ka	<0.05	-	<0.05	-	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	-	<0.05	_	<0.05
A.4'-DDE	72-55-9	0.05	mg/kg	<0,05	-	<0.05		< 9.05
Endrin	72-20-8	0.05	mig/kg	<0.05	_	<0.05	-	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05		<0.05	-	<0.05
Endosultan (sum)	118-29-7	0.05	mg/kg	<0.05		<0.05		<0.05
4.4'-DDD	72-54-8	0.05	mig/kg	<0.05	-	<0.05	-	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	-	<0.05		<0,05
Endosulfan sulfate	10.35-07-8	0.05	mig/kg	<0.05	-	<0.05	-	<0,05
4.4 -DDT	50-29-3	0.2	mg/kg	<0.2	1.000	<0.2		<0.2
Endrin ketone	53494-70-5	0.05	ing/kg	<0.05	-	<0.05	-	<0.05
Methoxychiar	72-43-5	0.2	mg/kg	<0.2		<0.2	-	<0.2
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0,05		+0.05	-	<0.05
Sum of DDD + DDE + DDT		0.05	mg/kg	<0.05		=0.05	-	=0.05
EP075(SIM)A: Phenolic Compound	źś	-		-				
Phenol	106-95-2	0.5	mg/kg	<0.5	-	<0.5	-	+0.5
2-Chlorophenol	95-57-8	0.8	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-Mathylphenol	1319-77-3	1	mg/kg	<1	1000	51		*1
2-Nitrophenol	88-75-5	0.5	ing/kg	<0.5		<0.5	-	<0.5
2.4-Dimethylphonol	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
2.4.5-Trichlorophenol	88-05-2	0,5	mg/kg	<0.5	-	<0.5		<0.5
2.4.5-Trichlorophensi	R5-R5-4	0.5	mg/kg	×0.5		<0.5	-	<0.5
Pentachlorophenol	57-86-5	2	mg/kg	2	-	<2	-	-2

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Work Order	ES1322093
Client	GOLDER ASSOCIATES
Project	137623028



Sub-Matrix: SOIL (Matrix: SOIL)		CR	ent 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	09-007-2013 15:00	09-OCT-2013 15:00
Compound	CAS Number	LOR	Linit	ES1322093-002	E51322093-004	ES1322093-007	ES1322093-009	ES1322093-012
EP075(SIM)B: Polyauclear Aromatic Hyd	rocarbons					1		
Naphthalene	91-20-3	0.5	mg/kg	<0.5		<0.5	-	<0.5
Acenaphthylene	208-95-8	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	mgikg	<0.5		<0.5	-	<0.5
Phenanthrene	85-01-8	0.5	mgikg	<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	mgikg	<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)fluoranthen#	207-08-9	0.5	malka	<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	mgikg	<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.liperylene	191-24-2	0.5	mg/kg	<0.5		<0.6		<0.5
Sum of polycyclic aromatic hydrocarbons	-	0.5	mg/kg	<0.5	-	<0.5		-12.5
Benzo(a)pyrene TEQ (zero)	_	0.5	mg/kg	<0.5	-	<0.5	-	*0.5
Benzo(a)pyrene TEQ (half LOR)	_	0.5	mg/kg	0.6	+	0.6	-	0,6
Benzo(a)pyrene TEQ (LOR)	-	0.5	mg/kg	1.2		1.2	-	1.2
EP080/071: Total Petroleum Hydrocarbo	191							
C6 - C9 Fraction	-	10	mgikg	<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	maika	<100	-	<100	-	<100
C10 - C36 Fraction (sum)		50	mg/kg	<50	-	<50	-	<50
EP050/071: Total Recoverable Hydrocart	bons - NEPM 201	3						
C6 - C10 Fraction	C6_C10	10	mg/kg	<10		<10	-	<10
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mgikg	<10	-	<10	-	<10
>C10 - C16 Fraction	>C10_C16	50	mg/kg	<50	-	<50	-	<50
>C16 - C34 Fraction		100	mg/kg	<100	-	<100	-	<100
>C34 - C40 Fraction	-	100	mg/kg	<100	-	<100	-	<100
>C10 - C40 Fraction (sum)	-	50	mg/kg	<50		<50	-	<50

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Sub-Matrix: SOIL (Matrix: SOIL)		CI	ent samplé ID	BH4-0.4-09/10/13	BH4-1.0-09/10/13	BH6-0.1-09/10/13	BH5-1,0-09/10/13	BH6-0.3-09/10/13
	GA	ent sampi	ng 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	E81322093-012
EP080/071: Total Recoverable Hydroc	arbons - NEPM 201	3 - Contin	ued	and the second second		1		
^b >C10 - C16 Fraction minus Naphthalene (F2)	-	50	mg/kg	<50	-	<50		<50
EP080: BTEXN		-		and the second se				
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	-	<2.5
Sum of BTEX	-	0.2	mg/kg	=0.2	-	<0.2	-	<0.2
Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	-	<0.5		<0.5
Naphthalene	91-20-3	1	mg/kg	<1	-	×1		<1
EP068S: Organochlorine Pesticide Su	mogate	-	-					
Dibromo-DDE	21655-73-2	0,1	96	77.1		86.9	-	79.2
EP068T: Organophosphorus Pesticid	Surrogate		-					
DEF	78-48-8	0.1	16	64.4	-	85.2	-	74.6
EP075(SIM)S: Phenolic Compound Su	rogates		and the second second	State of the local division of the local div				
Phenol-d6	13127-88-3	0.1	96	110		110	-	110
2-Chlorophenol-D4	93951-73-0	0.1	76	110	-	103	-	109
2.4.6-Tribromophenol	118-79-6	0.5	76	96.7	-	95.8	-	104
EP075(SIM)T: PAH Surrogates				and the second se				
2-Fluorobiphenyl	321-00-8	0.1	76	96,8		97.6	-	100
Anthracene-d10	1710-06-8	0.1	16	91.2	-	65.6	-	94.1
4-Terphenyl-d14	1718-51-0	0.1	- 16	85.3	\rightarrow	82.8	-	86.9
EP080S: TPH(V)/BTEX Surrogates		-		100 million (100 m				
1.2-Dichloroethane-D4	17060-07-0	0.1	16	91.7	-	99.9	-	104
Toluene-D8	2037-28-5	0.1	76	96.6		104		102
4-Bromofluorobenzene	460-00-4	0.1	16	100	-	109	-	111

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Work Order	ES1322093
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Sub-Matrix: SOIL (Matrix: SOIL)		Ch	ertt 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
	Ch	ent sample	ig 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
Commund	CAS Alumber	LOR	Unit	ES1322093-013	ES1322093-015	ES1322093-017	ES1322093-019	E\$1322093-021
EADER: Mainture Content	Constitution		-					
Moisture Content Idried @ 103*C)	-1	1.0	5.	13.4	16.3	27.2	11.6	18.8
COOST Tetal Metals by ICB ACS		-	-					
Manganese	7439-95-5	5	ma/kg	87	147	16	92	21
Selenium	7782-49-2	5	malka	<5	<5	<5	-45	<5
Arsenic	7440-38-2	5	mg/kg	-45	37	<5	6	<5
Cadmium	7440-43-9	1	mg/kg	<1	1	<1	<t< td=""><td>-<1</td></t<>	-<1
Chromisum	7440-47-3	2	mg/kg	25	20	26	9	30
Copper	7440-50-8	5	ma/kg	137	436	102	82	65
Lead	7439-92-1	5	ma/ka	8	350	9	219	7
Nickel	7440-02-0	2	mg/kg	15	1	3	4	15
Zinc	7440-66-6	5	ma/kg	90	257	54	1150	38
EGOTET: Total Recoverable Marcune	by EIMS	-						
Mercury	7439-97-6	0.1	mpiko	<0.7	0.2	+0.1	0.2	<0.1
EVALE: Ammonia as N				Concession of the local division of the loca	Accession in the second			
Ammonia as N	7664-41-7	20	mg/kg	-	<20	-	<20	
EB058AL Organoshlarina Resticides //	001			-				
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	
heta-RHC	319.85-7	0.05	mo/kg		<0.05	-	<0.05	-
gamma-RHC	58,85,5	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	309-00-7	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	-
Endosultan (sum)	115,29.7	0.05	mg/kg	-	<0.05		<0.05	-

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Work Order	ES1322093
Client	GOLDER ASSOCIATES
Project	137623028



Sub-Matric: SOIL (Matrix: SOIL)		Ca	ent 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
	- (3	ent samoli	na date / lime	05-007-2012 15:00	09-OCT-2013 15:00	09-007-2017 15-00	08.007.30(3)(5:05	05-007-2013-15-00
Compound	CAS Number	LOR	Line	E51322093-013	E51322093-015	ES1322093-017	ES1322093-019	ES1322093-021
EP068A: Organochlorine Pesticid	es (OC) - Continued		-					
4.4'-DDD	72-54-8	0.05	marka	-	<0.05		<0.05	-
Endrin aldehyde	7421-93-4	0.05	ma/ka	-	<0.05	-	<0.05	-
Endosulfan sulfate	1031-07-8	0.05	mg/kd	_	<0.05	-	<0.05	
4.4'-0DT	50-29-3	0.2	mg/kg	-	<0.2	-	<0.2	-
Endrin ketone	53494-70-5	0.05	tho/kg	-	<0.05		<0.05	-
Methoxychior	72-43-5	0.2	mg/kg	-	<0.2	-	<0,2	-
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	malkg	-	<0.05		<0.05	-
Sum of DDD + DDE + DDT	_	0.05	mg/kg	-	×0.05	-	<0.05	-
EP075(SIM)A: Phenolic Compound	ds	-	-	and the second second	-			
Phenol	108-95-2	0.5	-mg/kg	-	<0.5	-	<0,5	-
2-Chiorophenol	95-57-8	0.5	mg/kg	-	<0,5		<0.5	-
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	-	<0.5	-
3-8.4-Methylphonol	1319-77-3	1	mg/kg	-	et.		<1	-
2-Nitrophenol	88-75-5	0.5	mg/kg	(≠0.5		<0,5	-
2,4-Dimethylphenol	105-67-9	0.5	mg/kg	-	×1.5	_	<0.5	_
2.4-Dichlorophenol	120-85-2	0.5	mg/kg		<0.5	-	<0.5	-
2.6-Dichlorophenol	87-65-0	0,5	mg/kg	-	<0.5	-	<0.5	-
4-Chloro-J-methylphenol	59-50-7	0.5	mig/kg	-	<0.5		+0,5	-
2.4.6-Trichlorophenol	88-05-2	0.5	mg/kg		<0.5	-	#0,5	-
2.4.5-Trichlorophenol	95-05-4	0.5	mg/kg		+0.5	-	*0,5	-
Pentachlorophenol	87-85-5	2	mg/kg	-	12		2	
EP075(SIM)B: Polynuclear Aromat	tic Hydrocarbons							
Naphthalene	91-20-3	.0,5	mg/kg	-	≺0,5	-	<0.5	-
Acanaphthylena	208-96-8	0.5	mg/kg	-	<0.5	-	<0,5	-
Aconaphthene	83-32-9	0.5	mg/kg	-	<0.5	-	<0.5	-
Fluorene	66-73-7	0.5	mg/kg	-	<0.5		<0.5	-
Phonanthrone	85-01-8	0.5	mg/kg	(mm) (mm)	×0,5	-	<0.5	
Anthracene	120-12-7	0.5	mg/kg	-	<0.5	-	<0.5	
Fluoranthene	206-44-0	0.5	mg/kg	-	<0.5	_	<0.5	3-0
Pyrene	129-00-0	0.5	mg/kg	-	<0.5	-	<0.5	_
Benz(a)anthracene	58-55-3	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	mgikg	-	<0.5	-	<0.5	-
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	-	<0.5	-	<0.5	-

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Client	GOLDER ASSOCIATES
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Bub-Matrix: SOR. (Matrix: SOIL)		Ch	ent sample /D	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
	CM	ent sample	ng date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-DCT-2013 15:00	09-OCT-2013 15:00
Compaund	CAS Nomber	LOR	Unit	ES1322093-013	ES1322093-015	ES1322093-017	ES1322093-019	ES1322093-021
EP075(SIM)B: Polynuclear Aromatic H	ydrocarbons - Conti	nued						
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)anthraceno	53-70-3	0.5	mg/kg	-	<0.5	-	<0,5	-
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5		<0.5	
Sum of polycyclic aromatic hydrocarbons		0.5	mg/kg		<0.5	-	<0.5	-
Benzo(a)pyrene TEQ (zero)	-	0.5	mg/kg	-	<0.5	-	<0.5	
Benzo(a)pyrene TEQ (half LOR)		0.5	mg/kg	-	0,6		0.6	-
Benzo(a)pyrane TEQ (LOR)		0.5	marka		1.2	-	1.2	
EP080/071: Total Petroleum Hydrocart	ons	-						
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 Hydroci	arbons - NEPM 201							
C6 - C10 Fraction	C6_C10	10	mg/kg	-	<10	-	<10	
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	migikg	- C	<10	-	<10	-
>C10 - C16 Fraction	>C10_C16	50	mg/kg	-	<50	-	<50	
>C16 - C34 Fraction	-	100	mig/kg	+	<100	-	<100	
>C34 - C40 Fraction	_	100	mg/kg		<100	-	<100	-
>C10 - C40 Fraction (sum)		50	mg/kg	-	<50	-	<50	
>C10 - C16 Fraction minus Naphthalene (F2)	-	50	mg/kg	-	<50	-	<50	-
EP080: BTEXN								
Benzene	71-43-2	0,2	mg/kg		<0.2		<0.2	-
Toluene	108-88-3	0,5	mg/kg	-	<0.5	-	<0,5	-
Ethylbonzone	100-41-4	0,5	mg/kg		<0.5		<0,5	
meta- & para-Xylene	105-38-3 108-42-3	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	-
Nophthalene	91-20-3	1	mg/kg	-	<1	-	<1	

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Sub-Matrix: SOIL (Matrix: SOIL)		Cit	erit 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
	CI	ient sampli	ng date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00
Compound	CAS Number	LOR	Unit	ES1322093-013	ES1322093-015	ES1322093-017	ES1322093-019	E51322093-021
EP068S: Organochlorine Pesticide	Surrogate							
Dibrome-DDE	21655-73-2	0.1	%	-	79.0		78,1	-
EP068T: Organophosphorus Pestic	ide Surrogate	-	and the second s					
DEF	78-48-8	0.1	5	-	68.2	-	77.1	-
EP075(SIM)S: Phenolic Compound	Surrogates	_	-					
Phonol-d6	13127-88-3	0,1	55	()	108		112	
2-Chiorophenol-D4	83951-73-6	0.1	%	_	113	-	103	-
2.4.6-Tribromophenol	118-79-6	0.1	- 54		93.3	-	64.6	_
EP075(SIM)T: PAH Surrogates		100	-		and the second se			
2-Fluorobiphenyl	321-60-8	0.1			98.2	-	101	-
Anthracene-d10	1719-08-8	0.1	- 55.	-	92.7	-	90.6	
4-Terphenyi-d14	1718-51-0	0.1	75		86.4	-	84.5	-
EP080S: TPH(V)/BTEX Surrogates				and the second se	and the second second			
1.2-Dichloroethane-D4	17060-07-0	0.1	56		96.0	-	96.8	-
Toluene-D8	2037-26-5	0.1	- 96		97.7		96.9	-
4-Bromofluorobenzene	460-00-4	0.1	- 15	-	104	-	98.3	-

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Sub-Matrix: SOIL (Matrix: SOIL)	Client sample ID			BH1-0.5-09/10/13	BH1-1.0-09/10/13		-	-
	CM	ent sample	g date / time	09-OCT-2013 15:00	09-OCT-2013 15 00	-	-	-
Companied	000 Unt			ES1322093-025	E51322093-026	-		-
FA055: Moisture Content	COND THEMOST		-	Commence of the local	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			-
Moisture Content (dried @ 103*C)	-	1.0	%	29.2	19.0	-	-	
EG005T: Total Metals by ICP-AES		-	-	A REAL PROPERTY AND INCOME.	And the second s			
Manganose	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	<t></t>			-
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	ma/ka	6	42		-	-
Zinc	7440-56-6	5	mg/kg	28	17	-	-	-
EG035T: Total Recoverable Mercure bu	FING	-	and the second					
Mercury	7439-97-6	0,1	mg/kg	<0.1	<0,1	÷++		-
EKOSS: Ammonia as N								
Ammonia as N	7664-41-7	20	mg/kg	-	<20	-		
EP068A: Organochlorine Pesticides (OC	C)	-						
alpha-BHC	319-84-6	0.05	mg/kg	+	<0.05	-	-	
Hoxachlorobenzene (HCB)	118-74-1	0.05	mg/kp	-	<0.05	1.000	1.000	
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		1.000	
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	-	-	3
Dieldrin	60-57-1	0.05	mg/kg	-	<0.05	-	-	
4.4'-DDE	72-55-9	0.05	mg/kg	-	<0.05			
Endrin	72-20-8	0.05	mg/kg	-	<0.05	-		
beta-Endosulfan	33213-65-9	0.05	mg/kg	-	<0.05			-
Endosulfan (sum)	115-29-7	0.05	mg/kg	-	<0.05	-	-	

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Sub-Matrix: SOIL (Matrix: SOIL)		City	int sample ID.	BH1-0.5-09/10/13	BH1-1.0-09/10/13	-	-	-
	0	ient samok	og dale / time	09-OCT-2013 15:00	09-OCT-2013 15:00			
Compound	CAS Number	LOR	Unit	ES1322093-025	ES1322093-026	-	-	-
EP068A: Organochlorine Pasticides	(OC) - Continued		-					
4.4'-000	72-54-8	0.05	mg/kg	-	<0.05	-	-	-
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	\rightarrow	-	-
Endosulfan sulfate	1031-07-8	0.05	mg/kg	-	<0.05	-	4	
4,4'-DDT	50-29-3	0.2	mg/kg		<0.2	-	-	-
Endrin ketone	53494-70-5	0.05	ma/ka	-	<0.05		1.000	
Methoxychlor	72-43-5	0.2	mg/kg	-	<0.2	-	-	-
Sum of Aldrin + Dieldrin	309-00-2/60-57-t	0.05	mg/kg	_	~0.05	-		
Sum of DDD + DDE + DDT	-	0.05	rag/kg		<0.05		-	-
EP075(SIM)A: Phenolic Compounds			-	the second s				
Phenol	108-95-2	0.5	mg/kg		<0.5	-	-	
2-Chlorophenol	95-57-8	0.5	mg/kg	-	<0.5		-	-
2-Methylphenol	95-48-7	0.5	mg/kg	-	<0.5	-	-	
3- & 4-Methylphenol	1310-77-3	1	mg/kg	-	<1	-	-	-
2-Nitrophenol	88-75-5	0.5	mg/kg	-	<0.5			
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	-	<0.5	-	-	-
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	-	<0.5	_	-	
2.6-Dichlorophenol	87-65-0	0.5	mg/kg	_	<0.5	-	-	
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	-	<0.5	-	-	
2.4.5-Trichlorophenol	55-05-2	0.5	mg/kg	-	<0.5		-	
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	-	<0.5	_	-	-
Pentachlorophenol	87-86-5	2	marka	-	4	-	-	
EP075(SIM)B: Polynuclear Aromatic	Hydrocarbons			and the second se			1	
Naphthalene	91-20-3	0.5	mg/kg.	-	<0.5	-	-	-
Acenaphthylene	208-95-8	0.5	mg/kg	-	<0.5	-	-	_
Acenephthene	83-32-9	0.5	mg/kg	-	<0.5	-	-	-
Fluorene	86-75-7	0.5	mg/kg	-	<0.5	-	-	-
Phenanthrene	85-01-8	0.0	mg/kg		<0.5	_	-	-
Anthracene	120-12-7	0.5	mp/kg	_	<0,5	-	-	-
Fluoranthone	208-44-0	0.5	mg/kg	-	<0.5	-	-	-
Pyrene	129-00-0	0.5	mg/kg	-	<0.5	-	-	-
Benz(a)anthracene	56-55-3	0.5	mg/kg	_	<0.5	-	-	
Chrysene	218-01-9	0.5	mg/kg	-	<0.5	-	-	-
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	-	<0,5	-	-	-
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0,5	1	-	-

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Sub-Matrix: SOIL (Matrix: SOIL)		Ch	ent sample ID	BH1-0.5-09/10/13	BH1-1.0-09/10/13	-	-	-
	Client sampling date / lime			09-OCT-2013 15:00	09-OCT-2013 15:00	-	-	
Conserved	CAS Number	LOR	Unit	ES1322093-025	E\$1322093-026	-	-	-
EP075(SIM)B: Polynuclear Aromatic H	vdrocarbons - Cont	beun		and the second se	A COLORADO AND A COLO			
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.fLi)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 Hydrocart	bons							
C6 - C9 Fraction	-	10	mg/ka	-	<10		-	-
C10 - C14 Fraction		50	mg/kg	-	<\$0		-	-
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 Hydroc	arbons - NEPM 201	3	-					
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	-		
>C15 - 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		<\$0	-	-	-
EP080: BTEXN		-						
Benzene	71-43-2	0.2	mg/kg	-	<0.2	-	-	-
Toluene	108-58-3	0.5	mg/kg	-	<0.5	-	-	-
Ethylbenzene	100-61-6	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	2		-

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Sub-Matrix: SOIL (Matrix: SOIL)		Cit	ent sample ID	BH1-0.5-09/10/13	BH1-1.0-09/10/13	-	-	-
	CA	ent sampli	ng date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	-	-	-
Compound	CAS Number	LOR	Unit	ES1322093-025	ES1322093-026	÷	-	-
EP068S: Organochlorine Pesticide !	Surrogate							
Dibromo-DDE	21655-73-2	0,1	74		74.9	-	-	-
EP068T: Organophosphorus Pestic	ide Surrogate							
DEF	78-48-8	0,1	%	-	65.0	-	-	- 1
EP075(SIM)S: Phenolic Compound !	Surrogates							
Phenol-d6	13127-88-3	0,1	- %	-	106	-		-
2-Chlorophenol-D4	93951-73-8	0.1	%	-	111	-	-	-
2.4.6-Tribromophenol	118-79-6	0,1	36		100			
EP075(SIM)T: PAH Surrogates				and the second se				
2-Fluorobiphenyl	321-80-8	0.1	36	-	98.9	-	-	
Anthracene-d10	1719-06-8	0,1	%	-	90,0	-	-	-
4-Terphenyl-d14	1718-51-0	0.1	%	-	84.9	-	-	-
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	-	101	-	-	-
Toluene-D8	2037-26-5	0.1	96	-	96.9	-	-	-
4-Bromofluorobenzene	460-00-4	0.1	96	-	104	-		-

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Surrogate Control Limits

Sub-Matrix: SOIL		Recovery	Limita (%)
Compound	CAS Number	Litw	High
EP068S: Organochlorine Pesticide	Surrogale		
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesti	tide Surrogate		
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound	Surrogates		
Phenol-d6	13127-68-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenal	116-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-05-8	66	128
4-Terphonyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72.8	133.2
Toluene-D8	2037-26-5	73,9	132,1
4-Bromofluorobenzene	460-00-4	71.0	130.0






Environmental Division

CERTIFICATE OF ANALYSIS

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

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

This Certificate of Analysis contains the following information:

NATA Accredited Laboratory 825 Accredited for compliance with Signatories

- · General Comments
- Analytical Results
- Surrogate Control Limits



This	document	has	been	electronically	signed	by	the	authorized	signatories	indicated	below.	Electronic	signing	has	been
carrie	ed out in cor	npilan	ce with	procedures sor	cified in	21 0	FRE	art 11.							

•	ISO/IEC 17025.	Signatories	Position	Accreditation Category	
		Alex Rossi	Organic Chemist	Sydney Organics	
		Alex Rossi	Organic Chemist	Sydney Organics	
01		Ankit Joshi	Inorganic Chemist	Sydney Inorganics	
		Ankit Joshi	Inorganic Chemist	Sydney Inorganics	
		Celine Conceicao	Senior Spectroscopist	Sydney Inorganics	

Environmental Dismon Systemy 40 000 206 (20 Part of the ALS Group An ALS Lineter Company)



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NIGHT SOLUTIONS INCOME PARTY

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Work Order	ES1316167
Client	- PORT KEMBLA COPPER
Project	137623028



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationality 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 surpless.

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)

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Work Order	ES1316167
Client	PORT KEMBLA COPPER
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Sub-Matrix: WATER (Matrix: WATER)		Cle	int sample ID	D1_17/07/13	D4_17/07/13	QC300_17/07/13	-	-
	0	lient sample	ng 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	mpL	567	1650	- 1	-	-
ED037P: Alkalinity by PC Titrator	and the second second	-			and the second se			
Hydroxide Alkalinity as CaCO3	DMO-210-001	1.	mg/L	<1	4	· - /	-	
Carbonate Alkalinity as CaCO3	3812-32-6	.1.	mg/L	<1	<1	++	-	1.00
Bicarbonate Alkalinity as GaCO3	71-52-3	1	img/L	20	9	-		-
Total Alkalinity as CaCO3	_	1.	mg/L.	20	9	-	-	-
ED038A: Acidity			-					1
Acidity as CaCO3	-	1	mg/L	103	99	- 1	-	-
ED041G: Sulfate (Turbidimetric) as SC	14 2- by DA	-		and the second				-
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mgit	122	697	- 1		
ED045G: Chloride Discrete analyser	-	-						
Chloride	16887-00-6	1	Jam	208	270			
ED093E: Dissolved Major Cations				The second s				
Calcium	7440-70-2	1	mgiL	6	3	- 1	-	
Magnesium	7439-95-4	1	ma/L	5	18			
Sodium	7440-23-5	1	mg/L	189	682	-	-	
Potassium	7440-09-7	1	mail	4	3	-		-
EG020E: Dissolved Metals by ICP-MS				Contract of the local division of the local	and the second se			
Aluminium	7429.90.5	0.01	ma/L	0.38	0.76		-	1
Araenic	7440-38-2	0.001	ma/L	0.002	0.001	-		
Cadmium	7440-43-9	0.0001	mg/L	0.0009	<0.0001	-	-	-
Chromium	7440-47-3	0.001	mail	<0.001	<0.001	-	-	-
Cobalt	7440-48-4	0.001	ma/L	0.053	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/t.	0.004	0.012	_	_	
Selenium	7782-49-2	0.01	mg/L	<0.01	<0.01	-	-	-
Zinc	7440-66-8	0.005	mg/L	0.082	0.041	-	-	
Iron	7439-89-8	0.05	mg/L	0.48	<0.05	-	_	-
EG020T: Total Metals by ICB-MS			Constanting of					
Arsenic	7440-38-2	0.001	mg/L	0.004	0.005	<0.001		[
Cadmium	7440-43-9	0.0001	ma/L	0.0011	<0.0001	<0.0001	1.00	-

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Sub-Matrix: WATER (Matrix: WATER)		Cle	nt sample ID	D1_17/07/13	D4_17/07/13	QC300_17/07/13	-	-
	C	ient sample	g date / time	17-JUL-2013 02:30	17-JUL-2013 03:30	17-JUL-2013 15:00	-	-
Compound	CAS Number	LOR	Unit	ES1316167-001	ES1316167-002	ES1316167-003	-	-
EG020T: Total Metals by ICP-MS - Conti	nuede	-						
Chromium	7440-67-3	0.001	mg/L	0.003	0.003	<0.001	-	-
Copper	7440-50-8	0.001	mg/L	0.163	0.062	<0.001		
Nickel	7440-02-0	0.001	mg/L	0.008	0.015	<0.001	-	-
Load	7439-92-1	0.001	mg/L	0.004	0.003	<0.001	-	-
Zinc	7440-66-6	0.005	mg/L	0.105	0.055	<0.005	-	-
Manganese	7439-96-5	0.001	mg/L	0.042	0.150	<0.001	-	-
Selenium	7782-49-2	0.01	mg/L	<0.01	<0.01	<0,01	-	-
EG036F: Dissolved Mercury by FIMS	-	-						
Mercury	7439-97-5	0.0001	img/L	<0.0001	<0.0001	-	-	-
EG035T: Total Recoverable Mercury b	FIMS							
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	-	-
EG051G: Ferrous Iron by Discrete Anal	vser	-		and the second se				
Ferrous Iron		0.05	mg/L	0.45	<0.05	- 1	-	-
ECOE2C: Silica by Discrete Analyzer			-	Contraction of the local division of the loc				
Reactive Silica	-	0,10	mg/L	64.1	112			-
EKOSSG: Ammonia as N by Discrete Ar	alvser			Constant of the local diversion of the local				
Ammonia as N	7664-41-7	0.01	mg/L	0.08	<0.01	-	-	-
EK057G: Nitrite as N by Discrete Anab	ser			Section 2.				
Nitrite as N	-	0.01	mg/L	<0.01	<0.01	-		-
EKOERCI Nitrate as N by Discrete Appl	Near	-	-					
Nitrate as N	14797-55-8	0.01	mg/L	0,02	120	-	-	-
EKOSOG: Nitrito plus Nitrate as N (NOx	hy Discrete An	lyser		and the second se				
Nitrite + Nitrate as N		0.01	mg/L	0.02	120		-	-
EKOEIG: Total Kieldahl Nitronen By Di	scrate Analyser		-					
Total Kieldahl Nitrogen as N		0.1	mg/L	0.8	29.8			-
EVOLUTION TOTAL MILLION OF MUTURE AND	Ox) by Discrete A	nabusar						
Total Nitronen as N		0.1	mg/L	0.8	150	-	-	-
EKOLTO, Total Rhosphorus as R by Dis	crate Analyzer							
Total Phosebons as P	Cereter Analysen	0.01	mg/L	0.47	0.52		-	-
ENGES: Jonic Balance	-		-	All of the local division of the local divis				
Total Anions	-	0.01	meg/L	8.81	-		-	-
Total Anions	_	0.01	meq/L		28.8	-	-	-
Total Cations		0.01	meq/L	8.98	31.4		-	-

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Sub-Malrix: WATER (Matrix: WATER)		Cle	ent sample ID	D1_17/07/13	D4_17/07/13	QC360_17/07/13		-
	0	ient tampi	na chate / time	17-JUL-2013 02:30 ES1318167-001	17. 88. 2012 02:20	17.88.00131500		
Compound	CAS Munhar	LOR	Unit		ES1316167-002	ES1316167-003	-	-
EN055: Jonic Balance - Continued	CHO MUMOU				and the second se	Les P		
Ionic Balance	-	0.01	70	0.97	-	- 1	-	-
Ionic Balance	-	0.01	96	-	4.28	-	-	-
EP058A: Organochloring Posticides	(00)		-	the second s				
alpha-BHC	319-84-6	0.6	pat	-0.5	<0.5	- 1	-	-
Hexachlorobenzene (HCB)	118-74-1	0.5	Jug/L	40.5	<0.5	-	-	-
beta-BHC	319-85-7	0.5	Jugit	-0.5	<0.5	-		-
gamma-BHC	58-89-9	0.5	µg/L	<0.5	<0.5	_	-	_
delta-BHC	319-86-8	0.5	LO/L	<0.5	<0.5	-	-	_
Heptachlor	76-44-8	0.5	HOL	<0.5	<0.6	-		-
Aldrin	309-00-2	0.5	HOL	<0.5	<0.5	_	-	_
Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	<0.5	-	_	-
trans-Chlordane	5103-74-2	0.5	HQ/L	<0.5	<0.5	_	-	_
alpha-Endosulfan	959-98-8	0.5	ugit	<0.5	<0.5	-	-	-
cis-Chlordane	5103-71-9	0.5	ug/L	<0.5	<0.5	-	_	-
Dieldrin	60-57-1	0.5	ug/L	<0.5	<0.5	-	-	-
4.4'-DDE	72-55-9	0.5	Hg/L	<0.5	<0.5	-	-	-
Endrin	72-20-8	0,5	ug/L	<0.5	<0.5	-	-	-
beta-Endosulfan	33213-65-9	0.5	ugit.	<0.5	<0.5	-	-	-
4.4'-DDD	72-54-8	0.5	HOL	<0.5	<0.5	-		-
Endrin aldehyde	7421-93-4	0,5	ug/L	<0.5	<0.5	-	-	-
Endosulfan sulfate	1031-07-8	0.5	HO/L	<0,5	<0.5	-	-	-
4,4'-DDT	50-29-3	2,0	Hg/L	<2.0	<2.0	-	+	-
Endrin ketone	53494-70-5	0.5	µg/L	<0.5	<0.5	-	-	-
Methoxychior	72-43-5	2.0	ug/L	9.0	<2.0	-		-
Total Chlordane (sum)	-	0.5	Hg/L	<0.5	<0.5	-	-	-
Sum of DDD + DDE + DDT		0,5	Hg/L	<0.5	<0.5	-	-	-
Sum of Aldrin + Dieldrin	309-00-2/80-57-1	0.5	Harl	<0.5	<0,5		1.000	-
EP068B: Organophosphorus Pesticid	tes (OP)							
Dichloryos	62-73-7	0,5	µg/L	<0.5	<0.5		-	-
Demeton-S-methyl	919-86-8	0.5	ug/L	<0.5	<0.5	-	-	-
Monocrotophos	6923-22-4	2.0	HQ1L	<2.0	<2.0	-	-	-
Dimethoate	60-51-5	0.5	HB/L	<0,5	<0,5	-	-	
Diazinon	333-41-5	0,5	µg/L	<0,5	<0.5	-	-	+
Chiorpyrifos-methyl	5598-13-0	0,5	Hg/L	<0.5	<0.5	÷-	-	-

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Sub-Matrix: WATER (Matrix: WATER)		Cile	nt sample ID	D1_17/07/13	D4_17/07/13	QC300_17/07/13		-
	C	ent samplin	ig date / time	17-JUL-2013 02:30	17-JUL-2013 03:30	17-JUL-2013 15:00	-	
Compound	CAS Number	LOR	Link	ES1316167-001	ES1316167-002	ES1316167-003	-	
EP068B: Organophosphorus Pesticida	es (OP) - Continued	-						
Parathion-methyl	298-00-0	2.0	ug/L	<2.0	<2.0		-	-
Malathion	121-75-5	0.5	ug/L	<0.5	<0.5	-	-	-
Fenthion	55-38-9	0.5	HOL	≺0.5	<0.5	-	-	-
Chlorpyrifes	2921-88-2	0.5	ug/L	<0.5	<0.5	-	-	-
Parathion	58-38-2	2,0	µg/L	<2.0	<2.0	-	-	-
Pirimphos-ethyl	23505-41-1	0,5	HQ/L	<0.5	<0.5	-	-	-
Chlorfenvinphos	470-90-5	0.5	µg/L.	<0.5	<0.5	-	-	
Bromophos-ethyl	4824-78-6	0,5	Hg/L	<0.5	<0.5	-	-	-
Fenamiphos	22224-92-6	0,5	Pg/L	<0.5	<0.5	-	-	-
Prothiofos	34643-46-4	0.5	Pg/L	<0.5	<0.5	-	-	-
Ethion	563-12-2	0.5	Hg/L	<0.5	<0.5	-		-
Carbophenothion	786-19-6	0.5	ug/L	<0.5	<0.5			1
Azinphos Methyl	86-50-0	0.5	PB/L	<0.5	<0.5	-		-
EP075(SIM)A: Phenolic Compounds			-					
Phenol	108-95-2	1.0	µg/L	kt,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	HOR	<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	ugh	<1,0	<1,0	<1.0	-	-
2.4-Dimethylphenol	105-87-9	1.0	µg/L	<1.0	<1.0	<1.0	-	-
2.4-Dichlorophenol	120-83-2	1.0	yg/L	<1.0	<1.0	<1.0	-	
2.6-Dichlorophenol	87-65-0	1.0	µg/L	<1.0	<1.0	<1.0	-	-
4-Chloro-3-Methylphenol	59-50-7	1.0	ug/L	41.0	<1.0	<1,0	++	
2.4.6-Trichlorophenol	88-06-2	1.0	ug/L	<1.0	<1.0	<1.0	-	-
2.4.5-Trichlorophenol	95-95-4	1.0	µg/L	.41.0	<1.0	<1.0		-
Pentachlorophenol	87-86-5	2.0	µg/L	<2.0	<2.0	<2.0		-
EP075(SIM)B: Polynuclear Aromatic H	lydrocarbons	-						
Naphthalene	91-20-3	1.0	ug/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	J/Q/L	<1.0	<1.0	<1.0		-
Fluorene	86-73-7	1,0	µg/L	<1.0	<1.0	<1,0		-
Phonanthrene	85-01-8	1.0	HOL	+1.0	<1.0	<1.0		-
Anthracene	120-12-7	1.0	ug/L	<1.0	<1,0	<1.0		

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Sub-Matrix; WATER (Matrix; WATER)		Cite	ent sample ID	D1_17/07/13	D4_17/07/13	QC300_17/07/13	-	-
	c	Client sampling date /		17-JUL-2013 02:30	17-JUL-2013 03:30	17-JUL-2013 15:00		-
Compound	CAS Number	LÓR	Linit	E51316167-001	ES1316167-002	ES1316167-003	-	-
EP075(SIM)B: Polynuclear Aromatic Hy	drocarbons - Cont	inued						-
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	<t:0< td=""><td>-</td><td>-</td></t:0<>	-	-
Benz(a)anthracene	56-55-3	1.0	1/g/L	<1.0	<t.0< td=""><td><1.0</td><td>-</td><td></td></t.0<>	<1.0	-	
Chrysenie	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	Pg/L	<1.0	<1.0	<1.0	-	-
Benzo(a)pyrene	50-32-8	0.5	HQ/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	Hg/L	<1.0	<1.0	<1.0	_	-
Benzo(g.h.l)perylene	191-24-2	1,0	PD/L	<1.0	<1.0	<1.0	-	-
Sum of polycyclic aromatic hydrocarbons		0.5	Jug/L	<0.5	<0.5	+0.5	-	-
Benzo(a)pyrene TEQ (WHO)	-	0.5	Vg/L	<0.5	<0.5	<0.5	-	-
EP080/071: Total Petroleum Hydrocarb	ans	-	-					
C6 - C9 Fraction		20	Hg/L	<20	<20	<20		
C10 - C14 Fraction	-	50	alg/L	<50	<50	<50	_	-
C15 - C28 Fraction		100	ug/L	<100	<100	<100	-	-
C29 - C36 Fraction	-	50	Hg/L	<50	<50	<50		-
C10 - C36 Fraction (sum)		50	ug/L	<50	<50	<50	-	-
EP080/071: Total Recoverable Hydrocal	bons - NEPM 201	0 Draft	-					
C6 - C10 Fraction		20	Hg/L	<20	<20	<20	-	-
C6 - C10 Fraction minus BTEX (F1)		20	µg/L	<20	<20	<20		-
>C10 - C16 Fraction		100	ug/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	Jug/L	=100	<100 ×	<100	-	-
EP080: BTEXN	-							
Benzene	71-43-2	1	ug/L	<1	-1	- 41	-	-
Toluene	108-88-3	2	Pg/L	4	9	~2	-	
Ethylbenzene	100-41-4	z	HOL.	4	<2	-42	-	-
meta-& para-Xylene	108-38-3 105-42-3	2	ug1_	<2	2	2	_	_
ortho-Xylene	95-47-6	2	Ug/L	12	<2	<2	-	-
Total Xylenes	1330-20-7	2	HOL	<2	<2	<2	_	-
Sum of BTEX	_	1	. ual.	<1	<1	<1	-	-

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Sub-Matrix: WATER (Metrix: WATER)		Cile	int sample ID	D1_17/07/13	D4_17/07/13	QC300_17/07/13	_	-
	CH	ent samplin	ng 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	ug/L	<5	45	<5		-
EP068S: Organochlorine Pesticide St	urrogate	-						
Dibromo-DDE	21655-73-2	0.1	76	74.3	69.7	/ ==	-	
EP0587: Organophosphorus Pesticid	e Surrogate	-						
DEF	76-48-8	Q.1	%	85.7	77.1		100	
EP075(SIMIS: Phenolic Compound S	urrogates							
Phenol-d6	13127-88-3	0.1	%	24.2	24.4	27.5	++	
2-Chlorophenol-D4	93951-73-6	0.1	%	56.9	55.8	59.4	-	
2.4.6-Tribromophenol	118-79-6	0.1	%	62.5	61,4	68.2	++	
EP075(SIM)T: PAH Surrogates			-					
2-Fluorobiphenyl	321-60-8	0,1	96	64.8	68.7	68.0		
Anthracene-d10	1710-06-8	0.1	%	64.8	68.6	69.2		
4-Terphenyl-d14	1718-51-0	0.1	%	64.2	62,4	64.6	-	
EP080S: TPH/V)/BTEX Surrogates			-					
1.2-Dichloroethane-D4	17080-07-0	0,1	- %	104	103	105	÷	-
Toluene-D8	2037-26-5	0.1	-96	113	115	110	-	-
4-Bromofluorobenzene	460-00-4	0.1	56	112	110	112		-

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Surrogate Control Limits

Sub-Matrix: WATER		Recovery	Limits (%)
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide	Surrogate		
Dibromo-DDE	21655-73-2	30	120
EP068T: Organophosphorus Pestic	ide 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	83951-73-6	15.9	102
2.4.6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-6	20.4	512
Anthracene-d10	1719-06-8	29.6	118
4-Terphenyl-d14	1718-51-0	21.5	126
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128



Appendix D

Laboratory Results Summary Table

Douglas Partners

Table 1: Laborator	v Results Summarv	(All results in ma/ka	unless otherwise stated)

Comula ID	Fill /	Coll Tumo	1			Heav	y Metals		-					TRH	BTEX				F	PAHs		Dhanal				OCP					OPP	Ashestes ID
Sample ID	Natural	Soli Type	As Cd Cr Cu Pb Hg Ni Zr					Zn	F1 F2 F3 F4 Benzene Toluene					Ethyl benzene Total Xylene Total PAH B(a)P TEQ B(a)P Napthalene					Phenoi	Aldrin + Dieldrin	Chlordane	DDT + DDD + DDE	Endosulfan	Endrin	Methoxychlor	Chlorpyrifos	Aspestos ID					
																	Golder (2013) Lab Data													-	
TP1_0.0-0.1_27/06/13	Fill	sandy CLAY	6	<1	13	140	29	<0.1	11	68	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	-
TP1_0.9-1.0_27/06/13	Natural	BEDROCK	<5	<1	14	87	<5	<0.1	9	33	-	-		-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-		-
TP2_0.0-0.1_27/06/13	Fill	sandy CLAY	<5	<1	10	10	9	<0.1	7	18		-		-	-	-	-				-	-	-	-	-	-	-	-	•	-	<u> </u>	-
TP2_0.2-0.4_27/06/13	Natural	CLAY	<5	<1	20	82	7	<0.1	3	12	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	< 0.5	< 0.05	<0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	-
TP3_0.0-0.1_27/06/13	Fill	sandy CLAY	8	3	7	589	120	<0.1	6	152	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	< 0.5	<0.05	<0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	NO
TP3_0.5-0.6_27/06/13	Fill	CLAY	<5	<1	25	80	12	<0.1	4	25	-	-		-	-	-	-					-	-	-	-	-	-	-			<u> </u>	-
TP4_0.0-0.1_27/06/13	Fill	SAND	<5	<1	3	287	126	<0.1	2	32	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	< 0.05	-
TP4_0.5-0.6_27/06/13	Natural	BEDRUCK	9	<	10	/8	71	<0.1	3	10	- 10	-		-		- - 0 E					.0 E		-0.05				- 0.05	- -0.0E	-0.05		-0.05	-
TP5_0.3-0.0_27/06/13 TP5_0.0_1.0_27/06/13	Natural	arayolly CLAY	-5	4	13	407	-/1	<0.1	-2	112	<10	<00	<100 <100	<0.Z	<0.5	<0.5	<0.5	<0.0	<0.0	<0.0	<0.5	<0.5	<0.05	<0.05	<0.03	<0.05	<0.03	<0.00	<0.05	<u.2< td=""><td><0.03</td><td>-</td></u.2<>	<0.03	-
TP6_0.2-0.3_27/06/13	Fill	CWR	37	27	5	2740	216	<0.1	14	500	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	
TP6_0.5-0.6_27/06/13	Natural	silty CLAY	<5	<1	22	61	7	<0.1	4	9	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
TP7 0.3-0.4 27/06/13	Fill	gravelly CLAY	7	<1	20	66	19	<0.1	3	41	<10	<50	<100 <100	<0.2	< 0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	< 0.5	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	NO
TP7 0.5-0.6 27/06/13	Natural	CLAY	<5	<1	24	77	9	<0.1	4	24	-	-		-	-	-	-				-	-	-	-	-	-	-	-		-	· · ·	-
TP8_0.0-0.1_26/06/13	Natural	(Topsoil) sandy CLA	Y 41	10	22	2280	677	0.3	12	397	<10	<50	<100 <100	<0.2	< 0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	<0.5	< 0.5	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	-
TP8_0.9-1.0_26/06/13	Natural	BEDROCK	<5	<1	12	76	<5	<0.1	5	31	-	-		-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	!	-
TP9_0.3-0.4_26/06/13	Fill	silty CLAY	36	11	21	1020	192	0.3	9	443	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	<0.5	<0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	-
TP9_0.5-0.6_26/06/13	Natural	silty CLAY	<5	<1	21	82	10	<0.1	2	17	-	-		-	-	-	-	•	-	•	-	-	-	-	-	-	-		•	-	<u> </u>	
TP10_0.0-0.1_26/06/13	Fill	silty CLAY	31	3	16	422	124	0.2	6	256	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	4.5	0.7	0.6	<0.5	<0.5	<0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	YES + AF
TP10_0.5-0.6_26/06/13	Natural	CLAY	<5	<1	24	88	9	<0.1	4	27	-	-		-	-	-						-	-	-	-	-	-	-			<u>i</u>	-
TP11_0.1-0.2_26/06/13	Fill	SAND	<5	<1	19	201	21	<0.1	6	92	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	YES + AF
TP11_0.9-1.0_26/06/13 TP12_0.0_0.1_26/06/12	Natural	CLAY clavov SAND	<5	<	14	/3	172	<0.1	5	38 107	- 10	-				- - 0 E	-	- 0.5		- 0.5			- -0.0E		-		- 0.05	- - 0.0E	-0.05		-0.05	-
TP12_0.0-0.1_20/00/13 TP12_0.0_1.0_24/04/12	FIII	DEDDOCK	10	- 3	10	114	1/3	0.3	0	00	<10	<00		<u.z< td=""><td><0.5</td><td><0.5</td><td><0.5</td><td><0.0</td><td><0.0</td><td><0.0</td><td><0.5</td><td><0.5</td><td><0.03</td><td><0.05</td><td><0.03</td><td><0.05</td><td><0.03</td><td><0.00</td><td><0.03</td><td><0.2</td><td><0.05</td><td>NU</td></u.z<>	<0.5	<0.5	<0.5	<0.0	<0.0	<0.0	<0.5	<0.5	<0.03	<0.05	<0.03	<0.05	<0.03	<0.00	<0.03	<0.2	<0.05	NU
TP12A 0.1-0.2 20/00/13	Fill	silty CLAY	<:) -	-	- 17			<0.1	- 14		<u> </u>	-		-		-			-		-			-				-		-	· · · · · · · · · · · · · · · · · · ·	YES
TP13 0.5-0.6 26/06/13	Fill	clavev SAND	17	<1	10	171	38	<0.1	4	35	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	
TP13_1.5-1.6_26/06/13	Natural	BEDROCK	<5	<1	15	63	6	<0.1	2	21	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TP14_0.0-0.1_26/06/13	Fill	clayey SAND	11	<1	8	660	415	0.3	5	85	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	<0.5	< 0.5	<0.05	< 0.05	<0.05	<0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	· ·
TP14_0.5-0.6_26/06/13	Natural	silty CLAY	<5	<1	18	60	6	<0.1	2	13	-	-		-	<u> </u>	-	-	-	-	<u> </u>	-	-	-	-	-	-	<u> </u>	-			<u> </u>	<u> </u>
TP15_0.0-0.1_26/06/13	Fill	sandy CLAY	8	4	8	1620	239	0.2	10	231	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	<0.5	< 0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	YES + AF
TP15_0.9-1.0_26/06/13	Natural	BEDROCK	<5	<1	20	139	10	<0.1	18	98	-	-		-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-		-
TP16A_0.2-0.3_26/06/13	Fill	CWR	11	10	12	320	48	0.1	24	369	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	-
TP16A_0.5-0.6_26/06/13	Fill	silty CLAY	33	5	13	335	61	0.2	6	145	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	-
TP16A_0.9-1.0_26/06/13	Fill	silty CLAY	-	-	-	-	-	-	•	·	-	-		-	-	-	-			·	-	-	-		-	-	-	-	· ·	-	<u> </u>	YES
TP16B_0.1-0.2_26/06/13	Fill	sandy CLAY			-	-	-	-	· ·	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	YES
TP20_0.5-0.6_26/06/13	Fill	SILLY CLAY	166	4	19	1330	489	0.8	10	23/	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	< 0.05	YES
TP20_0.9-1.0_20/00/13 TP24_0.0.0.1_26/06/13	Fill	silty CLAY	<0	<1	13	1/190	101	<0.1	0	286	-	·		-	-	-	-	-			-	-	-	-	-	-	-	-		-	<u>⊢</u>	-
TP24_0.0-0.1_20/00/13 TP24_0.5.0.6_26/06/13	Natural		10	4	13	1400	70	0.J	7	200	<10	-50	-100 -100	- 0.2	- 0.5	- 0.5	- 0.5	-05	<0.5	-05	- 0.5	- 0.5		-0.05		<0.05	<0.05		<0.05	<0.2	<0.05	-
TP25_0.0-0.1_26/06/13	Fill	silty CLAY	10	3	9	791	243	0.1	12	514	<10	<50	480 <100	<0.2	<0.5	<0.5	<0.5	43	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP25 0.9-1.0 26/06/13	Fill	silty CLAY	209	4	11	1060	253	0.4	6	200	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP26 0.5-0.6 25/06/13	Fill	silty CLAY	9	<1	22	132	66	0.1	5	154	-			-	- 1	-	-		-		-	-	-	-	-	-	-	-	-	-	· · ·	-
TP26_1.5-1.6_25/06/13	Fill	gravelly CLAY	22	2	17	923	156	0.1	22	179	<10	<50	<100 <100	<0.2	< 0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	< 0.5	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	-
TP27_0.0-0.1_25/06/13	Fill	silty CLAY	<5	<1	6	262	38	<0.1	8	132	-	-		-	-	-	-				-	-	-	-	-	-	-	-	-	-	· · ·	-
TP27_0.5-0.6_25/06/13	Fill	CWR	35	8	12	479	155	0.2	13	404	<10	<50	<100 <100	<0.2	< 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	-
TP28_0.0-0.1_25/06/13	Fill	silty CLAY	26	2	9	2240	397	0.4	12	176	<10	70	1330 220	<0.2	0.6	<0.5	0.5	19.7	1	0.7	0.8	< 0.5	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	-
TP28_0.9-1.0_25/06/13	Natural	silty CLAY	<5	<1	14	72	22	<0.1	6	107		-		-	-	-	-				-	-	-	-	-	-	-	-	•	-	<u> </u>	-
TP29_0.3-0.4_25/06/13	Natural	silty CLAY	13	13	5	333	44	0.1	7	154	<10	<50	<100 <100	<0.2	<0.5	<0.5	<1.0	<0.5	< 0.5	<0.5	<0.5	< 0.5	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	< 0.05	-
TP29_0.9-1.0_25/06/13	Natural	BEDROCK	6	<1	17	99	14	<0.1	6	54	-	•		-	-	-		•	•	•		· ·	-	-	-	-	-		· ·		<u> </u>	-
TP30_0.0-0.1_25/06/13	Natural	silty CLAY	201	10	13	2820	65/	1.2	11	415	<10	<50	<100 <100	<0.2	<0.5	<0.5	<1.0	1.8	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	< 0.05	<0.05	<0.05	<0.05	<0.2	< 0.05	-
1P30_0.5-0.6_25/06/13 BH1.0.5.00/10/14	Natural	CLAY sandy city CLAY	<5 ,r	1	21	249	6/	<0.1	4	15/	·	·	· ·	-	<u> </u>	-		· ·	-	<u> </u>	-		-	-	-		<u> </u>	-			<u>⊢ · </u> /	
BH1-0.3-09/10/10 BH1-1.0.00/10/14	Natural	sandy silty CLAY	<>	<1	32	/4	7	<0.1	0	20	<10	- 50		- (0.2						- 0.5	-05		<0.05	<0.05	<0.05		<0.05		<0.05		<u>⊢</u>	- ·
BH2-0 1-09/10/13	Fill	aravelly sandy CLAY	<>	<1	0	49	210	<0.1	<2 A	1150	<10	<50	<100 <100	<0.2	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5	<0.5 <0.5	<0.5	<0.5 <0.5	<0.5	<0.05 <0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<u> </u>	
BH2-1.0-09/10/13	Natural	sandy CLAT	<5	<1	30	68	7	<0.2	15	38				- 0.2			- 0.0	-0.5		-0.0	U	- 0.0			-0.05		-0.03	- 0.03			<u> </u>	- ·
BH3-0.1-09/10/13	Fill	gravelly sandy CLAY	37	3	20	436	350	0.2	8	257	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5	<0.5	< 0.5	< 0.05	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	<0.2		
BH3-1.0-09/10/13	Natural	silty CLAY	<5	<1	26	102	9	<0.1	3	54	-			-	- 1	-	-	-	-	-	-	-	-	-	-	-	- 1	-		-	· ·	· ·
BH4-0.4-09/10/13	Fill	gravelly silty CLAY	73	5	26	717	404	<0.1	24	798	<10	<50	<100 <100	<0.2	< 0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2	<u> </u>	-
BH4-1.0-09/10/13	Natural	gravelly silty CLAY	<5	<1	31	79	14	<0.1	9	76	-	-		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	<u> </u>	-
BH5-0.1-09/10/13	Fill	SAND	5	1	6	574	92	0.1	3	190	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	< 0.5	<0.5	< 0.5	<0.5	< 0.5	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.2		-
BH5-1.0-09/10/13	Natural	gravelly silty CLAY	11	<1	26	83	44	<0.1	7	31	· [· [-	_ · _	-		· ·	· -	<u> </u>	-	· ·	-	-	-	· ·	·]	-			L · 7	· ·
BH6-0.3-09/10/13	Natural	gravelly silty CLAY	<5	<1	32	130	10	<0.1	30	111	<10	<50	<100 <100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	< 0.5	<0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05	< 0.05	<0.2	<u> </u>	· ·
BH6-1.0-09/10/13	Natural	gravelly silty CLAY	<5	<1	25	137	8	<0.1	15	90		-		-	-	-	L .	<u> </u>	-	· ·	-		-	-	-		· ·	-		-	<u> </u>	
	Min		-			10	1.				10	70	400 000			~ ~	Summary S	statistics	0.7		0.0	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0	0.05	1
	Max		5	1	3	10	6	0.1	2	9	<10	70	480 220	<0.2	0.6	<0.5	0.5	1.8	0./	0.6	0.8	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	· ·
	WidX Modian		209	21	32	2820	6//	1.2	30	1150	<10	70	005 000	<0.2	U.6	<0.5	U.5 1	19.7	1	U./	0.8	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<u.2< td=""><td><0.05</td><td>· ·</td></u.2<>	<0.05	· ·
Arith	matic Moan		16	4	1/	138	110 1	0.2	9.4	95 166 0	·	70.0 4	YU5 220	-	0.4	-	05	4	0.0	0.7	1	-	-	-	-		<u> </u>	-	<u> </u>	-	<u>⊢</u>	· ·
UIIIA briet2	and Deviation	n	50.9	0.1	10.0	4/0.9	160	0.3	d.4 6	202		10.0	/125	-	U.0	-	U.3	7.0	0.9	0.05	0.0	-	-	-	-	· ·		-			<u></u>	- ·
Jidilu	a a DoviduUI	•	33	U		000	100	0.20	U	202	·	·	TLJ -	-	· · · ·	-	Site Assessm	ent Criteria	0.13	0.0J	-		-	ļ	ļ	· ·	<u> </u>	-	<u> </u>	-		· ·
	HIL-A		100	20	100	6000	300	40	400	7400	.	-		-		-	-	300	3	. I	-	100	6	50	240	270	10	6	10	300	160	NAD
HSL-A	Direct Conta	act	-	-	-	-	-	-	-		4400	3300	4500 6300	100	14000	4500	12000	-	-	.	1400	-	-	-	-		-	-		-	-	
HSL-A Vap	our Intrusion	- Sand	- 1	- 1	-	- 1	· ·	-	1 -	·	45	110		0.5	160	55	40	-	-	-	3	-	-	-	-	-	- 1	-		-	· ·	
HSL-A Vap	our Intrusion	- Clay	L -	- 1	1 -	L -	I -	L -	-		50	280		0.7	480	NL	110	-	-	_ ·	5	-		-	-	-	I	-			<u> </u>	- ·
EIL	coarse soils		100	-	520	170	1100	-	160	410	-	-		-	-	-	-	-	-	-	170	-	-	-	180	-	-	-	-			-
El	L fine soil		100	-	660	190	1100	-	280	430	-	-		-	-	-	-	-	-	-	170	-	-	-	180	-	-	-	-	-		-
ESL	coarse soils		-	-	-	-	-	-	-	-	180	120	300 2800	50	85	70	105	-	-	0.7	-	-	-	-	-	-	-	-	-	-		-
ES	SL fine soil				-	-	-	-	<u> </u>	L · ⊥	180	120	1300 5600	65	105	125	45	-	-	0.7	-			-	-		·	-		-		
Managemen	t Limits coars	se soils	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	1 ·	·	· ↓	700	1000	2500 10000	-	<u> </u>	-	-	· ·	-	·	-	· ·	-	-	-	· ·	·	-	\vdash	-	<u>↓ · · /</u>	· ·
Manageme	ent Limits fine	e soils	-		1 -	-	· ·		· ·	· ·	800	1000	3500 10000	-	-	-	-	•	•	· ·	-	-	-	-	-	-	-	-		-	<u> </u>	-

BOLD

Exceedance of HIL A Exceedance of or equal to ELUESL Not tested/not available Value recorded for Avoidor 1254. All other recorded PCBs below POL. Coal Washery Rejects No abselsts detected NEPC, National Environment Protection (Assessment of Site Contamination) Measure 1999 (Amended 2013), Schedule B1, Table 1A (1) Health investigation levels for soil contaminants - HIL A, Residential with garden/accessible soil CRC CARE Cooperative Research Centre for Contamination Measure 1999 (Amended 2013), Schedule B1, Table 1A (1) Health investigation levels for soil contaminants - HIL A, Residential with garden/accessible soil CRC CARE Cooperative Research Centre for Contamination Measure 1999 (Amended 2013), Schedule B1, Table 1A (3) Soil health screening levels for vapour intrusion - HSL & HSL & Low-High density residential for sadn or clay soils at depths of the Environment Technical Report no. 10 Health screening levels for vapour intrusion - HSL & HSL & Low-High density residential for sadn or clay soils at depths of the contamination) Measure 1999 (Amended 2013), Schedule B1, Table 1A (3) Soil health screening levels for vapour intrusion - HSL & HSL & Low-High density residential for sadn or clay soils at depths of the contamination) Measure 1999 (Amended 2013), Schedule B1, Table 1B (6) ESLs for TPH fractions F1 - F4, BTEX and benzo(a)pyrene in soi - urban residential and public open space for coarse and fine soil types NEPC, National Environment Protection (Assessment of Site Contamination) Measure 1999 (Amended 2013), Schedule B1, Table 1B (7) Management Limits for TPH fractions F1 - F4 in soil - Residential Parkland and public open space for coarse and fine soil types NEPC, National Environment Protection (Assessment of Site Contamination) Measure 1999 (Amended 2013), Schedule B1, Table 1B (7) Management Limits for TPH fractions F1 - F4 in soil - Residential Parkland and public open space for coarse and fine soil types Calculated as being TRH - C₀, minus Napthalene TRH > C16-C34 TRH > C34-C40 BOLD CWR NAD HIL - A HSL-A Direct Contact HSL-A Vapour Intrusion EIL ESL Management Limits F1 F2 F3 F3 F4