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CERTIFICATE OF ANALYSIS

Contents :

Report No.	:	4E1239
Attention	:	David Stone
Client	:	Patterson Britton & Partners Pty Ltd
	:	PO Box 515
	:	NORTH SYDNEY
Samples	:	5
Reference/Order	:	Q02012166
Project	:	Q02012166
Received Samples	:	09/07/04
Instructions	:	09/07/04
Date Reported	:	20/07/04

PLEASE SEE FOLLOWING PAGES FOR METHOD LISTING AND RESULTS

RESULTS

All samples were analysed as received. This report relates specifically to the samples as received. Results relate to the source material only to the extent that the samples as supplied are truly representative of the sample source. This report replaces any preliminary results issued. Note that for methods indicated with "#", NATA accreditation does not cover the performance of this service. Three significant figures (or 2 for < 10PQL) are reported for statistical purposes only. Where "Total" concentrations are reported for organic suites of compounds this is the summation of the individual compounds and the PQL is noted for reporting purposes only. This report has been authorized by NATA signatories for PDF format. Refer to the method descriptions for further information.

James McMahon B.Sc.,Ph.D. (Chem.)
Manager - Environmental

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Report No. : 4E1239

Please note: Where samples are collected/submitted over several days, the date on which the last samples were analysed or extracted is reported.
Unless Ferrous Iron is determined on site, the possibility of a ferrous-ferric ratio change may occur.

Method	Description	Extracted	Analysed	Authorised
E2670	Suspended Solids	13/07/04	13/07/04	MCM 101
E2570	Total Nitrogen	14/07/04	14/07/04	MCM 101
E2550	Nitrate-N	13/07/04	13/07/04	MCM 101
E2560	Nitrite-N	13/07/04	13/07/04	MCM 101
E2770	TKN	13/07/04	14/07/04	MCM 101
E2330	Ammonia as N	13/07/04	13/07/04	MCM 101
E2640	Phosphorus-Total	13/07/04	14/07/04	MCM 101
E2630	Dissolved Phosphorus	16/07/04	16/07/04	MCM 101
E2530	Total Hardness	12/07/04	19/07/04	DLU 093
E0142	Total Phenolics	14/07/04	14/07/04	MCM 101
E0080	Organochlorine Pesticides	13/07/04	13/07/04	MNG 095
E0090	Organophosphorus Pesticides	13/07/04	14/07/04	MNG 095
E0110	Polycyclic Aromatic Hydrocarbons	13/07/04	14/07/04	MNG 095
E2395	Chlorophyll-a	13/07/04	13/07/04	MCM 101
E4970	Total Metals by ICP-MS	12/07/04	13/07/04	DLU 093
E4950	Mercury	13/07/04	13/07/04	DLU 093
E2523	Grease & Oil (Gravimetric)	15/07/04	15/07/04	MCM 101

NATA Signatory

Initials	Name	Sections/Methods
MCM	James McMahon	093, 094, 095, 101
MNG	Minh Nguyen	094, 095
MFA	Mark Fahmy	094
LHA	Ly Kim Ha	095
DJA	Dilanthi Jayamanne	094
GTO	Greg Towers	094
DLU	Darrel Luck	093

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Job Number : 4E1239

Client : Patterson Britton & Partners Pty Ltd

Reference : Q02012166

Project : Q02012166

Analyte	Lab No	E125907	E125908	E125909	E125910	E125911
	Sample Id	WSP13US	WSP13DS	WSP13IS	WS301US	WS301DS
	PQL					
E2670 Suspended Solids in Water						
Suspended Solids	1	7	12	2	5	170
Total Nitrogen	0.1	0.7	1.0	5.2	1.4	1.2
E2550 Nitrate as N in Water						
Nitrate as N	0.01	nd	nd	4.99	0.90	0.60
E2560 Nitrite as N in Water						
Nitrite as N	0.01	nd	nd	0.04	nd	0.03
E2770 Kjeldahl Nitrogen in Water						
Kjeldahl Nitrogen	0.1	0.7	1.0	nd	0.4	0.7
E2330 Ammonia as N in Water						
Ammonia as N	0.01	0.30	0.07	nd	0.01	0.07
E2640 Total Phosphorus in Water						
Phosphorus	0.02	0.06	0.11	0.03	nd	0.12
E2630 Dissolved Phosphorus in Water						
Dissolved Phosphorus	0.01	nd	0.01	nd	nd	0.05
E2530 Total Hardness						
Total Hardness as CaCO3	0.5	57	85	140	93	97

PQL = Practical Quantitation Limit
LNR = Samples Listed not Received
nd = <PQL
-- = Not Applicable

Soils : mg/kg (ppm) dry weight unless otherwise specified
Waters : mg/L (ppm) unless otherwise specified in Method Header
Leachates : mg/L (ppm) in leachate unless otherwise specified in Method Header

Refer to Amdel standard laboratory qualifier codes for comments.

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Job Number : 4E1239

Client : Patterson Britton & Partners Pty Ltd

Reference : Q02012166

Project : Q02012166

Analyte	Lab No	E125907	E125908	E125909	E125910	E125911
	Sample Id	WSP13US	WSP13DS	WSP13IS	WS301US	WS301DS
	PQL					
E2395 Chlorophyll-a in Water						
Chlorophyll-a	0.005	nd	nd	nd	nd	nd
E4970 Total Recoverable Metals in Waters						
Chromium	0.005	nd	nd	nd	nd	nd
Lead	0.002	nd	nd	0.006	nd	0.004
Zinc	0.01	nd	nd	nd	nd	0.02
Arsenic	0.002	nd	nd	nd	nd	nd
Copper	0.005	nd	nd	nd	nd	nd
E4950 Total Recoverable Mercury in Water						
Mercury	0.001	nd	nd	nd	nd	nd
E2523 Grease & Oil (Hexane)						
Grease & Oil	5	nd	nd	nd	nd	nd

PQL = Practical Quantitation Limit
LNR = Samples Listed not Received
nd = <PQL
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Job Number : 4E1239

Client : Patterson Britton & Partners Pty Ltd

Reference : Q02012166

Project : Q02012166

Analyte	Lab No	E125907	E125908	E125909	E125910	E125911
	Sample Id	WSP13US	WSP13DS	WSP13IS	WS301US	WS301DS
	PQL					
E0080 OC Pesticides in Water (ug/L)						
HCB	1	nd	nd	nd	nd	nd
a-BHC	1	nd	nd	nd	nd	nd
g-BHC	1	nd	nd	nd	nd	nd
Heptachlor	1	nd	nd	nd	nd	nd
Aldrin	1	nd	nd	nd	nd	nd
b-BHC	1	nd	nd	nd	nd	nd
d-BHC	1	nd	nd	nd	nd	nd
Oxychlordane	1	nd	nd	nd	nd	nd
Heptachlor epoxide	1	nd	nd	nd	nd	nd
Endosulfan 1	1	nd	nd	nd	nd	nd
Chlordane-Trans	1	nd	nd	nd	nd	nd
Chlordane-Cis	1	nd	nd	nd	nd	nd
trans-Nonachlor	1	nd	nd	nd	nd	nd
DDE	1	nd	nd	nd	nd	nd
Dieldrin	1	nd	nd	nd	nd	nd
Endrin	1	nd	nd	nd	nd	nd
DDD	1	nd	nd	nd	nd	nd
Endosulfan 2	1	nd	nd	nd	nd	nd
DDT	1	nd	nd	nd	nd	nd
Endosulfan sulfate	1	nd	nd	nd	nd	nd
Methoxychlor	1	nd	nd	nd	nd	nd
2.4.5.6-TCMX-SURROGATE	1	76%	91%	95%	98%	93%

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Job Number : 4E1239

Client : Patterson Britton & Partners Pty Ltd

Reference : Q02012166

Project : Q02012166

Analyte	Lab No	E125907	E125908	E125909	E125910	E125911
	Sample Id	WSP13US	WSP13DS	WSP13IS	WS301US	WS301DS
	PQL					
E0090 OP Pesticides in Water (ug/L)						
Dichlorvos	10	nd	nd	nd	nd	nd
Mevinphos	10	nd	nd	nd	nd	nd
Ethoprop	10	nd	nd	nd	nd	nd
Phorate	10	nd	nd	nd	nd	nd
Demeton-s-methyl	10	nd	nd	nd	nd	nd
Diazinon	10	nd	nd	nd	nd	nd
Disulfoton	10	nd	nd	nd	nd	nd
Ronnel	10	nd	nd	nd	nd	nd
Chlorpyrifos methyl	10	nd	nd	nd	nd	nd
Chlorpyrifos	10	nd	nd	nd	nd	nd
Merphos	10	nd	nd	nd	nd	nd
Parathion methyl	10	nd	nd	nd	nd	nd
Fenthion	10	nd	nd	nd	nd	nd
Malathion	10	nd	nd	nd	nd	nd
Fenitrothion	10	nd	nd	nd	nd	nd
Prothiofos	10	nd	nd	nd	nd	nd
Stirophos	10	nd	nd	nd	nd	nd
Ethion	10	nd	nd	nd	nd	nd
Bolstar	10	nd	nd	nd	nd	nd
Fensulfothion	10	nd	nd	nd	nd	nd
Azinphos methyl	10	nd	nd	nd	nd	nd
Coumaphos	10	nd	nd	nd	nd	nd
2-nitro-m-xylene-SURROGATE	1	108%	124%	72%	79%	77%

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Leachates : mg/L (ppm) in leachate unless otherwise specified in Method Header

Refer to Amdel standard laboratory qualifier codes for comments.

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Job Number : 4E1239

Client : Patterson Britton & Partners Pty Ltd

Reference : Q02012166

Project : Q02012166

Analyte	Lab No	E125907	E125908	E125909	E125910	E125911
	Sample Id	WSP13US	WSP13DS	WSP13IS	WS301US	WS301DS
	PQL					
E0142 T.Phenolics as Phenol in Water(mg/L)						
Total Phenolics	0.01	nd	nd	nd	nd	nd
E0110 Priority PAH's in Water (ug/L)						
Naphthalene	1	nd	nd	nd	nd	nd
Acenaphthylene	1	nd	nd	nd	nd	nd
Acenaphthene	1	nd	nd	nd	nd	nd
Fluorene	1	nd	nd	nd	nd	nd
Phenanthrene	1	nd	nd	nd	nd	nd
Anthracene	1	nd	nd	nd	nd	nd
Fluoranthene	1	nd	nd	nd	nd	nd
Pyrene	1	nd	nd	nd	nd	nd
Benz(a)anthracene	1	nd	nd	nd	nd	nd
Chryene	1	nd	nd	nd	nd	nd
Benzo(b) & (k)fluoranthene	2	nd	nd	nd	nd	nd
Benzo(a)pyrene	1	nd	nd	nd	nd	nd
Indeno(1.2.3-cd)pyrene	1	nd	nd	nd	nd	nd
Dibenz(a.h)anthracene	1	nd	nd	nd	nd	nd
Benzo(g.h.i)perylene	1	nd	nd	nd	nd	nd
Total USEPA Priority PAHs	1	nd	nd	nd	nd	nd
2-Fluorobiphenyl-SURROGATE	1	82%	87%	93%	83%	78%
Anthracene-D10-SURROGATE	1	85%	94%	99%	93%	82%
p-Terphenyl-D14-SURROGATE	1	85%	94%	100%	91%	85%

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nd = < PQL
-- = Not Applicable

Soils : mg/kg (ppm) dry weight unless otherwise specified
Waters : mg/L (ppm) unless otherwise specified in Method Header
Leachates : mg/L (ppm) in leachate unless otherwise specified in Method Header

Refer to Amdel standard laboratory qualifier codes for comments.

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AMDEL INTERNAL QUALITY ASSURANCE REVIEW.

Job No. 4E1239

General

1. Laboratory QA/QC including Method Blanks, Duplicates, Matrix Spikes, Laboratory Control Samples or CRM's are included in this QA/QC appendix. (Where applicable)
2. Inter-Laboratory proficiency trial results are available upon request.
3. PQLs are matrix dependent and are increased accordingly where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spike or surrogate recoveries.
5. Where 3 and 2 significant figures are reported for > 10x PQL and < 10x PQL respectively, the last figure is uncertain and is provided for statistical purposes only.
6. Samples duplicated or spiked are from this job only and are identified in the following QA/QC report.
7. SVOC analyses on waters are performed on homogenized, unfiltered samples, unless noted otherwise.

Maximum Holding Times for Soils, Sediments and Waters

Parameter	Holding Times
Soils	
Volatile and Semi-Volatile Organic Analysis.	Extracted in 14 days, analysed within 40 days.
Metals	Extracted and analysed within 28 days-6 months.
Inorganics*	Extracted and analysed within 7-28 days.
TCLPs*	Extracted and analysed within 14 days, (Zero Headspace-TCLP 7 days).
Waters	
Volatile Organic Analysis	Analysed within 7 days (USEPA requires 14 days).
Semi-Volatile Organic Analysis	Extracted in 7 days, analysed within 40 days.
Inorganics*	Analysed within 24 hrs-28 days.
Metals (dissolved metals should be supplied field filtered)	Prepared and analysed within 28 days.

* Please refer to 'Preservation Information Chart for Soils, Sediments & Waters' for further information. (ISFORM.098). Holding times may be extended with the use of preservation bottles and/or freezing samples. Holding times can be calculated from dates reported in the body of the report. Tests clearly exceeding holding times will be noted when sufficient information is provided.
Reference: USEPA SW846 and AMDEL SPM-01 (incorporating NEPM Guidelines).

Chain of Custody and Sample Integrity	Yes/NO/NA
Chain of Custody / instructions received with samples	Yes
Custody seals were received intact, if used	NA
Samples were received chilled and in good condition	Yes
Samples received appropriately preserved for all tests	Yes
VOC/SVOC samples were received in teflon lined containers	Yes
Samples received with Zero Headspace	Yes
Chain of Custody completed and attached (if applicable)	Yes

Chromatography Calibration/Acceptence Criteria (if applicable)

Retention time window meets acceptance criteria (+/-2%)	Yes
Reference standard meets acceptance criteria (+/-10%)	Yes
Recalibration standard meets acceptance criteria (+/-15%)	Yes
Internal standard recovery acceptable.	Yes

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AMDEL INTERNAL QUALITY ASSURANCE REVIEW Cont..

Amdel QA/QC Compliance Assessment

	Compliance
Surrogates performed on all appropriate GC analyses and meet acceptance limits (70% - 130% recovery*).	Please see body of report
Matrix Spikes performed once per process batch and at least 1 in 20 samples (Results meet acceptance limits - 70% - 130% recovery* or 80% - 120% recovery* for inorganics in water.)	Please see body of report
Laboratory Control samples performed once per process batch and at least 1 in 20 samples (Results meet acceptance limits - 70% - 130% recovery* in soil or 70%-130%/90-110% recovery* for waters.)	Yes
Laboratory Duplicate samples performed once per process batch and at least 1 in 10 samples	Yes
Laboratory duplicates meet acceptance criteria < 4 PQL - +/- 2 PQL 4-10 PQL - 25-50 or 50% RPD > 10 PQL - 10-30 or 30% RPD	Please see body of report
Method Blanks performed once per process batch and at least 1 in 20 samples (Results not detected at the PQL).	Yes

N/A = Not Applicable.

* Phenols 50% - 130% recovery
* SVOCs 60% - 130% recovery
* Phenoxy Acid Herbicides 60% - 140% recovery

QA/QC Appendix

Please refer to the following pages for the QA/QC data.
For further information on samples or non-conformance in QC protocols please see notations in the body of the report plus comments on the following page.

Additional Comments

James McMahon B.Sc.,Ph.D. (Chem.)
Manager - Environmental

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AMDEL STANDARD LABORATORY QUALIFIER CODES.

Job NO. 4E1239

Qualifier Codes	Description
*	PQLs are raised due to matrix interference.
@	PQLs are raised due to insufficient sample provided for analysis.
$	The mass imbalance indicates the presence of other ions not measured as part of this procedure.
nd	< PQL
--	Not applicable
LNR	The sample was listed on the COC, but not received.
IS	Insufficient sample was supplied to conduct this analysis.
AN	The analysis indicates the presences of an analyte that has been 'tentatively' identified, and the associated numerical value represents it's approximate concentration.
A	Sample results are reported on an 'as received' basis (not moisture corrected).
B	The sample was not received in a suitable timeframe to allow completion within the recommended holding time.
C	This sample was received with headspace.
D	This sample was received with the incorrect preservation for this analysis.
E	The raw data indicates the absence of 0.055g of Copper Sulphate in the sample.
F	This sample contained significant amounts of solids and was therefore analysed by settling and decanting the aqueous phase to avoid including the solid in the analysis portion.
G	This test was performed outside the recommended holding time.
H	This sample contained significant material > 5mm which was removed prior to analysis.
ISD	Insufficient sample was supplied to conduct duplicate analyses.
ISM	Insufficient sample was supplied to conduct matrix spike analyses.
W	The spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.
J	The duplicate %RPD is outside the recommended acceptance criteria. Further analysis indicates sample heterogeneity as the cause.
K	The matrix spike concentration is less than five times the background concentration in the sample, and therfore the spike recovery can not be determined.
L	The surrogate recovery is outside of the recommended acceptance criteria, due to matrix interference.
M	The surrogate recovery is outside of the recommended acceptance criteria. Insufficent sample remains to perform re-analysis.
N	Results are expressed in mg/L (ppm) due to the high concentration of the analyte.
O	The results reported are 'recoverable organics' for this fraction, as the chromatogram and peak shape indicates the presence of a significant concentration of polar compounds.
P	The concentration reported is mainly due to a single peak.
Q	This samples contains volatile halogenated oxygenated or other compounds that are included and quantitated as part of TPH C6-9.
R	Theoretically the total result should be greater or equal to the dissolved concentration. However the difference reported is within the uncertainty of the individual tests.
S	The mass imbalance was equal to or less than 0.2 milli-equivalents.
T	During Kjeldahl digestion, nitrate (> 10mg/L) can oxidise ammonia resulting in a negative TKN interference, which may have occurred for this sample.
U	Theoretically the TKN result should be greater or equal to ammonia concentration. However the difference reported is within the uncertainty of the individual tests.
V	This sample contained significant amounts of sediment which was included in the analysis portion as requested.
SUR	Surrogate recoveries could not be determined due to the dilution required to quantify the analyte.

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Job Number : 4E1239

QAQC : Laboratory Control Sample(s)

Analyte	Level	Level Detected			Recovery Details		
		Result1	Result2	Result3	Rec 1 (%)	Rec 2 (%)	Rec 3 (%)
E2670 Suspended Solids in Water							
Suspended Solids	75	75			99%		
E2550 Nitrate as N in Water							
Nitrate as N	1.0	1.01			101%		
E2560 Nitrite as N in Water							
Nitrite as N	1.0	1.03			103%		
E2770 Kjeldahl Nitrogen in Water							
Kjeldahl Nitrogen	1.0	1.0			101%		
E2330 Ammonia as N in Water							
Ammonia as N	1.0	1.00			100%		
E2640 Total Phosphorus in Water							
Phosphorus	0.4	0.39			98%		
E2630 Dissolved Phosphorus in Water							
Dissolved Phosphorus	1.0	1.08			108%		
E2530 Total Hardness							
Total Hardness as CaCO3	66.2	65			98%		

PQL = Practical Quantitation Limit
-- = Not Applicable
nd = < PQL

(S) Soils : mg/kg (ppm) dry weight
(W) Waters : mg/L (ppm) unless otherwise specified

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Job Number : 4E1239

QAQC : Laboratory Duplicate(s)

Analyte	Dupl A	Dupl B	Average	RPD (%)	Dupl A	Dupl B	Average	RPD (%)
E2670 Suspended Solids in Water (E125907)								
Suspended Solids	7	7	7	0%				
E2550 Nitrate as N in Water (E125907)								
Nitrate as N	nd	nd						
E2560 Nitrite as N in Water (E125907)								
Nitrite as N	nd	nd						
E2330 Ammonia as N in Water (E125907)								
Ammonia as N	0.29	0.30	0.30	3%				
E2630 Dissolved Phosphorus in Water (E125907)								
Dissolved Phosphorus	nd	nd						
E2530 Total Hardness (E125907)								
Total Hardness as CaCO3	56	57	57	1%				

PQL = Practical Quantitation Limit
nd = < PQL
-- = Not Applicable

(S) Soils : mg/kg (ppm) dry weight
(W) Waters : mg/L (ppm) unless otherwise specified

The number in brackets after the method header identifies the sample tested.

QAQC : Method Blank(s)

ANALYTE	Sample ID PQL	Blank1	Blank2	Blank3	Blank4	Blank5
E2670 Suspended Solids in Water						
Suspended Solids	1	nd				
E2550 Nitrate as N in Water						
Nitrate as N	0.01	nd				
E2560 Nitrite as N in Water						
Nitrite as N	0.01	nd				
E2770 Kjeldahl Nitrogen in Water						
Kjeldahl Nitrogen	0.1	nd				
E2330 Ammonia as N in Water						
Ammonia as N	0.01	nd				
E2640 Total Phosphorus in Water						
Phosphorus	0.02	nd				
E2630 Dissolved Phosphorus in Water						
Dissolved Phosphorus	0.01	nd				
E2530 Total Hardness						
Total Hardness as CaCO3	0.5	nd				

PQL = Practical Quantitation Limit
nd = < PQL
-- = Not Applicable

(S) Soils : mg/kg (ppm) dry weight
(W) Waters : mg/L (ppm) unless otherwise specified

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Job Number : 4E1239

QAQC : Matrix Spike(s)

Analyte	Spike Level	Level Detected		Recovery Details			
		Spike 1	Spike 2	Rec 1 (%)	Rec 2 (%)	Average (%)	RPD (%)
E4970 Total Recoverable Metals in Waters (E125907)							
Chromium	0.100	0.100		100%			
Lead	0.100	0.106		106%			
Zinc	0.100	0.10		104%			
Arsenic	0.100	0.101		101%			
Copper	0.100	0.116		116%			
E4950 Total Recoverable Mercury in Water (E125907)							
Mercury	0.01	0.010		100%			

PQL = Practical Quantitation Limit
nd = < PQL
-- = Not Applicable

(S) Soils : mg/kg (ppm) dry weight
(W) Waters : mg/L (ppm) unless otherwise specified

The number in brackets after the method header identifies the sample tested.

QAQC : Laboratory Control Sample(s)

Analyte	Level	Level Detected			Recovery Details		
		Result1	Result2	Result3	Rec 1 (%)	Rec 2 (%)	Rec 3 (%)
E2523 Grease & Oil (Hexane)							
Grease & Oil	50	48			96%		
E4970 Total Recoverable Metals in Waters							
Chromium	0.100	0.107			107%		
Lead	0.100	0.106			106%		
Zinc	0.100	0.11			113%		
Arsenic	0.100	0.115			115%		
Copper	0.100	0.116			116%		
E4950 Total Recoverable Mercury in Water							
Mercury	0.010	0.010			100%		

PQL = Practical Quantitation Limit
-- = Not Applicable
nd = < PQL

(S) Soils : mg/kg (ppm) dry weight
(W) Waters : mg/L (ppm) unless otherwise specified

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Job Number : 4E1239

QAQC : Laboratory Duplicate(s)

Analyte	Dupl A	Dupl B	Average	RPD (%)	Dupl A	Dupl B	Average	RPD (%)
E2395 Chlorophyll-a in Water (E125907)								
Chlorophyll-a	nd	nd						
E4970 Total Recoverable Metals in Waters (E125907)								
Chromium	nd	nd						
Lead	nd	nd						
Zinc	nd	nd						
Arsenic	nd	nd						
Copper	nd	nd						
E4950 Total Recoverable Mercury in Water (E125907)								
Mercury	nd	nd						

PQL = Practical Quantitation Limit
nd = < PQL
-- = Not Applicable

(S) Soils : mg/kg (ppm) dry weight
(W) Waters : mg/L (ppm) unless otherwise specified

The number in brackets after the method header identifies the sample tested.

QAQC : Method Blank(s)

ANALYTE	Sample ID PQL	Blank1	Blank2	Blank3	Blank4	Blank5
E2395 Chlorophyll-a in Water						
Chlorophyll-a	0.005	nd				
E2523 Grease & Oil (Hexane)						
Grease & Oil	5	nd				
E4970 Total Recoverable Metals in Waters						
Chromium	0.005	nd				
Lead	0.002	nd				
Zinc	0.01	nd				
Arsenic	0.002	nd				
Copper	0.005	nd				
E4950 Total Recoverable Mercury in Water						
Mercury	0.001	nd				

PQL = Practical Quantitation Limit
nd = < PQL
-- = Not Applicable

(S) Soils : mg/kg (ppm) dry weight
(W) Waters : mg/L (ppm) unless otherwise specified

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Job Number : 4E1239

QAQC : Matrix Spike(s)

Analyte	Spike Level	Level Detected		Recovery Details			
		Spike 1	Spike 2	Rec 1 (%)	Rec 2 (%)	Average (%)	RPD (%)
E0080 OC Pesticides in Water (ug/L) (E125908)							
HCB	10	9		94%			
a-BHC	10	10		102%			
g-BHC	10	10		103%			
Heptachlor	10	10		100%			
Aldrin	10	10		99%			
b-BHC	10	9		95%			
d-BHC	10	10		105%			
Oxychlordane	10	10		96%			
Heptachlor epoxide	10	10		97%			
Endosulfan 1	10	10		97%			
Chlordane-Trans	10	10		100%			
Chlordane-Cis	10	10		100%			
trans-Nonachlor	10	10		99%			
DDE	20	20		100%			
Dieldrin	10	10		100%			
Endrin	10	10		102%			
DDD	20	19		97%			
Endosulfan 2	10	10		99%			
DDT	20	23		115%			
Endosulfan sulfate	10	10		99%			
Methoxychlor	10	11		108%			

PQL = Practical Quantitation Limit
nd = < PQL
-- = Not Applicable

(S) Soils : mg/kg (ppm) dry weight
(W) Waters : mg/L (ppm) unless otherwise specified

The number in brackets after the method header identifies the sample tested.

amdel

Job Number : 4E1239

QAQC : Laboratory Control Sample(s)

Analyte	Level	Level Detected			Recovery Details		
		Result1	Result2	Result3	Rec 1 (%)	Rec 2 (%)	Rec 3 (%)
E0080 OC Pesticides in Water (ug/L)							
HCB	10	10			95%		
a-BHC	10	10			105%		
g-BHC	10	10			105%		
Heptachlor	10	10			104%		
Aldrin	10	10			102%		
b-BHC	10	9			94%		
d-BHC	10	11			109%		
Oxychlordane	10	10			99%		
Heptachlor epoxide	10	10			101%		
Endosulfan 1	10	10			102%		
Chlordane-Trans	10	11			105%		
Chlordane-Cis	10	10			104%		
trans-Nonachlor	10	10			104%		
DDE	20	21			104%		
Dieldrin	10	11			106%		
Endrin	10	11			112%		
DDD	20	21			106%		
Endosulfan 2	10	10			100%		
DDT	20	23			113%		
Endosulfan sulfate	10	10			103%		
Methoxychlor	10	11			107%		

PQL = Practical Quantitation Limit
-- = Not Applicable
nd = < PQL

(S) Soils : mg/kg (ppm) dry weight
(W) Waters : mg/L (ppm) unless otherwise specified

Job Number : 4E1239

QAQC : Laboratory Duplicate(s)

Analyte	Dupl A	Dupl B	Average	RPD (%)	Dupl A	Dupl B	Average	RPD (%)
E0080 OC Pesticides in Water (ug/L) (E125907)								
HCB	nd	nd						
a-BHC	nd	nd						
g-BHC	nd	nd						
Heptachlor	nd	nd						
Aldrin	nd	nd						
b-BHC	nd	nd						
d-BHC	nd	nd						
Oxychlordane	nd	nd						
Heptachlor epoxide	nd	nd						
Endosulfan 1	nd	nd						
Chlordane-Trans	nd	nd						
Chlordane-Cis	nd	nd						
trans-Nonachlor	nd	nd						
DDE	nd	nd						
Dieldrin	nd	nd						
Endrin	nd	nd						
DDD	nd	nd						
Endosulfan 2	nd	nd						
DDT	nd	nd						
Endosulfan sulfate	nd	nd						
Methoxychlor	nd	nd						

PQL = Practical Quantitation Limit
nd = < PQL
-- = Not Applicable

(S) Soils : mg/kg (ppm) dry weight
(W) Waters : mg/L (ppm) unless otherwise specified

The number in brackets after the method header identifies the sample tested.

QAQC : Method Blank(s)

ANALYTE	Sample ID PQL	Blank1	Blank2	Blank3	Blank4	Blank5
E0080 OC Pesticides in Water (ug/L)						
HCB	1	nd				
a-BHC	1	nd				
g-BHC	1	nd				
Heptachlor	1	nd				
Aldrin	1	nd				
b-BHC	1	nd				
d-BHC	1	nd				
Oxychlordane	1	nd				
Heptachlor epoxide	1	nd				
Endosulfan 1	1	nd				
Chlordane-Trans	1	nd				
Chlordane-Cis	1	nd				
trans-Nonachlor	1	nd				
DDE	1	nd				
Dieldrin	1	nd				
Endrin	1	nd				
DDD	1	nd				
Endosulfan 2	1	nd				
DDT	1	nd				
Endosulfan sulfate	1	nd				
Methoxychlor	1	nd				

PQL = Practical Quantitation Limit
nd = <PQL
-- = Not Applicable

(S) Soils : mg/kg (ppm) dry weight
(W) Waters : mg/L (ppm) unless otherwise specified