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Matrix: SOIL Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method	Container / Client Sample ID(s)	Sample Date	Extraction / Preparation		Analysis			
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074B: Oxygenated Compounds								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,	10-FEB-2012	14-FEB-2012	24-FEB-2012	✓	17-FEB-2012	24-FEB-2012	✓
EP074C: Sulfonated Compounds								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,	10-FEB-2012	14-FEB-2012	24-FEB-2012	✓	17-FEB-2012	24-FEB-2012	✓
EP074D: Fumigants								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,	10-FEB-2012	14-FEB-2012	24-FEB-2012	✓	17-FEB-2012	24-FEB-2012	✓
EP074E: Halogenated Aliphatic Compounds								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,	10-FEB-2012	14-FEB-2012	24-FEB-2012	✓	17-FEB-2012	24-FEB-2012	✓
EP074F: Halogenated Aromatic Compounds								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,	10-FEB-2012	14-FEB-2012	24-FEB-2012	✓	17-FEB-2012	24-FEB-2012	✓
EP074G: Trihalomethanes								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,	10-FEB-2012	14-FEB-2012	24-FEB-2012	✓	17-FEB-2012	24-FEB-2012	✓
EP075A: Phenolic Compounds								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,	10-FEB-2012	17-FEB-2012	24-FEB-2012	✓	20-FEB-2012	28-MAR-2012	✓
EP075B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,	10-FEB-2012	17-FEB-2012	24-FEB-2012	✓	20-FEB-2012	28-MAR-2012	✓
EP075C: Phthalate Esters								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,	10-FEB-2012	17-FEB-2012	24-FEB-2012	✓	20-FEB-2012	28-MAR-2012	✓
EP075D: Nitrosamines								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,	10-FEB-2012	17-FEB-2012	24-FEB-2012	✓	20-FEB-2012	28-MAR-2012	✓
EP075E: Nitroaromatics and Ketones								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,	10-FEB-2012	17-FEB-2012	24-FEB-2012	✓	20-FEB-2012	28-MAR-2012	✓



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Method	Container / Client Sample ID(s)	Sample Date		Extraction / Preparation		Analysis		
		Date extracted	Due for extraction	Due for analysis	Evaluation	Date analysed	Due for analysis	
EP075F: Haloethers								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,A8HA3/2001	10-FEB-2012	17-FEB-2012	24-FEB-2012	24-FEB-2012	20-FEB-2012	28-MAR-2012	✓
EP075G: Chlorinated Hydrocarbons								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,A8HA3/2001	10-FEB-2012	17-FEB-2012	24-FEB-2012	24-FEB-2012	20-FEB-2012	28-MAR-2012	✓
EP075H: Anilines and Benzidines								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,A8HA3/2001	10-FEB-2012	17-FEB-2012	24-FEB-2012	24-FEB-2012	20-FEB-2012	28-MAR-2012	✓
EP075I: Organochlorine Pesticides								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,A8HA3/2001	10-FEB-2012	17-FEB-2012	24-FEB-2012	24-FEB-2012	20-FEB-2012	28-MAR-2012	✓
EP075J: Organophosphorus Pesticides								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,A8HA3/2001	10-FEB-2012	17-FEB-2012	24-FEB-2012	24-FEB-2012	20-FEB-2012	28-MAR-2012	✓
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,A8HA3/2001	10-FEB-2012	14-FEB-2012	24-FEB-2012	24-FEB-2012	17-FEB-2012	24-FEB-2012	✓
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,A8HA3/2001	10-FEB-2012	21-FEB-2012	24-FEB-2012	24-FEB-2012	21-FEB-2012	01-APR-2012	✓
EP080/071: Total Recoverable Hydrocarbons - NIEPM 2010 Draft								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,A8HA3/2001	10-FEB-2012	14-FEB-2012	24-FEB-2012	24-FEB-2012	17-FEB-2012	24-FEB-2012	✓
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,A8HA3/2001	10-FEB-2012	21-FEB-2012	24-FEB-2012	24-FEB-2012	21-FEB-2012	01-APR-2012	✓
EP080: BTEX								
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,A8HA3/2001	10-FEB-2012	14-FEB-2012	24-FEB-2012	24-FEB-2012	17-FEB-2012	24-FEB-2012	✓
Soil Glass Jar - Unpreserved	A9HA2/3001, A9HA1/3001, A8HA1/2001,A8HA3/2001	10-FEB-2012	14-FEB-2012	24-FEB-2012	24-FEB-2012	17-FEB-2012	24-FEB-2012	✓



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Method	Container / Client Sample ID(s)	Sample Date	Extraction / Preparation		Analysis		
			Date extracted	Due for extraction	Date analysed	Due for analysis	
EP216: Perchlorate by LC/MS							
Soil Glass Jar - Unpreserved A9HA1/3001, A8HA1/2001,	A9HA2/3001, A8HA3/2001	10-FEB-2012	21-FEB-2012	09-MAR-2012	21-FEB-2012	21-MAR-2012	✓
EP231: Perfluorooctyl Acids and Sulfonates.							
Soil Glass Jar - Unpreserved A9HA1/3001, A8HA1/2001,	A9HA2/3001, A8HA3/2001	10-FEB-2012	21-FEB-2012	08-AUG-2012	21-FEB-2012	01-APR-2012	✓

Matrix: **WATER** Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method	Container / Client Sample ID(s)	Sample Date	Extraction / Preparation		Analysis		
			Date extracted	Due for extraction	Date analysed	Due for analysis	
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Unfiltered A9HA2/35100212		10-FEB-2012	24-FEB-2012	08-AUG-2012	24-FEB-2012	08-AUG-2012	✓
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Unfiltered A9HA2/35100212		10-FEB-2012	-----	-----	16-FEB-2012	09-MAR-2012	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Amber VOC Vial- NaHSO4 or H2SO4 A9HA2/37100212		10-FEB-2012	23-FEB-2012	24-FEB-2012	24-FEB-2012	24-FEB-2012	✓
EP074B: Oxygenated Compounds							
Amber VOC Vial- NaHSO4 or H2SO4 A9HA2/37100212		10-FEB-2012	23-FEB-2012	24-FEB-2012	24-FEB-2012	24-FEB-2012	✓
EP074C: Sulfonated Compounds							
Amber VOC Vial- NaHSO4 or H2SO4 A9HA2/37100212		10-FEB-2012	23-FEB-2012	24-FEB-2012	24-FEB-2012	24-FEB-2012	✓
EP074D: Fumigants							
Amber VOC Vial- NaHSO4 or H2SO4 A9HA2/37100212		10-FEB-2012	23-FEB-2012	24-FEB-2012	24-FEB-2012	24-FEB-2012	✓
EP074E: Halogenated Aliphatic Compounds							
Amber VOC Vial- NaHSO4 or H2SO4 A9HA2/37100212		10-FEB-2012	23-FEB-2012	24-FEB-2012	24-FEB-2012	24-FEB-2012	✓
EP074F: Halogenated Aromatic Compounds							
Amber VOC Vial- NaHSO4 or H2SO4 A9HA2/37100212		10-FEB-2012	23-FEB-2012	24-FEB-2012	24-FEB-2012	24-FEB-2012	✓
EP074G: Trihalomethanes							
Amber VOC Vial- NaHSO4 or H2SO4 A9HA2/37100212		10-FEB-2012	23-FEB-2012	24-FEB-2012	24-FEB-2012	24-FEB-2012	✓
EP074H: Naphthalene							
Amber VOC Vial- NaHSO4 or H2SO4 A9HA2/37100212		10-FEB-2012	23-FEB-2012	24-FEB-2012	24-FEB-2012	24-FEB-2012	✓



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Matrix: **WATER** Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method	Sample Date	Extraction / Preparation		Analysis		
		Date extracted	Due for extraction	Date analysed	Due for analysis	
EP080/071: Total Petroleum Hydrocarbons						
Amber VOC Vial- NaHSO4 or H2SO4 A9HA2/35100212	10-FEB-2012	23-FEB-2012	24-FEB-2012	23-FEB-2012	24-FEB-2012	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft						
Amber VOC Vial- NaHSO4 or H2SO4 A9HA2/35100212	10-FEB-2012	23-FEB-2012	24-FEB-2012	23-FEB-2012	24-FEB-2012	✓
EP080: BTEXN						
Amber VOC Vial- NaHSO4 or H2SO4 A9HA2/35100212	10-FEB-2012	23-FEB-2012	24-FEB-2012	23-FEB-2012	24-FEB-2012	✓



Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type Analytical Methods	Method	Count		Rate (%)		Quality Control Specification	
		QC	Regular	Actual	Expected	Rate (%)	Evaluation
Laboratory Duplicates (DUP)							
Moisture Content	EA055-103	2	18	11.1	10.0		NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Organic Matter	EP004	1	4	25.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Perchlorate in Soils and Sediments by LC/MS	EP216	1	7	14.3	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Perfluorooctyl Acids and Sulfonates by LC/MS/MS	EP231	2	14	14.3	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Pesticides by GC/MS	EP068	2	11	18.2	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	2	11	18.2	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Semivolatile Organic Compounds	EP075	2	11	18.2	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	2	20	10.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	2	20	10.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	2	17	11.8	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	4	25.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	4	25.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
Organic Matter	EP004	1	4	25.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Perchlorate in Soils and Sediments by LC/MS	EP216	1	7	14.3	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Perfluorooctyl Acids and Sulfonates by LC/MS/MS	EP231	1	14	7.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Pesticides by GC/MS	EP068	1	11	9.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	1	11	9.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Semivolatile Organic Compounds	EP075	1	11	9.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	20	5.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	20	5.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	17	5.9	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	4	25.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	4	25.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
Organic Matter	EP004	1	4	25.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Perchlorate in Soils and Sediments by LC/MS	EP216	1	7	14.3	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Perfluorooctyl Acids and Sulfonates by LC/MS/MS	EP231	1	14	7.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Pesticides by GC/MS	EP068	1	11	9.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	1	11	9.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Semivolatile Organic Compounds	EP075	1	11	9.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	20	5.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	20	5.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	17	5.9	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	4	25.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	4	25.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)							
Perchlorate in Soils and Sediments by LC/MS	EP216	1	7	14.3	5.0	✓	ALS QCS3 requirement
Perfluorooctyl Acids and Sulfonates by LC/MS/MS	EP231	1	14	7.1	5.0	✓	ALS QCS3 requirement



Matrix: **SOIL** Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type	Analytical Methods	Method	Count		Rate (%)		Quality Control Specification
			QC	Regular	Actual	Expected	
Matrix Spikes (MS) - Continued							
Pesticides by GCMS	EP068	1	11	9.1	5.0	✓	ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	1	11	9.1	5.0	✓	ALS QCS3 requirement
Semivolatile Organic Compounds	EP075	1	11	9.1	5.0	✓	ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	20	5.0	5.0	✓	ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	20	5.0	5.0	✓	ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	17	5.9	5.0	✓	ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	4	25.0	5.0	✓	ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	4	25.0	5.0	✓	ALS QCS3 requirement

Matrix: **WATER** Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type	Analytical Methods	Method	Count		Rate (%)		Quality Control Specification
			QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)							
Total Mercury by FIMS	EG035T	2	20	10.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	2	20	10.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	2	20	10.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	2	50.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
Total Mercury by FIMS	EG035T	1	20	5.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	5.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	20	5.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	2	50.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
Total Mercury by FIMS	EG035T	1	20	5.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	5.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	20	5.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	2	50.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)							
Total Mercury by FIMS	EG035T	1	20	5.0	5.0	✓	ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	5.0	5.0	✓	ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	20	5.0	5.0	✓	ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	2	50.0	5.0	✓	ALS QCS3 requirement



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Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055-103	SOIL	A gravimetric procedure based on weight loss over a 12 hour drying period at 103-105 degrees C. This method is compliant with NEPM (2010 Draft) Schedule B(3) Section 7.1 and Table 1 (14 day holding time).
Total Metals by ICP-AES	EG005T	SOIL	(APHA 21st ed., 3120; USEPA SW 846 - 6010) (ICPAES) Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (1999) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	AS 3550, APHA 21st ed., 3112 Hg - B (Flow-injection (SnCl ₂)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl ₂ which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3)
Organic Matter	EP004	SOIL	AS 1289.4.1.1 - 1997., Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM (1999) Schedule B(3) (Method 105)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 504)
Pesticides by GCMS	EP068	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (1999) Schedule B(3) (Method 504,505)
TPH - Semivolatile Fraction	EP071	SOIL	(USEPA SW 846 - 8015A) Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C36. This method is compliant with NEPM (1999) Schedule B(3) (Method 506.1)
Volatile Scan for Unknowns	EP072	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS and unknowns are identified by comparison of peaks with the NIST library. Semi-quantification is by comparison with the closest eluting internal standard.
Semivolatile Scan for Unknowns	EP073	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Capillary GC/MS and unknowns are identified by comparison of peaks with the NIST library. Semi-quantification is by comparison with the closest eluting internal standard.
Volatile Organic Compounds	EP074	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 501)
Semivolatile Organic Compounds	EP075	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (1999) Schedule B(3) (Method 502)
TPH Volatiles/BTEX	EP080	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 501)
Perchlorate in Soils and Sediments by LC/MS	EP216	SOIL	US EPA Method 6850: 5 g of sample is extracted with 25 mL of water acidified with acetic acid, filtered with a 0.2 µm filter (to extend extract holding time) and analysed by LC/MS in ESI (negative) mode.
Perfluorooctyl Acids and Sulfonates by LC/MS/MS	* EP231	SOIL	In-House. A portion of soil is soaked in sodium hydroxide followed by extraction with methanol. The extract is neutralised with HCl and an aliquot taken to dryness, made up in mobile phase. Analysis is by LC/MS/MS, ESI Negative Mode using MRM.



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Analytical Methods	Method	Matrix	Method Descriptions
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	(APHA 21st ed., 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020): The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Mercury by FIMS	EG035T	WATER	AS 3550, APHA 21st ed. 3112 Hg - B (Flow-injection (SnCl ₂)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl ₂ which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
TPH - Semivolatle Fraction	EP071	WATER	USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Volatile Organic Compounds	EP074	WATER	USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	WATER	USEPA SW 846 - 8270D Sample extracts are analysed by Capillary GC/MS in SIM Mode and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
TPH Volatiles/BTEX	EP080	WATER	USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	USEPA 200.2 Mod. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM (1999) Schedule B(3) (Method 202)
Organic Matter	EP004-PR	SOIL	AS 1289 4.1.1 - 1997., Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM (1999) Schedule B(3) (Method 105)
Sample Extraction for Perchlorate	EP216-PR	SOIL	US EPA 6850.
Sample Extraction for Perfluoroalkyl Compounds	EP231-PR	SOIL	In-House
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	(USEPA SW 846 - 5030A) 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids (Option A - Concentrating)	ORG17A	SOIL	In-house, Mechanical agitation (tumbler). 20g of sample, Na ₂ SO ₄ and surrogate are extracted with 150mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Tumbler Extraction of Solids (Option B - Non-concentrating)	ORG17B	SOIL	In-house, Mechanical agitation (tumbler). 10g of sample, Na ₂ SO ₄ and surrogate are extracted with 20mL 1:1 DCM/Acetone by end over end tumble. The solvent is transferred directly to a GC vial for analysis.
Digestion for Total Recoverable Metals	EN25	WATER	USEPA SW846-3005 Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)



Page : 11 of 12
Work Order : EM1201441
Client : GOLDR ASSOCIATES
Project : 117613201

Preparation Methods	Method	Matrix	Method Descriptions
Separatory Funnel Extraction of Liquids	ORG14	WATER	USEPA SW 846 - 3510B 500 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using 60mL DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2). ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.



Page : 12 of 12
 Work Order : EM1201441
 Client : GOLDER ASSOCIATES
 Project : 117613201

Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report. Surrogate recovery limits are static and based on USEPA SW846 or ALS-QW/EN/38 (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: SOIL

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP075D: Nitrosamines	2570835-008	----	Methapyriene	91-80-5	18.7 %	24.4-143%	Recovery less than lower control limit
EP075E: Nitroaromatics and Ketones	2570835-008	----	1-Naphthylamine	134-32-7	4.4 %	10-84%	Recovery less than lower control limit
Matrix Spike (MS) Recoveries							
EP231: Perfluorooctyl Acids and Sulfonates.	EM1201441-001	A9HA1/3001	PFOS	1763-23-1	Not Determined	----	MS recovery not determined, background level greater than or equal to 4x spike level.

- For all matrices, no Method Blank value outliers occur.
- For all matrices, no Duplicate outliers occur.

Regular Sample Surrogates

- For all regular sample matrices, no surrogate recovery outliers occur.

Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

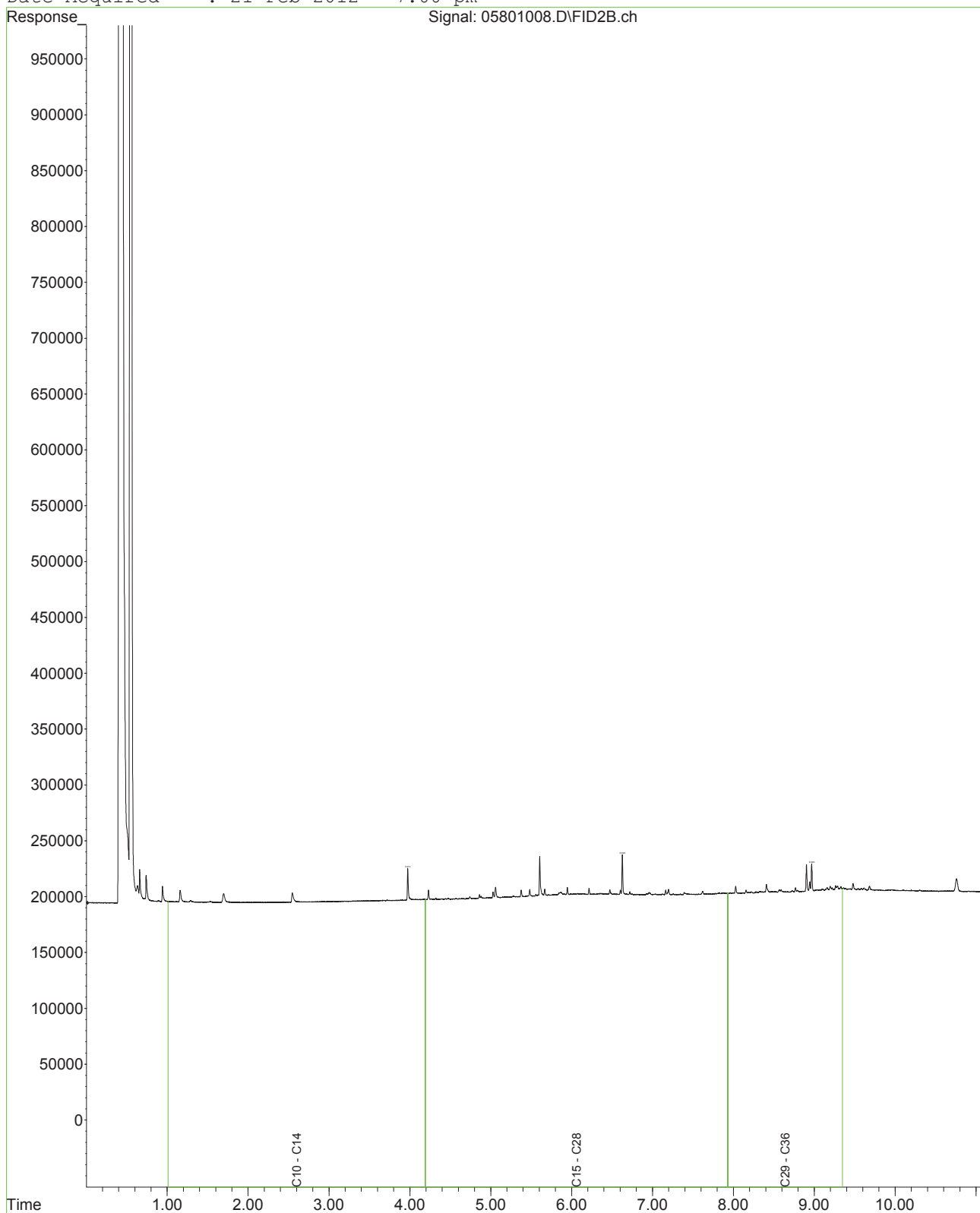
- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

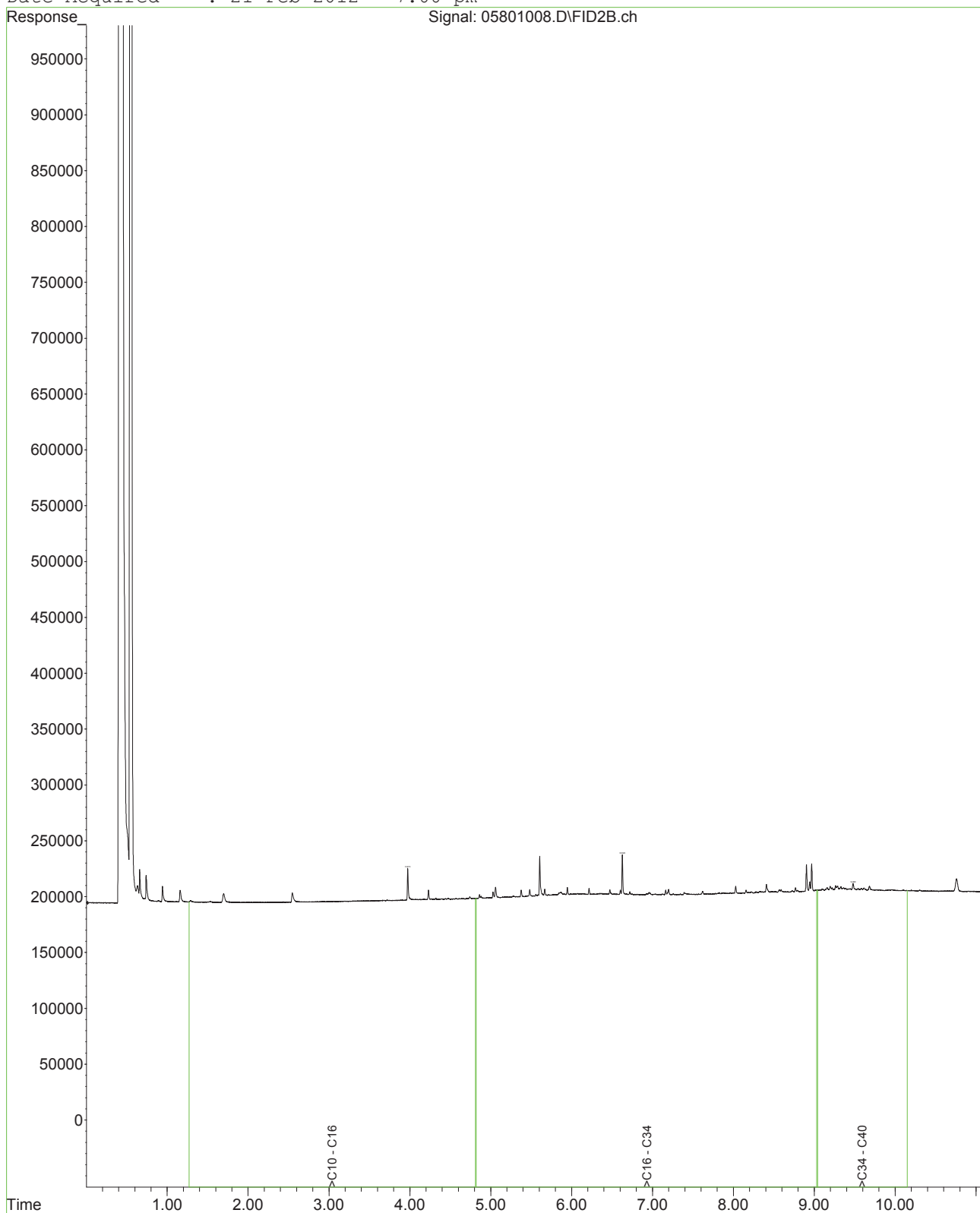
The following report highlights breaches in the Frequency of Quality Control Samples.

- No Quality Control Sample Frequency Outliers exist.

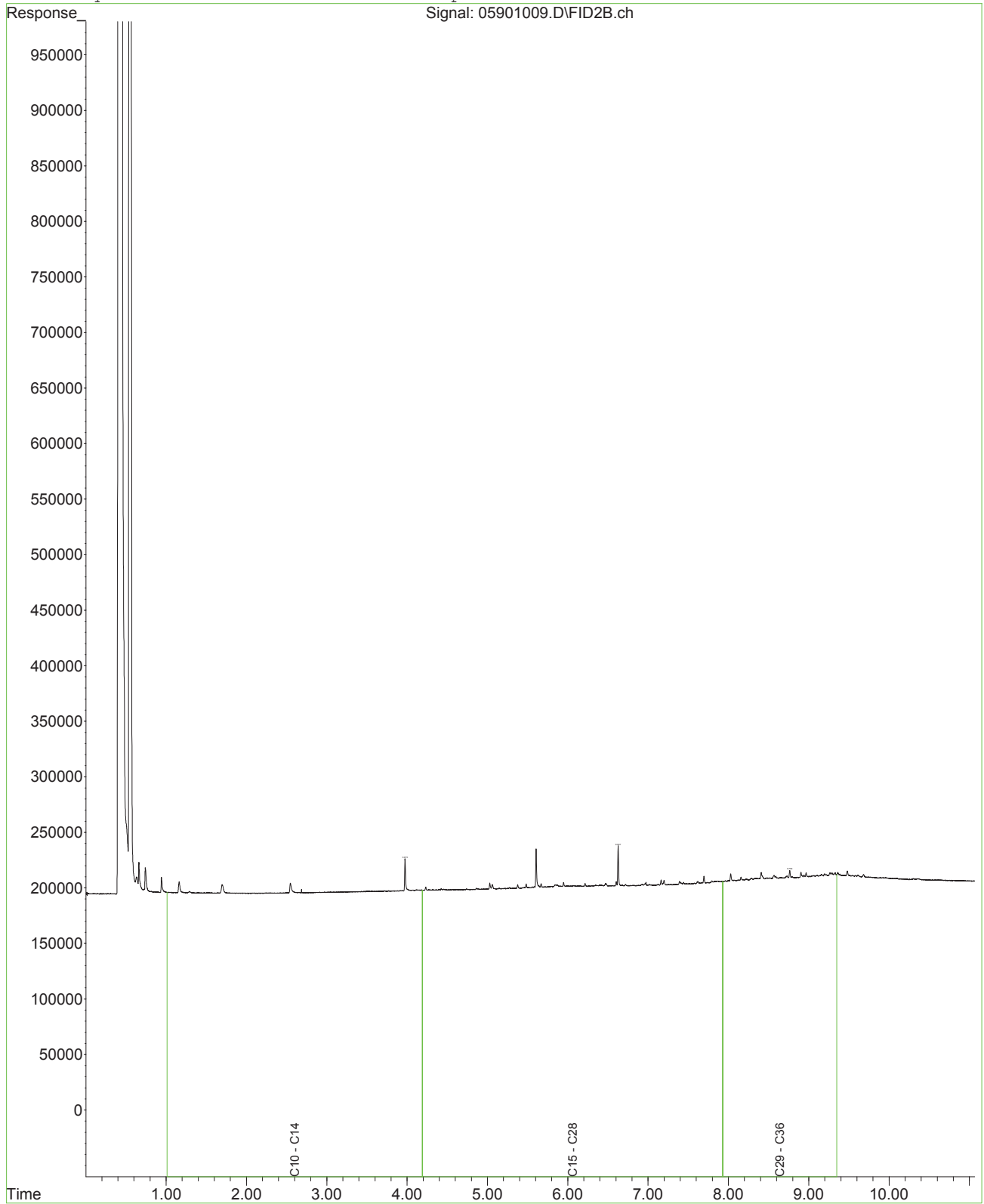
Fraction Scheme :
Data File : 05801008.D
Laboratory Number: EM1201441-001
Sample ID : A9HA1/3001
Date Acquired : 21 Feb 2012 7:00 pm



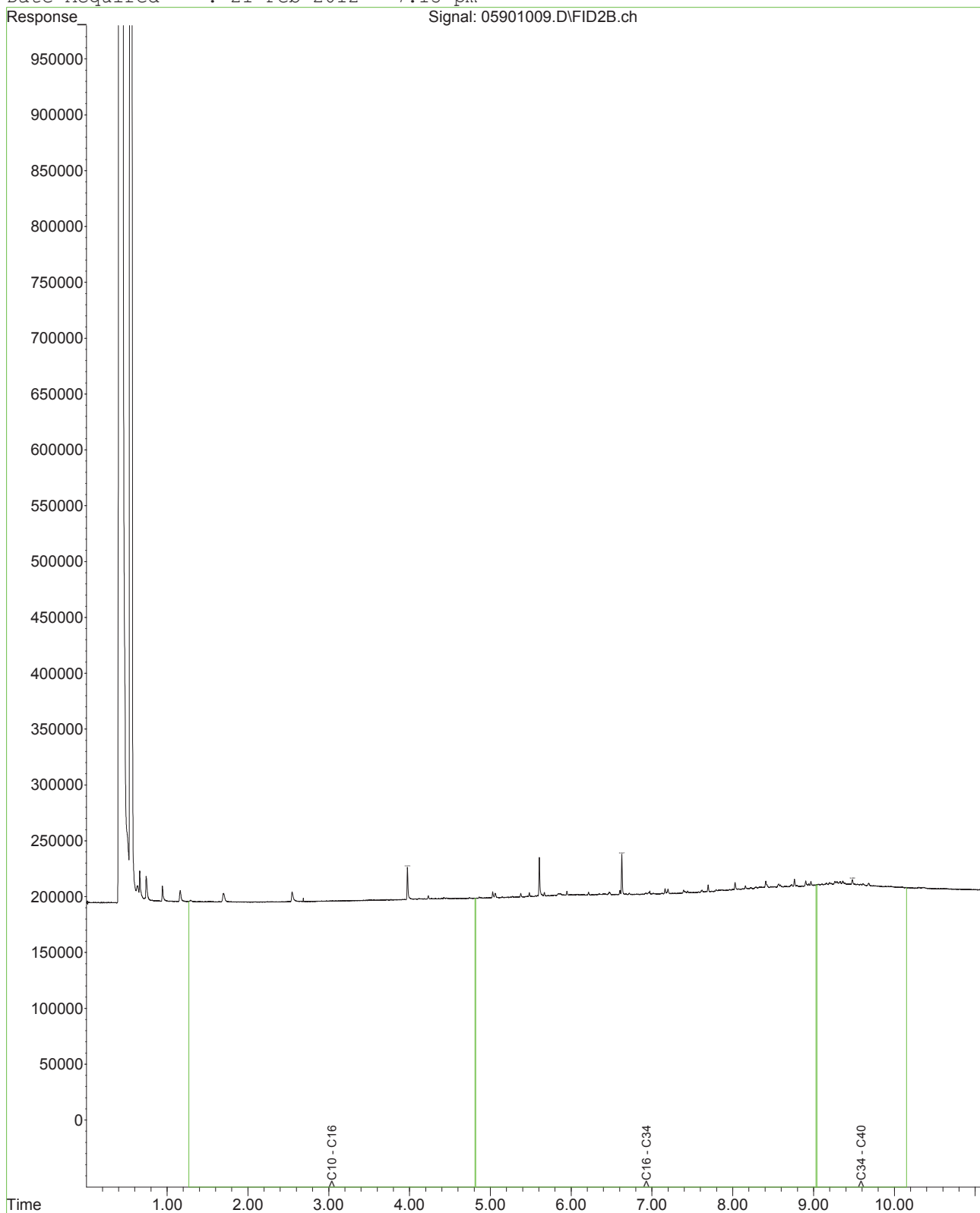
Fraction Scheme :
Data File : 05801008.D
Laboratory Number: EM1201441-001
Sample ID : A9HA1/3001
Date Acquired : 21 Feb 2012 7:00 pm



Fraction Scheme :
Data File : 05901009.D
Laboratory Number: EM1201441-002
Sample ID : A9HA2/3001
Date Acquired : 21 Feb 2012 7:15 pm



Fraction Scheme :
Data File : 05901009.D
Laboratory Number: EM1201441-002
Sample ID : A9HA2/3001
Date Acquired : 21 Feb 2012 7:15 pm





CHAIN OF CUSTODY

GOLDER ASSOCIATES PTY LTD
 BUILDING 7, BOTANICCA CORPORATE PARK
 570 - 588 SWAN STREET,
 RICHMOND, VICTORIA 3121.

Tel: (03) 8862 3500
 Fax: (03) 8862 3501

Golder Job Number: 117613201
 Job Location: Fiskville
 Laboratory Issued To: ALS Springvale
 Order No.:
 Sampled By (Golder): RM
 Golder Job Contact: Roberto Murgia / Niamh McCormack
 Golder Contact Email: rmurgia@golder.com.au / NMcCormack@golder.com.au

# OBSERVATIONS	SAMPLE DATE	SAMPLE NUMBER TAAXXX/MONN	SAMPLE TYPE	SAMPLE DEPTH (m)	No. OF CONTAINERS
1	10/02/2012	A9HA1/3001	Soil	0.3-0.5	5
2	10/02/2012	A9HA2/3001	Soil	0.3-0.5	5
3	10/02/2012	A8HA1/2001	Soil	0.3-0.5	5
4	10/02/2012	A8HA3/2001	Soil	0.3-0.5	5
5	10/02/2012		Soil		5
6	10/02/2012		Soil		5
7	10/02/2012		Soil		5
8	10/02/2012	A9HA2/37100212	TB		2
9	10/02/2012	A9HA2/350100212	Rins		2

TPH	BTEX	Metals	PAH	Phenols	VOC (full & unknown scan)	SVOC (full & unknown scan)	Pesticides (OC & OP)	PCBs	Perchlorates	PFOs/POA	TOC
X	X	X	X	X	X	X	X	X	X	X	X

Environmental Division
 Melbourne
 Work Order
 EM1201441



Telephone: +61-3-8549-9600

Special Instructions:

TURN AROUND TIME REQUIRED
 1 Working Day 2 Working Days 3 Working Days 4 Working Days 5 Working Days (standard) Other

SAMPLE RECEIPT
 Relinquished by: Roberto Murgia
 Organisation: Golder Associates
 Date: 10/02/2012
 Time: 15:30

ANALYTICAL SCHEDULE
 Relinquished by: Roberto Murgia
 Organisation: Golder Associates
 Date: 10/02/2012
 Time: 15:30

RECEIVING LABORATORY TO CONFIRM RECEIPT OF ANALYTICAL SCHEDULE BY RETURN FAX TO: (03) 8862 3501

Received by: *RM* Date: 10/2/2012
 Organisation: GOLDER
 Received by: *RM* Date: 10/2/2012
 Organisation: GOLDER

SAMPLE STATUS
 DELIVERED BY: COURIER/LAB Security Sealed
 GOLD Chilled
 RECEIVED BY: FAX Frozen
 HAND Ambient

Observations to Assist Analysis and OH&S
 C - Expected to be Highly Contaminated HS - Expected High Salinity
 N - NAPL Sample HOC - Expected High Total Organic Carbon

Original (white) - Laboratory
 Duplicate (yellow) - Project File
 Triplicate (pink) - COC Book

S - Sheen
 O - Odourous

Checked By: _____ Date: _____



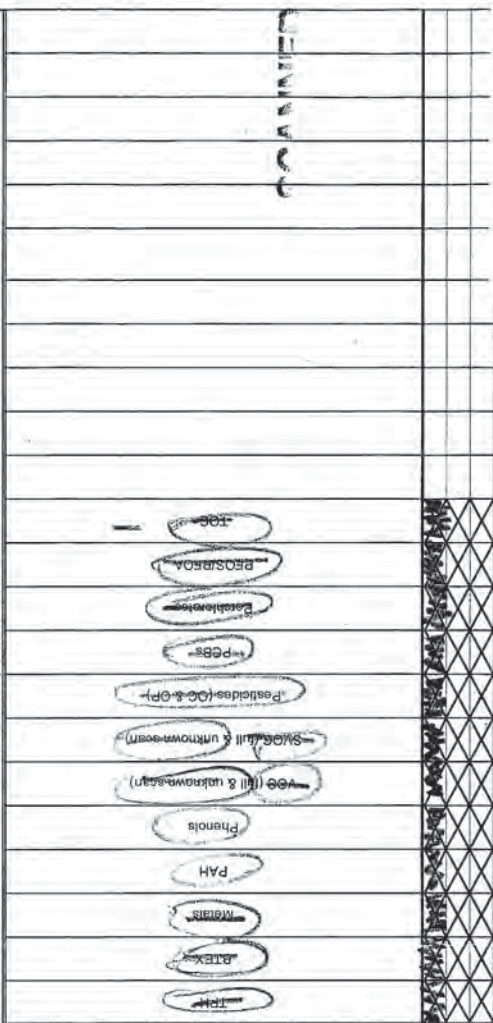
CHAIN OF CUSTODY

GOLDER ASSOCIATES PTY LTD
BUILDING 7, BOTANICCA CORPORATE PARK
570 - 588 SWAN STREET,
RICHMOND, VICTORIA 3121.

Tel: (03) 8862 3500
Fax: (03) 8862 3501
Page 1 of 1

No.

Golder Job Number: 117613201
Job Location: Fiskville
Laboratory Issued To: ALS Springvale
Order No.:
Sampled By (Golder): RM
Golder Job Contact: Roberto Murgila / Niamh McCormack
Golder Contact Email: rmurgila@golder.com.au / NMcCormack@golder.com.au



# OBSERVATIONS	SAMPLE DATE	SAMPLE NUMBER TAAxxx/MQNN	SAMPLE TYPE	SAMPLE DEPTH (m)	No. OF CONTAINERS
1	10/02/2012	A9HA1/3001	Soil	0.3-0.5	5
2	10/02/2012	A9HA2/3001	Soil	0.3-0.5	5
3	10/02/2012	A8HA1/2001	Soil	0.3-0.5	5
4	10/02/2012	A8HA3/2001	Soil	0.3-0.5	5
5	10/02/2012		Soil		5
6	10/02/2012		Soil		5
7	10/02/2012		Soil		5
8	10/02/2012	A9HA2/37100212	TB		2
9	10/02/2012	A9HA2/35100212	Rins		4

Environmental Division
Melbourne
Work Order
13/EM1201441



Telephone +61-3-9549 9500

Special Instructions:

TURN AROUND TIME REQUIRED
 1 Working Day
 2 Working Days
 3 Working Days
 4 Working Days
 5 Working Days (standard)
 Other

DELIVERED BY:
 COURIER/LAB
 GOLDER
 SECURITY SEALED
 CHILLED
 FROZEN
 AMBIENT

RECEIVED BY:
 FAX
 HAND

Received by: *RM* Date: *10/2*
 Organisation: *ALS* Time: *5:30 PM*

Received by: *RM* Date: *10/02/2012*
 Organisation: *ALS* Time: *15:30*

ANALYTICAL SCHEDULE
 Date: *10/02/2012*
 Time: *15:30*

RECEIVING LABORATORY TO CONFIRM RECEIPT OF ANALYTICAL SCHEDULE BY RETURN FAX TO: (03) 8862 3501

Observations to Assist Analysis and OH&S
C - Expected to be Highly Contaminated
N - NAPL Sample

S - Sheen
O - Odorous

Original (white) - Laboratory
Duplicate (yellow) - Project File
Triblicate (pink) - COC Book

Checked By: *RM* Date: *10/2/12*

Form F12-b RL8 Aug 06

Peter Ravlic

From: Samantha Smith
Sent: Tuesday, 14 February 2012 3:10 PM
To: Wendy Hoang
Cc: Peter Ravlic
Subject: RE: regarding wo: EM1201441

Hi Wendy,

Can you please only log for metals, BTEX and TPH C6-C9. The PAH and TPH C10-C36 will be non compliant.

Regards,

How was your customer experience? [Please send us your feedback](#) (click the link)

Samantha Smith
SENIOR PROJECT MANAGER

ALS | Environmental (Traditional Environmental Group)

Address
4 Westall Road
Springvale VIC 3171

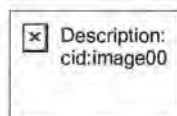
PHONE +61 3 8549 9644
FAX +61 3 8549 9601

Winner of the inaugural CARE Award 2011 - Sustainable Technology & Innovation:
Reduction in Sample Volumes - Improving quality, safety, efficiency and sustainability in environmental practices



www.alsglobal.com

 Please consider the environment before printing this email.



From: Wendy Hoang
Sent: Tuesday, 14 February 2012 12:20 PM
To: Samantha Smith
Subject: regarding wo: EM1201441

Hey Sam,

Regarding sample 6 in attached COC, client has supplied unpreserved plastic for semi volatile organic.
Can you please confirm with client whether we are to analyse the organics from the bottle.
Thanks!

Wendy

14/02/2012

ANALYTICAL RESULTS SHEET

EP-073

Semivolatile Scan for Unknowns

(20 Largest Peaks > LOR)

SHEET413/1

Batch No.: EM1201497

Units : mg/kg

Sample I.D. : 1

Client I.D. : A6PT4/2001

Analyst : PTN

Sample Amt (g) : 20.79

Final Volume (mL): 5

Matrix : Soil

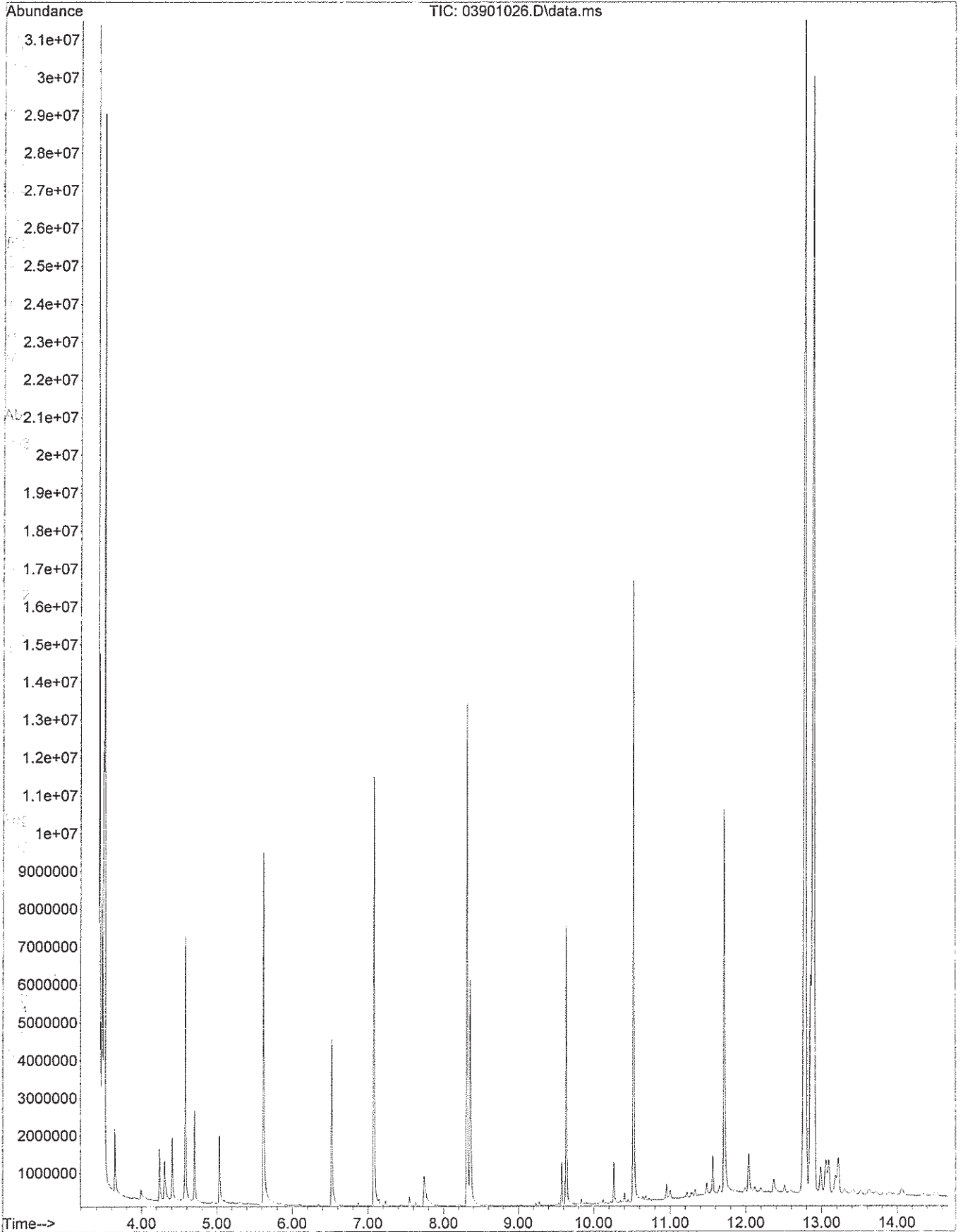
Extract Dilution : 1: 1

	Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1	3.99	N/A	Unknown semi-volatile compound	783613	1	1
2	12.04	95	Substituted alkane	1440672	1	6
4	12.79	N/A	Unknown semi-volatile compound	54671776	23	6
5	12.90	N/A	Unknown semi-volatile compound	59460791	25	6
6	13.06	92	(3.Beta.)-3-methoxy-olean-12-ene	1724085	1	6
7	13.09	N/A	Unknown semi-volatile compound	1428719	1	6
8	13.22	N/A	Unknown semi-volatile compound	1652651	1	6

- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	4.58	1,4-Dichlorobenzene-d4	6474968	20
2	5.62	Naphthalene-d8	9623090	20
3	7.08	Acenaphthene-d10	11105346	20
4	8.31	Phenanthrene-d10	12084114	20
5	10.52	Chrysene-d12	15351699	20
6	11.71	Perylene-d12	11558096	20

File : D:\MSDCHEM\1\DATA\2576757\03901026.D
Operator : SV15
Acquired : 21 Feb 2012 1:45 am using AcqMethod FASTSVOC.M
Instrument : SV-15
Sample Name: 2576757_9
Misc Info : A6PT4/2001
Vial Number: 39



ANALYTICAL RESULTS SHEET

EP-073

Semivolatile Scan for Unknowns

(20 Largest Peaks > LOR)

SHEET413/1

Batch No.: EM1201497

Units : mg/kg

Sample I.D. : 4

Client I.D. : A6PT2/2002

Analyst : PTN

Sample Amt (g) : 20.3

Final Volume (mL): 5

Matrix : Soil

Extract Dilution : 1: 1

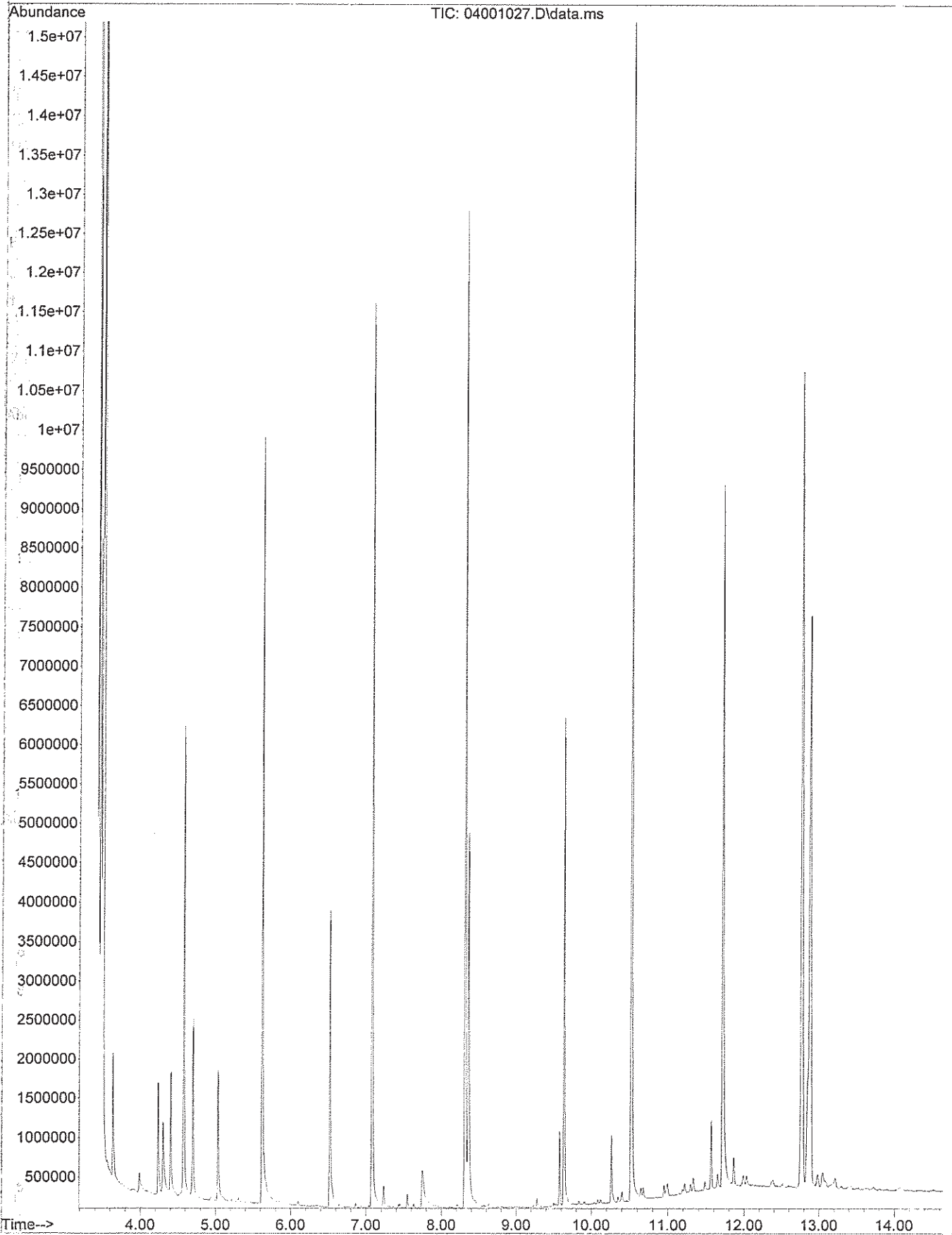
	Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1	12.77	91	(3.Beta.)-3-methoxy-d-Friedoolean-14-ene	16173640	7	6
2	12.88	N/A	Unknown semi-volatile compund	13851163	6	6

- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	4.58	1,4-Dichlorobenzene-d4	5868329	20
2	5.62	Naphthalene-d8	9376858	20
3	7.08	Acenaphthene-d10	10987022	20
4	8.31	Phenanthrene-d10	11676471	20
5	10.52	Chrysene-d12	14995788	20
6	11.71	Perylene-d12	11036149	20

- 1) The
- 2) The
- 3) The

File : D:\MSDCHEM\1\DATA\2576757\04001027.D
Operator : SV15
Acquired : 21 Feb 2012 2:04 am using AcqMethod FASTSVOC.M
Instrument : SV-15
Sample Name: 2576757_10
Misc Info : A6PT2/2002
Vial Number: 40



ANALYTICAL RESULTS SHEET

EP-073

Semivolatile Scan for Unknowns

(20 Largest Peaks > LOR)

SHEET413/1

Batch No.: EM1201497

Units : mg/kg

Sample I.D. : 6

Client I.D. : A6PT3/2002

Analyst : PTN

Sample Amt (g) : 22.2

Final Volume (mL): 5

Matrix : Soil

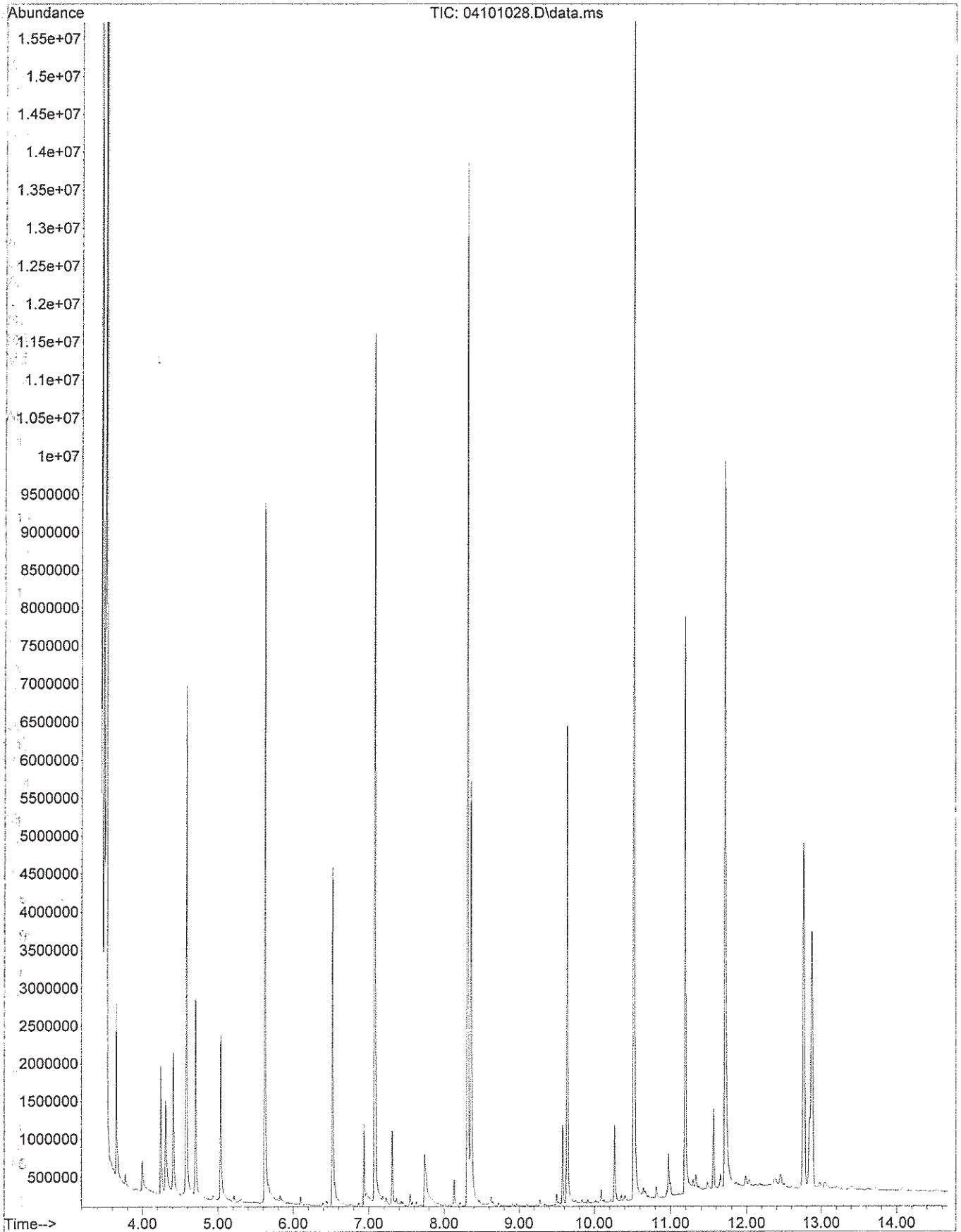
Extract Dilution : 1: 1

	Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1	4.41	n/a	Unknown semivolatile organic compound	2137941	2	1
2	11.71	64	Substituted phenol	11787392	3	5
3	12.76	n/a	Unknown semivolatile organic compound	7189300	4	6
4	12.87	n/a	Unknown semivolatile organic compound	6992306	4	6

- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	4.58	1,4-Dichlorobenzene-d4	6076906	20
2	5.62	Naphthalene-d8	9293046	20
3	7.08	Acenaphthene-d10	11255476	20
4	8.31	Phenanthrene-d10	12776191	20
5	10.52	Chrysene-d12	15774473	20
6	11.71	Perylene-d12	7915130	20

File :D:\MSDCHEM\1\DATA\2576757\04101028.D
Operator : SV15
Acquired : 21 Feb 2012 2:23 am using AcqMethod FASTSVOC.M
Instrument : SV-15
Sample Name: 2576757_11
Misc Info : A6PT3/2002
Vial Number: 41



ANALYTICAL RESULTS SHEET

EP-073

Semivolatile Scan for Unknowns

(20 Largest Peaks > LOR)

SHEET413/1

Batch No.: EM1201497

Units : mg/kg

Sample I.D. : 7

Client I.D. : A6PT1/2001

Analyst : PTN

Sample Amt (g) : 23.15

Final Volume (mL): 5

Matrix : Soil

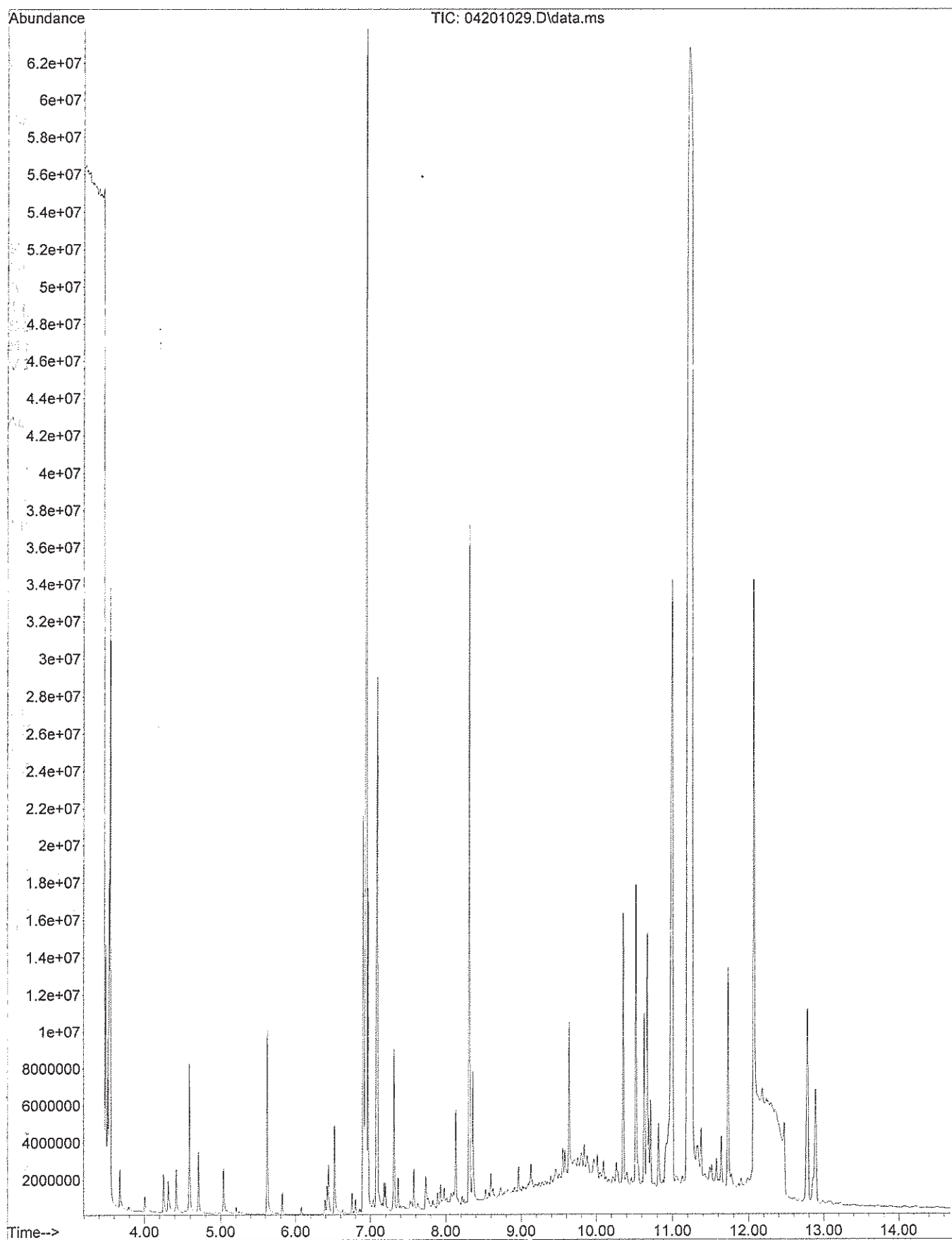
Extract Dilution : 1: 1

	Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1	6.90	70	Butylated Hydroxyanisole	22683311	10	2
2	6.95	99	2,6-bis(1,1-dimethylethyl)-Cyclohexadiene-1,4-dione	66557796	30	2
3	7.09	97	Butylated Hydroxytoluene	30944451	4	3
4	10.35	n/a	Unknown semivolatile organic compound	13883964	4	5
5	10.63	n/a	Unknown semivolatile organic compound	8033136	2	5
6	10.67	n/a	Unknown semivolatile organic compound	16159597	4	5
7	11.00	n/a	Unknown semivolatile organic compound	67055332	17	5
8	11.23	n/a	Unknown semivolatile organic compound	273705904	70	5
9	12.06	n/a	Unknown semivolatile organic compound	54127482	19	6
10	12.78	83	Substituted D-Friedooleanene	16761420	6	6
11	12.89	n/a	Unknown semivolatile organic compound	11909796	4	6

- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	4.58	1,4-Dichlorobenzene-d4	6580887	20
2	5.62	Naphthalene-d8	9498221	20
3	7.08	Acenaphthene-d10	30944451	20
4	8.31	Phenanthrene-d10	31414894	20
5	10.52	Chrysene-d12	16777768	20
6	11.71	Perylene-d12	12174514	20

File : D:\MSDCHEM\1\DATA\2576757\04201029.D
Operator : SV15
Acquired : 21 Feb 2012 2:42 am using AcqMethod FASTSVOC.M
Instrument : SV-15
Sample Name: 2576757_12
Misc Info : *A6PT1/2001*
Vial Number: 42



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: EM1201497	Page	: 1 of 12
Client	: GOLDER ASSOCIATES	Laboratory	: Environmental Division Melbourne
Contact	: Niamh McCormack	Contact	: Samantha Smith
Address	: P O BOX 6075 Building 79, 70-, 88 Swan St 9Richmond9VIC. H121 WAT UWORN T ESU VIC9A4 SURALIA H122	Address	: 3 T estall Rd Springvale VIC Australia H171
E-mail	: nmccormack@golder.com.au	E-mail	: samantha.smith@alsglobal.com
Telephone	: +61 0H8862 H 00	Telephone	: +61-H8, 35 5633
Facsimile	: +61 0H8862 H 01	Facsimile	: +61-H8, 35 5601
Project	: 11761H201	QC Level	: NEPM 1555 Schedule B(H) and ALS QCSHrequirement
Order number	: GA-MELB H2, 05	Date Samples Received	: 1HFEB-2012
C-O-C number	: 816,	Issue Date	: 28-FEB-2012
Sampler	: RM	No. of samples received	: 7
Site	: F-VIC	No. of samples analysed	: 3
Quote number	: ME/0, 3/12		

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



NATA Accredited Laboratory 82,
Accredited for compliance with
ISO/IEC 17025.

Signatories

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

Signatories	Position	Accreditation Category
Dilani Fernando	Senior Inorganic Chemist	Melbourne Inorganics
Eric Chau	Metals Ueam Leader	Melbourne Inorganics
Nancy T ang	Senior Semivolatle Instrument Chemist	Melbourne Inorganics
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Work Order : EM1201357
Client : GOLDER ASSOCIATES
Project : 11761H201

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the 4 SEPA9 APWA9 AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

These moisture determination has been performed. Results are reported on a dry weight basis.

These results are higher than the LOR. This may be due to primary sample extraction/digestion dilution and/or insufficient sample for analysis.

The LOR of a reported result differs from standard LOR. This may be due to high moisture content in insufficient sample (reduced weight employed) or matrix interference.

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

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

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

- EP076: 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- EP321: PFOA & PFOS results are reported as an aggregate of linear and branched isomers.
- Perchlorates and PFOS/PFOA analysis conducted by ALS Sydney, NATA accreditation no. 825, site no 10911.



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 T ork Order : EM1201357
 Client : GOLDR ASSOCIAUES
 Project : 11761H201

Analytical Results

Compound	CAS Number	LOR	Unit	Client sample ID							
				Client sampling date / time	AGPT4/2001	AGPT2/2002	AGPT3/2002	AGPT1/2001			
EA002 : pH (Soils)				1HFEB-2012 1, :00	1HFEB-2012 1, :00	1HFEB-2012 1, :00	1HFEB-2012 1, :00	EM1201497-001	EM1201497-004	EM1201497-006	EM1201497-007
pH Value		0.1	pW4 nit		5.8		8.1				
EA055: Moisture Content											
Moisture Content (dried @ 103°C)		1.0	µ		8.2	16.4	19.5		20.3		
EG005T: Total Metals by ICP-AES											
Arsenic	7330-HB-2		mg/kg		<	<	<		<		<
Cadmium	7330-3H5	1	mg/kg		<1	<1	<1		<1		<1
Chromium	7330-37-H	2	mg/kg		54	49	54		75		9
Copper	7330-, 0-8		mg/kg		6	5	8		5		9
Lead	73H5-52-1		mg/kg		12	12	10		17		17
Nickel	7330-02-0	2	mg/kg		11	12	23		27		27
Zinc	7330-66-6		mg/kg		7	7	8		13		13
EG035T: Total Recoverable Mercury by FIMS											
Mercury	73H5-57-6	0.1	mg/kg		0.1	<0.1	<0.1		<0.1		<0.1
EP004: Organic Matter											
Total Organic Carbon		0.,	µ		2.1	<0.,	<0.,		<0.,		<0.,
EP066: Polychlorinated Biphenyls (PCB)											
Total Polychlorinated biphenyls		0.10	mg/kg		<0.10	<0.10	<0.10		<0.10		<0.10
EP068A: Organochlorine Pesticides (OC)											
alpha-BHC	H15-83-6	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
Hexachlorobenzene (HCB)	118-73-1	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
beta-BHC	H15-8-, -7	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
gamma-BHC	, 8-85-5	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
delta-BHC	H15-86-8	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
Heptachlor	76-33-8	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
Aldrin	H05-00-2	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
Heptachlor epoxide	1023-, 7-H	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
trans-Chlordane	, 10H73-2	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
alpha-Endosulfan	5, 5-58-8	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
cis-Chlordane	, 10H71-5	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
Dieldrin	60-, 7-1	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
4,4'-DDE	72-, , -5	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
Endrin	72-20-8	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
beta-Endosulfan	HH21H6-, -5	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
4,4'-DDD	72-, 3-8	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
Endrin aldehyde	7321-5H3	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
Endosulfan sulfate	10H1-07-8	0.0,	mg/kg		<0.0,	<0.0,	<0.0,		<0.0,		<0.0,
4,4'-DDT	, 0-25-H	0.2	mg/kg		<0.2	<0.2	<0.2		<0.2		<0.2



Analytical Results

Sub-Matrix: SOIL

Compound	CAS Number	LOR	Client sampling date / time				Unit
			A6PT4/2001 1HFEB-2012 1, :00 EM1201497-001	A6PT2/2002 1HFEB-2012 1, :00 EM1201497-004	A6PT3/2002 1HFEB-2012 1, :00 EM1201497-006	A6PT1/2001 1HFEB-2012 1, :00 EM1201497-007	
EP068A: Organochlorine Pesticides (OC) - Continued							
Endrin ketone	853-70-	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Methoxychlor	72-3H,	0.2	<0.2	<0.2	<0.2	<0.2	
EP068B: Organophosphorus Pesticides (OP)							
Dichlorvos	62-7H7	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Demeton-S-methyl	515-86-8	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Monocrotophos	652H22-3	0.2	<0.2	<0.2	<0.2	<0.2	
Dimethoate	60-, 1-,	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Diazinon	HH31-,	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Chlorpyrifos-methyl	, 58-1H0	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Parathion-methyl	258-00-0	0.2	<0.2	<0.2	<0.2	<0.2	
Malathion	121-7-,	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Fenthion	, , -H8-5	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Chlorpyrifos	2521-88-2	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Parathion	, 6-H8-2	0.2	<0.2	<0.2	<0.2	<0.2	
Pirimphos-ethyl	2H 0, -31-1	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Chlorfenvinphos	370-50-6	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Bromophos-ethyl	3823-78-6	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Fenamiphos	22223-52-6	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Prothiofos	H63H36-3	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Ethion	, 6H-12-2	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Carbophenothion	786-15-6	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
Azinphos Methyl	86-, 0-0	0.0,	<0.0,	<0.0,	<0.0,	<0.0,	
EP074A: Monocyclic Aromatic Hydrocarbons							
Styrene	100-32-,	0.,	<0.,	<0.,	<0.,	<0.,	
Isopropylbenzene	58-82-8	0.,	<0.,	<0.,	<0.,	<0.,	
n-Propylbenzene	10H6, -1	0.,	<0.,	<0.,	<0.,	<0.,	
1,3,5-Trimethylbenzene	108-67-8	0.,	<0.,	<0.,	<0.,	<0.,	
sec-Butylbenzene	1H, -58-8	0.,	<0.,	<0.,	<0.,	<0.,	
1,2,4-Trimethylbenzene	5-, -6H6	0.,	<0.,	<0.,	<0.,	<0.,	
tert-Butylbenzene	58-06-6	0.,	<0.,	<0.,	<0.,	<0.,	
p-Isopropyltoluene	55-87-6	0.,	<0.,	<0.,	<0.,	<0.,	
n-Butylbenzene	103-, 1-8	0.,	<0.,	<0.,	<0.,	<0.,	
EP074B: Oxygenated Compounds							
Vinyl Acetate	108-0-, -3	,	<.,	<.,	<.,	<.,	
2-Butanone (MEK)	78-5HH	,	<.,	<.,	<.,	<.,	
4-Methyl-2-pentanone (MIBK)	108-10-1	,	<.,	<.,	<.,	<.,	
2-Hexanone (MBK)	, 51-78-6	,	<.,	<.,	<.,	<.,	
EP074C: Sulfonated Compounds							



Analytical Results

Sub-Matrix: SOIL

Compound	CAS Number	LOR	Client sampling date / time				Unit
			A6PT4/2001 1HFEB-2012 1, :00 EM1201497-001	A6PT2/2002 1HFEB-2012 1, :00 EM1201497-004	A6PT3/2002 1HFEB-2012 1, :00 EM1201497-006	A6PT1/2001 1HFEB-2012 1, :00 EM1201497-007	
EP074C: Sulfonated Compounds - Continued							
Carbon disulfide	7, -1, -0	0.,	<0.,	<0.,	<0.,	<0.,	
EP074D: Fumigants							
2,2-Dichloropropane	, 53-20-7	0.,	<0.,	<0.,	<0.,	<0.,	
1,2-Dichloropropane	78-87-,	0.,	<0.,	<0.,	<0.,	<0.,	
cis-1,3-Dichloropropylene	10061-01-,	0.,	<0.,	<0.,	<0.,	<0.,	
trans-1,3-Dichloropropylene	10061-02-6	0.,	<0.,	<0.,	<0.,	<0.,	
1,2-Dibromoethane (EDB)	106-5H3	0.,	<0.,	<0.,	<0.,	<0.,	
EP074E: Halogenated Aliphatic Compounds							
Dichlorodifluoromethane	7, -71-8	,	<	<	<	<	
Chloromethane	73-87-H	,	<	<	<	<	
Vinyl chloride	7, -01-3	,	<	<	<	<	
Bromomethane	73-8H5	,	<	<	<	<	
Chloroethane	7, -00-H	,	<	<	<	<	
Trichlorofluoromethane	7, -65-3	,	<	<	<	<	
1,1-Dichloroethene	7, -H, -3	0.,	<0.,	<0.,	<0.,	<0.,	
Iodomethane	73-88-3	0.,	<0.,	<0.,	<0.,	<0.,	
trans-1,2-Dichloroethene	1, 6-60-,	0.,	<0.,	<0.,	<0.,	<0.,	
1,1-Dichloroethane	7, -HB-H	0.,	<0.,	<0.,	<0.,	<0.,	
cis-1,2-Dichloroethane	1, 6-, 5-2	0.,	<0.,	<0.,	<0.,	<0.,	
1,1,1-Trichloroethane	71-, , -6	0.,	<0.,	<0.,	<0.,	<0.,	
1,1-Dichloropropylene	, 6H, 8-6	0.,	<0.,	<0.,	<0.,	<0.,	
Carbon Tetrachloride	, 6-2H,	0.,	<0.,	<0.,	<0.,	<0.,	
1,2-Dichloroethane	107-06-2	0.,	<0.,	<0.,	<0.,	<0.,	
Trichloroethene	75-01-6	0.,	<0.,	<0.,	<0.,	<0.,	
Dibromomethane	73-5, -H	0.,	<0.,	<0.,	<0.,	<0.,	
1,1,2-Trichloroethane	75-00-,	0.,	<0.,	<0.,	<0.,	<0.,	
1,3-Dichloropropane	132-28-5	0.,	<0.,	<0.,	<0.,	<0.,	
Tetrachloroethene	127-18-3	0.,	<0.,	<0.,	<0.,	<0.,	
1,1,1,2-Tetrachloroethane	6H0-20-6	0.,	<0.,	<0.,	<0.,	<0.,	
trans-1,4-Dichloro-2-butene	110-, 7-6	0.,	<0.,	<0.,	<0.,	<0.,	
cis-1,4-Dichloro-2-butene	1376-11-,	0.,	<0.,	<0.,	<0.,	<0.,	
1,1,2,2-Tetrachloroethane	75-HB,	0.,	<0.,	<0.,	<0.,	<0.,	
1,2,3-Trichloropropane	56-18-3	0.,	<0.,	<0.,	<0.,	<0.,	
Pentachloroethane	76-01-7	0.,	<0.,	<0.,	<0.,	<0.,	
1,2-Dibromo-3-chloropropane	56-12-8	0.,	<0.,	<0.,	<0.,	<0.,	
EP074F: Halogenated Aromatic Compounds							
Chlorobenzene	108-50-7	0.,	<0.,	<0.,	<0.,	<0.,	
Bromobenzene	108-86-1	0.,	<0.,	<0.,	<0.,	<0.,	



Analytical Results

Compound	CAS Number	LOR	Client sampling date / time		Client sample ID	
			Unit	EM1201497-001	EM1201497-004	EM1201497-006
EP074F: Halogenated Aromatic Compounds - Continued						
2-Chlorotoluene	5, -35-8	0.,	mg/kg	<0.,	<0.,	<0.,
4-Chlorotoluene	106-3H3	0.,	mg/kg	<0.,	<0.,	<0.,
1,2,3-Trichlorobenzene	87-61-6	0.,	mg/kg	<0.,	<0.,	<0.,
EP074G: Trihalomethanes						
Chloroform	67-66-H	0.,	mg/kg	<0.,	<0.,	<0.,
Bromodichloromethane	7, -27-3	0.,	mg/kg	<0.,	<0.,	<0.,
Dibromochloromethane	123-38-1	0.,	mg/kg	<0.,	<0.,	<0.,
Bromoform	7, -2, -2	0.,	mg/kg	<0.,	<0.,	<0.,
EP075A: Phenolic Compounds						
Phenol	108-5, -2	0.,	mg/kg	<0.,	<0.,	<0.,
2-Chlorophenol	5, -, 7-8	0.,	mg/kg	<0.,	<0.,	<0.,
2-Methylphenol	5, -38-7	0.,	mg/kg	<0.,	<0.,	<0.,
3- & 4-Methylphenol	1H15-77-H	0.,	mg/kg	<1.0	<1.0	<1.0
2-Nitrophenol	88-7, -,	0.,	mg/kg	<0.,	<0.,	<0.,
2,4-Dimethylphenol	10, -67-5	0.,	mg/kg	<0.,	<0.,	<0.,
2,4-Dichlorophenol	120-8H2	0.,	mg/kg	<0.,	<0.,	<0.,
2,6-Dichlorophenol	87-6, -0	0.,	mg/kg	<0.,	<0.,	<0.,
4-Chloro-3-Methylphenol	, 5, 0-7	0.,	mg/kg	<0.,	<0.,	<0.,
2,4,6-Trichlorophenol	88-06-2	0.,	mg/kg	<0.,	<0.,	<0.,
2,4,5-Trichlorophenol	5, -5, -3	0.,	mg/kg	<0.,	<0.,	<0.,
Pentachlorophenol	87-86-,	1	mg/kg	<1	<1	<1
EP075B: Polynuclear Aromatic Hydrocarbons						
Naphthalene	51-20-H	0.,	mg/kg	<0.,	<0.,	<0.,
2-Methylnaphthalene	51-, 7-6	0.,	mg/kg	<0.,	<0.,	<0.,
2-Chloronaphthalene	51-, 8-7	0.,	mg/kg	<0.,	<0.,	<0.,
Acenaphthylene	208-56-8	0.,	mg/kg	<0.,	<0.,	<0.,
Acenaphthene	8HH2-5	0.,	mg/kg	<0.,	<0.,	<0.,
Fluorene	86-7H7	0.,	mg/kg	<0.,	<0.,	<0.,
Phenanthrene	8, -01-8	0.,	mg/kg	<0.,	<0.,	<0.,
Anthracene	120-12-7	0.,	mg/kg	<0.,	<0.,	<0.,
Fluoranthene	206-33-0	0.,	mg/kg	<0.,	<0.,	<0.,
Pyrene	125-00-0	0.,	mg/kg	<0.,	<0.,	<0.,
N-2-Fluorenyl Acetamide	, H56-H	0.,	mg/kg	<0.,	<0.,	<0.,
Benz(a)anthracene	, 6-, -, H	0.,	mg/kg	<0.,	<0.,	<0.,
Chrysene	218-01-5	0.,	mg/kg	<0.,	<0.,	<0.,
Benzo(b) & Benzo(k)fluoranthene	20, -55-2 207-08-5	1	mg/kg	<1	<1	<1
7,12-Dimethylbenz(a)anthracene	, 7-57-6	0.,	mg/kg	<0.,	<0.,	<0.,



Analytical Results

Sub-Matrix: SOIL	Client sample ID		Client sampling date / time				
Compound	CAS Number	LOR	Unit	EM1201497-001	EM1201497-004	EM1201497-006	EM1201497-007
EP075B: Polynuclear Aromatic Hydrocarbons - Continued							
Benzo(a)pyrene	120-128-8	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
3-Methylcholanthrene	120-128-8	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
Indeno(1,2,3-cd)pyrene	15005-11-1	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
Dibenz(a,h)anthracene	120-128-8	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
Benzo(g,h,i)perylene	151-23-2	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
^ Sum of PAHs	----	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
EP075C: Phthalate Esters							
Dimethyl phthalate	101-81-1	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
Diethyl phthalate	83-66-2	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
Di-n-butyl phthalate	83-73-2	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
Butyl benzyl phthalate	83-68-7	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
bis(2-ethylhexyl) phthalate	117-81-7	0.,	mg/kg	<.0	<.0	<.0	<.0
Di-n-octylphthalate	117-83-0	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
EP075D: Nitrosamines							
N-Nitrosomethylethylamine	101-51-6	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
N-Nitrosodiethylamine	101-51-6	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
N-Nitrosopyrrolidine	500-07-2	0.,	mg/kg	<1.0	<1.0	<1.0	<1.0
N-Nitrosomorpholine	500-07-2	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
N-Nitrosodi-n-propylamine	621-63-7	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
N-Nitrosopiperidine	100-71-3	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
N-Nitrosodibutylamine	523-16-H	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
N-Nitrosodiphenyl & Diphenylamine	86-10-6	0.,	mg/kg	<1.0	<1.0	<1.0	<1.0
Methapyrene	51-80-,	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
EP075E: Nitroaromatics and Ketones							
2-Picoline	105-06-8	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
Acetophenone	58-86-2	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
Nitrobenzene	58-51-1	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
Isophorone	78-51-1	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
2,6-Dinitrotoluene	606-20-2	0.,	mg/kg	<1.0	<1.0	<1.0	<1.0
2,4-Dinitrotoluene	121-13-2	0.,	mg/kg	<1.0	<1.0	<1.0	<1.0
1-Naphthylamine	118-12-7	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
4-Nitroquinoline-N-oxide	61-71-7	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
5-Nitro-o-toluidine	55-11-8	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
Azobenzene	101-81-1	1	mg/kg	<1	<1	<1	<1
1,3,5-Trinitrobenzene	55-11-3	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
Phenacetin	62-33-2	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,
4-Aminobiphenyl	52-67-1	0.,	mg/kg	<0.,	<0.,	<0.,	<0.,



Analytical Results

Compound	CAS Number	LOR	Client sample ID			
			Client sampling date / time	Unit	A6PT4/2001 1HFEB-2012 1, :00 EM1201497-001	A6PT2/2002 1HFEB-2012 1, :00 EM1201497-004
EP075E: Nitroaromatics and Ketones - Continued						
Pentachloronitrobenzene	82-68-8	0.,	mg/kg	<0.,	<0.,	<0.,
Pronamide	2H5, 0-, 8-,	0.,	mg/kg	<0.,	<0.,	<0.,
Dimethylaminoazobenzene	60-11-7	0.,	mg/kg	<0.,	<0.,	<0.,
Chlorobenzilate	, 10-1, -6	0.,	mg/kg	<0.,	<0.,	<0.,
EP075F: Haloethers						
Bis(2-chloroethyl) ether	111-33-3	0.,	mg/kg	<0.,	<0.,	<0.,
Bis(2-chloroethoxy) methane	111-51-1	0.,	mg/kg	<0.,	<0.,	<0.,
4-Chlorophenyl phenyl ether	700, -72-H	0.,	mg/kg	<0.,	<0.,	<0.,
4-Bromophenyl phenyl ether	101-, -, -H	0.,	mg/kg	<0.,	<0.,	<0.,
EP075G: Chlorinated Hydrocarbons						
1,3-Dichlorobenzene	, 31-7H1	0.,	mg/kg	<0.,	<0.,	<0.,
1,4-Dichlorobenzene	106-36-7	0.,	mg/kg	<0.,	<0.,	<0.,
1,2-Dichlorobenzene	5, -, 0-1	0.,	mg/kg	<0.,	<0.,	<0.,
Hexachloroethane	67-72-1	0.,	mg/kg	<0.,	<0.,	<0.,
1,2,4-Trichlorobenzene	120-82-1	0.,	mg/kg	<0.,	<0.,	<0.,
Hexachloropropylene	1888-71-7	0.,	mg/kg	<0.,	<0.,	<0.,
Hexachlorobutadiene	87-68-H	0.,	mg/kg	<0.,	<0.,	<0.,
Hexachlorocyclopentadiene	77-37-3	0.,	mg/kg	<2.,	<2.,	<2.,
Pentachlorobenzene	608-5H,	0.,	mg/kg	<0.,	<0.,	<0.,
Hexachlorobenzene (HCB)	118-73-1	0.,	mg/kg	<1.0	<1.0	<1.0
EP075H: Anilines and Benzidines						
Aniline	62-, HH	0.,	mg/kg	<0.,	<0.,	<0.,
4-Chloroaniline	106-37-8	0.,	mg/kg	<0.,	<0.,	<0.,
2-Nitroaniline	88-73-3	0.,	mg/kg	<1.0	<1.0	<1.0
3-Nitroaniline	55-05-2	0.,	mg/kg	<1.0	<1.0	<1.0
Dibenzofuran	1H2-63-5	0.,	mg/kg	<0.,	<0.,	<0.,
4-Nitroaniline	100-01-6	0.,	mg/kg	<0.,	<0.,	<0.,
Carbazole	86-73-8	0.,	mg/kg	<0.,	<0.,	<0.,
3,3'-Dichlorobenzidine	51-53-1	0.,	mg/kg	<0.,	<0.,	<0.,
EP075I: Organochlorine Pesticides						
alpha-BHC	H15-83-6	0.,	mg/kg	<0.,	<0.,	<0.,
beta-BHC	H15-8-, 7	0.,	mg/kg	<0.,	<0.,	<0.,
gamma-BHC	, 8-85-5	0.,	mg/kg	<0.,	<0.,	<0.,
delta-BHC	H15-86-8	0.,	mg/kg	<0.,	<0.,	<0.,
Heptachlor	76-33-8	0.,	mg/kg	<0.,	<0.,	<0.,
Aldrin	H05-00-2	0.,	mg/kg	<0.,	<0.,	<0.,
Heptachlor epoxide	1023-, 7-H	0.,	mg/kg	<0.,	<0.,	<0.,
alpha-Endosulfan	5, 5-58-8	0.,	mg/kg	<0.,	<0.,	<0.,



Analytical Results

Sub-Matrix: SOIL

Compound	CAS Number	Client sampling date / time		Unit	Client sample ID			
		LOR			A6PT4/2001	A6PT2/2002	A6PT3/2002	A6PT1/2001
EP075I: Organochlorine Pesticides - Continued								
4,4'-DDE	72-, -5	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
Dieldrin	60-, 7-1	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
Endrin	72-20-8	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
beta-Endosulfan	HH21H6, -5	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
4,4'-DDD	72-, 3-8	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
Endosulfan sulfate	10H1-07-8	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
4,4'-DDT	, 0-25-H	0.,		mg/kg	<1.0	<1.0	<1.0	<1.0
EP075J: Organophosphorus Pesticides								
Dichlorvos	62-7H7	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
Dimethoate	60-, 1-,	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
Diazinon	HH31-,	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
Chlorpyrifos-methyl	, , 58-1H0	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
Malathion	121-7, -,	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
Fenthion	, , -H8-5	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
Chlorpyrifos	2621-88-2	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
Pirimphos-ethyl	2H 0, -31-1	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
Chlorfenvinphos	370-50-6	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
Prothiofos	H863H36-3	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
Ethion	, 6H12-2	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction		10		mg/kg	<10	<10	<10	<10
C10 - C14 Fraction		, 0		mg/kg	<, 0	<, 0	<, 0	<, 0
C15 - C28 Fraction		100		mg/kg	<100	<100	<100	260
C29 - C36 Fraction		100		mg/kg	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)		, 0		mg/kg	<, 0	<, 0	<, 0	260
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction		10		mg/kg	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)		10		mg/kg	<10	<10	<10	<10
>C10 - C16 Fraction		, 0		mg/kg	<, 0	<, 0	<, 0	50
>C16 - C34 Fraction		100		mg/kg	<100	<100	<100	270
>C34 - C40 Fraction		100		mg/kg	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)		, 0		mg/kg	<, 0	<, 0	<, 0	320
EP080: BTEX								
Benzene	71-3H2	0.2		mg/kg	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-H	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
Ethylbenzene	100-31-3	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
meta- & para-Xylene	108-HB-H106-32-H	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,
ortho-Xylene	5, -37-6	0.,		mg/kg	<0.,	<0.,	<0.,	<0.,



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 T ork Order : EM1201357
 Client : GOLDR ASSOCIAUES
 Project : 11761H201

Analytical Results

Compound	CAS Number	LOR	Client sampling date / time		Client sample ID
			Unit	Unit	
Sub-Matrix: SOIL					
EP080: BTEXN					
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2
^ Total Xylenes	1H0-20-7	0.,	mg/kg	<0.,	<0.,
Naphthalene	51-20-H	1	mg/kg	<1	<1
EP216: Perchlorate by LC/MS					
Perchlorate	7601-50-H	10.0	%/kg	<10.0	<10.0
EP231: Perfluoroocetyl Acids and Sulfonates.					
PFOS	176H2H1	0.000,	mg/kg	<0.000,	0.0010
PFOA	1H1-67-1	0.000,	mg/kg	<0.000,	<0.000,
6:2 Fluorotelomer Sulfonate (6:2 Fts)	27615-57-2	0.00,	mg/kg	<0.00,	<0.00,
EP066S: PCB Surrogate					
Decachlorobiphenyl	20, 1-23-H	0.1	µ	78.2	94.5
EP068S: Organochlorine Pesticide Surrogate					
Dibromo-DDE	216, , -7H2	0.1	µ	95.7	108
EP068T: Organophosphorus Pesticide Surrogate					
DEF	78-38-8	0.1	µ	79.5	108
EP074S: VOC Surrogates					
1,2-Dichloroethane-D4	17060-07-0	0.1	µ	79.8	79.0
Toluene-D8	20H7-26-,	0.1	µ	87.9	86.0
4-Bromofluorobenzene	360-00-3	0.1	µ	83.7	82.6
EP075S: Acid Extractable Surrogates					
2-Fluorophenol	H67-12-3	0.1	µ	82.0	97.4
Phenol-d6	1H127-88-H	0.1	µ	77.0	92.0
2-Chlorophenol-D4	5H5, 1-7H6	0.1	µ	76.9	83.8
2,4,6-Tribromophenol	118-75-6	0.1	µ	83.4	90.2
EP075T: Base/Neutral Extractable Surrogates					
Nitrobenzene-D5	316, -60-0	0.1	µ	82.1	86.6
1,2-Dichlorobenzene-D4	2155-65-1	0.1	µ	72.6	70.7
2-Fluorobiphenyl	H21-60-8	0.1	µ	83.2	86.6
Anthracene-d10	1715-06-8	0.1	µ	104	99.9
4-Terphenyl-d14	1718-, 1-0	0.1	µ	95.5	93.5
EP080S: TPH(V)/BTEX Surrogates					
1,2-Dichloroethane-D4	17060-07-0	0.1	µ	81.6	81.9
Toluene-D8	20H7-26-,	0.1	µ	89.0	88.4
4-Bromofluorobenzene	360-00-3	0.1	µ	87.3	88.8



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 T ork Order : EM1201357
 Client : GOLDER ASSOCIAUES
 Project : 11761H201

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	20, 1-23-H	HH	1HH
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	216, , -7H2	25.8	136
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-38-8	2H7	136
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	62	122
Toluene-D8	20H7-26-,	63	120
4-Bromofluorobenzene	360-00-3	66	123
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	H67-12-3	13	126
Phenol-d6	1H127-88-H	12.2	122
2-Chlorophenol-D4	5H6, 1-7H6	13.2	127
2,4,6-Tribromophenol	118-75-6	12.3	1HH
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	316, -60-0	12.3	128
1,2-Dichlorobenzene-D4	2155-65-1	11.6	108
2-Fluorobiphenyl	H21-60-8	18.7	127
Anthracene-d10	1715-06-8	28.,	132
4-Terphenyl-d14	1718-, 1-0	2, .8	1HB
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	, 7	125
Toluene-D8	20H7-26-,	, 8	120
4-Bromofluorobenzene	360-00-3	, 6	126



Environmental Division

QUALITY CONTROL REPORT

Work Order : **EM1201357**

Site : **GOLDER ASSOCIATES**

Address : **harrick u n ot d a n s**

City : **P B XB6 L079**

State : **Xc h o f e g 7, 570-588 AwaEay, RinkD o e Q Vii . 2131**

Zip : **HdWTHBRh WvAT Vii , dUATRdbld 2133**

Client : **ED NbtDaNS@golOet.NbD.ac**

Phone : **+L1 02 88L3 2500**

Fax : **+L1 02 88L3 2501**

Project : **117L12301**

Phase : **F-VII**

Sample : **81L5**

Method : **Ru**

Batch : **Kd-u v b X 223509**

QC Method : **u v 05403**

Page : 1 of 3L

Bar Code : **vEntoED eEyal MmmsroE u elr octEe**

Label : **Aad aEyka AD rnk**

Notes : **4 Wesleyl ROAprtrEgnrale Vli dcsyalra 2171**

Analyst : **saDaEYka.sD rnk@aIsqIor al.NbD**

Phone : **+L1-2-8549 9L44**

Fax : **+L1-2-8549 9L01**

Address : **h v Pu 1999 ANkeOble X(2) aEOdbA Qi A2 teqctedEeY**

Method : **12-FV X-3013**

QC Method : **38-FV X-3013**

QC Method : **7**

QC Method : **4**

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- This Quality Control Report is to be followed by the following reports:
- bar of report CMCP (MJP) Report/ Relayance PerNeEYage MiffeteEne (RPM) aEOdNepyaEne bIdrys
 - u exkoXlaES (u X) aEObar otayotCi oEYol AprEe (bi A) Repoty/ ReNmetCaEOdNepyaEne bIdrys
 - u aytr AprEe (u A) Repoty ReNmetCaEOdNepyaEne bIdrys



h d Td d n N e O y e O b a r o t a y o t C 8 3 5
d n N e O y e O f o t N b D p l a e E n e w r k
I A B 0 v i 1 7 0 3 5.

Signatories

Position	Accreditation Category
AeEot IeotgaENi keDrsy	u elr octEe IeotgaEENS
u eyals Tead beaOet	u elr octEe IeotgaEENS
AeEot AeD m o l a y t e I E s t c D e E y i k e D r s y	u elr octEe IeotgaEENS
AeEot AeD m o l a y t e I E s t c D e E y i k e D r s y	u elr octEe B t g a E N s
bar otayotCu aEaget - B t g a E N s	ACCECB t g a E N s
h o f u e y a l s T e a d b e a O e t	u elr octEe IeotgaEENS
AeEot B t g a E N i k e D r s y	u elr octEe B t g a E N s



Page : 3 of 3L
 WotSBtOet : v u 1301497
 i rreEy : KBbMwR dAAABi Id TvA
 PtojeNy : 117L12301

General Comments

The aEalQjNal ptoNeOctes cseO rC_je vErtioDEdeEjal MmmsnoE kame reeE Cernelopeo froD esyrlrnskeO rEjetEaywEallic teNbgExeO ptoNeOctes scNk as_jkose pcr lnskeO rC_je UAvPd, dPHd, dA aEO hvPu. IE koose CernelopeoptoNeOctes ate eDploGeOfE_je ar seENe of CoNDeEYeOsjæEOatOs of rCnreEyteqcesy

Wkete Donsycte CæjetD rEaywE kas r eeE peffoiDeQ, tescljys ate tepotyEooEa QcCwengkyr asæ.

Wkete a tepotyEoless_kaE(z) tescljys krqket_kaE_je bBR, jkrs DaCre Obe yo ptriD atCsaDple e;_jæNæGgesjæe OtcyøE aEOGt rEscriffneEysaDple fot aEalQsis.

Wkete_je bBR of a tepotyEOtesclyOfifeis froD sjæEOatObBR, jkrs DaCre Obe yo krqk Donsycte NbEjeEy rEscriffneEysaDple (teCoNæOwengkyeDploGeQ) of Dayn rEjetefeteENe.

#eC:

dEoECDocs < Refets yo saDples wkNk ate EoyspeNfNallicpatyof jkrs wotSofCet r cyfoiDeOpatyof_je Qi_ ptoNess loy

i dA hcDr et < i dA tegrsyCEcdret froD Cæyar ase DarEjæEæOr Ci_ keDfNal dr stæNjS AetmNæ. Tke i keDfNal dr stæNjS AetmNæ is a CmmsnoE of_je dDetrNæE i keDfNal AoNæyC.

bBR < bñDjyof tepotyEg

RPM < Relaymæ PetNæEjæge MifeteENe

= < IEONæyes fañeOQi



Laboratory Duplicate (DUP) Report

The quality of the data is dependent on the quality of the sample. The sample is analyzed using the following methods: pH, EC, and TOC. The results are reported as follows: pH 5.8, EC 9.1, and TOC 25.2. The recovery limits are 0% - 30% for pH, EC, and TOC.

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EA002 : Fi sSolnt a sb C Loy. 2171073a									
v u 1301497-001	dLPT4G3001	vd003: pH Value	---	0.1	pH UEY	5.8	5.7	1.7	0% - 30%
EA00PP: Molt y-re Co(lye) sb C Loy. 2170010a									
v u 1301482-015	dEoECDocs	vd055-102: u onycte i oEyeY(CrreO@ 102'i)	---	1.0	%	9.0	9.1	0.0	ho btdry
v u 1301482-05L	dEoECDocs	vd055-102: u onycte i oEyeY(CrreO@ 102'i)	---	1.0	%	2L.9	25.2	4.4	0% - 30%
EG00PT: ToYvMeyAt c lCu6AES sb C Loy. 21h1QJPa									
v u 1301441-001	dEoECDocs	vK005T: i aCDreD	7440-42-9	1	DgGg	z1	z1	0.0	ho btdry
		vK005T: i ktODreD	7440-47-2	3	DgGg	4L	41	11.7	0% - 30%
		vK005T: hINSeI	7440-03-0	3	DgGg	3L	34	L.5	0% - 50%
		vK005T: dtseEN	7440-28-3	5	DgGg	7	z5	37.L	ho btdry
		vK005T: i oppet	7440-50-8	5	DgGg	15	14	0.0	ho btdry
		vK005T: beaO	7429-93-1	5	DgGg	20	21	4.3	ho btdry
		vK005T: ZIEN	7440-LL-L	5	DgGg	91	74	30.2	0% - 50%
v u 1301553-008	dEoECDocs	vK005T: i aCDreD	7440-42-9	1	DgGg	z1	z1	0.0	ho btdry
		vK005T: i ktODreD	7440-47-2	3	DgGg	L2	59	5.L	0% - 30%
		vK005T: hINSeI	7440-03-0	3	DgGg	32	34	L.0	0% - 50%
		vK005T: dtseEN	7440-28-3	5	DgGg	z5	z5	0.0	ho btdry
		vK005T: i oppet	7440-50-8	5	DgGg	8	9	0.0	ho btdry
		vK005T: beaO	7429-93-1	5	DgGg	18	10	5L.5	ho btdry
		vK005T: ZIEN	7440-LL-L	5	DgGg	10	10	0.0	ho btdry
EG00PT: ToYvRenoBer4 ve Mem-rc) c plMS sb C Loy. 21h1Q8a									
v u 1301441-001	dEoECDocs	vK025T: u etNtC	7429-97-L	0.1	DgGg	z0.1	z0.1	0.0	ho btdry
v u 1301553-008	dEoECDocs	vK025T: u etNtC	7429-97-L	0.1	DgGg	0.1	0.1	0.0	ho btdry
Eu003: Org4(In M4yer sb C Loy. 2171hh5a									
v u 1301497-001	dLPT4G3001	vP004: ToYl BtgaENI: atroE	---	0.5	%	3.1	3.1	0.0	ho btdry
v u 1301575-008	dEoECDocs	vP004: ToYl BtgaENI: atroE	---	0.5	%	0.7	0.L	0.0	ho btdry
Eu088: uocnmorl(4yed HIFme(ct siCHa sb C Loy. 2171G53a									
v u 1301441-001	dEoECDocs	vPOLL: ToYl PolOXklorEayeOrmpkeEGs	---	0.10	DgGg	z0.50	z0.50	0.0	ho btdry
v u 1301553-011	dEoECDocs	vPOLL: ToYl PolOXklorEayeOrmpkeEGs	---	0.10	DgGg	z0.10	z0.10	0.0	ho btdry
Eu08Ha: Org4(onmorl(e uetYndet sOCa sb C Loy. 2171G5Qa									
v u 1301441-001	dEoECDocs	vPOL8: alpka-XHi	219-84-L	0.05	DgGg	z0.35	z0.35	0.0	ho btdry
		vPOL8: He: aNklotoreEeEe (Hi X)	118-74-1	0.05	DgGg	z0.35	z0.35	0.0	ho btdry
		vPOL8: r eye-XHi	219-85-7	0.05	DgGg	z0.35	z0.35	0.0	ho btdry
		vPOL8: gaDDa-XHi	58-89-9	0.05	DgGg	z0.35	z0.35	0.0	ho btdry
		vPOL8: Oelja-XHi	219-8L-8	0.05	DgGg	z0.35	z0.35	0.0	ho btdry



Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)	
						Original Result	Duplicate Result	RPD (%)		
Eu08hA: Org4(ommorl(e uet ylnidet sOCa sb C Loy. 2171Q5Qa 6no(y(- ed v u 1301441-001 dEoECDocs		vPOL8: HepyaNklot	71-44-8	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry	
		vPOL8: dIOfIE	209-00-3	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry	
		vPOL8: HepyaNklot epo; rOe	1034-57-2	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry	
		vPOL8: yaEs-i klotOaEe	5102-74-3	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry	
		vPOL8: alpka-vEOscifaE	959-98-8	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry	
		vPOL8: Ns-i klotOaEe	5102-71-9	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry	
		vPOL8: MreiOfIE	L0-57-1	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry	
		vPOL8: 4.4'-MMW	73-55-9	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry	
		vPOL8: vEQIE	73-30-8	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry	
		vPOL8: r eye-vEOscifaE	22312-L5-9	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry	
		vPOL8: 4.4'-MMW	73-54-8	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry	
		vPOL8: vEQIE alOekOQe	7431-92-4	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry	
		vPOL8: vEOscifaE scifaye	1021-07-8	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry	
		vPOL8: vEQIE SsyEe	52494-70-5	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry	
		vPOL8: 4.4'-MMT	50-39-2	0.3	Dg(8g	z1.0	z1.0	0.0	ho btdry	
		vPOL8: u eyko; ONklot	73-42-5	0.3	Dg(8g	z1.0	z1.0	0.0	ho btdry	
		vPOL8: alpka-XHI	219-84-L	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: He: aNklotoreExeEe (Hi X)	118-74-1	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
	v u 1301553-011 dEoECDocs		vPOL8: r eye-XHI	219-85-7	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry
			vPOL8: gaDDa-XHI	58-89-9	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry
		vPOL8: Oelja-XHI	219-81-8	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: HepyaNklot	71-44-8	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: dIOfIE	209-00-3	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: HepyaNklot epo; rOe	1034-57-2	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: yaEs-i klotOaEe	5102-74-3	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: alpka-vEOscifaE	959-98-8	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: Ns-i klotOaEe	5102-71-9	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: MreiOfIE	L0-57-1	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: 4.4'-MMW	73-55-9	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: vEQIE	73-30-8	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: r eye-vEOscifaE	22312-L5-9	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: 4.4'-MMW	73-54-8	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: vEQIE alOekOQe	7431-92-4	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: vEOscifaE scifaye	1021-07-8	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: vEQIE SsyEe	52494-70-5	0.05	Dg(8g	z0.05	z0.05	0.0	ho btdry	
		vPOL8: 4.4'-MMT	50-39-2	0.3	Dg(8g	z0.3	z0.3	0.0	ho btdry	
		vPOL8: u eyko; ONklot	73-42-5	0.3	Dg(8g	z0.3	z0.3	0.0	ho btdry	
Eu08hH: Org4(oFmot Fmor- t uet ylnidet sOua sb C Loy. 2171Q5Qa v u 1301441-001 dEoECDocs			vPOL8: MNklotnos	L3-72-7	0.05	Dg(8g	z0.35	z0.35	0.0	ho btdry



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Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			
						Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
Eu08Ht: Org4(ofromt Fmof- t uet ynidet sOua sb C Loy. 2171Q5a 6no(y(- ed dEoECDocs	vu 1301441-001	vPOL8: MeDeyoE-A-DeKQ	919-8L-8	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			L0-51-5	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			222-41-5	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			5598-12-0	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			131-75-5	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			55-28-9	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			3931-88-3	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			32505-41-1	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			470-90-L	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			4834-78-L	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			33334-93-L	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			24L42-4L-4	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			5L2-13-3	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			78L-19-L	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			8L-50-0	0.05	Dg09	z0.35	z0.35	0.0	ho bitDry
			L932-33-4	0.3	Dg09	z1.0	z1.0	0.0	ho bitDry
			398-00-0	0.3	Dg09	z1.0	z1.0	0.0	ho bitDry
			5L-28-3	0.3	Dg09	z1.0	z1.0	0.0	ho bitDry
			L3-72-7	0.05	Dg09	z0.05	z0.05	0.0	ho bitDry
			Eu073A: Mo(oncnvN Aro9 4yn i cdron4r) o(t sb C Loy. 21855P8a	vu 1301553-011	vPOL8: MeDeyoE-A-DeKQ	919-8L-8	0.05	Dg09	z0.05
L0-51-5	0.05	Dg09				z0.05	z0.05	0.0	ho bitDry
222-41-5	0.05	Dg09				z0.05	z0.05	0.0	ho bitDry
5598-12-0	0.05	Dg09				z0.05	z0.05	0.0	ho bitDry
131-75-5	0.05	Dg09				z0.05	z0.05	0.0	ho bitDry
55-28-9	0.05	Dg09				z0.05	z0.05	0.0	ho bitDry
3931-88-3	0.05	Dg09				z0.05	z0.05	0.0	ho bitDry
32505-41-1	0.05	Dg09				z0.05	z0.05	0.0	ho bitDry
470-90-L	0.05	Dg09				z0.05	z0.05	0.0	ho bitDry
4834-78-L	0.05	Dg09				z0.05	z0.05	0.0	ho bitDry
33334-93-L	0.05	Dg09				z0.05	z0.05	0.0	ho bitDry
24L42-4L-4	0.05	Dg09				z0.05	z0.05	0.0	ho bitDry
5L2-13-3	0.05	Dg09				z0.05	z0.05	0.0	ho bitDry
78L-19-L	0.05	Dg09				z0.05	z0.05	0.0	ho bitDry
8L-50-0	0.05	Dg09				z0.05	z0.05	0.0	ho bitDry
L932-33-4	0.3	Dg09				z0.3	z0.3	0.0	ho bitDry
398-00-0	0.3	Dg09				z0.3	z0.3	0.0	ho bitDry
5L-28-3	0.3	Dg09				z0.3	z0.3	0.0	ho bitDry
100-43-5	0.5	Dg09				z0.5	z0.5	0.0	ho bitDry



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Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			
						Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
Eu073A: Mo(onc nVn Ar09 4yn i cdron4r) o(t sb C Loy 21855P8a 6no(y(- ed									
vu 1301497-001	dLPT4G001	vP074: IsoptopGreExeEe	98-83-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: E-PTopQr eXeEe	102-L-5-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: 1.2.5-TitDeKOr eXeEe	108-L-7-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: seNXcyOr eXeEe	125-98-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: 1.3.4-TitDeKOr eXeEe	95-L-2-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: yetyXcyOr eXeEe	98-0L-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: p-IsoptopQjiceEe	99-87-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: E-XcyOr eXeEe	104-51-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
Eu073H: Oxcel(4yed Co9 Fo- (dt sb C Loy 21855P8a									
vu 1301497-001	dLPT4G001	vP074: VIEd dN8y8e	108-05-4	5	Dg08g	z5	z5	0.0	ho btDiy
		vP074: 3-XcyEoEe (u v#)	78-92-2	5	Dg08g	z5	z5	0.0	ho btDiy
		vP074: 4-u eK Q-3-peE8aEoEe (u IX#)	108-10-1	5	Dg08g	z5	z5	0.0	ho btDiy
		vP074: 3-He: aEoEe (u X#)	591-78-L	5	Dg08g	z5	z5	0.0	ho btDiy
Eu073C: S- vfo(4yed Co9 Fo- (dt sb C Loy 21855P8a									
vu 1301497-001	dLPT4G001	vP074: i atr oE Osciif0e	75-15-0	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
Eu073D: p- 9 Ig4(y sb C Loy 21855P8a									
vu 1301497-001	dLPT4G001	vP074: 3.3-MNKlotoptopaEe	594-30-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: 1.3-MNKlotoptopaEe	78-87-5	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: Ns-1.2-MNKlotoptopOeEe	100L1-01-5	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: yaEs-1.2-MNKlotoptopOeEe	100L1-03-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: 1.3-Mir toDoeKaEe (vMX)	10L-92-4	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
Eu073E: I 4vge(4yed ANFm8jn Co9 Fo- (dt sb C Loy 21855P8a									
vu 1301497-001	dLPT4G001	vP074: 1.1-MNKlotoeKeEe	75-25-4	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: loODeyKaEe	74-88-4	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: yaEs-1.3-MNKlotoeKeEe	15L-L0-5	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: 1.1-MNKlotoeKaEe	75-24-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: Ns-1.3-MNKlotoeKeEe	15L-59-3	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: 1.1.1-TitNKlotoeKaEe	71-55-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: 1.1-MNKlotoptopOeEe	5L2-58-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: i atr oE TeyaNklotOe	5L-32-5	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: 1.3-MNKlotoeKaEe	107-0L-3	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: TitNKlotoeKeEe	79-01-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: Mir toDoeKaEe	74-95-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: 1.1.3-TitNKlotoeKaEe	79-00-5	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: 1.2-MNKlotoptopaEe	143-38-9	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: TeyaNklotoeKeEe	137-18-4	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: 1.1.1.3-TeyaNklotoeKaEe	L20-30-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: yaEs-1.4-MNKloto-3-r cyeEe	110-57-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy
		vP074: Ns-1.4-MNKloto-3-r cyeEe	147L-11-5	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy



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Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
Eu073E: i 4voqe(4yed AVFmFmJn Co9 Fo- (dt sb C Loy 21855P8a 6no(y(- ed									
vu 1301497-001	dLPT4G001	vP074: 1.1.3.3-TexAnKlotoeKaEe	79-24-5	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP074: 1.3.2-TinKlotoptopaEe	9L-18-4	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP074: PeEaKlotoeKaEe	7L-01-7	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP074: 1.3-Mm toD o-2-NklotoptopaEe	9L-13-8	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP074: MINKlotofcotoDeKaEe	75-71-8	5	Dg09	z5	z5	0.0	ho btdry
		vP074: i klotodeKaEe	74-87-2	5	Dg09	z5	z5	0.0	ho btdry
		vP074: VIEG KlotroE	75-01-4	5	Dg09	z5	z5	0.0	ho btdry
		vP074: XtoDoDeKaEe	74-82-9	5	Dg09	z5	z5	0.0	ho btdry
		vP074: i klotoeKaEe	75-00-2	5	Dg09	z5	z5	0.0	ho btdry
		vP074: TinKlotofcotoDeKaEe	75-L9-4	5	Dg09	z5	z5	0.0	ho btdry
Eu073p: i 4voqe(4yed Aro9 4yn Co9 Fo- (dt sb C Loy 21855P8a									
vu 1301497-001	dLPT4G001	vP074: i klotoreXeEe	108-90-7	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP074: XtoDor eXeEe	108-8L-1	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP074: 3-i klotoylceEe	95-49-8	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP074: 4-i klotoylceEe	10L-42-4	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP074: 1.3.2-TinKlotoreXeEe	87-L1-L	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
Eu073G: TrinKno9 eyrk(et sb C Loy 21855P8a									
vu 1301497-001	dLPT4G001	vP074: i klotofotD	L7-L1-2	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP074: XtoDoCKlotodeKaEe	75-37-4	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP074: Mm toDoKlotodeKaEe	134-48-1	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP074: XtoDofotD	75-35-3	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
Eu07PA: unne(oVn Co9 Fo- (dt sb C Loy 2171Q58a									
vu 1301441-001	dEoEcdocs	vP075: PkeEol	108-95-3	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP075: 3-i klotopkeEol	95-57-8	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP075: 3-u eyQpkeEol	95-48-7	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP075: 2- & 4-u eyQpkeEol	1219-77-2	0.5	Dg09	z1.0	z1.0	0.0	ho btdry
		vP075: 3-hnyopkeEol	88-75-5	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP075: 3.4-MID eyQpkeEol	105-L7-9	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP075: 3.4-MINKlotopkeEol	130-82-3	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP075: 3.L-MINKlotopkeEol	87-L5-0	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP075: 4-i klotodeKaEe	59-50-7	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP075: 3.4.L-TinKlotopkeEol	88-0L-3	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP075: 3.4.5-TinKlotopkeEol	95-95-4	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP075: PeEaKlotopkeEol	87-8L-5	1	Dg09	z1	z1	0.0	ho btdry
		vP075: PkeEol	108-95-3	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP075: 3-i klotopkeEol	95-57-8	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP075: 3-u eyQpkeEol	95-48-7	0.5	Dg09	z0.5	z0.5	0.0	ho btdry
		vP075: 2- & 4-u eyQpkeEol	1219-77-2	0.5	Dg09	z1.0	z1.0	0.0	ho btdry
		vP075: 3-hnyopkeEol	88-75-5	0.5	Dg09	z0.5	z0.5	0.0	ho btdry



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Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
Eu07PA: uoꝘ(- me4r Aro9 4yn i cdron4r) o(t sb C Loy 2171Q58a 6no(y(- ed vu 1301553-011	dEoECDocs	vP075: 3.4-MD eĵQpkeEol	105-L7-9	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: 3.4-MNKlotopkeEol	130-82-3	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: 3.L-MNKlotopkeEol	87-L5-0	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: 4-i klot0-2-u eĵQpkeEol	59-50-7	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: 3.4.L-TitNKlotopkeEol	88-0L-3	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: 3.4.5-TitNKlotopkeEol	95-95-4	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: PeEaNKlotopkeEol	87-8L-5	1	DgŒg	z1	z1	0.0	ho btDiy
		Eu07PH: uoꝘ(- me4r Aro9 4yn i cdron4r) o(t sb C Loy 2171Q58a	dEoECDocs						
vu 1301441-001	dEoECDocs	vP075: h apkykaleEe	91-30-2	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: 3-u eĵQEapkykaleEe	91-57-L	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: 3-i klot0EapkykaleEe	91-58-7	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: dNĒEapkykaleEe	308-9L-8	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: dNĒEapkykaleEe	82-23-9	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: FicoteEe	8L-72-7	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: PkeEaEĵkteEe	85-01-8	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: dEĵtāNĒEe	130-13-7	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: FicotaEĵkeEe	30L-44-0	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: PQEeEe	139-00-0	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: h-3-FicoteEO dNĒEaDĒEe	52-9L-2	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: XeEx(a)āEĵtāNĒEe	5L-55-2	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: i ktOseEe	318-01-9	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: 7.13-MD eĵQreEx(a)āEĵtāNĒEe	57-97-L	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: XeEx(a)āEĵteEe	50-23-8	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: 2-u eĵQNKolaEĵkteEe	5L-49-5	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: IEOEo(1.3.2.N)āEĵteEe	192-29-5	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: MĒeEx(a.k)āEĵtāNĒEe	52-70-2	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: XeExo(g.k)āEĵteEe	191-34-3	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: AcD of PdHs	----	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
vP075: XeExo(r) & XeExo(S)ficotaEĵkeEe	305-99-3 307-08-9	1	DgŒg	z1	z1	0.0	ho btDiy		
vu 1301553-011	dEoECDocs	vP075: h apkykaleEe	91-30-2	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: 3-u eĵQEapkykaleEe	91-57-L	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: 3-i klot0EapkykaleEe	91-58-7	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: dNĒEapkykaleEe	308-9L-8	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: dNĒEapkykaleEe	82-23-9	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: FicoteEe	8L-72-7	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: PkeEaEĵkteEe	85-01-8	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: dEĵtāNĒEe	130-13-7	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: FicotaEĵkeEe	30L-44-0	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy
		vP075: PQEeEe	139-00-0	0.5	DgŒg	z0.5	z0.5	0.0	ho btDiy



Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
Eu07PH: uovc(- me4r Aro9 4Yn i cdron4r) o(t sb C Loy 2171 Q58a 6no(y(- ed									
v u 1301553-011	dEoECDocs								
		v P075: h-3-FicoteED dNeyD rOe	52-9L-2	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: XeEx(a)ajEktaN eEe	5L-55-2	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: i ktOseEe	318-01-9	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: 7.13-MD eyC r eX(a)ajEktaN eEe	57-97-L	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: XeExo(a)j pQeEe	50-23-8	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: 2-u eyC NKolaEkteEe	5L-49-5	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: IEoEo(1.3.2.N)j pQeEe	192-29-5	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: Mm eEx(a.k)ajEktaN eEe	52-70-2	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: XeExo(g.k)j petOeEe	191-34-3	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: AcD of PdHs	----	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: XeExo(r) & XeExo(S)ficotaEkteEe	305-99-3	1	DgOg	z1	z1	0.0	h o b rD rY
			307-08-9						
Eu07PC: unymwye Et yert sb C Loy 2171 Q58a									
v u 1301441-001	dEoECDocs								
		v P075: MD eyC j pkykalye	121-11-2	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: Mm eyC j pkykalye	84-LL-3	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: Mm E-r cyC j pkykalye	84-74-3	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: XcyC j r eXcD j pkykalye	85-L8-7	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: r r s(3-eyC ke; C) j pkykalye	117-81-7	0.5	DgOg	z5.0	z5.0	0.0	h o b rD rY
		v P075: Mm E-oN j pkykalye	117-84-0	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: MD eyC j pkykalye	121-11-2	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: Mm eyC j pkykalye	84-LL-3	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: Mm E-r cyC j pkykalye	84-74-3	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: XcyC j r eXcD j pkykalye	85-L8-7	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: r r s(3-eyC ke; C) j pkykalye	117-81-7	0.5	DgOg	z5.0	z5.0	0.0	h o b rD rY
		v P075: Mm E-oN j pkykalye	117-84-0	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
Eu07PD: Nlyrot 49 (et sb C Loy 2171 Q58a									
v u 1301441-001	dEoECDocs								
		v P075: h-h r ytoSoD eyC OeY cDaD rEe	10595-95-L	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: h-h r ytoSoD eyC OeY cDaD rEe	55-18-5	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: h-h r ytoSoD rOtoI rOeEe	920-55-3	0.5	DgOg	z1.0	z1.0	0.0	h o b rD rY
		v P075: h-h r ytoSoD rOtpkolrEe	59-89-3	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: h-h r ytoSoD rE-ptopDaD rEe	L31-L4-7	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: h-h r ytoSoD rE-ptopD rEe	100-75-4	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: h-h r ytoSoD rE-cyDaD rEe	934-1L-2	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: h-h r ytoSoD rE-cyDaD rEe	8L-20-L	0.5	DgOg	z1.0	z1.0	0.0	h o b rD rY
			133-29-4						
		v P075: u eyC apQ rEeEe	91-80-5	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: h-h r ytoSoD eyC OeY cDaD rEe	10595-95-L	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: h-h r ytoSoD eyC OeY cDaD rEe	55-18-5	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: h-h r ytoSoD rOtoI rOeEe	920-55-3	0.5	DgOg	z1.0	z1.0	0.0	h o b rD rY
		v P075: h-h r ytoSoD rE-ptopDaD rEe	100-75-4	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: h-h r ytoSoD rE-cyDaD rEe	934-1L-2	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: h-h r ytoSoD rE-cyDaD rEe	8L-20-L	0.5	DgOg	z1.0	z1.0	0.0	h o b rD rY
			133-29-4						
		v P075: u eyC apQ rEeEe	91-80-5	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: h-h r ytoSoD eyC OeY cDaD rEe	10595-95-L	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: h-h r ytoSoD eyC OeY cDaD rEe	55-18-5	0.5	DgOg	z0.5	z0.5	0.0	h o b rD rY
		v P075: h-h r ytoSoD rOtoI rOeEe	920-55-3	0.5	DgOg	z1.0	z1.0	0.0	h o b rD rY



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 WotSBtOet : vu 1301497
 i IreEy : KBbMwR dAAABi Id TvA
 PtojeNy : 117L12301

Laboratory sample ID	Client sample ID	Method/Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
Eu07PD: Nijyrot 49 I (et sb C Loy 2171Q58a 6noI y) (- ed vu 1301553-011 dEoECDocs		vP075: h-h nykosoDotpkoIIE	59-89-3	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			L31-L4-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			100-75-4	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			934-1L-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			8L-20-L 133-29-4	0.5	Dg08g	z1.0	z1.0	0.0	ho btdry
			91-80-5	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			109-0L-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			98-8L-3	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			98-95-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			78-59-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
Eu07PE: Nijyro4ro9 4yInt 4(d Keyo(et sb C Loy 2171Q58a vu 1301441-001 dEoECDocs		vP075: 3-PrIbIIE	109-0L-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			98-8L-3	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			98-95-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			78-59-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			L0L-30-3	0.5	Dg08g	z1.0	z1.0	0.0	ho btdry
			131-14-3	0.5	Dg08g	z1.0	z1.0	0.0	ho btdry
			124-23-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			5L-57-5	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			99-55-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			99-25-4	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
vu 1301553-011 dEoECDocs		vP075: 3-PrIbIIE	L3-44-3	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			93-L7-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			83-L8-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			32950-58-5	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			L0-11-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			510-15-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			102-22-2	1	Dg08g	z1	z1	0.0	ho btdry
			109-0L-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			98-8L-3	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			98-95-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
vu 1301553-011 dEoECDocs		vP075: 3-PrIbIIE	78-59-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			L0L-30-3	0.5	Dg08g	z1.0	z1.0	0.0	ho btdry
			131-14-3	0.5	Dg08g	z1.0	z1.0	0.0	ho btdry
			124-23-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			5L-57-5	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			99-55-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			99-25-4	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			L3-44-3	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			93-L7-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			83-L8-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
vu 1301553-011 dEoECDocs		vP075: 3-PrIbIIE	32950-58-5	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			L0-11-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			510-15-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			102-22-2	1	Dg08g	z1	z1	0.0	ho btdry
			109-0L-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			98-8L-3	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			98-95-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			78-59-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btdry
			L0L-30-3	0.5	Dg08g	z1.0	z1.0	0.0	ho btdry
			131-14-3	0.5	Dg08g	z1.0	z1.0	0.0	ho btdry



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 WotSBtOet : vu 1301497
 i IreEy : KBbMWR dAABI Id TvA
 PtojeNy : 117L12301

Acrr-u aYn : SOIL		Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)		
Eu07PE: Nliyro4ro9 4Yjnt 4(d Keyo(et sb C Loy 2171Q88a 6 no(y) (- ed											
vu 1301553-011	dEoECDocs	vP075: i klotor eXtlaye	510-15-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: dxor eXeEe	102-22-2	1	Dg08g	z1	z1	0.0	ho btDiy		
Eu07Pp: i 4woeynert sb C Loy 2171Q88a											
vu 1301441-001	dEoECDocs	vP075: Xis(3-NklotoeKQ) eKet	111-44-4	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: Xis(3-NklotoeKQ; Q DeykaEe	111-91-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 4-i klotopkeEQ pkeEQ eKet	7005-73-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 4-XtoD opkeEQ pkeEQ eKet	101-55-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
vu 1301553-011	dEoECDocs	vP075: Xis(3-NklotoeKQ) eKet	111-44-4	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: Xis(3-NklotoeKQ; Q DeykaEe	111-91-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 4-i klotopkeEQ pkeEQ eKet	7005-73-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 4-XtoD opkeEQ pkeEQ eKet	101-55-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
Eu07PG: Cmorl(4yed i cdron4r) o(t sb C Loy 2171Q88a											
vu 1301441-001	dEoECDocs	vP075: 1.2-MNklotor eXeEe	541-72-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 1.4-MNklotor eXeEe	10L-4L-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 1.3-MNklotor eXeEe	95-50-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: He; aNklotoeKaEe	L7-73-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 1.3.4-TiNklotor eXeEe	130-83-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: He; aNklotoptopQeEe	1888-71-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: He; aNklotor cy0eEe	87-L8-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: He; aNklotonNopeEjaOeEe	77-47-4	0.5	Dg08g	z3.5	z3.5	0.0	ho btDiy		
		vP075: PeEjaNklotor eXeEe	L08-92-5	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: He; aNklotor eXeEe (Hi X)	118-74-1	0.5	Dg08g	z1.0	z1.0	0.0	ho btDiy		
vu 1301553-011	dEoECDocs	vP075: 1.2-MNklotor eXeEe	541-72-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 1.4-MNklotor eXeEe	10L-4L-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 1.3-MNklotor eXeEe	95-50-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: He; aNklotoeKaEe	L7-73-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 1.3.4-TiNklotor eXeEe	130-83-1	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: He; aNklotoptopQeEe	1888-71-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: He; aNklotor cy0eEe	87-L8-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: He; aNklotonNopeEjaOeEe	77-47-4	0.5	Dg08g	z3.5	z3.5	0.0	ho btDiy		
		vP075: PeEjaNklotor eXeEe	L08-92-5	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: He; aNklotor eXeEe (Hi X)	118-74-1	0.5	Dg08g	z1.0	z1.0	0.0	ho btDiy		
Eu07Pi : A(N(et 4(d He(zidl(et sb C Loy 2171Q88a											
vu 1301441-001	dEoECDocs	vP075: dEiEe	L3-52-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 4-i klotoaEiEe	10L-47-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 3-h nytoaEiEe	88-74-4	0.5	Dg08g	z1.0	z1.0	0.0	ho btDiy		
		vP075: 2-h nytoaEiEe	99-09-3	0.5	Dg08g	z1.0	z1.0	0.0	ho btDiy		
		vP075: Mir eXofictaE	123-L4-9	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 4-h nytoaEiEe	100-01-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btDiy		



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 WotSBtOet : vu 1301497
 i IreEy : KBbMwR dAABi Id TvA
 PtojeNy : 117L12301

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
vu 1301441-001	dEoECDocs	vP075: i atraxole	8L-74-8	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: 2.2'-MnKlotor eExrOIE	91-94-1	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: dEiIE	L3-52-2	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: 4-i klotoaEiIE	10L-47-8	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: 3-h ryoaEiIE	88-74-4	0.5	Dg ^{08g}	z1.0	z1.0	0.0	ho btDy
		vP075: 2-h ryoaEiIE	99-09-3	0.5	Dg ^{08g}	z1.0	z1.0	0.0	ho btDy
		vP075: Mir eXofictaE	123-L4-9	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: 4-h ryoaEiIE	100-01-L	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: i atraxole	8L-74-8	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: 2.2'-MnKlotor eExrOIE	91-94-1	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
vu 1301441-001	dEoECDocs	vP075: alpka-XHI	219-84-L	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: r eya-XHI	219-85-7	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: gaDDa-XHI	58-89-9	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: Oelja-XHI	219-8L-8	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: HepyaKlot	7L-44-8	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: dIOIE	209-00-3	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: HepyaKlot epo; rOe	1034-57-2	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: alpka-v EOscifaE	959-98-8	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: 4.4'-MMW	73-55-9	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: MeIOIE	L0-57-1	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: vEQIE	73-30-8	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: r eya-v EOscifaE	22312-L5-9	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: 4.4'-MMW	73-54-8	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: v EOscifaE sclfaje	1021-07-8	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: 4.4'-MMT	50-39-2	0.5	Dg ^{08g}	z1.0	z1.0	0.0	ho btDy
		vP075: alpka-XHI	219-84-L	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vP075: r eya-XHI	219-85-7	0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
		vu 1301553-011	dEoECDocs	vP075: gaDDa-XHI	58-89-9	0.5	Dg ^{08g}	z0.5	z0.5
vP075: Oelja-XHI	219-8L-8			0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
vP075: HepyaKlot	7L-44-8			0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
vP075: dIOIE	209-00-3			0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
vP075: HepyaKlot epo; rOe	1034-57-2			0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
vP075: alpka-v EOscifaE	959-98-8			0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
vP075: 4.4'-MMW	73-55-9			0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
vP075: MeIOIE	L0-57-1			0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
vP075: vEQIE	73-30-8			0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy
vP075: r eya-v EOscifaE	22312-L5-9			0.5	Dg ^{08g}	z0.5	z0.5	0.0	ho btDy



Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			
						Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
Eu07PJ: Org4(oFmot Fmbr- t uet, ynidet sb C Loy. 2171Q88a									
v u 1301553-011	dEoECDocs	v P075: v ECoScifaE scfaye	1021-07-8	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: 4'4'-MMT	50-39-2	0.5	Dg08g	z1.0	z1.0	0.0	h o brDy
Eu07PJ: Org4(oFmot Fmbr- t uet, ynidet sb C Loy. 2171Q88a									
v u 1301441-001	dEoECDocs	v P075: MNklotnos	L3-72-7	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: MD ekoyae	L0-51-5	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: MaxfEoE	222-41-5	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: i klotpQrfos-DeykQ	5598-12-0	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: u alayk0E	131-75-5	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: FeEyk0E	55-28-9	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: i klotpQrfos	3931-88-3	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: PntIDpkos-eykQ	32505-41-1	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: i klotfeEmEpkos	470-90-L	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: Ptoyk0fos	24L42-4L-4	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: v yk0E	5L2-13-3	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: MNklotnos	L3-72-7	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: MD ekoyae	L0-51-5	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: MaxfEoE	222-41-5	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: i klotpQrfos-DeykQ	5598-12-0	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: u alayk0E	131-75-5	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: FeEyk0E	55-28-9	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: i klotpQrfos	3931-88-3	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: PntIDpkos-eykQ	32505-41-1	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: i klotfeEmEpkos	470-90-L	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: Ptoyk0fos	24L42-4L-4	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
		v P075: v yk0E	5L2-13-3	0.5	Dg08g	z0.5	z0.5	0.0	h o brDy
Eu0h0/071: Toy4vuyey0e-9 i cdron4r) o(t sb C Loy. 21855PPa									
v u 1301497-001	dLPT4G301	v P080: i L- i 9 FtaNy0E	----	10	Dg08g	z10	z10	0.0	h o brDy
Eu0h0/071: Toy4vuyey0e-9 i cdron4r) o(t sb C Loy. 217PhQ3a									
v u 1301497-001	dLPT4G301	v P071: i 15- i 38 FtaNy0E	----	100	Dg08g	z100	z100	0.0	h o brDy
		v P071: i 39- i 2L FtaNy0E	----	100	Dg08g	z100	z100	0.0	h o brDy
		v P071: i 10- i 14 FtaNy0E	----	50	Dg08g	z50	z50	0.0	h o brDy
		v P071: i 10- i 2L FtaNy0E (scD)	----	50	Dg08g	z50	z50	0.0	h o brDy
Eu0h0/071: Toy4vRenoBer4) ve i cdron4r) o(t 6NEuM 2010 Dr4fy sb C Loy. 21855PPa									
v u 1301497-001	dLPT4G301	v P080: i L- i 10 FtaNy0E	----	10	Dg08g	z10	z10	0.0	h o brDy
Eu0h0/071: Toy4vRenoBer4) ve i cdron4r) o(t 6NEuM 2010 Dr4fy sb C Loy. 217PhQ3a									
v u 1301497-001	dLPT4G301	v P071: > i 1L- i 24 FtaNy0E	----	100	Dg08g	z100	z100	0.0	h o brDy
		v P071: > i 24- i 40 FtaNy0E	----	100	Dg08g	z100	z100	0.0	h o brDy
		v P071: > i 10- i 1L FtaNy0E	----	50	Dg08g	z50	z50	0.0	h o brDy
		v P071: > i 10- i 40 FtaNy0E (scD)	----	50	Dg08g	z50	z50	0.0	h o brDy



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 i IreEy : KBbW R dAABi Id TvA
 PtojeNy : 117L12301

Laboratory sample ID		Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
Eu0h0: HTEXN sb C Loy 21855PPa										
v u 1301497-001		dLPT4G001	vP080: XeExeEe	71-42-3	0.3	Dg08g	z0.3	z0.3	0.0	h o btDiy
			vP080: TolceEe	108-88-2	0.5	Dg08g	z0.5	z0.5	0.0	h o btDiy
			vP080: v kQr eXeEe	100-41-4	0.5	Dg08g	z0.5	z0.5	0.0	h o btDiy
			vP080: Dey- & pata-6OeEe	108-28-2 10L-43-2	0.5	Dg08g	z0.5	z0.5	0.0	h o btDiy
			vP080: otuko-6OeEe	95-47-L	0.5	Dg08g	z0.5	z0.5	0.0	h o btDiy
			vP080: h apk,kaleEe	91-30-2	1	Dg08g	z1	z1	0.0	h o btDiy
Eu218: uermvor4je) c LC/MS sb C Loy 2171175a										
v u 1301497-001		dLPT4G001	vP31L: PetNklotaye	7L01-90-2	10.0	µg08g	z10.0	z10.0	0.0	h o btDiy
Eu2Ql: uerfv oroonyevAnldt 4f d S-vo(4yet. sb C Loy 217055ha										
v u 1301497-001		dLPT4G001	vP321: PFBA	17L2-32-1	0.0005	Dg08g	0.0050	0.0051	3.5	0% - 50%
			vP321: PFBd	225-L7-1	0.0005	Dg08g	z0.0005	z0.0005	0.0	h o btDiy
			vP321: L:3 FicotoyeloD et AcifoEaye (L:3 FYA)	37L19-97-3	0.005	Dg08g	z0.005	z0.005	0.0	h o btDiy
			vP321: PFBA	17L2-32-1	0.0005	Dg08g	z0.0005	z0.0005	0.0	h o btDiy
			vP321: PFBd	225-L7-1	0.0005	Dg08g	z0.0005	z0.0005	0.0	h o btDiy
			vP321: L:3 FicotoyeloD et AcifoEaye (L:3 FYA)	37L19-97-3	0.005	Dg08g	z0.005	z0.005	0.0	h o btDiy



Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality of the sample is critical to the accuracy of the results. The purpose of this report is to provide a detailed description of the sample and the results of the analysis. The sample was collected from the site on 11/12/2011. The results of the analysis are shown in the table below.

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB)		Laboratory Control Spike (LCS) Report		
				Result	Concentration	Spike Recovery (%)	LCS	Low
EG00PT: Toy4vMey4t c lCu6AES sb cLoy. 21h1Q0Pa								
vK005T: dtsetfN	7440-28-3	5	Dg	z5	12.L Dg	98.4	74	123
vK005T: i aCD rD	7440-42-9	1	Dg	z1	3.8 Dg	97.0	71	132
vK005T: i ktoD rD	7440-47-2	3	Dg	z3	L0.9 Dg	10L	72	135
vK005T: i oppet	7440-50-8	5	Dg	z5	55.1 Dg	103	74	134
vK005T: beaO	7429-93-1	5	Dg	z5	54.9 Dg	105	74	13L
vK005T: h nScl	7440-03-0	3	Dg	z3	55.1 Dg	107	74	138
vK005T: ZfEN	7440-LL-L	5	Dg	z5	105 Dg	103	74	134
EG00QT: Toy4vRenoBer4 ve Mern- rc) c plMS sb cLoy. 21h1Q08a								
vK025T: u etNtC	7429-97-L	0.1	Dg	z0.1	1.47 Dg	105	L4	11L
Eu003: Org4(in M4yep sb cLoy. 2171hh5a								
vP004: Toy4l BtgaENi atrOe	----	0.5	%	z0.5	42.5 %	98.0	94	118
Eu088: uovnmorl(4yed HlFme(ct suChA sb cLoy. 2171Q03a								
vPOL: Toy4l PolOklotEayOrpkeEOs	----	0.1	Dg	z0.10	1.34 Dg	L3.7	55	125
Eu08hA: Org4(onmorl(e uet yndtet sOCa sb cLoy. 2171Q05a								
vPOL8: alpka-XHi	219-84-L	0.05	Dg	z0.05	0.5 Dg	97.1	53	122
vPOL8: He: aNklotoreXeEe (Hi X)	118-74-1	0.05	Dg	z0.05	0.5 Dg	94.1	50	123
vPOL8: r eye-XHi	219-85-7	0.05	Dg	z0.05	0.5 Dg	99.2	50	128
vPOL8: gaDDa-XHi	58-89-9	0.05	Dg	z0.05	0.5 Dg	98.3	54	123
vPOL8: Celje-XHi	219-8L-8	0.05	Dg	z0.05	0.5 Dg	90.L	51	122
vPOL8: HepaNklot	7L-44-8	0.05	Dg	z0.05	0.5 Dg	90.4	51	124
vPOL8: dICrE	209-00-3	0.05	Dg	z0.05	0.5 Dg	89.1	53	122
vPOL8: HepaNklot epoc: rOe	1034-57-2	0.05	Dg	z0.05	0.5 Dg	90.8	54	12L
vPOL8: yaEs-i klotOaEe	5102-74-3	0.05	Dg	z0.05	0.5 Dg	90.9	52	12L
vPOL8: alpka-v EOsciflaE	959-98-8	0.05	Dg	z0.05	0.5 Dg	97.2	52	122
vPOL8: Ns-i klotOaEe	5102-71-9	0.05	Dg	z0.05	0.5 Dg	91.0	53	127
vPOL8: MeICrE	L0-57-1	0.05	Dg	z0.05	0.5 Dg	97.1	49	123
vPOL8: 4.4'-MMW	73-55-9	0.05	Dg	z0.05	0.5 Dg	90.4	52	124
vPOL8: v EOHE	73-30-8	0.05	Dg	z0.05	0.5 Dg	90.3	45	141
vPOL8: r eye-v EOsciflaE	22312-L5-9	0.05	Dg	z0.05	0.5 Dg	99.3	54	123
vPOL8: 4.4'-MMW	73-54-8	0.05	Dg	z0.05	0.5 Dg	88.4	53	12L
vPOL8: v EOHE alOsKCOe	7431-92-4	0.05	Dg	z0.05	0.5 Dg	74.0	49	125
vPOL8: v EOsciflaE scrlfaye	1021-07-8	0.05	Dg	z0.05	0.5 Dg	93.3	49	143
vPOL8: 4.4'-MMT	50-39-2	0.3	Dg	z0.3	0.5 Dg	92.1	40	14L
vPOL8: v EOHE SsypEe	52494-70-5	0.05	Dg	z0.05	0.5 Dg	93.3	51	127



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 WotSBtOet : v u 1301497
 i IreEy : KBbMWR dAABI Id TvA
 PtOetN : 117L12301

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
				Result	Concentration	Spike	Spike Recovery (%)	LCS	Low
Eu08nA: Org4(onmorl(e uet ylnidet sOca sb CLoy. 2171Q5Ca 6no(y(- ed									
v P0L8: u ekO: ONklot	73-42-5	0.3	DgGg	z0.3	0.5 DgGg	97.2	28	149	
Eu08nH: Org4(oFmot Fmor- t uet ylnidet sOua sb CLoy. 2171Q5Ca									
v P0L8: MNklotnos	L3-72-7	0.05	DgGg	z0.05	0.5 DgGg	50.1	25	127	
v P0L8: MeD eyE-A-DeYkQ	919-8L-8	0.05	DgGg	z0.05	0.5 DgGg	73.7	3L.8	140	
v P0L8: u oEoNoyopkos	L932-33-4	0.3	DgGg	z0.3	0.5 DgGg	107	10	185	
v P0L8: MD eykOayE	L0-51-5	0.05	DgGg	z0.05	0.5 DgGg	99.0	4L	144	
v P0L8: MaxEoE	222-41-5	0.05	DgGg	z0.05	0.5 DgGg	88.8	50	124	
v P0L8: i klotpOrfos-DeYkQ	5598-12-0	0.05	DgGg	z0.05	0.5 DgGg	89.8	53	124	
v P0L8: PataYkroE-DeYkQ	398-00-0	0.3	DgGg	z0.3	0.5 DgGg	89.2	50	127	
v P0L8: u alaykroE	131-75-5	0.05	DgGg	z0.05	0.5 DgGg	91.0	4L	140	
v P0L8: FeEYkroE	55-28-9	0.05	DgGg	z0.05	0.5 DgGg	8L.0	50	124	
v P0L8: i klotpOrfos	3931-88-3	0.05	DgGg	z0.05	0.5 DgGg	89.4	53	124	
v P0L8: PataYkroE	5L-28-3	0.3	DgGg	z0.3	0.5 DgGg	89L	47	129	
v P0L8: PitrDpkos-eykQ	32505-41-1	0.05	DgGg	z0.05	0.5 DgGg	89.2	48	127	
v P0L8: i klotfeEmEpkos	470-90-L	0.05	DgGg	z0.05	0.5 DgGg	93.1	48	142	
v P0L8: XtoDopkos-eykQ	4834-78-L	0.05	DgGg	z0.05	0.5 DgGg	90.5	53	12L	
v P0L8: FeEaDrpkos	33334-93-L	0.05	DgGg	z0.05	0.5 DgGg	78.8	27	12L	
v P0L8: PtoYkrofos	24L42-4L-4	0.05	DgGg	z0.05	0.5 DgGg	89.2	50	12L	
v P0L8: vYkroE	5L2-13-3	0.05	DgGg	z0.05	0.5 DgGg	94.3	50	12L	
v P0L8: i atr opkeEoykroE	78L-19-L	0.05	DgGg	z0.05	0.5 DgGg	87.8	47	128	
v P0L8: dxrEpkos u eykQ	8L-50-0	0.05	DgGg	z0.05	0.5 DgGg	97.7	19.L	170	
Eu073A: Mo(oncnvN Aro9 4Yn i cdrom4r) o(t sb CLoy. 21855P8a									
v P074: AYGeEe	100-43-5	0.5	DgGg	z0.5	1 DgGg	90.L	L4	130	
v P074: IsoptopOr eExeEe	98-83-8	0.5	DgGg	z0.5	1 DgGg	97.7	74	130	
v P074: E-PTopOr eExeEe	102-L5-1	0.5	DgGg	z0.5	1 DgGg	9L.4	L5	117	
v P074: 1.2.5-TitDeYkOr eExeEe	108-L7-8	0.5	DgGg	z0.5	1 DgGg	90.9	L5	117	
v P074: seNXcyOr eExeEe	125-98-8	0.5	DgGg	z0.5	1 DgGg	97.1	L7	117	
v P074: 1.3.4-TitDeYkOr eExeEe	95-L2-L	0.5	DgGg	z0.5	1 DgGg	94.7	LL	117	
v P074: YeyXcyOr eExeEe	98-0L-L	0.5	DgGg	z0.5	1 DgGg	91.8	L8	11L	
v P074: p-IsoptopOYpceEe	99-87-L	0.5	DgGg	z0.5	1 DgGg	85.L	L4	117	
v P074: EXcyOr eExeEe	104-51-8	0.5	DgGg	z0.5	1 DgGg	97.2	59	115	
Eu073H: Oxcge(4Yed Co9 Fo- (dt sb CLoy. 21855P8a									
v P074: VIEG dNBeyEe	108-05-4	5	DgGg	z5	10 DgGg	114	40	128	
v P074: 3-XcyEoEe (u v #)	78-92-2	5	DgGg	z5	10 DgGg	72.8	L1	142	
v P074: 4-u eykQ-3-peEYeoEe (u IX#)	108-10-1	5	DgGg	z5	10 DgGg	80.8	L2	127	
v P074: 3-He: aEoEe (u X#)	591-78-L	5	DgGg	z5	10 DgGg	73.5	L2	122	
Eu073C: S- vo(4Yed Co9 Fo- (dt sb CLoy. 21855P8a									
v P074: i atr oE OScifCg	75-15-0	0.5	DgGg	z0.5	1 DgGg	117	57	131	



Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
				Result	Concentration	Spike	Spike Recovery (%)	LCS	Low
Eu073D: p-9 Ig4 (y) sb CLoy. 21855P8a									
vP074: 3.3-MNklotoptopaEe	594-30-7	0.5	DgGg	z0.5	1DgGg	113	51	120	
vP074: 1.3-MNklotoptopaEe	78-87-5	0.5	DgGg	z0.5	1DgGg	83.5	72	131	
vP074: Ns-1.2-MNklotoptopOeEe	100L1-01-5	0.5	DgGg	z0.5	1DgGg	= 110	59	109	
vP074: yaEs-1.2-MNklotoptopOeEe	100L1-03-L	0.5	DgGg	z0.5	1DgGg	L9.7	53	110	
vP074: 1.3-Mir toDoeKaEe (vMX)	10L-92-4	0.5	DgGg	z0.5	1DgGg	108	L8	130	
Eu073E: i 4oge(4yed AvIFm4jn Co9 Fo- (dt) sb CLoy. 21855P8a									
vP074: MNklotoCfocotoDeyKaEe	75-71-8	5	DgGg	z5	10DgGg	85.1	24	133	
vP074: i klotoDeyKaEe	74-87-2	5	DgGg	z5	10DgGg	100	53	122	
vP074: VIEG NklotOe	75-01-4	5	DgGg	z5	10DgGg	115	47	122	
vP074: XtoDoDeyKaEe	74-82-9	5	DgGg	z5	10DgGg	100	29	111	
vP074: i klotoeKaEe	75-00-2	5	DgGg	z5	10DgGg	97.0	42	127	
vP074: TtrNklotofocotoDeyKaEe	75-L9-4	5	DgGg	z5	10DgGg	131	L1	13L	
vP074: 1.1-MNklotoeKaEe	75-25-4	0.5	DgGg	z0.5	1DgGg	92.0	L3	134	
vP074: loObDeyKaEe	74-88-4	0.5	DgGg	z0.5	1DgGg	100	47	111	
vP074: yaEs-1.3-MNklotoeKaEe	15L-L0-5	0.5	DgGg	z0.5	1DgGg	87.7	L9	119	
vP074: 1.1-MNklotoeKaEe	75-24-2	0.5	DgGg	z0.5	1DgGg	91.2	70	130	
vP074: Ns-1.3-MNklotoeKaEe	15L-59-3	0.5	DgGg	z0.5	1DgGg	93.1	73	130	
vP074: 1.1.1-TtrNklotoeKaEe	71-55-L	0.5	DgGg	z0.5	1DgGg	105	L4	113	
vP074: 1.1-MNklotoptopOeEe	5L2-58-L	0.5	DgGg	z0.5	1DgGg	87.9	71	117	
vP074: i atr oE TeyaNklotOe	5L-32-5	0.5	DgGg	z0.5	1DgGg	80.5	51	10L	
vP074: 1.3-MNklotoeKaEe	107-0L-3	0.5	DgGg	z0.5	1DgGg	90.L	70	13L	
vP074: TtrNklotoeKaEe	79-01-L	0.5	DgGg	z0.5	1DgGg	93.7	71	130	
vP074: Mir toDoDeyKaEe	74-95-2	0.5	DgGg	z0.5	1DgGg	89.2	70	133	
vP074: 1.1.3-TtrNklotoeKaEe	79-00-5	0.5	DgGg	z0.5	1DgGg	94.7	72	135	
vP074: 1.2-MNklotoptopaEe	143-38-9	0.5	DgGg	z0.5	1DgGg	102	75	135	
vP074: TeyaNklotoeKaEe	137-18-4	0.5	DgGg	z0.5	1DgGg	88.L	71	130	
vP074: 1.1.1.3-TeyaNklotoeKaEe	L20-30-L	0.5	DgGg	z0.5	1DgGg	88.9	54	10L	
vP074: yaEs-1.4-MNkloto-3-r cyeEe	110-57-L	0.5	DgGg	z0.5	1DgGg	L7.L	4L	113	
vP074: Ns-1.4-MNkloto-3-r cyeEe	147L-11-5	0.5	DgGg	z0.5	1DgGg	107	31.8	117	
vP074: 1.1.3.3-TeyaNklotoeKaEe	79-24-5	0.5	DgGg	z0.5	1DgGg	92.1	71	121	
vP074: 1.3.2-TtrNklotoptopaEe	9L-18-4	0.5	DgGg	z0.5	1DgGg	91.9	70	124	
vP074: PeEaNklotoeKaEe	7L-01-7	0.5	DgGg	z0.5	1DgGg	81.1	40	94	
vP074: 1.3-Mir toDo-2-NklotoptopaEe	9L-13-8	0.5	DgGg	z0.5	1DgGg	83.4	41	112	
Eu073p: i 4oge(4yed Aro9 4jn Co9 Fo- (dt) sb CLoy. 21855P8a									
vP074: i kloto eXeEe	108-90-7	0.5	DgGg	z0.5	1DgGg	99.1	78	130	
vP074: XtoDor eXeEe	108-8L-1	0.5	DgGg	z0.5	1DgGg	93.5	L8	11L	
vP074: 3-i klotoyIceEe	95-49-8	0.5	DgGg	z0.5	1DgGg	97.0	L7	117	
vP074: 4-i klotoyIceEe	10L-42-4	0.5	DgGg	z0.5	1DgGg	95.1	L7	115	
vP074: 1.3.2-TtrNkloto eXeEe	87-L1-L	0.5	DgGg	z0.5	1DgGg	= 130	L0	130	



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 WotSBtOet : v u 1301497
 i rreEy : KBbMWR dAABi ld TvA
 PtojeNy : 117L12301

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report			Laboratory Control Spike (LCS) Report		
				Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)	
						LCS	Low	High	
Eu073G: TrInrko9 eyrnf(et sb CLoy: 21855P8a									
v P074: i klotofotD	L7-L-2	0.5	Dg	z0.5	1 Dg	93.L	71	131	
v P074: XtoD oNklotDeykaEe	75-37-4	0.5	Dg	z0.5	1 Dg	90.1	L0	108	
v P074: Mir toD oNklotDeykaEe	134-48-1	0.5	Dg	z0.5	1 Dg	8.L0	48	104	
v P074: XtoD ofotD	75-35-3	0.5	Dg	z0.5	1 Dg	87.7	40	10L	
Eu07PA: urne(oVIn Co9 Fo- (dt sb CLoy: 2171Q58a									
v P075: PkeEol	108-95-3	0.5	Dg	z0.5	3.5 Dg	93.5	28	128	
v P075: 3-i klotopkeEol	95-57-8	0.5	Dg	z0.5	3.5 Dg	75.2	29	139	
v P075: 3-u eyQpkeEol	95-48-7	0.5	Dg	z0.5	3.5 Dg	78.8	22	123	
v P075: 2- & 4-u eyQpkeEol	1219-77-2	0.5	Dg	z1.0					
v P075: 3-h rtopkeEol	88-75-5	0.5	Dg	z0.5	3.5 Dg	93.1	25	121	
v P075: 3.4-MD eyQpkeEol	105-L-7-9	0.5	Dg	z0.5	3.5 Dg	81.0	21	121	
v P075: 3.4-MN klotopkeEol	130-82-3	0.5	Dg	z0.5	3.5 Dg	94.9	10	125	
v P075: 3.L-MN klotopkeEol	87-L-5-0	0.5	Dg	z0.5	3.5 Dg	80.4	25	122	
v P075: 4-i klotot-2-u eyQpkeEol	59-50-7	0.5	Dg	z0.5	3.5 Dg	81.0	2L	123	
v P075: 3.4.L-TInklotopkeEol	88-0L-3	0.5	Dg	z0.5	3.5 Dg	93.4	29	142	
v P075: 3.4.5-TInklotopkeEol	95-95-4	0.5	Dg	z0.5	3.5 Dg	70.9	24	128	
v P075: PeEyaNklotopkeEol	87-8L-5	1.0	Dg	z1	3.5 Dg	108	20.3	143	
Eu07PH: uoV(- ne4r Aro9 4In i cdron4r) o(t sb CLoy: 2171Q58a									
v P075: h apkykaleEe	91-30-2	0.5	Dg	z0.5	3.5 Dg	80.2	29	138	
v P075: 3-u eyQEapkykaleEe	91-57-L	0.5	Dg	z0.5	3.5 Dg	78.2	40	12L	
v P075: 3-i klototEapkykaleEe	91-58-7	0.5	Dg	z0.5	3.5 Dg	L5.1	39.5	127	
v P075: dNeEapkyQeEe	308-9L-8	0.5	Dg	z0.5	3.5 Dg	7L.4	28	128	
v P075: dNeEapkykeEe	82-23-9	0.5	Dg	z0.5	3.5 Dg	81.9	45	122	



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 WotSBtOet : v u 1301497
 i IreEy : KBbMWR dAABi ld TvA
 PtojeNy : 117L12301

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report			Laboratory Control Spike (LCS) Report			
				Result	Concentration	Spike	Spike Recovery (%)		Recovery Limits (%)	
							LCS	Low	High	
Eu07PH: uovc(-me4r Aro9 4yn i cdron4r) o(t sb cLoy: 2171Q58a 6no\Y(-ed										
v P075: FicoteEe	8L-72-7	0.5	Dg	z0.5	3.5 Dg	81.0	47	127		
v P075: PkeEaEjkteEe	85-01-8	0.5	Dg	z0.5	3.5 Dg	85.5	45	122		
v P075: dEjktanEe	130-13-7	0.5	Dg	z0.5	3.5 Dg	88.2	44	120		
v P075: FicotaEjkeEe	30L-44-0	0.5	Dg	z0.5	3.5 Dg	91.5	4L	128		
v P075: PQteEe	139-00-0	0.5	Dg	z0.5	3.5 Dg	8L.2	42	145		
v P075: h-3-FicoteEG dNeyDrDe	52-9L-2	0.5	Dg	z0.5	3.5 Dg	90.5	42	142		
v P075: XeEx(a)EjktanEe	5L-55-2	0.5	Dg	z0.5	3.5 Dg	82.5	42	129		
v P075: i ktGseEe	318-01-9	0.5	Dg	z0.5	3.5 Dg	89.7	43	140		
v P075: XeExo(r) & XeExo(S)ficotaEjkeEe	305-99-3 307-08-9	1	Dg	z1	5 Dg	90.3	42	129		
v P075: 7.13-MDejKOrEEx(a)EjktanEe	57-97-L	0.5	Dg	z0.5	3.5 Dg	87.2	40	154		
v P075: XeExo(a)PQteEe	50-23-8	0.5	Dg	z0.5	3.5 Dg	87.L	28	128		
v P075: 2-u eyONkolaEjkteEe	5L-49-5	0.5	Dg	z0.5	3.5 Dg	81.L	4L	1L3		
v P075: IEoEo(1.3.2.N)PQteEe	192-29-5	0.5	Dg	z0.5	3.5 Dg	112	49	159		
v P075: MirreEx(a.k)EjktanEe	52-70-2	0.5	Dg	z0.5	3.5 Dg	108	49	157		
v P075: XeExo(g.k)PpetQeEe	191-34-3	0.5	Dg	z0.5	3.5 Dg	118	48	158		
v P075: AcD of PdHS	----	0.5	Dg	z0.5	3.5 Dg	83.4	40	143		
Eu07PC: umm4ve Eiyert sb cLoy: 2171Q58a										
v P075: MDeyKQ pkxkalye	121-11-2	0.5	Dg	z0.5	3.5 Dg	85.1	48	140		
v P075: MneyKQ pkxkalye	84-LL-3	0.5	Dg	z0.5	3.5 Dg	95.4	28	1L9		
v P075: Mner cyQ pkxkalye	84-74-3	0.5	Dg	z0.5	3.5 Dg	93.L	43	140		
v P075: XcyQ r eExQ pkxkalye	85-L8-7	0.5	Dg	z0.5	3.5 Dg	---	---	---		



Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report				
				Result		Spike Concentration	Spike Recovery (%)		Recovery Limits (%)	
				Result	Result		LCS	Low	High	
Eu07PC: uMytAwE Eiyert sb cLOY. 2171Q88a 6no(y)l - ed										
v P075: r is(3-ekOkke; D)pykcalaye	117-81-7	0.5	DgQg	z0.5	z0.5	3.5 DgQg	113	47	155	
v P075: MhE-onQpkxalaye	117-84-0	0.5	DgQg	z0.5	z0.5	3.5 DgQg	91.3	47	127	
Eu07PD: Niyrot 49 (l et sb cLOY. 2171Q88a										
v P075: h-h nyosoDeykQaD rfe	10595-95-L	0.5	DgQg	z0.5	z0.5	3.5 DgQg	95.L	1L.3	12L	
v P075: h-h nyosoQeykQaD rfe	55-18-5	0.5	DgQg	z0.5	z0.5	3.5 DgQg	85.7	22	123	
v P075: h-h nyosopQtoirDfe	920-55-3	0.5	DgQg	z1.0	z1.0	3.5 DgQg	87.1	37.7	120	
v P075: h-h nyosoDotpkolrfe	59-89-3	0.5	DgQg	z0.5	z0.5	3.5 DgQg	113	22	121	
v P075: h-h nyosoQrE-ptopQaD rfe	L31-L4-7	0.5	DgQg	z0.5	z0.5	3.5 DgQg	8L.0	2L	137	
v P075: h-h nyosoppeirDfe	100-75-4	0.5	DgQg	z0.5	z0.5	3.5 DgQg	8L.5	25	138	
v P075: h-h nyosoQr cQaD rfe	934-1L-2	0.5	DgQg	z0.5	z0.5	3.5 DgQg	87.L	27	129	
v P075: h-h nyosoQpkEQ & MipkeQaD rfe	8L-20-L 133-29-4	0.5	DgQg	z1.0	z1.0	3.5 DgQg	79.2	43	124	
v P075: u eykapQrfe	91-80-5	0.5	DgQg	z0.5	z0.5	3.5 DgQg	= 18.7	34.4	142	
Eu07PE: Niyro4ro9 4yInt 4(d Keyo(et sb cLOY. 2171Q88a										
v P075: 3-PrIbifE	109-0L-8	0.5	DgQg	z0.5	z0.5	3.5 DgQg	90.5	10	128	
v P075: dNeypkEoEe	98-8L-3	0.5	DgQg	z0.5	z0.5	3.5 DgQg	77.3	25	138	
v P075: h nyor eExeEe	98-95-2	0.5	DgQg	z0.5	z0.5	3.5 DgQg	81.3	2L	137	
v P075: IsopkotoEe	78-59-1	0.5	DgQg	z0.5	z0.5	3.5 DgQg	82.7	40	12L	
v P075: 3.L-ME nyopceEe	L0L-30-3	0.5	DgQg	z1.0	z1.0	3.5 DgQg	79.7	43	140	
v P075: 3.4-ME nyopceEe	131-14-3	0.5	DgQg	z1.0	z1.0	3.5 DgQg	85.3	4L	140	
v P075: 1-h apkyQaD rfe	124-23-7	0.5	DgQg	z0.5	z0.5	3.5 DgQg	= 4.4	10	84	
v P075: 4-h nyoqceEoIte-h-o; rD	5L-57-5	0.5	DgQg	z0.5	z0.5	3.5 DgQg	L0.1	17.7	152	



Acry-aYn : SOIL				Method Blank (MB) Report			Laboratory Control Spike (LCS) Report		
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	LCS	Low	High
Eu07PE: Njyodro9 4Ynt 4(d Keyo(et sb CLoy. 2171Q88a 6no) (- ed									
v P075: 5-hYto-o-yolorOEe	99-55-8	0.5	DgEG	z0.5	3.5 DgEG	74.4	27	135	
v P075: d xor eExeEe	102-22-2	1	DgEG	z1	3.5 DgEG	9L.1	4L	140	
v P075: 1.2.5-TtrEYtor eExeEe	99-25-4	0.5	DgEG	z0.5	3.5 DgEG	80.L	13.L	151	
v P075: PkeEaEaYeE	L3-44-3	0.5	DgEG	z0.5	3.5 DgEG	74.9	48	143	
v P075: 4-dDIEor pkeEQ	93-L7-1	0.5	DgEG	z0.5	3.5 DgEG	13.0	10	97	
v P075: PeEYnKlotoeYtor eExeEe	83-L8-8	0.5	DgEG	z0.5	3.5 DgEG	91.5	47	129	
v P075: PtoEaDIEe	32950-58-5	0.5	DgEG	z0.5	3.5 DgEG	92.L	45	122	
v P075: MDeyKdDIEoaxor eExeEe	L0-11-7	0.5	DgEG	z0.5	3.5 DgEG	84.L	43	12L	
v P075: i klotor eXitaye	510-15-L	0.5	DgEG	z0.5	3.5 DgEG	L7.7	41	141	
Eu07Pp: i 4oeYnerit sb CLoy. 2171Q88a									
v P075: Xis(3-NklotoeKd) eyket	111-44-4	0.5	DgEG	z0.5	3.5 DgEG	71.5	2L	14L	
v P075: Xis(3-NklotoeKo; C) DeyKaEe	111-91-1	0.5	DgEG	z0.5	3.5 DgEG	84.5	40	12L	
v P075: 4-i klotopkeEQ pkeEQ eyket	7005-73-2	0.5	DgEG	z0.5	3.5 DgEG	80.8	4L	12L	
v P075: 4-XtoDopkeEQ pkeEQ eyket	101-55-2	0.5	DgEG	z0.5	3.5 DgEG	77.3	44	140	
Eu07PG: Cmori(4yed i cdron4r) o(t sb CLoy. 2171Q88a									
v P075: 1.2-MNklotor eExeEe	541-72-1	0.5	DgEG	z0.5	3.5 DgEG	74.8	25	133	
v P075: 1.4-MNklotor eExeEe	10L-4L-7	0.5	DgEG	z0.5	3.5 DgEG	84.4	2L	135	
v P075: 1.3-MNklotor eExeEe	95-50-1	0.5	DgEG	z0.5	3.5 DgEG	81.7	27	132	
v P075: He: aNklotoeKaEe	L7-73-1	0.5	DgEG	z0.5	3.5 DgEG	73.L	22	132	
v P075: 1.3.4-TtrNklotor eExeEe	130-83-1	0.5	DgEG	z0.5	3.5 DgEG	77.3	2L	123	
v P075: He: aNklotoptopQeEe	1888-71-7	0.5	DgEG	z0.5	3.5 DgEG	82.5	3L.L	127	



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 WotSBtOet : v u 1301497
 i IreEy : KBbMWR dAABi Id TvA
 PtojeNy : 117L12301

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report			Laboratory Control Spike (LCS) Report		
				Result	Spike Concentration	Spike Recovery (%)	LCS	Low	High
Eu07PG: Cmori(4jed i cdron4r) o(t sb CLoy: 2171Q58a 6no(y(- ed									
v P075: He: aNklotor cyæOreEe	87-L8-2	0.5	DgŒg	z0.5	3.5 DgŒg	80.1	40	120	
v P075: He: aNklotONoPeEjæOreEe	77-47-4	0.5	DgŒg	z3.5	3.5 DgŒg	42.9	17.2	141	
v P075: PeEjæNklotor eExeEe	L08-92-5	0.5	DgŒg	z0.5	3.5 DgŒg	82.2	4L	12L	
v P075: He: aNklotor eExeEe (Hi X)	118-74-1	0.5	DgŒg	z1.0	5 DgŒg	80.3	40	143	
Eu07PI : A(N(et 4(d He(zidi(et sb CLoy: 2171Q58a									
v P075: dEiŒEe	L3-52-2	0.5	DgŒg	z0.5	3.5 DgŒg	21.5	10	114	
v P075: 4-i klotoaEiŒEe	10L-47-8	0.5	DgŒg	z0.5	3.5 DgŒg	1L.3	10	102	
v P075: 3-hŒŒoaEiŒEe	88-74-4	0.5	DgŒg	z1.0	3.5 DgŒg	8L.5	40	143	
v P075: 2-hŒŒoaEiŒEe	99-09-3	0.5	DgŒg	z1.0	3.5 DgŒg	44.L	32.2	135	
v P075: Mir eExofctæE	123-L4-9	0.5	DgŒg	z0.5	3.5 DgŒg	89.1	4L	124	
v P075: 4-hŒŒoaEiŒEe	100-01-L	0.5	DgŒg	z0.5	3.5 DgŒg	74.9	28	123	
v P075: i atraxole	8L-74-8	0.5	DgŒg	z0.5	3.5 DgŒg	8L.1	44	124	
v P075: 2.2-IMNklotor eExŒEe	91-94-1	0.5	DgŒg	z0.5	3.5 DgŒg	30.1	10	134	
Eu07PI: Org4(onmori(e uet ynidet sb CLoy: 2171Q58a									
v P075: alpka-XHi	219-84-L	0.5	DgŒg	z0.5	3.5 DgŒg	88.7	50	124	
v P075: r eyæ-XHi	219-85-7	0.5	DgŒg	z0.5	3.5 DgŒg	93.3	47	125	
v P075: gaDD a-XHi	58-89-9	0.5	DgŒg	z0.5	3.5 DgŒg	9L.2	50	127	
v P075: Oelje-XHi	219-8L-8	0.5	DgŒg	z0.5	3.5 DgŒg	94.8	48	12L	
v P075: HepyaNklot	7L-44-8	0.5	DgŒg	z0.5	3.5 DgŒg	88.3	40	128	
v P075: dICŒE	208-00-3	0.5	DgŒg	z0.5	3.5 DgŒg	89.2	44	140	
v P075: HepyaNklot epc: Œæ	1034-57-2	0.5	DgŒg	z0.5	3.5 DgŒg	85.8	45	129	



Acrr-u aYn : SOIL	Method Blank (MB) Report				Laboratory Control Spike (LCS) Report					
	Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)	
							LCS	Low	High	
Eu07P1: Org4(onmori)(e uet ynidet sb CLoy. 2171Q68a 6no(y(- ed										
v P075: alpka-v EOscifaE	999-98-8	0.5	Dg@	z0.5	3.5 Dg@	100	4L	143		
v P075: 4.4'-MMW	73-55-9	0.5	Dg@	z0.5	3.5 Dg@	87.3	70	120		
v P075: MeIctre	L0-57-1	0.5	Dg@	z0.5	3.5 Dg@	97.2	47	129		
v P075: v Ectre	73-30-8	0.5	Dg@	z0.5	3.5 Dg@	97.2	43	143		
v P075: r eye-v EOscifaE	22312-L5-9	0.5	Dg@	z0.5	3.5 Dg@	92.5	47	141		
v P075: 4.4'-MMW	73-54-8	0.5	Dg@	z0.5	3.5 Dg@	8L.4	43	14L		
v P075: v EOscifaE scifaye	1021-07-8	0.5	Dg@	z0.5	3.5 Dg@	84.2	41	141		
v P075: 4.4'-MMT	50-39-2	0.5	Dg@	z1.0	3.5 Dg@	87.L	19.L	148		
Eu07P1: Org4(oFmot Fmor- t uet ynidet sb CLoy. 2171Q68a										
v P075: MNklotnos	L3-72-7	0.5	Dg@	z0.5	3.5 Dg@	77.2	31.9	121		
v P075: MDekcaye	L0-51-5	0.5	Dg@	z0.5	3.5 Dg@	90.5	28	143		
v P075: MaxEoE	222-41-5	0.5	Dg@	z0.5	3.5 Dg@	98.5	2L	122		
v P075: i klotpCrfos-DekD	5598-12-0	0.5	Dg@	z0.5	3.5 Dg@	87.5	25	142		
v P075: u alajkroE	131-75-5	0.5	Dg@	z0.5	3.5 Dg@	90.9	25	142		
v P075: FeEktroE	55-28-9	0.5	Dg@	z0.5	3.5 Dg@	85.8	35.1	125		
v P075: i klotpCrfos	3931-88-3	0.5	Dg@	z0.5	3.5 Dg@	92.5	2L	123		
v P075: PntDpkos-ekD	32505-41-1	0.5	Dg@	z0.5	3.5 Dg@	89.5	2L	125		
v P075: i klotfeEmEpkos	470-90-L	0.5	Dg@	z0.5	3.5 Dg@	89.1	25	128		
v P075: Ptoykrofos	24L42-4L-4	0.5	Dg@	z0.5	3.5 Dg@	94.3	27	125		
v P075: v kroE	5L2-13-3	0.5	Dg@	z0.5	3.5 Dg@	88.L	28	127		
Eu0h0/071: Toy4vueyroE- 9 i cdron4r) o(t sb CLoy. 21855PPa										



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 WotSBtOet : v u 1301497
 i IreEy : KBbMWR dAABi IdTvA
 PtojeNy : 117L12301

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report		
				Result	Concentration	Spike Recovery (%)	Recovery Limits (%)	Low
Eu0h0/074: Toy4vuyeyoe-9 i cdron4r) o(t sb CLoy: 21855PPa 6no(y(- ed								
vP080: i L- i 9 FtaiNyE	----	10	DgGg	z10	23 DgGg	112	70	122
Eu0h0/074: Toy4vuyeyoe-9 i cdron4r) o(t sb CLoy: 217PhO3a								
vP071: i 10- i 14 FtaiNyE	----	50	DgGg	z50	544 DgGg	94.3	55	132
vP071: i 15- i 38 FtaiNyE	----	100	DgGg	z100	1981 DgGg	10L	73	124
vP071: i 39- i 2L FtaiNyE	----	100	DgGg	z100	818 DgGg	9L.4	71	142
vP071: i 10- i 2L FtaiNyE (scD)	----	50	DgGg	z50	----	----	----	----
Eu0h0/074: Toy4vRenoBer4) ve i cdron4r) o(t 6NEuM 2010 Dr4fy sb CLoy: 21855PPa								
vP080: i L- i 10 FtaiNyE	----	10	DgGg	z10	27 DgGg	112	70	120
Eu0h0/074: Toy4vRenoBer4) ve i cdron4r) o(t 6NEuM 2010 Dr4fy sb CLoy: 217PhO3a								
vP071: > i 10- i 1L FtaiNyE	----	50	DgGg	z50	870 DgGg	104	L9	132
vP071: > i 1L- i 24 FtaiNyE	----	100	DgGg	z100	3495 DgGg	100	71	124
vP071: > i 24- i 40 FtaiNyE	----	100	DgGg	z100	3L2 DgGg	79.4	L2	142
vP071: > i 10- i 40 FtaiNyE (scD)	----	100	DgGg	z100	----	----	----	----
Eu0h0: HTEXN sb CLoy: 21855PPa								
vP080: XeExeEe	71-42-3	0.3	DgGg	z0.3	3 DgGg	100	73	13L
vP080: TolceEe	108-88-2	0.5	DgGg	z0.5	3 DgGg	108	72	139
vP080: vKGr eXeEe	100-41-4	0.5	DgGg	z0.5	3 DgGg	10L	73	13L
vP080: Dey- & pata-6DeEe	108-28-2 10L-43-2	0.5	DgGg	z0.5	4 DgGg	113	70	128
vP080: otKo-6DeEe	95-47-L	0.5	DgGg	z0.5	3 DgGg	107	72	121
vP080: h apk,kaleEe	91-30-2	1	DgGg	z1	0.5 DgGg	139	70	120
Eu218: uermmor4ye) c LC/MS sb CLoy: 2171175a								
vP31L: PetNklotay	7L01-90-2	10	ugGg	z10.0	35 ugGg	100	5L	120
Eu2Q1: uerfv-oroonyvAnldt 4(d S- vfo(4yef. sb CLoy: 2170555ha								
vP321: PFBA	17L2-32-1	0.0005	DgGg	z0.0005	0.005 DgGg	90.5	54	14L
vP321: PFBD	225-L7-1	0.0005	DgGg	z0.0005	0.005 DgGg	99.0	54	124
vP321: L:3 FicotoyeloDet ActfoEaye (L:3 FA)	37L19-97-3	0.005	DgGg	z0.005	.035 DgGg	128	5L	128



Matrix Spike (MS) Report

The quality of the sample is not guaranteed. The purpose of this report is to provide information on the recovery of the spiked sample. The recovery of the spiked sample is not guaranteed. The recovery of the spiked sample is not guaranteed. The recovery of the spiked sample is not guaranteed.

Acronym: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report		
				Spike Concentration	Spike Recovery (%)	Recovery Limits (%)
EG00PT: ToyvMeyAt) c lCuAES sb CLoy. 21h1Q0Pa						
v u 1301441-003	dEoEDocs	v K005T: dtseEN	7440-28-3	50 DgGg	7L.L	70 120
		v K005T: i aCDreD	7440-42-9	50 DgGg	100	70 120
		v K005T: i ktoDreD	7440-47-2	50 DgGg	82.5	70 120
		v K005T: i oppet	7440-50-8	50 DgGg	103	70 120
		v K005T: beaO	7429-93-1	50 DgGg	83.5	70 120
		v K005T: hINSeI	7440-03-0	50 DgGg	101	70 120
		v K005T: ZIEEN	7440-LL-L	50 DgGg	132	70 120
EG00QT: ToyvRenoBar4) ve Memm- rc) c plIMS sb CLoy. 21h1Q08a						
v u 1301441-003	dEoEDocs	v K025T: u etNtIC	7429-97-L	5.0 DgGg	102	5L 133
Eu088: uovnmorl(4yed HIFme(ct) suCHa sb CLoy. 2171Q03a						
v u 1301441-002	dEoEDocs	v P0LL: TojAl PolOKlotrEajeOrnpkeEUs	----	1.34 DgGg	87.8	55 123
Eu08hA: Org4(onmorl(e uetYndet sOca sb CLoy. 2171Q05a						
v u 1301441-003	dEoEDocs	v P0L8: gaDDa-XHI	58-89-9	0.5 DgGg	5L.7	20 139
		v P0L8: HepyeKlot	7L-44-8	0.5 DgGg	54.0	33.3 139
		v P0L8: dIQrE	209-00-3	0.5 DgGg	40.2	35 138
		v P0L8: MleQrE	L0-57-1	0.5 DgGg	48.7	2L 123
		v P0L8: vEQrE	73-30-8	0.5 DgGg	48.3	23 128
		v P0L8: 4.4'-MMT	50-39-2	0.5 DgGg	42.1	31.8 140
Eu08hH: Org4(ofmot Fmor- t uetYndet sOua sb CLoy. 2171Q05a						
v u 1301441-003	dEoEDocs	v P0L8: MaxIEoE	222-41-5	0.5 DgGg	49.1	29 139
		v P0L8: i klotpQrfoS-DejK	5598-12-0	0.5 DgGg	51.3	29 13L
		v P0L8: PhtDpkos-ejK	32505-41-1	0.5 DgGg	49.3	28 120
		v P0L8: XtoDopkos-ejK	4834-78-L	0.5 DgGg	43.4	25 114
		v P0L8: PtoyrfoS	24L42-4L-4	0.5 DgGg	47.2	29 135
Eu073E: i 4oge(4yed ANFm#jN Co9 Fo- (dt) sb CLoy. 21855P8a						
v u 1301497-004	dLPT3G003	v P074: 1.1-MNklotoeKeEe	75-25-4	3 DgGg	9L.0	50 134
		v P074: TtrklotoeKeEe	79-01-L	3 DgGg	9L.0	L0 133
Eu073p: i 4oge(4yed Aro9 4jN Co9 Fo- (dt) sb CLoy. 21855P8a						
v u 1301497-004	dLPT3G003	v P074: i klotor eEeEe	108-90-7	3 DgGg	108	L9 139
Eu07PA: urne(oVn Co9 Fo- (dt) sb CLoy. 2171Q058a						
v u 1301441-004	dEoEDocs	v P075: PkeEol	108-95-3	5 DgGg	7L.0	32.7 119
		v P075: 3-i klotopkeEol	95-57-8	5 DgGg	LL.7	21.1 11L
		v P075: 3-h rkopkeEol	88-75-5	5 DgGg	75.8	1L.4 115
		v P075: 4-i klotro-2-u ejkOpkeEol	59-50-7	5 DgGg	93.7	33.2 133



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 WotSBtOet : v u 1301497
 i IreEy : KBbMWR dAABi IdTvA
 PtojeNy : 117L12301

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report			
				Spike Concentration	Spike Recovery (%)		
					MS	Low	High
Eu07PA: unne(ovln Co9 Fo- (dt sb CLoy. 2171Q58a 6no(y(- ed v u 1301441-004	dEoEDocs	v P075: PeEjNkiotopkeEo	87-8L-5	5 DgG	83.5	17.L	143
Eu07PH: uoc(- me4r Aro9 4yni cdron4r) o(t sb CLoy. 2171Q68a v u 1301441-004	dEoEDocs	v P075: dNeEapkyeEe v P075: PGeEe	82-23-9 139-00-0	5 DgG 5 DgG	72.7 74.5	35.4 14.L	133 137
Eu07PD: Niyot 49 (et sb CLoy. 2171Q68a v u 1301441-004	dEoEDocs	v P075: h-htosoQrE-ptopOaDfEe	L31-L4-7	5 DgG	L4.2	17.8	110
Eu07PE: Niyro4ro9 4ynt 4(d Keyo(et sb CLoy. 2171Q68a v u 1301441-004	dEoEDocs	v P075: 3.4-MEYtoyceEe	131-14-3	5 DgG	70.5	38.2	113
Eu07PG: Cmorl(4yed i cdron4r) o(t sb CLoy. 2171Q68a v u 1301441-004	dEoEDocs	v P075: 1.4-MNkiotor eExeEe v P075: 1.3.4-TnNkiotor eExeEe	10L-4L-7 130-83-1	5 DgG 5 DgG	L7.7 L0.9	32 13.9	113 111
Eu0h0/071: Toy4vuyeyoe-9 i cdron4r) o(t sb CLoy. 21855PPa v u 1301497-004	dLPT3G003	v P080: i L - i 9 FtaiNpE	----	38 DgG	92.1	49	137
Eu0h0/071: Toy4vuyeyoe-9 i cdron4r) o(t sb CLoy. 217PhQ3a v u 1301497-004	dLPT3G003	v P071: i 10 - i 14 FtaiNpE v P071: i 15 - i 38 FtaiNpE v P071: i 39 - i 2L FtaiNpE	---- ---- ----	544 DgG 1981 DgG 818 DgG	90.3 104 9L.4	54 74 L2	132 124 142
Eu0h0/071: Toy4vRenoBer4) ve i cdron4r) o(t 6NEuM 2010 Dr4fy sb CLoy. 21855PPa v u 1301497-004	dLPT3G003	v P080: i L - i 10 FtaiNpE	----	22 DgG	92.9	70	120
Eu0h0/071: Toy4vRenoBer4) ve i cdron4r) o(t 6NEuM 2010 Dr4fy sb CLoy. 217PhQ3a v u 1301497-004	dLPT3G003	v P071: i 10 - i 1L FtaiNpE v P071: i 1L - i 24 FtaiNpE v P071: i 24 - i 40 FtaiNpE	---- ---- ----	870 DgG 3495 DgG 3L2 DgG	98.L 99.3 87.5	54 74 L2	132 124 142
Eu0h0: HTEXN sb CLoy. 21855PPa v u 1301497-004	dLPT3G003	v P080: XeExeEe v P080: TolceEe	71-42-3 108-88-2	3 DgG 3 DgG	108 114	58 L2	12L 125
Eu218: uermmor4ye) c LC/MS sb CLoy. 2171175a v u 1301497-001	dLPT4G001	v P31L: PetNkiotaje	7L01-90-2	35 µgG	83.8	70	120
Eu2Ql: uerfv oroonycvAnldt 4(d S- vo(4yet . sb CLoy. 217055ha v u 1301497-001	dLPT4G001	v P32L: PFBA v P32L: PFBD v P32L: L:3 FlocotoyeloDet AcifoEaye (L:3 FYA)	17L2-32-1 225-L7-1 37L19-97-3	0.005 DgG 0.005 DgG .035 DgG	119 84.2 13L	54 54 5L	14L 124 128



Environmental Division

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: EM1201497	Page	: 1 of 12
Client	: GOLDER ASSOCIATES	Laboratory	: Environmental Division Melbourne
Contact	: Niamh McCormack	Contact	: Samantha Smith
Address	: P O BOX 6207 Building 09, 025 -- S8 an St9Richmond9wICV. 131 HAWTHORN WEST wIC9AUSTRALIA . 133	Address	: 4 Westall Rd Springvale wIC Australia . 101
E5mail	: nmccormack@golder.com.au	E5mail	: samantha.smith@alsglobal.com
Telephone	: +61 2. -- 63 . . 22	Telephone	: +615 5 , 47 7644
Facsimile	: +61 2. -- 63 . . 21	Facsimile	: +615 5 , 47 7621
Project	: 11061 . 321	QC Level	: NEPM 1777 Schedule B(.) and ALS QCS . requirement
Site	: F5wIC	Date Samples Received	: 1 . FEB5213
C5DE number	: - 16,	Issue Date	: 3 - FEB5213
Sampler	: RM	NoVof samples received	: 0
Order number	: GA5MELB . . 3, 27	NoVof samples analysed	: 4
Quote number	: ME12, 413		

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 Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers



Page : 3 of 12
 Work Order : EM1321470
 Client : GOLDER ASSOCIATES
 Project : 11061.321

Analysis Holding Time Compliance

The following report summarises e/traction K preparation and analysis times and compares 8th recommended holding times. Dates reported represent first date of e/traction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the analysis aliquot was taken. Elapsed period to analysis represents number of days from sampling. Here no e/traction K digestion is involved or period from e/traction K digestion. Here this is present. For composite samples, sampling date is assumed to be that of the oldest sample contributing to the composite. Sample date for laboratory produced leachates is assumed as the completion date of the leaching process. Outliers for holding time are based on USEPA SW-469 APHA9 AS and NEPM (1777) A listing of breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according to the analytes being determined on the resulting solution. For non-volatile analytes, the holding time compliance assessment compares the leachate date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days), Mercury (3- days); other metals (1-2 days). A recorded breach therefore does not guarantee a breach for all non-volatile parameters.

Matrix : SOIL

Evaluation: * & Holding time breach x ✓ & Within holding time ✓

Method	Container / Client Sample ID(s)	Sample Date	Extraction / Preparation		Evaluation	Analysis	
			Date extracted	Due for extraction		Date analysed	Due for analysis
EA002 : pH (Soils)							
Soil Glass Jar - Unpreserved							
A6PT4182219	A6PT.18223	13-FEB-2012	16-FEB-2012	32-FEB-2012	✓	16-FEB-2012	16-FEB-2012
EA055: Moisture Content							
Soil Glass Jar - Unpreserved							
A6PT4182239	A6PT3182239	13-FEB-2012	----	----	----	15-FEB-2012	30-FEB-2012
A6PT.182239	A6PT118221	13-FEB-2012	23-FEB-2012	11-AUG-2012	✓	27-FEB-2012	11-AUG-2012
EG05T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved							
A6PT4182219	A6PT3182239	13-FEB-2012	23-FEB-2012	13-MAR-2012	✓	24-FEB-2012	13-MAR-2012
A6PT.182239	A6PT118221	13-FEB-2012	16-FEB-2012	32-FEB-2012	✓	16-FEB-2012	16-FEB-2012
EG05T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved							
A6PT4182219	A6PT3182239	13-FEB-2012	16-FEB-2012	32-FEB-2012	✓	16-FEB-2012	16-FEB-2012
A6PT.182239	A6PT118221	13-FEB-2012	17-FEB-2012	30-FEB-2012	✓	20-FEB-2012	30-FEB-2012
EP004: Organic Matter							
Soil Glass Jar - Unpreserved							
A6PT4182219	A6PT3182239	13-FEB-2012	16-FEB-2012	32-FEB-2012	✓	16-FEB-2012	16-FEB-2012
A6PT.182239	A6PT118221	13-FEB-2012	17-FEB-2012	30-FEB-2012	✓	20-FEB-2012	30-FEB-2012
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved							
A6PT4182219	A6PT3182239	13-FEB-2012	17-FEB-2012	30-FEB-2012	✓	20-FEB-2012	30-FEB-2012
A6PT.182239	A6PT118221	13-FEB-2012	17-FEB-2012	30-FEB-2012	✓	20-FEB-2012	30-FEB-2012
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved							
A6PT4182219	A6PT3182239	13-FEB-2012	17-FEB-2012	30-FEB-2012	✓	20-FEB-2012	30-FEB-2012
A6PT.182239	A6PT118221	13-FEB-2012	17-FEB-2012	30-FEB-2012	✓	20-FEB-2012	30-FEB-2012
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved							
A6PT4182219	A6PT3182239	13-FEB-2012	17-FEB-2012	30-FEB-2012	✓	20-FEB-2012	30-FEB-2012
A6PT.182239	A6PT118221	13-FEB-2012	17-FEB-2012	30-FEB-2012	✓	20-FEB-2012	30-FEB-2012



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Matri: SOIL Evaluation: * & Holding time breach x ✓ & Within holding time ✓

Method	Sample Date	Extraction / Preparation		Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved							
A6PT3I82239	13-FEB-2012	15-FEB-2012	30-FEB-2012	✓	17-FEB-2012	30-FEB-2012	✓
A6PT4I82219							
A6PT. I82239							
EP074B: Oxygenated Compounds							
Soil Glass Jar - Unpreserved							
A6PT3I82239	13-FEB-2012	15-FEB-2012	30-FEB-2012	✓	17-FEB-2012	30-FEB-2012	✓
A6PT4I82219							
A6PT. I82239							
EP074C: Sulfonated Compounds							
Soil Glass Jar - Unpreserved							
A6PT3I82239	13-FEB-2012	15-FEB-2012	30-FEB-2012	✓	17-FEB-2012	30-FEB-2012	✓
A6PT4I82219							
A6PT. I82239							
EP074D: Fumigants							
Soil Glass Jar - Unpreserved							
A6PT3I82239	13-FEB-2012	15-FEB-2012	30-FEB-2012	✓	17-FEB-2012	30-FEB-2012	✓
A6PT4I82219							
A6PT. I82239							
EP074E: Halogenated Aliphatic Compounds							
Soil Glass Jar - Unpreserved							
A6PT3I82239	13-FEB-2012	15-FEB-2012	30-FEB-2012	✓	17-FEB-2012	30-FEB-2012	✓
A6PT4I82219							
A6PT. I82239							
EP074F: Halogenated Aromatic Compounds							
Soil Glass Jar - Unpreserved							
A6PT3I82239	13-FEB-2012	15-FEB-2012	30-FEB-2012	✓	17-FEB-2012	30-FEB-2012	✓
A6PT4I82219							
A6PT. I82239							
EP074G: Trihalomethanes							
Soil Glass Jar - Unpreserved							
A6PT3I82239	13-FEB-2012	15-FEB-2012	30-FEB-2012	✓	17-FEB-2012	30-FEB-2012	✓
A6PT4I82219							
A6PT. I82239							
EP075A: Phenolic Compounds							
Soil Glass Jar - Unpreserved							
A6PT3I82239	13-FEB-2012	17-FEB-2012	30-FEB-2012	✓	20-FEB-2012	3-5MAR-2012	✓
A6PT4I82219							
A6PT. I82239							
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved							
A6PT3I82239	13-FEB-2012	17-FEB-2012	30-FEB-2012	✓	20-FEB-2012	3-5MAR-2012	✓
A6PT4I82219							
A6PT. I82239							
EP075C: Phthalate Esters							
Soil Glass Jar - Unpreserved							
A6PT3I82239	13-FEB-2012	17-FEB-2012	30-FEB-2012	✓	20-FEB-2012	3-5MAR-2012	✓
A6PT4I82219							
A6PT. I82239							
EP075D: Nitrosamines							
Soil Glass Jar - Unpreserved							
A6PT3I82239	13-FEB-2012	17-FEB-2012	30-FEB-2012	✓	20-FEB-2012	3-5MAR-2012	✓
A6PT4I82219							
A6PT. I82239							



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Matrix : SOIL Evaluation: * & Holding time breach x ✓ & Within holding time ✓

Method	Container / Client Sample ID(s)	Sample Date	Extraction / Preparation		Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis
EP075E: Nitroaromatics and Ketones							
Soil Glass Jar - Unpreserved	A6PT3I82239 A6PT4I82219 A6PT. I82239	13-FEB-2012	17-FEB-2012	30FEB53213	20-FEB-2012	3-5MAR53213	✓
EP075F: Haloethers							
Soil Glass Jar - Unpreserved	A6PT3I82239 A6PT4I82219 A6PT. I82239	13-FEB-2012	17-FEB-2012	30FEB53213	20-FEB-2012	3-5MAR53213	✓
EP075G: Chlorinated Hydrocarbons							
Soil Glass Jar - Unpreserved	A6PT3I82239 A6PT4I82219 A6PT. I82239	13-FEB-2012	17-FEB-2012	30FEB53213	20-FEB-2012	3-5MAR53213	✓
EP075H: Anilines and Benzidines							
Soil Glass Jar - Unpreserved	A6PT3I82239 A6PT4I82219 A6PT. I82239	13-FEB-2012	17-FEB-2012	30FEB53213	20-FEB-2012	3-5MAR53213	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved	A6PT3I82239 A6PT4I82219 A6PT. I82239	13-FEB-2012	17-FEB-2012	30FEB53213	20-FEB-2012	3-5MAR53213	✓
EP075J: Organophosphorus Pesticides							
Soil Glass Jar - Unpreserved	A6PT3I82239 A6PT4I82219 A6PT. I82239	13-FEB-2012	17-FEB-2012	30FEB53213	20-FEB-2012	3-5MAR53213	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved	A6PT3I82239 A6PT4I82219 A6PT. I82239	13-FEB-2012	15-FEB-2012	30FEB53213	17-FEB-2012	30FEB53213	✓
Soil Glass Jar - Unpreserved	A6PT3I82239 A6PT4I82219 A6PT. I82239	13-FEB-2012	21-FEB-2012	30FEB53213	22-FEB-2012	215APR53213	✓
EP080/071: Total Recoverable Hydrocarbons - NIEPM 2010 Draft							
Soil Glass Jar - Unpreserved	A6PT3I82239 A6PT4I82219 A6PT. I82239	13-FEB-2012	15-FEB-2012	30FEB53213	17-FEB-2012	30FEB53213	✓
Soil Glass Jar - Unpreserved	A6PT3I82239 A6PT4I82219 A6PT. I82239	13-FEB-2012	21-FEB-2012	30FEB53213	22-FEB-2012	215APR53213	✓
EP080: BTEX							
Soil Glass Jar - Unpreserved	A6PT3I82239 A6PT4I82219 A6PT. I82239	13-FEB-2012	15-FEB-2012	30FEB53213	17-FEB-2012	30FEB53213	✓



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Matrix: SOIL Evaluation: x & Holding time breach x ✓ & Within holding time ✓

Method	Container / Client Sample ID(s)	Sample Date		Extraction / Preparation		Analysis	
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved	A6PT4182219 A6PT.182239	13-FEB-2012	15-FEB-2012	30-FEB-2012	17-FEB-2012	30-FEB-2012	✓
EP216: Perchlorate by LC/MS							
Soil Glass Jar - Unpreserved	A6PT3182239 A6PT118221	13-FEB-2012	16-FEB-2012	13-MAR-2012	17-FEB-2012	1-MAR-2012	✓
EP231: Perfluorooctyl Acids and Sulfonates.							
Soil Glass Jar - Unpreserved	A6PT3182239 A6PT.182239	13-FEB-2012	22-FEB-2012	11-AUG-2012	22-FEB-2012	23-APR-2012	✓



Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed 8 (in the analytical lot(s) in which the submitted sample(s) 8 as (here) processed) Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers

Matrix : SOIL

Evaluation: * & Quality Control frequency not 8 (in this specification) ✓ & Quality Control frequency 8 (in this specification)

Quality Control Sample Type Analytical Methods	Method	Count			Rate (%)		Evaluation	Quality Control Specification
		QC	Regular	Actual	Expected			
Laboratory Duplicates (DUP)								
Moisture Content	EA2., 5I2.	3	32	10.0	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Organic Matter	EP224	3	13	16.7	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Perchlorate in Soils and Sediments by LCM/MS	EP316	1	4	25.0	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Perfluorooctyl Acids and Sulfonates by LCM/MS/MS	EP3. 1	3	1.	13.3	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Pesticides by GC/MS	EP26-	3	11	18.2	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
pH (1;)	EA223	1	12	10.0	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Polychlorinated Biphenyls (PCB)	EP266	3	11	18.2	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Semivolatile Organic Compounds	EP20,	3	11	18.2	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Total Mercury by FIMS	EG2., T	3	32	10.0	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Total Metals by ICP/AES	EG22, T	3	32	10.0	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
TPH 5Semivolatile Fraction	EP201	1	0	14.3	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
TPH volatiles/TEX	EP2- 2	1	,	20.0	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
volatile Organic Compounds	EP204	1	,	20.0	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Laboratory Control Samples (LCS)								
Organic Matter	EP224	1	13	8.3	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Perchlorate in Soils and Sediments by LCM/MS	EP316	1	4	25.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Perfluorooctyl Acids and Sulfonates by LCM/MS/MS	EP3. 1	1	1.	6.7	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Pesticides by GC/MS	EP26-	1	11	9.1	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Polychlorinated Biphenyls (PCB)	EP266	1	11	9.1	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Semivolatile Organic Compounds	EP20,	1	11	9.1	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Total Mercury by FIMS	EG2., T	1	32	5.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Total Metals by ICP/AES	EG22, T	1	32	5.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
TPH 5Semivolatile Fraction	EP201	1	0	14.3	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
TPH volatiles/TEX	EP2- 2	1	,	20.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
volatile Organic Compounds	EP204	1	,	20.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Method Blanks (MB)								
Organic Matter	EP224	1	13	8.3	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Perchlorate in Soils and Sediments by LCM/MS	EP316	1	4	25.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Perfluorooctyl Acids and Sulfonates by LCM/MS/MS	EP3. 1	1	1.	6.7	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Pesticides by GC/MS	EP26-	1	11	9.1	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Polychlorinated Biphenyls (PCB)	EP266	1	11	9.1	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Semivolatile Organic Compounds	EP20,	1	11	9.1	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Total Mercury by FIMS	EG2., T	1	32	5.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Total Metals by ICP/AES	EG22, T	1	32	5.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
TPH 5Semivolatile Fraction	EP201	1	0	14.3	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
TPH volatiles/TEX	EP2- 2	1	,	20.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
volatile Organic Compounds	EP204	1	,	20.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Matrix/ Spikes (MS)								
Perchlorate in Soils and Sediments by LCM/MS	EP316	1	4	25.0	5.0	✓	ALS QCS. requirement	



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Matrix : **SOIL** Evaluation: * & Quality Control frequency not 8 ithin specification x ✓ & Quality Control frequency 8 ithin specification ✓

Analytical Methods	Method	Count		Rate (%)		Evaluation	Quality Control Specification
		QC	Regular	Actual	Expected		
Matrix/ Spikes (MS) 5Continued							
Perfluorooctyl Acids and Sulfonates by LCM/SM/MS	EP3. 1	1	1,	6.7	5.0	✓	ALS QCS. requirement
Pesticides by GC/MS	EP26-	1	11	9.1	5.0	✓	ALS QCS. requirement
Polychlorinated Biphenyls (PCB)	EP266	1	11	9.1	5.0	✓	ALS QCS. requirement
Semivolatile Organic Compounds	EP20,	1	11	9.1	5.0	✓	ALS QCS. requirement
Total Mercury by FIMS	EG2. , T	1	32	5.0	5.0	✓	ALS QCS. requirement
Total Metals by ICP-AES	EG22, T	1	32	5.0	5.0	✓	ALS QCS. requirement
TPH 5Semivolatile Fraction	EP201	1	0	14.3	5.0	✓	ALS QCS. requirement
TPH volatilesBTEX	EP2-2	1	,	20.0	5.0	✓	ALS QCS. requirement
volatile Organic Compounds	EP204	1	,	20.0	5.0	✓	ALS QCS. requirement



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Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA 9104.4 and NEMMn house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided in the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
pH (1,)	EA223	SOIL	(APHA 31st ed) pH is determined on soil samples after a 1; soil after leach. This method is compliant with NEPM (1777) Schedule B. (Method 12.)
Moisture Content	EA2, , 5f2.	SOIL	A gravimetric procedure based on 80% loss over a 13 hour drying period at 12. 5f2, degrees C. This method is compliant with NEPM (3212 Draft) Schedule B. (Section 0M and Table 1 (14 day holding time)).
Total Metals by ICP-AES	EG22, T	SOIL	(APHA 31st ed) ICP-AES technique ionises samples in a plasma emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix-matched standards. This method is compliant with NEPM (1777) Schedule B. ()
Total Mercury by FIMS	EG2, T	SOIL	AS . . . , 29APHA 31st ed) . 113 Hg 5B (Fluo8 injection) (SnCl3)(Cold vapour generation) AAS) FIMS/AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl3. This is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1777) Schedule B. ()
Organic Matter	EP224	SOIL	AS 13- 74M 51770) Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM (1777) Schedule B. () (Method 12.)
Polychlorinated Biphenyls (PCB)	EP266	SOIL	(USEPA SW - 46 5- 302B) E/ tracts are analysed by Capillary GC/MS and quantification is by comparison against an established, point calibration curve. This method is compliant with NEPM (1777) Schedule B. () (Method , 24)
Pesticides by GC/MS	EP26-	SOIL	(USEPA SW - 46 5- 302B) E/ tracts are analysed by Capillary GC/MS and quantification is by comparison against an established, point calibration curve. This technique is compliant with NEPM (1777) Schedule B. () (Method , 249 2.)
TPH 5-Semivolatile Fraction	EP201	SOIL	(USEPA SW - 46 5- 21, A) Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C12-C26. This method is compliant with NEPM (1777) Schedule B. () (Method , 26M)
volatile Scan for Unknowns	EP203	SOIL	(USEPA SW - 46 5- 362B) E/ tracts are analysed by Purge and Trap Capillary GC/MS and unknowns are identified by comparison of peaks with the NIST library. Semi-quantification is by comparison with the closest eluting internal standard.
Semivolatile Scan for Unknowns	EP20.	SOIL	(USEPA SW - 46 5- 362B) E/ tracts are analysed by Capillary GC/MS and unknowns are identified by comparison of peaks with the NIST library. Semi-quantification is by comparison with the closest eluting internal standard.
volatile Organic Compounds	EP204	SOIL	(USEPA SW - 46 5- 362B) E/ tracts are analysed by Purge and Trap Capillary GC/MS. Quantification is by comparison against an established, point calibration curve. This method is compliant with NEPM (1777) Schedule B. () (Method , 21)
Semivolatile Organic Compounds	EP20,	SOIL	(USEPA SW - 46 5- 302B) E/ tracts are analysed by Capillary GC/MS and quantification is by comparison against an established, point calibration curve. This technique is compliant with NEPM (1777) Schedule B. () (Method , 23)
TPH volatiles/TEX	EP2-2	SOIL	(USEPA SW - 46 5- 362B) E/ tracts are analysed by Purge and Trap Capillary GC/MS. Quantification is by comparison against an established, point calibration curve. This method is compliant with NEPM (1777) Schedule B. () (Method , 21)
Perchlorate in Soils and Sediments by LC/MS	EP316	SOIL	US EPA Method 6- , 2- , g of sample is extracted with 3, mL of 80% acetic acid. Filtered extract is analysed by LC/MS in ESI (negative) mode.



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Analytical Methods	Method	Matrix	Method Descriptions
Perfluorooctyl Acids and Sulfonates by LCM/MS/MS	µEP3. 1	SOIL	In 5 House V A portion of soil is soaked in sodium hydroxide followed by extraction 8 1/2 hours. The extract is neutralised with HCl and an aliquot taken to dryness. Analysis is by LCM/MS/MS. Negative Mode using MRMV.
Preparation Methods	Method	Matrix	Method Descriptions
1.; solid KBr leach for soluble analytes	EN. 4	SOIL	12 g of soil is mixed with 2 mL of distilled water and tumbled overnight for 1 hour. Water soluble salts are leached from the soil by the continuous suspension. Samples are settled and the water filtered off for analysis.
Hot Block Digest for metals in soils sediments and sludges	EN67	SOIL	USEPA 3220 Method Hot Block Acid Digestion. 10g of sample is heated with Nitric and Hydrochloric acids then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge and sediments and soils. This method is compliant with NEPM (1777) Schedule B. (Method 323)
Organic Matter	EP224PR	SOIL	AS 13-74 Method 51770 Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM (1777) Schedule B. (Method 12,)
Sample Extraction for Perchlorate	EP316PR	SOIL	US EPA 600/4-91-010 Method 516
Sample Extraction for Perfluoroalkyl Compounds	EP3. 1PR	SOIL	In 5 House
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	(USEPA SW - 46 5. 2. 2A) , g of solid is shaken with surrogate and 12mL methanol prior to analysis by Purge and Trap GC/MSV
Tumbler Extraction of Solids (Option A 5 Concentrating)	ORG10A	SOIL	In 5 House Mechanical agitation (tumbler) 32g of sample Na2SO4 and surrogate are extracted with 1, 2mL 1:1 DCMAcetone by end of tumbler. The solvent is decanted, dehydrated and concentrated (by * D) to the desired volume for analysis.
Tumbler Extraction of Solids (Option B 5 Non-concentrating)	ORG10B	SOIL	In 5 House Mechanical agitation (tumbler) 12g of sample Na2SO4 and surrogate are extracted with 32mL 1:1 DCMAcetone by end of tumbler. The solvent is transferred directly to a GC vial for analysis.



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Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report. Surrogate recovery limits are static and based on USEPA SW-46 or ALS QWIENK - (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix : SOIL

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP204D: Fumigants	3, 6- 730522,	555	cis-1,3-Dichloropropylene	12261215,	112 %	, 75127%	Recovery greater than upper control limit
EP204F: Halogenated Aromatic Compounds	3, 6- 730522,	555	1,2,3-Trichlorobenzene	-05155	132 %	625132%	Recovery greater than upper control limit
EP20, D: Nitrosamines	3, 02- ., 522-	555	Methapyriene	715 25	1-10 %	344514. %	Recovery less than lower control limit
EP20, E: Nitroaromatics and * etones	3, 02- ., 522-	555	1-Naphthylamine	1. 45 35	44 %	125- 4%	Recovery less than lower control limit

- For all matrices, no Method Blank value outliers occur.
- For all matrices, no Duplicate outliers occur.
- For all matrices, no Matrix Spike outliers occur.

Regular Sample Surrogates

- For all regular sample matrices, no surrogate recovery outliers occur.

Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective E/ fraction (Preparation and/or Analysis component) is displayed.

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

- No Quality Control Sample Frequency Outliers exist.



CHAIN OF CUSTODY
No 8165

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Golder Job Number: 117613001
 Job Location: F-VIC
 Laboratory Issued To: ALS
 Purchase Order No.: G/MELB - 332807
 Sampled By (Golder): Roberto Henriquez
 Golder Job Contact: Nicole McCombe
 Golder Contact Email: niccombe@jamilcon.com

* OBSERVATIONS	SAMPLE DATE	SAMPLE ID TAAXXX/MQNN	SAMPLE TYPE	SAMPLE DEPTH (m)	No. OF CONTAINERS	pH	Metals (As, Cd, Cr (total), Cu, Hg, Ni, Pb, Zn)	Total Petroleum Hydrocarbons (TPH)	Benzene, Toluene, Ethyl benzene, Xylenes (BTEX)	Polycyclic Aromatic Hydrocarbons (PAH) (Standard 16)	Organochlorine Pesticides (OCP)	Organophosphorus Pesticides (OPP)	Polychlorinated Biphenyls (PCB)	EPA Victoria Publication 448.3 Table 2 Screen (no ASLP testing)	EPA Victoria Publication 448.3 Table 3 Screen (incl. ASLP testing)	PFOs/PFOA	VOC (incl. Fullsies)	SVOC (incl. Fullsies)	Phenols	TOC	Perchlorates
1	13/2	AGPT4/2001	Soil	0.1-0.5	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
2		AGPT4/2001		0.5-1.0	6																
3		AGPT2/2001		0.7-1.2	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
4		AGPT2/2001		0.2-0.5	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
5		AGPT3/2001		1.2-1.4	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
6		AGPT3/2001		0.7-1.0	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
7		AGPT7/2001	1 on jars																		

Environmental Division
Melbourne
Work Order
EM1201497



Telephone: +61-3-8549 9600

Special Instructions:

TURN AROUND TIME REQUIRED: 5 Working Days (standard) 4 Working Days 3 Working Days 2 Working Days 1 Working Day Other

Relinquished by: Nicole McCombe Date: 13/2 Time: 8:45
 Organisation: Golder Associates
 Received by: [Signature] Date: 13/2 Time: [Signature]
 Organisation: Golder Associates

DELIVERED BY: COURIER/LAB GOLDER
 RECEIVED BY: FAX HAND

SAMPLE STATUS: Security Sealed Chilled Frozen Ambient

RECEIVING LABORATORY TO CONFIRM RECEIPT OF ANALYTICAL SCHEDULE BY RETURN FAX TO: (03) 8862 3501

ANALYTICAL RESULTS SHEET

EP-073

Semivolatile Scan for Unknowns

(20 Largest Peaks > LOR)

SHEET413/1

Batch No.: EM1201552

Units : mg/kg

Sample I.D. : 11

Client I.D. : A6PT10/2001

Analyst : GW

Sample Amt (g) : 22.53

Final Volume (mL): 5

Matrix : Soil

Extract Dilution : 1: 1

	Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1	11.19	64	Substituted Phenol	4465981	2	6
2	12.78	89	(beta.)methoxy-d-Friedoolean-14-ene	51233952	20	6
3	12.89	n/a	Unknown organic compound	46492208	18	6

- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	4.57	1,4-Dichlorobenzene-d4	5673412	20
2	5.62	Naphthalene-d8	8695442	20
3	7.07	Acenaphthene-d10	10640196	20
4	8.31	Phenanthrene-d10	11851347	20
5	10.52	Chrysene-d12	15164023	20
6	11.71	Perylene-d12	11579341	20

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16) The

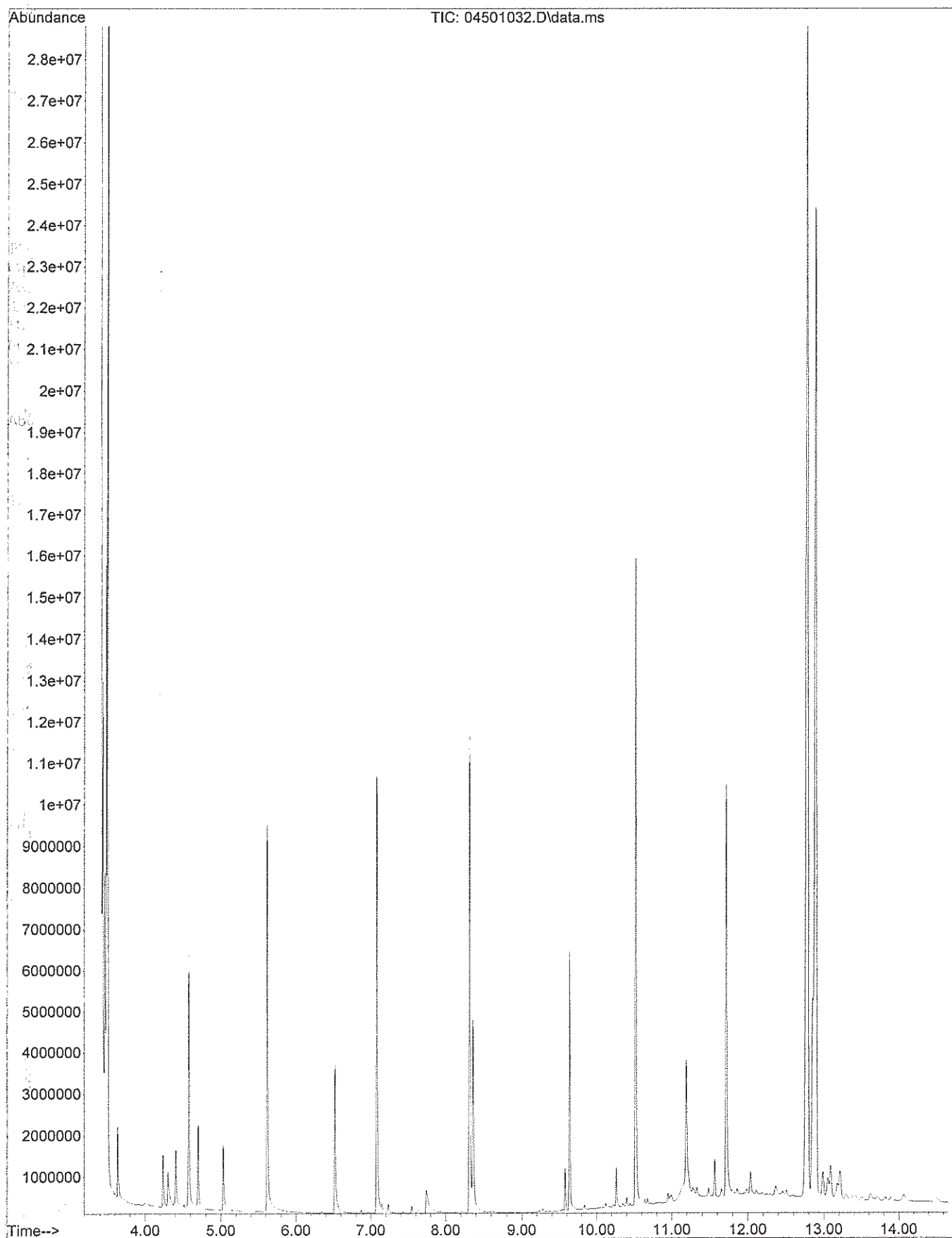
17) The

18) The

19) The

20) The

File : D:\MSDCHEM\1\DATA\2576757\04501032.D
Operator : SV15
Acquired : 21 Feb 2012 3:40 am using AcqMethod FASTSVOC.M
Instrument : SV-15
Sample Name: 2576757_15
Misc Info : A6PT10/2001
Vial Number: 45



ANALYTICAL RESULTS SHEET

EP-073

**Semivolatile Scan for Unknowns
(20 Largest Peaks > LOR)**

SHEET413/1

Batch No.: EM1201552

Units : mg/kg

Sample I.D. : 8

Client I.D. : A6PT8/2002

Analyst : XL

Sample Amt (g) : 21.14

Final Volume (mL): 5

Matrix : Soil

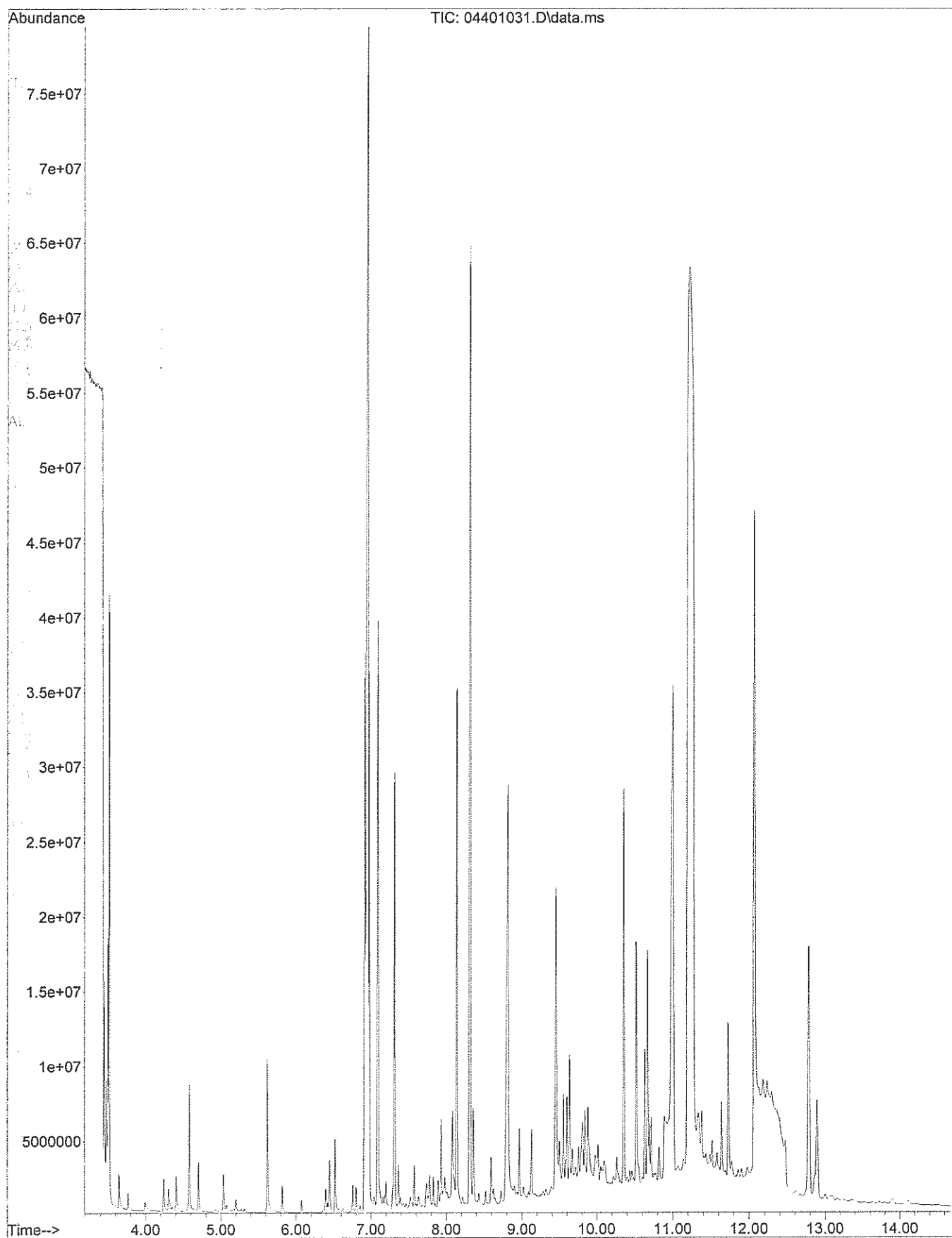
Extract Dilution : 1: 1

	Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1	6.92	70	Butylated Hydroxyanisole	35885395	4	3
2	6.96	99	2,6-Bis(1,1-dimethylethyl)-cyclohexadiene-dione	101004307	12	3
3	7.31	98	Butylated Hydroxytoluene	24148236	3	3
4	8.14	74	Substituted Phenol	29283951	2	4
5	8.82	99	Hexadecanoic acid	48543729	3	4
6	9.45	99	Octadecanoic acid	27635952	2	4
7	10.36	n/a	Unknown organic compound	23190086	1	4
8	10.67	n/a	Unknown organic compound	14226980	4	5
9	11.00	n/a	Unknown organic compound	72507407	20	5
10	11.22	n/a	Unknown organic compound	315597566	86	5
11	12.08	n/a	Unknown organic compound	82321947	35	6
12	12.79	89	(beta.)methoxy-d-Friedoolean-14-ene	26694395	11	6
13	12.89	n/a	Unknown organic compound	13070364	6	6

- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1		1,4-Dichlorobenzene-d4	7283976	20
2		Naphthalene-d8	9382218	20
3		Acenaphthene-d10	38514209	20
4		Phenanthrene-d10	76653835	20
5		Chrysene-d12	17453422	20
6		Perylene-d12	11169188	20

File : D:\MSDCHEM\1\DATA\2576757\04401031.D
Operator : SV15
Acquired : 21 Feb 2012 3:21 am using AcqMethod FASTSVOC.M
Instrument : SV-15
Sample Name : 2576757_14
Misc Info : A6PT8/2002
Vial Number: 44



ANALYTICAL RESULTS SHEET

EP-073

**Semivolatile Scan for Unknowns
(20 Largest Peaks > LOR)**

SHEET413/1

Batch No.: EM1201552

Units : mg/kg

Sample I.D. : 2

Client I.D. : A6PT6/2002

Analyst : XL

Sample Amt (g) : 23.15

Final Volume (mL): 5

Matrix : Soil

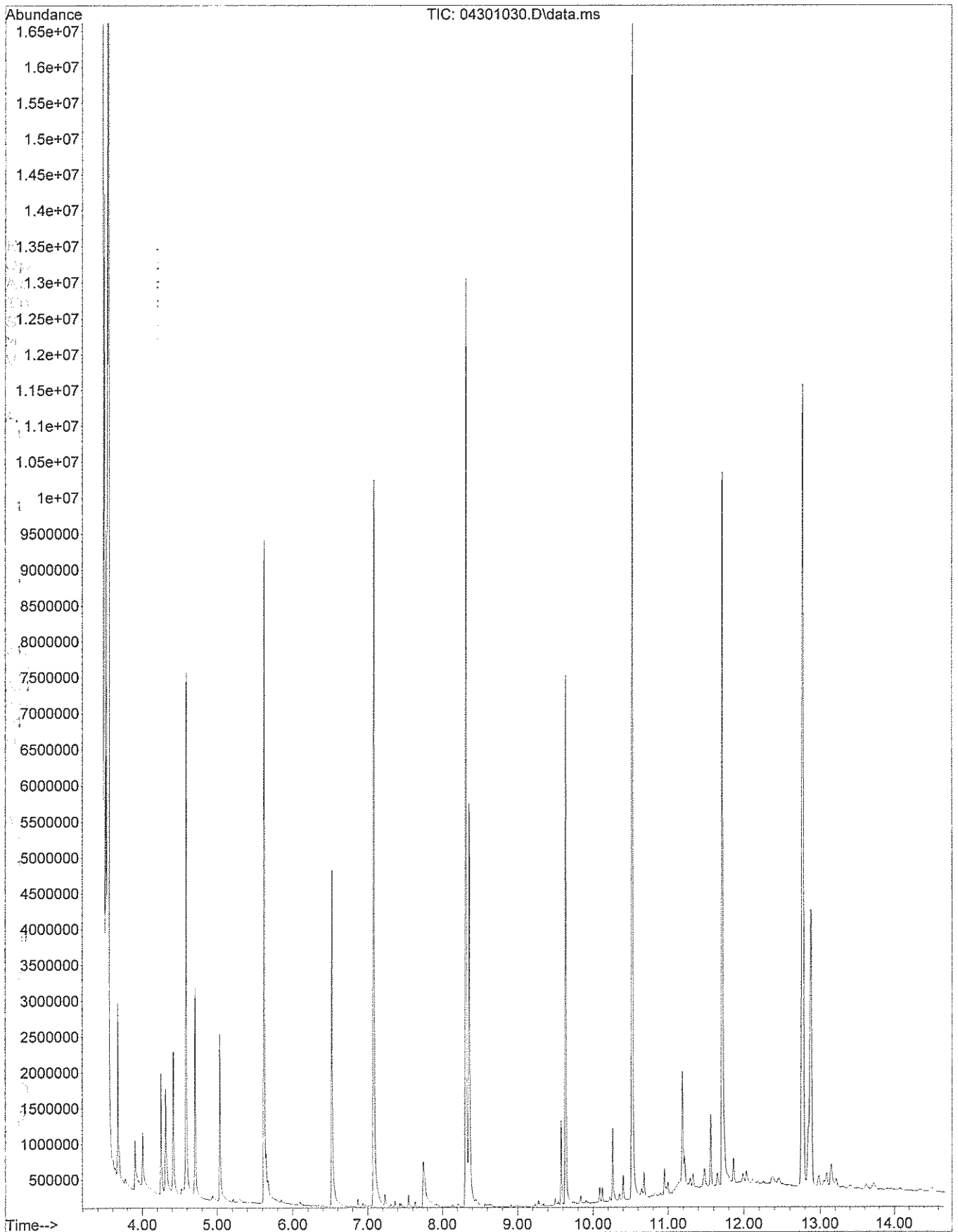
Extract Dilution : 1: 1

	Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1	12.77	90	(beta.)-methoxy-d-Frisedoolean-14-ene	17200971	6	6
2	12.87	n/a	Unknown organic compound	7671584	3	6

- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	4.59	1,4-Dichlorobenzene-d4	6101084	20
2	5.62	Naphthalene-d8	9589671	20
3	7.08	Acenaphthene-d10	11477106	20
4	8.31	Phenanthrene-d10	12320278	20
5	10.52	Chrysene-d12	15649460	20
6	11.71	Perylene-d12	12213281	20

File :D:\MSDCHEM\1\DATA\2576757\04301030.D
Operator : SV15
Acquired : 21 Feb 2012 3:02 am using AcqMethod FASTSVOC.M
Instrument : SV-15
Sample Name: 2576757_13
Misc Info : A6PT6/2002
Vial Number: 43





Environmental Division

CERTIFICATE OF ANALYSIS

Work Order : EM1201442

Client : P9 O7GEL DRROASDCER

Project : Puɔŋn cgmD : Ln 7DN

Sample : Ps gA gA Ogb0X6

Location : d mɔyCegkɔgX0,3-- gh870ghlɔɔwɔɔn : CSgRV Ig 121

Address : HkWTHAWu gVEH TgRV gk Uh Twk oK g 122

Site : PCh DD: Ln 7DN@e: ISi UD: n 17m

Reference : P+B1g. g - B2g 300

Method : P+B1g. g - B2g 301

Sample ID : P11XB1. 201

ALS ID : PGk, MEodg . 2306

Analyst : P-1BB

Technician : PwM

Quality Control : P5ggRV

Method : PME/034/12

Sample Description : P1g gl1

Client Reference : PEOɔ: Ch l Oɔŋy y ɔy CgMI f : mIQ

Project Reference : Ph7n 7Oɔ7gh n yɔ

Sample Reference : P4gMI abŋŋySgh plYcei 7f gRV gk mad7ŋg 1X1

Method Reference : Pa7n 7Oɔ7lan yɔ@7ŋeF: f 7FD n

Reference 1 : P+B1,., - 346gB44

Reference 2 : P+B1,., - 346gB01

Reference 3 : PuEs Mgl666gh Dcl Sŋf g(.)gCSgk ohgQt h. gl qmɔl n l Ob

Reference 4 : P14,5Ed, 2012

Reference 5 : P2-, 5Ed, 2012

Reference 6 : P12

Reference 7 : P.

Client Address : v 7b gh7n plf agwi D y l S

Client Contact : Váant g 7b

Client Phone : u : lg gá7n plf adl D y l S

Client Email : u : lg gá7n plf agC7Ffal S .

Client Name : P12

Client Address 2 : P.

Client Name : P12

Client Address : P.

Client Phone : P.

Client Email : P.

Client Name : P.

Client Address : P.

Client Phone : P.

Client Email : P.

Client Name : P.

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Client Email : P.



WORLD RECOGNISED ACCREDITATION

Signatories

Client Name : P.

Client Address : P.

Client Phone : P.

Client Email : P.

Signatories

Client Name : P.

Client Address : P.

Client Phone : P.

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Signatories

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Client Name : P.

Client Address : P.

Client Phone : P.

Client Email : P.



sTel P 2g g1
 W: INqALS L P EM1201332
 t f Ob P GAov Ewgf hAt V TEh
 sL: j Db P 11XB1. 201

General Comments

Tcl g 7C7F b777 pl: D SntL ag mal Sg f r g tcl g EQ y: On l C77f v y yey Cg c 7 l g f l l Cg S l l f p l Sg L n g l ab7f f a c l Sg y b l C 7 f f g l l D e O z l Sg p l: D SntL ag am D o g 7 ag t b: a l g p m f f a c l Sg f r g tcl g U h E s k g k s H k g k h g 7 C S g u E s M l g V O g c : m a l .
 S l l f p l S g p l: D S n t L a g l g n p f r l S g C g n a g 7 f a l C D g g s: D m n l C h S g a b 7 C S 7 L S a g l g r g n u C g u l q n t a b
 W c l l u g n : y a b n l g s i b l n y C 7 b y C g : 7 a g l l C p l L : l n l S g l a m f i a g l u g l p : l b S g C g 7 g s l r g l y e c t f 7 a y a l
 W c l l u g 7 g l p : l b S g f a a g t e 7 C g < y l a m f i a g p e a c l l g n e 7 C g n a g A w g n a y e g n 7 r g l g n a g m p h y 7 l r g n p l f g x l b 7 D y S y e l a b 7 b g n y C g 7 C S : l g C a m y D y C g a 7 n p l f g : l g 7 C 7 F a y a l
 W c l l u g n a g A w g 7 g l p : l b S g l a m f i a g l l L a g l : n g n e 7 C S 7 L S p A w g n a y e g n 7 r g l g n a g m p h y 7 l r g n p l f g x l b 7 D y S y e l a b 7 b g n y C g 7 C S : l g C a m y D y C g a 7 n p l f g : l g 7 C 7 F a y a l
 W c l C g a 7 n p l f z e g n l g C : l n 7 b y C g a e C : k p l : i y l S g f r g t c l g n u C g a 7 n p l f z e g 7 b a g l u g a c : 8 C g y a c : n a g 7 g n l g n p p : C C h g n C g n a l g C a b 7 C D a g n a l g n p p : C C a g 7 a g l l C g 7 a a m l S g f r g t c l g n u C g a 7 n p l f z e g n p l : a l
 K l r g P t k h g u m f l l e g k h g l e y a t r g m f l l g l : n g s 7 b 7 7 a l g n 7 y C b y C S g f r g c l n y D 7 f a b 7 D a g n l u y a l a g t c l g c l n y D 7 f a b 7 D a g n l u y a l g a g 7 g y y e y C g g n a g k n l l y D 7 C g c l n y D 7 f a : D y b l
 o A w g e g n y y g g l p : l b y C e
 n g 7 g e y a g l a m f i a g l n p m b S g L : n g C S y y n 7 7 C 7 f b g s i b D y C a g 7 t e l g f : i l g n a g f i l l g g l p : l b y C e

- E^0P4: 'Ruc of ^DH' ia the auc of the URE^D 1. priority ^DHA
- E^261: ^FOD & ^FOR realita we reported wa wn ws res wte of linewr wnd grwnbhed iaoc eraTMwri/ apike rebo, ery not deterc ined for ^FOR due to hish gw bks round le, el of twrset wnwlyteT
- ^FORM FOD wnd ^erbhlorwe bondubtid gy D7R Rydnehey() DCD wbbredittwion noT- 24(aite no 10811T



s7el
 W: INqALS L
 t f Ob
 s L j Db
 P . g g1
 P EM1201332
 P GAov EwghhAt V TEH
 P 11XB1. 201

Analytical Results

hmf ,M7bxy: RO9

Compound	CAS Number	LOR	Unit	Client sampling date / time			D. ^C. M002 1. ,5Ed.,2012g13R0 EM1201442-002	D. ^C- M002 1. ,5Ed.,2012g13R0 EM1201442-00-	D. ^C10M001 1. ,5Ed.,2012g13R0 EM1201442-011	
				Client sample ID						
ED044: Moisture Aontent										
Moisture Aontent Vdried @ 106°AZ		110	µ	1PB	21B	26B				
E9 004C: Cotw Metwla gy SA^DIER										
Draenib	X440. .-,2	3	n e/Nb	<3	<3	<3				
Awdc iuc	X440.4.,6	1	n e/Nb	<1	<1	<1				
Ahroc iuc	X440.4X.	2	n e/Nb	P6	.6	P3				
Aopper	X440.30,-	3	n e/Nb	8	-	16				
7ewd	X4.6.62,1	3	n e/Nb	13	1-	16				
) libkel	X440.02,0	2	n e/Nb	2-	26	62				
vinb	X440.BB,B	3	n e/Nb	-	10	13				
E9 064C: Cotw Lebo, ewgle Merbury gy F3MR										
Merbury	X4.6.6XB	011	n e/Nb	0T	0T	0Z				
E^A003: Orswnib Mwtter										
Cotw Orswnib Awrgon		013	µ	<013	1D	0P				
E^A0. . . ^olybhlornitwed Biphenyla V^ABZ										
Cotw ^olybhlornitwed giphenyla		0110	n e/Nb	<0110	<0110	<0110				
E^A0. - D: Orswnobhlornine ^eatibidea NOAZ										
wphwBHA	.16.-4,B	0103	n e/Nb	<0103	<0103	<0103				
He/ vbhlrogegene V^ABZ	11-,X4,1	0103	n e/Nb	<0103	<0103	<0103				
getwBHA	.16.-3,X	0103	n e/Nb	<0103	<0103	<0103				
swc c wBHA	3-,-6,6	0103	n e/Nb	<0103	<0103	<0103				
deltwBHA	.16.-B,-	0103	n e/Nb	<0103	<0103	<0103				
Heptwblor	XB,44,-	0103	n e/Nb	<0103	<0103	<0103				
Didrin	.06,00,2	0103	n e/Nb	<0103	<0103	<0103				
Heptwblor epo/ ide	1024,3X.	0103	n e/Nb	<0103	<0103	<0103				
trwna^Ahlordwne	310.,X4,2	0103	n e/Nb	<0103	<0103	<0103				
wphwEndoaufwn	636.6,-	0103	n e/Nb	<0103	<0103	<0103				
bia^Ahlordwne	310.,X1,6	0103	n e/Nb	<0103	<0103	<0103				
Gieldrin	B0.3X1	0103	n e/Nb	<0103	<0103	<0103				
3Bz^GGE	X2,33,6	0103	n e/Nb	<0103	<0103	<0103				
Endrin	X2,20,-	0103	n e/Nb	<0103	<0103	<0103				
getwEndoaufwn	..21.,B3,6	0103	n e/Nb	<0103	<0103	<0103				
3Bz^GGG	X2,34,-	0103	n e/Nb	<0103	<0103	<0103				
Endrin wddehyde	X421,6.,4	0103	n e/Nb	<0103	<0103	<0103				
Endoaufwn aufwte	10.1,0X,-	0103	n e/Nb	<0103	<0103	<0103				
3Bz^GGC	30,26.,	012	n e/Nb	<012	<012	<012				
Endrin ketone	3.464,X0,3	0103	n e/Nb	<0103	<0103	<0103				
Metho/ ybhor	X2,4.,3	012	n e/Nb	<012	<012	<012				



sTel P 4g, g1
 W: INALSI L P EM1201332
 t f Ob P GAov EwghhAt V TEH
 s L j Db P 11XB1. 201

Analytical Results

hmf, M7bx: RO9

Compound	CAS Number	Client sampling data / time		Client sample ID			
		LOR	Unit	D. ^C. M002 1., 5Ed., 2012g13R0 EM1201442-002	D. ^C. M002 1., 5Ed., 2012g13R0 EM1201442-00-	D. ^C10M001 1., 5Ed., 2012g13R0 EM1201442-011	
E^0 - B: Orsnwphoaphorua ^eatibidea V^Z							
Gibblor, ca	B2, X, X	0103	n e/Nb	<0103	<0103	<0103	***
Gec etonr^c ethyl	616, -B,-	0103	n e/Nb	<0103	<0103	<0103	***
Monobrotophoa	B62., 22,4	012	n e/Nb	<012	<012	<012	***
Gic ethowte	B0,31,3	0103	n e/Nb	<0103	<0103	<0103	***
Giwkion	...41,3	0103	n e/Nb	<0103	<0103	<0103	***
Ahlorpyrifoac ethyl	336-, 1., 0	0103	n e/Nb	<0103	<0103	<0103	***
^w^thion^c ethyl	26-, 00, 0	012	n e/Nb	<012	<012	<012	***
Mlwthion	121, X3,3	0103	n e/Nb	<0103	<0103	<0103	***
Fenthion	33., -6	0103	n e/Nb	<0103	<0103	<0103	***
Ahlorpyrifo	2621, -, 2	0103	n e/Nb	<0103	<0103	<0103	***
^w^thion	3B., -, 2	012	n e/Nb	<012	<012	<012	***
^iric phoaethyl	2. 303, 41, 1	0103	n e/Nb	<0103	<0103	<0103	***
Ahlorfen, inphoa	4X0, 60, B	0103	n e/Nb	<0103	<0103	<0103	***
Broc ophoaethyl	4-24, X, B	0103	n e/Nb	<0103	<0103	<0103	***
Fencw iphoa	22224, 62, B	0103	n e/Nb	<0103	<0103	<0103	***
^rothiofo	.4B4., 4B, 4	0103	n e/Nb	<0103	<0103	<0103	***
Ethion	3B., 12, 2	0103	n e/Nb	<0103	<0103	<0103	***
Awgophenothion	X- B, 16, B	0103	n e/Nb	<0103	<0103	<0103	***
Dxinphoa Methyl	- B, 30, 0	0103	n e/Nb	<0103	<0103	<0103	***
E^0P3D: MonobybliB Broc wib Hydrobwrgona							
Benzene	X1, 4., 2	012	n e/Nb	<012	<012	<012	***
Colluene	10-, -, .	013	n e/Nb	<013	<013	<013	***
Ethylgenxene	100, 41, 4	013	n e/Nb	<013	<013	<013	***
c etw^& pwrw^ ylene	10-, -, ., g0B, 42., .	013	n e/Nb	<013	<013	<013	***
Rlyrene	100, 42, 3	013	n e/Nb	<013	<013	<013	***
ortho^ ylene	63, 4XB	013	n e/Nb	<013	<013	<013	***
^opropylgenxene	6-, -2,-	013	n e/Nb	<013	<013	<013	***
n^ropygenxene	10., B3, 1	013	n e/Nb	<013	<013	<013	***
1B^Cric ethylgenxene	10-, BX,-	013	n e/Nb	<013	<013	<013	***
aeb^Butylgenxene	1. 3, 6-, -	013	n e/Nb	<013	<013	<013	***
1ZB^Cric ethylgenxene	63, B., B	013	n e/Nb	<013	<013	<013	***
tert^Butylgenxene	6-, 0B, B	013	n e/Nb	<013	<013	<013	***
p^opropyltoluene	66-, X, B	013	n e/Nb	<013	<013	<013	***
n^Butylgenxene	104, 31,-	013	n e/Nb	<013	<013	<013	***
E^0P3B: O/ ysenwtd Aoc pounda							
Kinyl Dbetme	10-, 03, 4	3	n e/Nb	<3	<3	<3	***
2-Butwnone WIEqZ	X- 6., .	3	n e/Nb	<3	<3	<3	***
3-Methyl^2-pentwnone WIEqZ	10-, 10, 1	3	n e/Nb	<3	<3	<3	***



s7el P 3g, g1
 W: INALSI L P EM1201332
 t f Ob P GAov EwghhAt V TEH
 s L j Db P 11XB1. 201

Analytical Results

hmf, M7bxy: RO9

Compound	CAS Number	LOR	Client sampling date / time		D. ^C. M002 1., 5Ed., 2012g13R0 EM1201442-002	D. ^C. M002 1., 5Ed., 2012g13R0 EM1201442-00-	D. ^C10M001 1., 5Ed., 2012g13R0 EM1201442-011	****	****	****
			Unit	Unit						
E^0P3B: O/ysewnted Aoc pounda +Aontinued										
2He/wnone W1BqZ	361,X,B	3	n e/Nb	<3	<3	<3	****	****	****	****
E^0P3A: Rulfonwted Aoc pounda										
Arwon dialufide	X3,13,0	013	n e/Nb	<013	<013	<013	****	****	****	****
E^0P3C: Fuc iswnta										
2Tz+Gibhloropropne	364,20,X	013	n e/Nb	<013	<013	<013	****	****	****	****
1Tz+Gibhloropropne	X-,X3	013	n e/Nb	<013	<013	<013	****	****	****	****
bia+1B+Gibhloropropylene	100B1,01,3	013	n e/Nb	<013	<013	<013	****	****	****	****
trwna+1B+Gibhloropropylene	100B1,02,B	013	n e/Nb	<013	<013	<013	****	****	****	****
1Tz+Gigroc oethwne VEGBZ	10B,6.,4	013	n e/Nb	<013	<013	<013	****	****	****	****
E^0P3E: Hwlosenwted Diiphwifib Aoc pounda										
Gibhlorodifluoroc ethwne	X3,X1,-	3	n e/Nb	<3	<3	<3	****	****	****	****
Ahloroc ethwne	X4,-X.	3	n e/Nb	<3	<3	<3	****	****	****	****
Kinyl bhloride	X3,01,4	3	n e/Nb	<3	<3	<3	****	****	****	****
Brocc ethwne	X4,-,6	3	n e/Nb	<3	<3	<3	****	****	****	****
Ahloroethwne	X3,00.,	3	n e/Nb	<3	<3	<3	****	****	****	****
Cribhlorofluoroc ethwne	X3,B6,4	3	n e/Nb	<3	<3	<3	****	****	****	****
1Tt+Gibhloroethene	X3.,3,4	013	n e/Nb	<013	<013	<013	****	****	****	****
Sdoc ethwne	X4,-,4	013	n e/Nb	<013	<013	<013	****	****	****	****
trwna+1Tz+Gibhloroethene	13B,B0,3	013	n e/Nb	<013	<013	<013	****	****	****	****
1Tt+Gibhloroethwne	X3.,4.,	013	n e/Nb	<013	<013	<013	****	****	****	****
bia+1Tz+Gibhloroethene	13B,36,2	013	n e/Nb	<013	<013	<013	****	****	****	****
1Tt+1Tz+Gibhloroethwne	X1,33,B	013	n e/Nb	<013	<013	<013	****	****	****	****
1Tt+Gibhloropropylene	3B.,3.,B	013	n e/Nb	<013	<013	<013	****	****	****	****
Arwon Cetrvbhloride	3B,2.,3	013	n e/Nb	<013	<013	<013	****	****	****	****
1Tz+Gibhloroethwne	10X,0B,2	013	n e/Nb	<013	<013	<013	****	****	****	****
Cribhloroethene	X6,01,B	013	n e/Nb	<013	<013	<013	****	****	****	****
Gigroc oc ethwne	X4,63.,	013	n e/Nb	<013	<013	<013	****	****	****	****
1Tt+Gibhloroethwne	X6,00,3	013	n e/Nb	<013	<013	<013	****	****	****	****
1Tz+Gibhloropropne	142,2-,6	013	n e/Nb	<013	<013	<013	****	****	****	****
Cetrvbhloroethene	12X1-,4	013	n e/Nb	<013	<013	<013	****	****	****	****
1Tt+1Tz+Cetrvbhloroethwne	B,0,20,B	013	n e/Nb	<013	<013	<013	****	****	****	****
trwna+1Tz+Gibhloro-2-gutene	110,3X,B	013	n e/Nb	<013	<013	<013	****	****	****	****
bia+1Tz+Gibhloro-2-gutene	14XB,11,3	013	n e/Nb	<013	<013	<013	****	****	****	****
1Tt+1Tz+Cetrvbhloroethwne	X6.,4,3	013	n e/Nb	<013	<013	<013	****	****	****	****
1Tz+1Tz+Cetrvbhloropropne	6B,1-,4	013	n e/Nb	<013	<013	<013	****	****	****	****
^entvbhloroethwne	XB,01,X	013	n e/Nb	<013	<013	<013	****	****	****	****
1Tz+Gigroc o-6-bhloropropne	6B,12,-	013	n e/Nb	<013	<013	<013	****	****	****	****
E^0P3F: Hwlosenwted Droc wfib Aoc pounda										



s 7el P Bg, g1
 W: INALSI L P EM1201332
 t f Ob P GAov EwghhAt V TEh
 s L j Db P 11XB1. 201

Analytical Results

hmf, M7byx: RO9

Compound	CAS Number	Client sampling date / time		D. ^C. M002 1., 5Ed., 2012gt3R0 EM1201442-002	D. ^C. M002 1., 5Ed., 2012gt3R0 EM1201442-00-	D. ^C10M001 1., 5Ed., 2012gt3R0 EM1201442-011	Client sample ID
		LOR	Unit				
E^0P3F: Hwloswntd Droc wlib Aoc pounda +Aontinued							
Ahlorogxene	10-, 60, X	013	n e/Nb	<013	<013	<013	****
Broc ogenxene	10-, -, B, 1	013	n e/Nb	<013	<013	<013	****
2^Ahlorotoluene	63, 46, -	013	n e/Nb	<013	<013	<013	****
3^Ahlorotoluene	10B, 4, 4	013	n e/Nb	<013	<013	<013	****
1^2B^Cribhlorogxene	- X, B1, B	013	n e/Nb	<013	<013	<013	****
E^0P39 : Cribhwloc ethwnea							
Ahloroforc	BX, BB,	013	n e/Nb	<013	<013	<013	****
Broc odibhloroc ethwne	X3, 2X, 4	013	n e/Nb	<013	<013	<013	****
Gigroc obhloroc ethwne	124, 4, 1	013	n e/Nb	<013	<013	<013	****
Broc oforc	X3, 23, 2	013	n e/Nb	<013	<013	<013	****
E^0P4D: ^ henolib Aoc pounda							
^henol	10-, 63, 2	013	n e/Nb	<013	<013	<013	****
2^Ahlorophenol	63, 3X, -	013	n e/Nb	<013	<013	<013	****
2^Methylphenol	63, 4-, X	013	n e/Nb	<013	<013	<013	****
6+8, 3^Methylphenol	1, 16, XX,	013	n e/Nb	<110	<110	<110	****
2^4 itrophenol	- -, X3, 3	013	n e/Nb	<013	<013	<013	****
2B^Gic ethylphenol	103, BX, 6	013	n e/Nb	<013	<013	<013	****
2B^Gibhlorophenol	120-, -, 2	013	n e/Nb	<013	<013	<013	****
2T ^Gibhlorophenol	- X, B3, 0	013	n e/Nb	<013	<013	<013	****
3^Ahloro-6^Methylphenol	36, 30, X	013	n e/Nb	<013	<013	<013	****
2BT ^Cribhlorophenol	- -, 0B, 2	013	n e/Nb	<013	<013	<013	****
2B^Cribhlorophenol	63, 63, 4	013	n e/Nb	<013	<013	<013	****
^entubhlorophenol	- X-, B3	1	n e/Nb	<1	<1	<1	****
E^0P4B: ^ olynublew Droc wlib Hydrobwrgona							
) wphthwlene	61, 20, .	013	n e/Nb	<013	<013	<013	****
2^Methylmpthwlene	61, 3XB	013	n e/Nb	<013	<013	<013	****
2^Ahloronwphthwlene	61, 3-, X	013	n e/Nb	<013	<013	<013	****
Dbenwphthylene	20-, 6B, -	013	n e/Nb	<013	<013	<013	****
Dbenwphthene	- . . . 2, 6	013	n e/Nb	<013	<013	<013	****
Fluorene	- B, X, X	013	n e/Nb	<013	<013	<013	****
^henwthrene	- 3, 01, -	013	n e/Nb	<013	<013	<013	****
Dnthrbene	120, 12, X	013	n e/Nb	<013	<013	<013	****
Fluorwthene	20B, 44, 0	013	n e/Nb	<013	<013	<013	****
^yrene	126, 00, 0	013	n e/Nb	<013	<013	<013	****
) ^2^Fluorenyl Dbetwc ide	3, . 6B, .	013	n e/Nb	<013	<013	<013	****
Benx^2^wnthrwbene	3B, 33, .	013	n e/Nb	<013	<013	<013	****
Ahryaene	21-, 01, 6	013	n e/Nb	<013	<013	<013	****



sTel P Xg, g1
 W: INALSI L P EM1201332
 t f Ob P GAov Ewgf hAt V TEH
 s L: j Db P 11XB1. 201

Analytical Results

hmf, M7bX: RO9

Compound	CAS Number	LOR	Client sampling date / time		D. ^C. M002 1., 5Ed., 2012g13R0 EM1201442-002	D. ^C. M002 1., 5Ed., 2012g13R0 EM1201442-00-	D. ^C10M001 1., 5Ed., 2012g13R0 EM1201442-011	Client sample ID
			Unit	Unit				
E-0P4B: ^ olynublew Droc wib Hydrobwrgona +Acontinued								
BenzoVgZ&	203.66.2g0X,0-, 6	1	n e/Nb	<1	<1	<1	***	***
BenzoVZfluorwrtene			n e/Nb	<03	<03	<03	***	***
PT2-Gic ethylgenxwZntrwbene	3X,6XB	03	n e/Nb	<03	<03	<03	***	***
BenoVWZpyrene	30., 2-	03	n e/Nb	<03	<03	<03	***	***
6-Methylbholwrtene	3B,46,3	03	n e/Nb	<03	<03	<03	***	***
SidenoV1Z6TdZpyrene	16., 6,3	03	n e/Nb	<03	<03	<03	***	***
GigenxWthZmtrwbene	3., X0.,	03	n e/Nb	<03	<03	<03	***	***
BenoV6 TITZperylene	161,24,2	03	n e/Nb	<03	<03	<03	***	***
gRuc of ^DHa	***	03	n e/Nb	<03	<03	<03	***	***
E-0P4A: ^ hthwke Eatera								
Gic ethyl pthwkte	1., 1, 11.,	03	n e/Nb	<03	<03	<03	***	***
Giehyll pthwkte	-4, BB, 2	03	n e/Nb	<03	<03	<03	***	***
Gi-n-gutyl pthwkte	-4, X4, 2	03	n e/Nb	<03	<03	<03	***	***
Butyl genxyl pthwkte	-3, B, X	03	n e/Nb	<03	<03	<03	***	***
giaV2-ethylhe/ yIZphtwkte	11X-1, X	03	n e/Nb	<30	<30	<30	***	***
Gi-n-obytphtwkte	11X-4, 0	03	n e/Nb	<03	<03	<03	***	***
E-0P4G:) itroawc inea								
) ^ itroac ethylethwlc ine	10363, 63, B	03	n e/Nb	<03	<03	<03	***	***
) ^ itroacodietheylwlc ine	33, 1-, 3	03	n e/Nb	<03	<03	<03	***	***
) ^ itroacopyrolidene	6, 0, 33, 2	03	n e/Nb	<10	<10	<10	***	***
) ^ itroac orpholine	36-, 6, 2	03	n e/Nb	<03	<03	<03	***	***
) ^ itroacodi-n-propylwlc ine	B21, B4, X	03	n e/Nb	<03	<03	<03	***	***
) ^ itroacopiperidine	100, X3, 4	03	n e/Nb	<03	<03	<03	***	***
) ^ itroacodigutylwlc ine	624, 1B,	03	n e/Nb	<03	<03	<03	***	***
) ^ itroacodiphenyl & Giphenylwlc ine	-B, 0, Bgg22., 6, 4	03	n e/Nb	<10	<10	<10	***	***
Methwpyriline	61-, 0, 3	03	n e/Nb	<03	<03	<03	***	***
E-0P4E:) itrowoc wiba wrd qetonea								
2-^iboline	106, 0B,-	03	n e/Nb	<03	<03	<03	***	***
Dibetophenone	6-, B, 2	03	n e/Nb	<03	<03	<03	***	***
) itrogenxene	6-, 63.,	03	n e/Nb	<03	<03	<03	***	***
Sophorone	X-, 36, 1	03	n e/Nb	<03	<03	<03	***	***
2T-^Ginitrotoluene	B0B, 20, 2	03	n e/Nb	<10	<10	<10	***	***
2B-^Ginitrotoluene	121, 14, 2	03	n e/Nb	<10	<10	<10	***	***
1-^ wphthwlc ine	1., 4., 2, X	03	n e/Nb	<03	<03	<03	***	***
3-^ itroJuinoline-^o/ ide	3B, 3X, 3	03	n e/Nb	<03	<03	<03	***	***
4-^ itro-^o-toluidine	66, 33,-	03	n e/Nb	<03	<03	<03	***	***
Droxgenxene	10.,	1	n e/Nb	<1	<1	<1	***	***



sTel P - g g1
 W: INALSI L P EM1201332
 t f Ob P GAov EwghhAt V TEH
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Analytical Results

hmf ,M7bxy: RO9

Compound	CAS Number	Client sampling date / time		D. ^C. M002 1. ,5Ed.,2012gl3R0 EM1201442-002	D. ^C- M002 1. ,5Ed.,2012gl3R0 EM1201442-00-	D. ^C10M001 1. ,5Ed.,2012gl3R0 EM1201442-011		
		LOR	Unit					
E^0P4E:) itrowroc wiba wnd qetonea ^Aontinued								
1B7^Cnritrogenxene	66., 3,4	013	n e/Nb	<013	<013	<013	****	****
^ henwbetin	B2,44,2	013	n e/Nb	<013	<013	<013	****	****
3^Dc inogiphenyl	62,BX1	013	n e/Nb	<013	<013	<013	****	****
^ entwbhloronitrogenxene	- 2,B,-	013	n e/Nb	<013	<013	<013	****	****
^ ronwc ide	2. 630,3,-,3	013	n e/Nb	<013	<013	<013	****	****
Gic ethylwlc inowogxene	B0,11,X	013	n e/Nb	<013	<013	<013	****	****
Ahlorogxnlwte	310,13,B	013	n e/Nb	<013	<013	<013	****	****
E^0P4F: Hwloethera								
Bia^2^bhloroethylZether	111,44,4	013	n e/Nb	<013	<013	<013	****	****
Bia^2^bhloroetho/ yZc ethwne	111,61,1	013	n e/Nb	<013	<013	<013	****	****
3^4hlorophenyl phenyl ether	X003,X2.,	013	n e/Nb	<013	<013	<013	****	****
3^Broc ophenyl phenyl ether	101,33.,	013	n e/Nb	<013	<013	<013	****	****
E^0P49: Ahlorinwtd Hydrobwrgona								
1B^Gibhlorogxene	341,X, 1	013	n e/Nb	<013	<013	<013	****	****
1B^Gibhlorogxene	10B,4B,X	013	n e/Nb	<013	<013	<013	****	****
1B^Gibhlorogxene	63,30,1	013	n e/Nb	<013	<013	<013	****	****
He/ wbhloroethwne	BX,X2,1	013	n e/Nb	<013	<013	<013	****	****
1B^C^Cribhlorogxene	120,-2,1	013	n e/Nb	<013	<013	<013	****	****
He/ wbhloropropylene	1--,-,X1,X	013	n e/Nb	<013	<013	<013	****	****
He/ wbhlorogutwdiene	- X,B,.,	013	n e/Nb	<013	<013	<013	****	****
He/ wbhlorobylopentwdiene	XX,4X,4	013	n e/Nb	<213	<213	<213	****	****
^ entwbhlorogxene	B0-,6, ,3	013	n e/Nb	<013	<013	<013	****	****
He/ wbhlorogxene WABZ	11-,X4,1	013	n e/Nb	<110	<110	<110	****	****
E^0P4H: Dnllinea wnd Benxdlinea								
Dnlline	B2,3,.,	013	n e/Nb	<013	<013	<013	****	****
3^4hlorowiline	10B,4X,-	013	n e/Nb	<013	<013	<013	****	****
2^4 itrowiline	-- ,X4,4	013	n e/Nb	<110	<110	<110	****	****
6^4 itrowiline	66,06,2	013	n e/Nb	<110	<110	<110	****	****
Gigenxofurwn	1. 2,B4,6	013	n e/Nb	<013	<013	<013	****	****
3^4 itrowiline	100,01,B	013	n e/Nb	<013	<013	<013	****	****
Awrgwole	- B,X4,-	013	n e/Nb	<013	<013	<013	****	****
6B^zGibhlorogxndine	61,64,1	013	n e/Nb	<013	<013	<013	****	****
E^0P4S: Orswnobhlorine ^ eatibidea								
wphwBHA	. 16,-4,B	013	n e/Nb	<013	<013	<013	****	****
getwBHA	. 16,-3,X	013	n e/Nb	<013	<013	<013	****	****
swc wBHA	3-,-,6,6	013	n e/Nb	<013	<013	<013	****	****
deltwBHA	. 16,-B,-	013	n e/Nb	<013	<013	<013	****	****
Heptwbhlor	XB,44,-	013	n e/Nb	<013	<013	<013	****	****



sTel P 6g, g1
 W: INALSI L P EM1201332
 t f Ob P GAov Ewg h hAt V TEH
 s L j Db P 11XB1. 201

Analytical Results

hmf, M7bxy: RO9

Compound	CAS Number	Client sampling date / time		D. ^C. M002	D. ^C. M002	D. ^C10M001	D. ^C10M001
		LOR	Unit				
E^0P4S Orswnobhlorine ^eatibidea +Aontinued							
Didrin	.06.00,2	013	n e/Nb	<013	<013	<013	***
Heptbhlor epo/ ide	1024,3X.	013	n e/Nb	<013	<013	<013	***
wlphwEndoaufwn	636,6,-	013	n e/Nb	<013	<013	<013	***
3BzCGE	X2,33,6	013	n e/Nb	<013	<013	<013	***
Gieldrin	B0,3X1	013	n e/Nb	<013	<013	<013	***
Endrin	X2,20,-	013	n e/Nb	<013	<013	<013	***
getwEndoaufwn	. . 21.,B3,6	013	n e/Nb	<013	<013	<013	***
3BzGGG	X2,34,-	013	n e/Nb	<013	<013	<013	***
Endoaufwn aufwte	10, 1,0X-	013	n e/Nb	<013	<013	<013	***
3BzGGC	30,26..	013	n e/Nb	<110	<110	<110	***
E^0P4X: Orswnobhlorine ^eatibidea							
Giblor, oa	B2,X, X	013	n e/Nb	<013	<013	<013	***
Gic ethowte	B0,31,3	013	n e/Nb	<013	<013	<013	***
Giwinon	. . . ,41,3	013	n e/Nb	<013	<013	<013	***
Ahlorpyrifoac ethyl	336-, 1, 0	013	n e/Nb	<013	<013	<013	***
Mlwthion	121,X3,3	013	n e/Nb	<013	<013	<013	***
Fenthion	33., -, 6	013	n e/Nb	<013	<013	<013	***
Ahlorpyrifo	2621,-, 2	013	n e/Nb	<013	<013	<013	***
^iric phoaethyl	2, 303,41,1	013	n e/Nb	<013	<013	<013	***
Ahlorfen, inphoa	4X0,60,B	013	n e/Nb	<013	<013	<013	***
^rothiofoa	.4B4., 4B,4	013	n e/Nb	<013	<013	<013	***
Ethion	3B., 12,2	013	n e/Nb	<013	<013	<013	***
E^0-0M0P1: Cotwl ^etroleuc Hydrobwrgona							
A. +A8 Frwbton	***	10	n e/Nb	<10	<10	<10	***
A10 +A13 Frwbton	***	30	n e/Nb	<30	<30	<30	***
A14 +A2- Frwbton	***	100	n e/Nb	<100	. 00	<100	***
A28 +A6. Frwbton	***	100	n e/Nb	<100	<100	<100	***
^gA10 +A6. Frwbton \auc Z	***	30	n e/Nb	<30	. 00	<30	***
E^0-0M0P1: Cotwl Lebo, erwgle Hydrobwrgona +) E^M 2010 Grwt							
A. +A10 Frwbton	***	10	n e/Nb	<10	<10	<10	***
>A10 +A1. Frwbton	***	30	n e/Nb	<30	120	<30	***
>A1. +A63 Frwbton	***	100	n e/Nb	<100	. 10	<100	***
>A63 +A30 Frwbton	***	100	n e/Nb	<100	<100	<100	***
^g>A10 +A30 Frwbton \auc Z	***	30	n e/Nb	<30	P60	<30	***
E^A21. : ^erbhlorwte gy 7AMIR							
^erbhlorwte	XB01,60..	1010	%/Nb	<1010	<1010	<1010	***
E^A261: ^erfluorooobyj Dbida wnd Ruffonwteat							



s7el P 10g_g1
 W: INALSI L P EM1201332
 t f Ob P GAov Ewg h hAt V TEH
 s L: j lb P 11XB1. 201

Analytical Results

hmf ,M7bX: RO9

Compound	CAS Number	LOR	Client sampling date / time		D. ^C. M002	D. ^C. M002	D. ^C10M001	D. ^C10M001
			Unit	Unit				
E^A261: ^e fluoroo bbyl Dbida wnd RulfonwteaT+Aontinued								
^FOR	1XB.,2.,1	010003	n e/Nb	<010003	0D00-	0D016	0D016	0D016
^FOD	. .3.BX,1	010003	n e/Nb	<010003	<010003	<010003	<010003	<010003
. :2 Fluorotoloc er Rulfonwte V :2	2XB16,6X,2	01003	n e/Nb	<01003	<01003	<01003	<01003	<01003
FIRZ								
E^A0. . R: ^AB Rurros wte								
Gebvhhlorophenyl	2031,24.,	011	µ	P1B	P1B	.8T	.8T	.8T
E^A0. - R: Orswnobhlorine ^eatibide Rurros wte								
Gigroc o^GGE	21B33,X,2	011	µ	81Z	-2D	-2B	-2B	-2B
E^A0. - C: Orswnophoaphorua ^eatibide Rurros wte								
GEF	X-,4,-,	011	µ	--D	84T	122	122	122
E^A0P3R: KOA Rurros wtea								
1Z-Gibhloroethwne-G3	1X0B0,0X,0	011	µ	-0B	80Z	-3T	-3T	-3T
Colluene-G-	20.X,2B,3	011	µ	-8B	86B	80T	80T	80T
3^Broc ofluorogensexene	4B0,00,4	011	µ	-.Z	81P	80Z	80Z	80Z
E^A0P4R: Dbid E/ trwbtvgle Rurros wtea								
2-Fluorophenol	. BX,12,4	011	µ	88D	10.	80B	80B	80B
^henold.	1. 12X--.,	011	µ	8-T	84P	-1D	-1D	-1D
2^4hlorophenol-G3	6. 631,X,B	011	µ	--B	-3B	P4T	P4T	P4T
2BT ^Crigroc ophenol	11-.,X6,B	011	µ	PPD	-.F	-0B	-0B	-0B
E^A0P4C: BvaelY eutrvl E/ trwbtvgle Rurros wtea								
) itrogenxene-G4	41B3,B0,0	011	µ	8. T	-8D	-3T	-3T	-3T
1Z-Gibhlorogensexene-G3	2166,B6,1	011	µ	P4B	P2D	P3B	P3B	P3B
2-Fluorogiphenyl	. 21,B0,-	011	µ	-. B	-4B	PP6	PP6	PP6
Dntrhwbene-tf10	1X16,0B,-	011	µ	8PP	-6T	82B	82B	82B
3^CerphenylHd13	1X1-,31,0	011	µ	86P	-1B	-4B	-4B	-4B
E^A0-0R: C^HVKBCE^ Rurros wtea								
1Z-Gibhloroethwne-G3	1X0B0,0X,0	011	µ	P8Z	--Z	-6T	-6T	-6T
Colluene-G-	20.X,2B,3	011	µ	-3B	--T	-.T	-.T	-.T
3^Broc ofluorogensexene	4B0,00,4	011	µ	80B	81F	--B	--B	--B



s7el P 11g_g1
 W: UNALS L P EM1201332
 t f Ob P GAov Ewg hAt V TEh
 s L: j Db P 11XB1: 201

Surrogate Control Limits

Compound	CAS Number	Recovery Limits (%)	
		Low	High
E⁰ - R: ^ AB Rurros wte			
Gebwhlorogiphenyl	2031,24,,	..	1..
E⁰ - R: Orswobhlorine ^ eatibide Rurros wte			
Gigroc o+GGE	21B33,X ,2	26I-	14B
E⁰ - C: Orswophoaphorua ^ eatibide Rurros wte			
GEF	X ,4 ,,-	2. IX	14B
E⁰ 0P3R: KOA Rurros wtea			
12+Gibhloroethwne+G3	1X0B0,0X,0	B2	122
Coluene+G-	20. X,2B,3	B4	120
3+Broc ofluorogxene	4B0,00,4	BB	124
E⁰ 0P4R: Dbid E/ trwbwgle Rurros wtea			
2+Fluorophenol	. BX,12,4	14	12B
^ henol+hd.	1. 12X,-,-.	12I2	122
2+Ahlorophenol+G3	6. 631,X ,B	14I2	12X
23I. +Crigroc ophenol	11- ,X6,B	12I4	1..
E⁰ 0P4C: BxaeY eutrw E/ trwbwgle Rurros wtea			
) ifroge xene+G4	41B3,B0,0	12I4	12-
12+Gibhlorogxene+G3	2166,B6,1	11IB	10-
2+Fluorogiphenyl	. 21,B0,-	1- IX	12X
Dntrwbene+I0	1X16,0B,-	2- I3	142
3+Cerphenyl+I3	1X1- ,31,0	23I-	1. -
E⁰ 0-0R: C^ HVZBCE` Rurros wtea			
12+Gibhloroethwne+G3	1X0B0,0X,0	3X	126
Coluene+G-	20. X,2B,3	3-	120
3+Broc ofluorogxene	4B0,00,4	3B	12B

Environmental Division

QUALITY CONTROL REPORT

Work Order	: EM1201552	Page	: 1 of 3L
Site	: GOLDER ASSOCIATES	BarotayotC	: vEntoED eEyal MmnsroE u elr octEe
Site Name	: hradK u N otDaNS	Site Name	: Aad aEka ADrk
Access	: P B XB6 L079	Access	: 4 Wessyll ROAprEgnale Vli dcsyalra 2171
	XcrtEg 7, 570-588 AwaEay, RmKD oEQ Vli . 2131		
	HdWTHBRh WvAT Vli , dUATRdbld 2133		
	: ED NbtDaNS@golOet.NbD.ac	v-Dat	: saDaEYka.sDrk@alsglor al.NbD
Telephone	: +L1 02 88L3 2500	Telephone	: +L1-2-8549 9L44
Facsimile	: +L1 02 88L3 2501	Facsimile	: +L1-2-8549 9L01
Project	: 117L12301	Qi	: h vPu 1999 ANkeOle X(2) aEOdba Qi A2 teqcteDeEY
Age	: F - Vli		
i-Bi Ecdret	: 81LL	Maye Aadples ReNameO	: 14-Fv X-3013
Aadplet	: Ru	Issce Maye	: 38-Fv X-3013
BitOet Ecdret	: Kd-u vbx 223509	h.o. of sadples teNameO	: 13
Ocoye Ecdret	: u v 05403	h.o. of sadples aEalCseO	: 2

This report is a summary of the test results. The results are subject to change if the test is repeated. The results are for the test only and do not represent the quality of the sample. The results are for the test only and do not represent the quality of the sample.

Quality Control

- bar otayotCMcpplhaye (MUP) Repoty/ Relayme PetNeEYage MiffeteEne (RPM) aEOdNepyaEne bIdrys
- u eykoXlaES (u X) aEObar otayotCi oEYol AprEe (bi A) Repoty/ ReNmetCaEOdNepyaEne bIdrys
- u aytr AprEe (u A) Repoty/ ReNmetCaEOdNepyaEne bIdrys



WORLD RECOGNISED
ACCREDITATION

Signatories

This report is a summary of the test results. The results are subject to change if the test is repeated. The results are for the test only and do not represent the quality of the sample. The results are for the test only and do not represent the quality of the sample.

Signatories

Site Name: h radK u N otDaNS
Access: P B XB6 L079
Project: 117L12301
Age: F - Vli
i-Bi Ecdret: 81LL
Aadplet: Ru
BitOet Ecdret: Kd-u vbx 223509
Ocoye Ecdret: u v 05403

Position

Site Name: vEntoED eEyal MmnsroE u elr octEe
Access: Aad aEka ADrk
Project: 4 Wessyll ROAprEgnale Vli dcsyalra 2171
Age: saDaEYka.sDrk@alsglor al.NbD
i-Bi Ecdret: +L1-2-8549 9L44
Aadplet: +L1-2-8549 9L01
BitOet Ecdret: h vPu 1999 ANkeOle X(2) aEOdba Qi A2 teqcteDeEY
Ocoye Ecdret: u v 05403

Accreditation Category

Site Name: u elr octEe
Access: u elr octEe
Project: u elr octEe
Age: u elr octEe
i-Bi Ecdret: u elr octEe
Aadplet: u elr octEe
BitOet Ecdret: u elr octEe
Ocoye Ecdret: u elr octEe



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 WotSBtOet : v u 1301553
 i IreEy : KBbMwR dAAABi Id TvA
 PtojeNy : 117L12301

General Comments

The aEalQjNal ptoNeOctes cseO rC_je vErtioEDEeEal MmmsnoE kame reeE CernelopeO froD esyrlrnskeO rEjetEaynoEallic teNbgExeO ptoNeOctes scNk as_ kose pcr lnskeO rC_je UAvPd, dPHd, dA aEO hvPu. IE koose CernelopeO ptoNeOctes ate eDploGeOfE_je ar seENe of CoND eEyeO sjaEOatOs of rC NreEyteqcesy

Wkete Donsycte CayeD rEaynoE kas r eeE peffotDeQ, tesclys ate tepotyE oOEa QcCwengkyr asr.

Wkete a tepotyE Oless_kaE(z) tesclys krqket_kaE_je bBR, krs DaCre Obe yo ptrnD atCsadple e;_kaNvGngesjye QtcyOE aEOgt rEscffirNeEysaDple fot aEalQsrs.

Wkete_je bBR of a tepotyE OtesclyOftefs froD sjaEOatObBR, krs DaCre Obe yo krqk Donsycte NbEjeEy rEscffirNeEysaDple (teCoNboWengkyeD ploGeQ) of Dayn rEjeteteENe.

#eC:

dEoECDocs < Refets yo sadPles wkrnk ate EoyspeNfNal(Cpatyof_ krs wotSotCet r cyfoiDeOpatyof_je Qi_ ptoNess loy

i dA hcDr et < i dA tegrsyCEcDr et froD Cayar ase DarEjateEeOr Ci_ keDfNal dr styarNs AetmNbe. Tke i keDfNal dr styarNs AetmNbe is a CmmsnoE of_je dDetrNbe i keDfNal AoNeyC.

bBR < bndlyof tepotyEg

RPM < Relayme PetNeEjage MifeteENe

= < IEONayes faiteOQi



Laboratory Duplicate (DUP) Report

The quality of the sample is determined by the laboratory. The sample is analyzed by the laboratory and the results are reported. The laboratory is accredited by the relevant authority. The laboratory is located at the following address: [Address]. The laboratory is contactable at the following telephone number: [Phone Number]. The laboratory is contactable at the following email address: [Email Address].

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EA055: Moisture Content (QC Lot: 2171372)									
v u 130154L-037	dEoEDocs			1.0	%	13.8	12.4	4.1	0% - 50%
v u 130154L-047	dEoEDocs			1.0	%	35.1	35.4	1.3	0% - 30%
EG005T: Total Metals by ICP-AES (QC Lot: 2181305)									
v u 1301441-001	dEoEDocs	vK005T: i aCDreD	7440-42-9	1	Dg	z1	z1	0.0	ho bDy
		vK005T: i ktODreD	7440-47-2	3	Dg	4L	41	11.7	0% - 30%
		vK005T: hINSeI	7440-03-0	3	Dg	3L	34	L.5	0% - 50%
		vK005T: dtseEN	7440-28-3	5	Dg	7	z5	37.1	ho bDy
		vK005T: i oppet	7440-50-8	5	Dg	15	14	0.0	ho bDy
		vK005T: beaO	7429-93-1	5	Dg	20	21	4.3	ho bDy
		vK005T: ZIEN	7440-LL-L	5	Dg	91	74	30.2	0% - 50%
v u 1301553-008	dLPT8G003	vK005T: i aCDreD	7440-42-9	1	Dg	z1	z1	0.0	ho bDy
		vK005T: i ktODreD	7440-47-2	3	Dg	L2	59	5.1	0% - 30%
		vK005T: hINSeI	7440-03-0	3	Dg	32	34	L.0	0% - 50%
		vK005T: dtseEN	7440-28-3	5	Dg	z5	z5	0.0	ho bDy
		vK005T: i oppet	7440-50-8	5	Dg	8	9	0.0	ho bDy
		vK005T: beaO	7429-93-1	5	Dg	18	10	5L.5	ho bDy
		vK005T: ZIEN	7440-LL-L	5	Dg	10	10	0.0	ho bDy
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 2181306)									
v u 1301441-001	dEoEDocs	vK025T: u etNtC	7429-97-L	0.1	Dg	z0.1	z0.1	0.0	ho bDy
v u 1301553-008	dLPT8G003	vK025T: u etNtC	7429-97-L	0.1	Dg	0.1	0.1	0.0	ho bDy
EP004: Organic Matter (QC Lot: 2171889)									
v u 1301497-001	dEoEDocs	vP004: Toyl BtgaENi: atroE		0.5	%	3.1	3.1	0.0	ho bDy
v u 1301575-008	dEoEDocs	vP004: Toyl BtgaENi: atroE		0.5	%	0.7	0.L	0.0	ho bDy
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 2171394)									
v u 1301441-001	dEoEDocs	vPOLL: Toyl PolOXklotEayeOrmpkeEGs		0.10	Dg	z0.50	z0.50	0.0	ho bDy
v u 1301553-011	dLPT10G001	vPOLL: Toyl PolOXklotEayeOrmpkeEGs		0.10	Dg	z0.10	z0.10	0.0	ho bDy
EP068A: Organochlorine Pesticides (OC) (QC Lot: 2171393)									
v u 1301441-001	dEoEDocs	vPOL8: alpka-XHi	219-84-L	0.05	Dg	z0.35	z0.35	0.0	ho bDy
		vPOL8: He: aNklotoreEeEe (Hi X)	118-74-1	0.05	Dg	z0.35	z0.35	0.0	ho bDy
		vPOL8: r eye-XHi	219-85-7	0.05	Dg	z0.35	z0.35	0.0	ho bDy
		vPOL8: gaDD a-XHi	58-89-9	0.05	Dg	z0.35	z0.35	0.0	ho bDy
		vPOL8: Oelja-XHi	219-8L-8	0.05	Dg	z0.35	z0.35	0.0	ho bDy
		vPOL8: HepyaNklot	7L-44-8	0.05	Dg	z0.35	z0.35	0.0	ho bDy
		vPOL8: dIOrE	209-00-3	0.05	Dg	z0.35	z0.35	0.0	ho bDy
		vPOL8: HepyaNklot epo: rOe	1034-57-2	0.05	Dg	z0.35	z0.35	0.0	ho bDy



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 WotSBtOet : v u 1301553
 i IreEy : KBbWvR dAAABi Id TvA
 PtojeNy : 117L12301

Laboratory sample ID	Client sample ID	Method/Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
EP068A: Organochlorine Pesticides (OC) (QC Lot: 2171393) - continued									
v u 1301441-001	dEoECDocs	vPOL8: yaES-i klotOaEe	5102-74-3	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy
		vPOL8: alpka-vEOscifaE	959-98-8	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy
		vPOL8: Ns-i klotOaEe	5102-71-9	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy
		vPOL8: MeIOtIE	L0-57-1	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy
		vPOL8: 4.4'-MMW	73-55-9	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy
		vPOL8: vEQIE	73-30-8	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy
		vPOL8: r eye-vEOscifaE	22312-L5-9	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy
		vPOL8: 4.4'-MMW	73-54-8	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy
		vPOL8: vEQIE alOekOCe	7431-92-4	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy
		vPOL8: vEOscifaE scifaye	1021-07-8	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy
		vPOL8: vEQIE SeyeE	52494-70-5	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy
		vPOL8: 4.4'-MMT	50-39-2	0.3	DgOg	z1.0	z1.0	0.0	h o btdRy
		vPOL8: u eko; ONklot	73-42-5	0.3	DgOg	z1.0	z1.0	0.0	h o btdRy
v u 1301553-011	dLPT103001	vPOL8: alpka-XHi	219-84-L	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: He; aNklotoreEeEe (Hi X)	118-74-1	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: r eye-XHi	219-85-7	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: gabD a-XHi	58-89-9	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: OeIya-XHi	219-81-8	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: HepyaNklot	7L-44-8	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: dIOtIE	209-00-3	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: HepyaNklot epo; rOe	1034-57-2	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: yaES-i klotOaEe	5102-74-3	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: alpka-vEOscifaE	959-98-8	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: Ns-i klotOaEe	5102-71-9	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: MeIOtIE	L0-57-1	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: 4.4'-MMW	73-55-9	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: vEQIE	73-30-8	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: r eye-vEOscifaE	22312-L5-9	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: 4.4'-MMW	73-54-8	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: vEQIE alOekOCe	7431-92-4	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: vEOscifaE scifaye	1021-07-8	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: vEQIE SeyeE	52494-70-5	0.05	DgOg	z0.05	z0.05	0.0	h o btdRy
		vPOL8: 4.4'-MMT	50-39-2	0.3	DgOg	z0.3	z0.3	0.0	h o btdRy
		vPOL8: u eko; ONklot	73-42-5	0.3	DgOg	z0.3	z0.3	0.0	h o btdRy
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 2171393)									
v u 1301441-001	dEoECDocs	vPOL8: MNklotnes	L3-72-7	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy
		vPOL8: MeDeyoE-A-DeKO	919-81-8	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy
		vPOL8: MD eKOaye	L0-51-5	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy
		vPOL8: MmaxEoE	222-41-5	0.05	DgOg	z0.35	z0.35	0.0	h o btdRy



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 WotSBtOet : vu 1301553
 i IreEy : KBbWR dAABi Id TvA
 PtojeNy : 117L12301

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 2171393) - continued									
vu 1301441-001	dEoECDocs	vPOL8: i klotpCrfos-DeykQ	5598-12-0	0.05	Dg00g	z0.35	z0.35	0.0	ho btdRy
		vPOL8: u alayknoE	131-75-5	0.05	Dg00g	z0.35	z0.35	0.0	ho btdRy
		vPOL8: FeEyknoE	55-28-9	0.05	Dg00g	z0.35	z0.35	0.0	ho btdRy
		vPOL8: i klotpCrfos	3931-88-3	0.05	Dg00g	z0.35	z0.35	0.0	ho btdRy
		vPOL8: PntDpkos-eykQ	32505-41-1	0.05	Dg00g	z0.35	z0.35	0.0	ho btdRy
		vPOL8: i klotfeEmEpkos	470-90-L	0.05	Dg00g	z0.35	z0.35	0.0	ho btdRy
		vPOL8: XtoDopkos-eykQ	4834-78-L	0.05	Dg00g	z0.35	z0.35	0.0	ho btdRy
		vPOL8: FeEaDnpkos	33334-93-L	0.05	Dg00g	z0.35	z0.35	0.0	ho btdRy
		vPOL8: PtoyknoE	24L42-4L-4	0.05	Dg00g	z0.35	z0.35	0.0	ho btdRy
		vPOL8: v yknoE	5L2-13-3	0.05	Dg00g	z0.35	z0.35	0.0	ho btdRy
		vPOL8: i atr opkeEoyknoE	78L-19L	0.05	Dg00g	z0.35	z0.35	0.0	ho btdRy
		vPOL8: dxEpkos u eykQ	8L-50-0	0.05	Dg00g	z0.35	z0.35	0.0	ho btdRy
		vPOL8: u oEoNoyppkos	L932-33-4	0.3	Dg00g	z1.0	z1.0	0.0	ho btdRy
		vPOL8: PatayknoE-DeykQ	398-00-0	0.3	Dg00g	z1.0	z1.0	0.0	ho btdRy
		vPOL8: PatayknoE	5L-28-3	0.3	Dg00g	z1.0	z1.0	0.0	ho btdRy
	dLPT103001	vPOL8: MNklotnos	L3-72-7	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: MeDeyoE-A-DeykQ	919-8L-8	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: MDeykoE	L0-51-5	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: MaxreE	222-41-5	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: i klotpCrfos-DeykQ	5598-12-0	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: u alayknoE	131-75-5	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: FeEyknoE	55-28-9	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: i klotpCrfos	3931-88-3	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: PntDpkos-eykQ	32505-41-1	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: i klotfeEmEpkos	470-90-L	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: XtoDopkos-eykQ	4834-78-L	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: FeEaDnpkos	33334-93-L	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: PtoyknoE	24L42-4L-4	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: v yknoE	5L2-13-3	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: i atr opkeEoyknoE	78L-19L	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: dxEpkos u eykQ	8L-50-0	0.05	Dg00g	z0.05	z0.05	0.0	ho btdRy
		vPOL8: u oEoNoyppkos	L932-33-4	0.3	Dg00g	z0.3	z0.3	0.0	ho btdRy
		vPOL8: PatayknoE-DeykQ	398-00-0	0.3	Dg00g	z0.3	z0.3	0.0	ho btdRy
		vPOL8: PatayknoE	5L-28-3	0.3	Dg00g	z0.3	z0.3	0.0	ho btdRy
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 2171236)									
vu 1301550-001	dEoECDocs	vP074: XeExeEe	71-42-3	0.3	Dg00g	z0.3	z0.3	0.0	ho btdRy
		vP074: TolceEe	108-88-2	0.5	Dg00g	z0.5	z0.5	0.0	ho btdRy
		vP074: v ykGr eXeEe	100-41-4	0.5	Dg00g	z0.5	z0.5	0.0	ho btdRy
		vP074: Deya- & pata-6OeEe	108-28-2	0.5	Dg00g	z0.5	z0.5	0.0	ho btdRy
			10L-43-2						



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 WotSBtOet : v u 1301553
 i IreEy : KBbMWR dAABi Id TvA
 PtoJenY : 117L12301

Laboratory sample ID	Client sample ID	Method/Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 2171236) - continued									
v u 1301550-001	dEoECDocs	v P074: AyQeEe	100-43-5	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: otyko-6DeEe	95-47-L	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: IsoptopOr eExeEe	98-83-8	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: E-PTopOr eExeEe	102-L5-1	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: 1.2.5-TtD eYkOr eExeEe	108-L7-8	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: seNXcYGr eExeEe	125-98-8	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: 1.3.4-TtD eYkOr eExeEe	95-L2-L	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: yetyXcyGr eExeEe	98-0L-L	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: p-IsoptopOlyceEe	99-87-L	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: E-XcYGr eExeEe	104-51-8	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
EP074B: Oxygenated Compounds (QC Lot: 2171236)									
v u 1301550-001	dEoECDocs	v P074: VtED dNbyEe	108-05-4	5	Dg ⁰⁸	z5	z5	0.0	h o b t D r y
		v P074: 3-XcyEoEe (u #)	78-92-2	5	Dg ⁰⁸	z5	z5	0.0	h o b t D r y
		v P074: 4-u eYQ-3-peEaEoEe (u IX#)	108-10-1	5	Dg ⁰⁸	z5	z5	0.0	h o b t D r y
		v P074: 3-He: aEoEe (u X#)	591-78-L	5	Dg ⁰⁸	z5	z5	0.0	h o b t D r y
EP074C: Sulfonated Compounds (QC Lot: 2171236)									
v u 1301550-001	dEoECDocs	v P074: i atr oE OasclifEe	75-15-0	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
EP074D: Fumigants (QC Lot: 2171236)									
v u 1301550-001	dEoECDocs	v P074: 3.3-MNklotoptopaEe	594-30-7	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: 1.3-MNklotoptopaEe	78-87-5	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: Ns-1.2-MNklotoptopGeEe	100L1-01-5	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: yAES-1.2-MNklotoptopGeEe	100L1-03-L	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: 1.3-Mt toDoeKaEe (vMX)	10L-92-4	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
EP074E: Halogenated Aliphatic Compounds (QC Lot: 2171236)									
v u 1301550-001	dEoECDocs	v P074: 1.1-MNklotoeKeEe	75-25-4	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: loObDeYKaEe	74-88-4	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: yAES-1.3-MNklotoeKeEe	15L-L0-5	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: 1.1-MNklotoeKaEe	75-24-2	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: Ns-1.3-MNklotoeKeEe	15L-59-3	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: 1.1.1-TtNklotoeKaEe	71-55-L	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: 1.1-MNklotoptopOeEe	5L2-58-L	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: i atr oE TeyaNklotOe	5L-32-5	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: 1.3-MNklotoeKaEe	107-0L-3	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: TtNklotoeKeEe	79-01-L	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: Mt toDeKaEe	74-95-2	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: 1.1.3-TtNklotoeKaEe	79-00-5	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: 1.2-MNklotoptopaEe	143-38-9	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: TeyaNklotoeKeEe	137-18-4	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y
		v P074: 1.1.1.3-TeyaNklotoeKaEe	L20-30-L	0.5	Dg ⁰⁸	z0.5	z0.5	0.0	h o b t D r y



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 i IreEy : KBbW R dAABi Id Tv A
 PtojeNy : 117L12301

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
EP074E: Halogenated Aliphatic Compounds (QC Lot: 2171236) - continued									
v u 1301550-001	dEoECDocs	v P074: 1.4-MNklototo-3-r cyeEe	110-57-L	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P074: 1.4-MNklototo-3-r cyeEe	147L-11-5	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P074: 1.1.3.3-TeykNklotoeKaEe	79-24-5	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P074: 1.3.2-TtrNklotoptopaEe	9L-18-4	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P074: PeEgNklotoeKaEe	7L-01-7	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P074: 1.3-Mtr toD o-2-NklotoptopaEe	9L-13-8	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P074: MNklotocilicotoDeyKaEe	75-71-8	5	Dg09	z5	z5	0.0	h o btdiy
		v P074: i klotodeKaEe	74-87-2	5	Dg09	z5	z5	0.0	h o btdiy
		v P074: ViEG Nklotoe	75-01-4	5	Dg09	z5	z5	0.0	h o btdiy
		v P074: XtoDodeKaEe	74-82-9	5	Dg09	z5	z5	0.0	h o btdiy
		v P074: i klotoeKaEe	75-00-2	5	Dg09	z5	z5	0.0	h o btdiy
		v P074: TtrNklotoficotoDeyKaEe	75-L9-4	5	Dg09	z5	z5	0.0	h o btdiy
EP074F: Halogenated Aromatic Compounds (QC Lot: 2171236)									
v u 1301550-001	dEoECDocs	v P074: i klotoreXeEe	108-90-7	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P074: XtoDoreXeEe	108-8L-1	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P074: 3-i klotoylceEe	95-49-8	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P074: 4-i klotoylceEe	10L-42-4	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P074: 1.3.2-TtrNklotoreXeEe	87-L1-L	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
EP074G: Trihalomethanes (QC Lot: 2171236)									
v u 1301550-001	dEoECDocs	v P074: i klotofotD	L7-LL-2	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P074: XtoDokNklotodeKaEe	75-37-4	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P074: Mtr toDokNklotodeKaEe	134-48-1	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P074: XtoDofotD	75-35-3	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
EP075A: Phenolic Compounds (QC Lot: 2171396)									
v u 1301441-001	dEoECDocs	v P075: PkeEol	108-95-3	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P075: 3-i klotopkeEol	95-57-8	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P075: 3-u eykQpkeEol	95-48-7	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P075: 2- & 4-u eykQpkeEol	1219-77-2	0.5	Dg09	z1.0	z1.0	0.0	h o btdiy
		v P075: 3-h ntopkeEol	88-75-5	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P075: 3.4-MID eykQpkeEol	105-L7-9	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P075: 3.4-MNklotopkeEol	130-82-3	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P075: 3.L-MNklotopkeEol	87-L5-0	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P075: 4-i klototo-2-u eykQpkeEol	59-50-7	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P075: 3.4.L-TtrNklotopkeEol	88-0L-3	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P075: 3.4.5-TtrNklotopkeEol	95-95-4	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P075: PeEgNklotopkeEol	87-8L-5	1	Dg09	z1	z1	0.0	h o btdiy
		v P075: PkeEol	108-95-3	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
v u 1301553-011	dLPT100001	v P075: 3-i klotopkeEol	95-57-8	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy
		v P075: 3-u eykQpkeEol	95-48-7	0.5	Dg09	z0.5	z0.5	0.0	h o btdiy



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 i IreEy : KBbWvR dAABi Id TvA
 PtojeNy : 117L12301

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report					
						Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)		
EP075A: Phenolic Compounds (QC Lot: 2171396) - continued											
vu 1301553-011	dLPT103001	vP075: 2- & 4-u eKQpkeEol	1219-77-2	0.5	Dg08g	z1.0	z1.0	0.0	ho btDy		
		vP075: 3-hYtopkeEol	88-75-5	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
		vP075: 3-4-MD eKQpkeEol	105-L7-9	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
		vP075: 3-4-MNKlotopkeEol	130-82-3	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
		vP075: 3-L-MNKlotopkeEol	87-L5-0	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
		vP075: 4-i klotO-2-u eKQpkeEol	59-50-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
		vP075: 3-4-L-TiNKlotopkeEol	88-0L-3	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
		vP075: 3-4-5-TiNKlotopkeEol	95-95-4	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
		vP075: PeEaNKlotopkeEol	87-8L-5	1	Dg08g	z1	z1	0.0	ho btDy		
		EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 2171396)									
		vu 1301441-001	dEOEDocs	vP075: h apkykaleEe	91-30-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy
				vP075: 3-u eKQEpkykaleEe	91-57-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy
				vP075: 3-i klotOEpkykaleEe	91-58-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy
vP075: dNeEapkyQeEe	308-9L-8			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: dNeEapkyEeEe	82-23-9			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: FicoteEe	8L-72-7			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: PkeEaEkteEe	85-01-8			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: dEYktaNeEe	130-13-7			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: FicotaEkyEeEe	30L-44-0			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: PQeEe	139-00-0			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: h-3-FicoteEol dNeYaDri0e	52-9L-2			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: XeEx(a)EYktaNeEe	5L-55-2			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: i kIOseEe	318-01-9			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: 7.13-MD eKQr eEx(a)EYktaNeEe	57-97-L			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: XeExo(a)PQeEe	50-23-8			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: 2-u eKQNKolaEkteEe	5L-49-5			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: IEOeO(1.3.2.N)PQeEe	192-29-5			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: MreEx(a.k)EYktaNeEe	52-70-2			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: XeExo(g.k.n)petOeEe	191-34-3			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: AcD of Pd Hs	----			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: XeExo(r) & XeExo(S)ficotaEkteEe	305-99-3			1	Dg08g	z1	z1	0.0	ho btDy		
vu 1301553-011											
dLPT103001	dLPT103001			vP075: h apkykaleEe	91-30-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy
		vP075: 3-u eKQEpkykaleEe	91-57-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
		vP075: 3-i klotOEpkykaleEe	91-58-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
		vP075: dNeEapkyQeEe	308-9L-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
		vP075: dNeEapkyEeEe	82-23-9	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
		vP075: FicoteEe	8L-72-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
		vP075: PkeEaEkteEe	85-01-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
		vP075: dEYktaNeEe	130-13-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
		vu 1301441-001									
		dLPT103001	dLPT103001	vP075: h apkykaleEe	91-30-2	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy
				vP075: 3-u eKQEpkykaleEe	91-57-L	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy
				vP075: 3-i klotOEpkykaleEe	91-58-7	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy
				vP075: dNeEapkyQeEe	308-9L-8	0.5	Dg08g	z0.5	z0.5	0.0	ho btDy
vP075: dNeEapkyEeEe	82-23-9			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: FicoteEe	8L-72-7			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: PkeEaEkteEe	85-01-8			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		
vP075: dEYktaNeEe	130-13-7			0.5	Dg08g	z0.5	z0.5	0.0	ho btDy		



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 WotSBtOet : vu 1301553
 i IreEy : KBbMwR dAABi Id TvA
 PtojeNy : 117L12301

Laboratory sample ID	Client sample ID	Method/Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)		
						Original Result	Duplicate Result	RPD (%)			
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 2171396) - continued											
vu 1301553-011	dLPT103001	vP075: FicotatEYeEe	30L-44-0	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: PQeEe	139-00-0	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: h-3-FicoteEC dNeyDriDe	52-9L-2	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: XeEX(a)jEYktNtEe	5L-55-2	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: i ktOseEe	318-01-9	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 7.13-MD eYQr eEX(a)jEYktNtEe	57-97-L	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: XeExo(a)PQeEe	50-23-8	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: 2-u eYkQNKolaEXteEe	5L-49-5	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: IEOeO(1.3.2.N)PQeEe	192-29-5	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: Mir eEX(a.k)jEYktNtEe	52-70-2	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: XeExo(g.k)PetOeEe	191-34-3	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: AcD of PdHs	----	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: XeExo(r) & XeExo(S)ficotaEXteEe	305-99-3 307-08-9	1	Dg0g	z1	z1	0.0	ho btDiy		
		EP075C: Phthalate Esters (QC Lot: 2171396)									
vu 1301441-001	dEOEDocs	vP075: MD eYQ pkykalye	121-11-2	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: MteYkQ pkykalye	84-LL-3	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: MteRcyQ pkykalye	84-74-3	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: XcyQ r eEXD pkykalye	85-L8-7	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: r rS(3-eYkOke; Q) pkykalye	117-81-7	0.5	Dg0g	z5.0	z5.0	0.0	ho btDiy		
		vP075: MteE-oNjQpkykalye	117-84-0	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: MD eYQ pkykalye	121-11-2	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: MteYkQ pkykalye	84-LL-3	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: MteRcyQ pkykalye	84-74-3	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: XcyQ r eEXD pkykalye	85-L8-7	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: r rS(3-eYkOke; Q) pkykalye	117-81-7	0.5	Dg0g	z5.0	z5.0	0.0	ho btDiy		
		vP075: MteE-oNjQpkykalye	117-84-0	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		EP075D: Nitrosamines (QC Lot: 2171396)									
		vu 1301441-001	dEOEDocs	vP075: h-h rYtosoDeYkOeYkQaD rEe	10595-95-L	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy
vP075: h-h rYtosoOreYkQaD rEe	55-18-5			0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
vP075: h-h rYtosoQtoirD rEe	920-55-3			0.5	Dg0g	z1.0	z1.0	0.0	ho btDiy		
vP075: h-h rYtosoD oipkol rEe	59-89-3			0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
vP075: h-h rYtosoOrE-ptopQaD rEe	L31-L4-7			0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
vP075: h-h rYtosoPpP rEe	100-75-4			0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
vP075: h-h rYtosoOr cyQaD rEe	934-1L-2			0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
vP075: h-h rYtosoOpk rEe & Mpk rEe	8L-20-L 133-29-4			0.5	Dg0g	z1.0	z1.0	0.0	ho btDiy		
vP075: u eYkP rEe	91-80-5			0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
vP075: h-h rYtosoDeYkOeYkQaD rEe	10595-95-L			0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
EP075E: Nitrosamines (QC Lot: 2171396)											
vu 1301553-011	dLPT103001			vP075: h-h rYtosoDeYkOeYkQaD rEe	10595-95-L	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy
				vP075: h-h rYtosoOreYkQaD rEe	55-18-5	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy
				vP075: h-h rYtosoQtoirD rEe	920-55-3	0.5	Dg0g	z1.0	z1.0	0.0	ho btDiy
		vP075: h-h rYtosoD oipkol rEe	59-89-3	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: h-h rYtosoOrE-ptopQaD rEe	L31-L4-7	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: h-h rYtosoPpP rEe	100-75-4	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: h-h rYtosoOr cyQaD rEe	934-1L-2	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: h-h rYtosoOpk rEe & Mpk rEe	8L-20-L 133-29-4	0.5	Dg0g	z1.0	z1.0	0.0	ho btDiy		
		vP075: u eYkP rEe	91-80-5	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		
		vP075: h-h rYtosoDeYkOeYkQaD rEe	10595-95-L	0.5	Dg0g	z0.5	z0.5	0.0	ho btDiy		



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Laboratory sample ID	Client sample ID	Method/Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
EP075D: Nitrosamines (QC Lot: 2171396) - continued									
vu 1301553-011	dLPT10G001	vP075: h-h-nykosoOreykQaDfEe	55-18-5	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: h-h-nykosoQtoIrdEe	920-55-3	0.5	DgGg	z1.0	z1.0	0.0	ho brDy
		vP075: h-h-nykosoDolpkolife	59-89-3	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: h-h-nykosoOrE-ptopQaDfEe	L31-L47	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: h-h-nykosoipetriOEE	100-75-4	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: h-h-nykosoOrcyQaDfEe	934-1L-2	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: h-h-nykosoOpkEeQ & MpkEeQaDfEe	8L-20-L 133-29-4	0.5	DgGg	z1.0	z1.0	0.0	ho brDy
		vP075: uekqapQheEe	91-80-5	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
EP075E: Nitroaromatics and Ketones (QC Lot: 2171396)									
vu 1301441-001	dEoECDocs	vP075: 3-PrnIbife	109-0L-8	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: dNeypkEeEe	98-8L-3	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: hnytor eExeEe	98-95-2	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: IsopkotoEe	78-59-1	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: 3-L-MEjyoylceEe	L0L-30-3	0.5	DgGg	z1.0	z1.0	0.0	ho brDy
		vP075: 3-4-MEjyoylceEe	131-14-3	0.5	DgGg	z1.0	z1.0	0.0	ho brDy
		vP075: 1-h-apkjkQaDfEe	124-23-7	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: 4-h-nykocriEolIe-h-o: rCb	5L-57-5	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: 5-h-nykoo-o-ylc rOEE	99-55-8	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: 1.2.5-TitEjyor eExeEe	99-25-4	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: PkeEaNeYf	L3-44-3	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: 4-dIfor ipkeEQ	93-L7-1	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: PeEaNklotEjyor eExeEe	83-L8-8	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: PtoEad rCb	32950-58-5	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: i klotor eXitaye	L0-11-7	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: MDeykQaDfEeoxor eExeEe	510-15-L	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: dxor eExeEe	102-22-2	1	DgGg	z1	z1	0.0	ho brDy
vu 1301553-011	dLPT10G001	vP075: 3-PrnIbife	109-0L-8	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: dNeypkEeEe	98-8L-3	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: hnytor eExeEe	98-95-2	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: IsopkotoEe	78-59-1	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: 3-L-MEjyoylceEe	L0L-30-3	0.5	DgGg	z1.0	z1.0	0.0	ho brDy
		vP075: 3-4-MEjyoylceEe	131-14-3	0.5	DgGg	z1.0	z1.0	0.0	ho brDy
		vP075: 1-h-apkjkQaDfEe	124-23-7	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: 4-h-nykocriEolIe-h-o: rCb	5L-57-5	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: 5-h-nykoo-o-ylc rOEE	99-55-8	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: 1.2.5-TitEjyor eExeEe	99-25-4	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: PkeEaNeYf	L3-44-3	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: 4-dIfor ipkeEQ	93-L7-1	0.5	DgGg	z0.5	z0.5	0.0	ho brDy
		vP075: PeEaNklotEjyor eExeEe	83-L8-8	0.5	DgGg	z0.5	z0.5	0.0	ho brDy



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 PtojeNy : 117L12301

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
EP075E: Nitroaromatics and Ketones (QC Lot: 2171396) - continued									
vu 1301553-011	dLPT10G001	v P075: PtoEaDrOe	32950-58-5	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: MD eYkGaD ifcoaxor eExeEe	L0-11-7	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: i klotor eXtlaye	510-15-L	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: dxor eExeEe	102-22-2	1	DgGg	z1	z1	0.0	ho btDiy
EP075F: Haloethers (QC Lot: 2171396)									
vu 1301441-001	dEoECDocs	v P075: Xns(3-NklotoeKQ) eYket	111-44-4	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: Xns(3-NklotoeKQ; Q DeykaEe	111-91-1	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 4-i klotopkeEQ pkeEQ eYket	7005-73-2	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 4-XtoD opkeEQ pkeEQ eYket	101-55-2	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: Xns(3-NklotoeKQ) eYket	111-44-4	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: Xns(3-NklotoeKQ; Q DeykaEe	111-91-1	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 4-i klotopkeEQ pkeEQ eYket	7005-73-2	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 4-XtoD opkeEQ pkeEQ eYket	101-55-2	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
EP075G: Chlorinated Hydrocarbons (QC Lot: 2171396)									
vu 1301441-001	dEoECDocs	v P075: 1.2-MNklotor eExeEe	541-72-1	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 1.4-MNklotor eExeEe	10L-4L-7	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 1.3-MNklotor eExeEe	95-50-1	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: He; aNklotoeKaEe	L7-73-1	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 1.3.4-TiNklotor eExeEe	130-83-1	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: He; aNklotoptopQeEe	1888-71-7	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: He; aNklotor cYQOeEe	87-L8-2	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: He; aNklotonNopeEYQeEe	77-47-4	0.5	DgGg	z3.5	z3.5	0.0	ho btDiy
		v P075: PeEYaNklotor eExeEe	L08-92-5	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: He; aNklotor eExeEe (Hi X)	118-74-1	0.5	DgGg	z1.0	z1.0	0.0	ho btDiy
vu 1301553-011	dLPT10G001	v P075: 1.2-MNklotor eExeEe	541-72-1	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 1.4-MNklotor eExeEe	10L-4L-7	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 1.3-MNklotor eExeEe	95-50-1	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 1.3-MNklotor eExeEe	L7-73-1	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: He; aNklotoeKaEe	130-83-1	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 1.3.4-TiNklotor eExeEe	1888-71-7	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: He; aNklotor cYQOeEe	87-L8-2	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: He; aNklotonNopeEYQeEe	77-47-4	0.5	DgGg	z3.5	z3.5	0.0	ho btDiy
		v P075: PeEYaNklotor eExeEe	L08-92-5	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: He; aNklotor eExeEe (Hi X)	118-74-1	0.5	DgGg	z1.0	z1.0	0.0	ho btDiy
		v P075: 1.2-MNklotor eExeEe	541-72-1	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 1.4-MNklotor eExeEe	10L-4L-7	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 1.3-MNklotor eExeEe	95-50-1	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: He; aNklotoeKaEe	L7-73-1	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 1.3.4-TiNklotor eExeEe	130-83-1	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: He; aNklotoptopQeEe	1888-71-7	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: He; aNklotor cYQOeEe	87-L8-2	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: He; aNklotonNopeEYQeEe	77-47-4	0.5	DgGg	z3.5	z3.5	0.0	ho btDiy
		v P075: PeEYaNklotor eExeEe	L08-92-5	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: He; aNklotor eExeEe (Hi X)	118-74-1	0.5	DgGg	z1.0	z1.0	0.0	ho btDiy
EP075H: Anilines and Benzidines (QC Lot: 2171396)									
vu 1301441-001	dEoECDocs	v P075: dEiMfEe	L3-52-2	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 4-i klotoaEiMfEe	10L-47-8	0.5	DgGg	z0.5	z0.5	0.0	ho btDiy
		v P075: 3-h nYloaEiMfEe	88-74-4	0.5	DgGg	z1.0	z1.0	0.0	ho btDiy
		v P075: 2-h nYloaEiMfEe	99-09-3	0.5	DgGg	z1.0	z1.0	0.0	ho btDiy



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 PtojeNy : 117L12301

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)		
						Original Result	Duplicate Result	RPD (%)			
EP075H: Anilines and Benzidines (QC Lot: 2171396) - continued											
vu 1301441-001	dEoECDocs	vP075: Mir eExofctae	123-L49	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: 4-h ryoaEimEe	100-01-L	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: i atr axole	8L-748	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: 2.2'-Mnkliot eExOfEe	91-94-1	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: dEimEe	L3-52-2	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: 4-i klotoaEimEe	10L-47-8	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: 3-h ryoaEimEe	88-74-4	0.5	Dg ⁰⁸⁹	z1.0	z1.0	0.0	ho btDy		
		vP075: 2-h ryoaEimEe	99-09-3	0.5	Dg ⁰⁸⁹	z1.0	z1.0	0.0	ho btDy		
		vP075: Mir eExofctae	123-L49	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: 4-h ryoaEimEe	100-01-L	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: i atr axole	8L-748	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: 2.2'-Mnkliot eExOfEe	91-94-1	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		EP075I: Organochlorine Pesticides (QC Lot: 2171396)									
vu 1301441-001	dEoECDocs	vP075: alpa-XHi	219-84-L	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: r eye-XHi	219-85-7	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: gaD a-XHi	58-89-9	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: OeIya-XHi	219-8L-8	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: HepyaNklot	7L-44-8	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: dIOIE	209-00-3	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: HepyaNklot epo; rOe	1034-57-2	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: alpa-v EOscifaE	959-98-8	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: 4.4'-MMv	73-55-9	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: MeIOIE	L0-57-1	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: vEQIE	73-30-8	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: r eye-vEOscifaE	22312-L5-9	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: 4.4'-MMM	73-54-8	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: vEOscifaE scifaye	1021-07-8	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		
		vP075: 4.4'-MMT	50-39-2	0.5	Dg ⁰⁸⁹	z1.0	z1.0	0.0	ho btDy		
		vu 1301553-011	dLLPT103001	vP075: alpa-XHi	219-84-L	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy
				vP075: r eye-XHi	219-85-7	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy
				vP075: gaD a-XHi	58-89-9	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy
				vP075: OeIya-XHi	219-8L-8	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy
				vP075: HepyaNklot	7L-44-8	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy
				vP075: dIOIE	209-00-3	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy
				vP075: HepyaNklot epo; rOe	1034-57-2	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy
				vP075: alpa-v EOscifaE	959-98-8	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy
				vP075: 4.4'-MMv	73-55-9	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy
				vP075: MeIOIE	L0-57-1	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy
		vP075: vEQIE	73-30-8	0.5	Dg ⁰⁸⁹	z0.5	z0.5	0.0	ho btDy		



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Laboratory sample ID		Client sample ID	Method/Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP075I: Organochlorine Pesticides (QC Lot: 2171396) - continued										
v u 1301553-011	dLPT10G001		v P075: r eya-v EoScifaE	22312-15-9	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: 4'4'-MMM	73-54-8	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: v EoScifaE sclfaye	1021-07-8	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: 4'4'-MMT	50-39-2	0.5	DgØg	z1.0	z1.0	0.0	ho btDiy
EP075J: Organophosphorus Pesticides (QC Lot: 2171396)										
v u 1301441-001	dEoEcdocs		v P075: MNklotnos	L3-72-7	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: MDeykoaye	L0-51-5	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: MaxfoE	222-41-5	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: i klotpQrfos-DeykQ	5598-12-0	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: u alaykøE	131-75-5	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: FeEkyøE	55-28-9	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: i klotpQrfos	3931-88-3	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: PtitDpkos-eykQ	32505-41-1	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: i klotfeEmEpkos	470-90-L	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: Ptoykøfos	24L42-4L-4	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: v k øE	5L2-13-3	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
v u 1301553-011	dLPT10G001		v P075: MNklotnos	L3-72-7	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: MDeykoaye	L0-51-5	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: MaxfoE	222-41-5	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: i klotpQrfos-DeykQ	5598-12-0	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: u alaykøE	131-75-5	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: FeEkyøE	55-28-9	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: i klotpQrfos	3931-88-3	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: PtitDpkos-eykQ	32505-41-1	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: i klotfeEmEpkos	470-90-L	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: Ptoykøfos	24L42-4L-4	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
			v P075: v k øE	5L2-13-3	0.5	DgØg	z0.5	z0.5	0.0	ho btDiy
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2171235)										
v u 1301550-001	dEoEcdocs		v P080: i L - i 9 FtaNyøE	----	10	DgØg	z10	z10	0.0	ho btDiy
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2175834)										
v u 1301497-001	dEoEcdocs		v P071: i 15 - i 38 FtaNyøE	----	100	DgØg	z100	z100	0.0	ho btDiy
			v P071: i 39 - i 2L FtaNyøE	----	100	DgØg	z100	z100	0.0	ho btDiy
			v P071: i 10 - i 14 FtaNyøE	----	50	DgØg	z50	z50	0.0	ho btDiy
			v P071: i 10 - i 2L FtaNyøE (scD)	----	50	DgØg	z50	z50	0.0	ho btDiy
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2171235)										
v u 1301550-001	dEoEcdocs		v P080: i L - i 10 FtaNyøE	----	10	DgØg	z10	z10	0.0	ho btDiy
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2175834)										
v u 1301497-001	dEoEcdocs		v P071: >1 -L - i 24 FtaNyøE	----	100	DgØg	z100	z100	0.0	ho btDiy
			v P071: >1 -L - i 40 FtaNyøE	----	100	DgØg	z100	z100	0.0	ho btDiy



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Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2175834) - continued									
vu 1301497-001	dEoECDocs	vP071: >1 10 - i 1L FtaNyoe	----	50	DgGg	z50	z50	0.0	h o btdry
		vP071: >1 10 - i 40 FtaNyoe (scD)	----	50	DgGg	z50	z50	0.0	h o btdry
EP216: Perchlorate by LC/MS (QC Lot: 2175836)									
vu 1301441-001	dEoECDocs	vP31L: PetKlotay	7L01-90-2	10.0	µgGg	z10.0	z10.0	0.0	h o btdry
EP231: Perfluorooctyl Acids and Sulfonates. (QC Lot: 2175573)									
vu 1301441-001	dEoECDocs	vP321: PFBA	17L2-32-1	0.0005	DgGg	0.387	0.379	2.0	0% - 30%
		vP321: PFBD	225-L7-1	0.0005	DgGg	0.007L	0.0085	10.9	0% - 50%
		vP321: L:3 FicotoyeloDet AcifoEaye (L:3 FyA)	37L19-97-3	0.005	DgGg	0.02L	0.039	30.2	h o btdry
vu 1301575-009	dEoECDocs	vP321: PFBA	17L2-32-1	0.0005	DgGg	0.000L	0.0007	17.8	h o btdry
		vP321: PFBD	225-L7-1	0.0005	DgGg	z0.0005	z0.0005	0.0	h o btdry
		vP321: L:3 FicotoyeloDet AcifoEaye (L:3 FyA)	37L19-97-3	0.005	DgGg	z0.005	z0.005	0.0	h o btdry



Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality of the sample is critical to the accuracy of the results. The purpose of this report is to provide a detailed description of the sample and the results of the analysis. The sample was collected from the site and analyzed for the presence of various metals and pesticides. The results are presented in the table below.

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report		
				Result	Concentration	Spike Recovery (%)	LCS	Low
EG005T: Total Metals by ICP-AES (QCLot: 2181305)								
vK005T: dtsetIn	7440-28-3	5	Dg	z5	12.L Dg	98.4	74	123
vK005T: i aCD rD	7440-42-9	1	Dg	z1	3.8 Dg	97.0	71	132
vK005T: i ktoD rD	7440-47-2	3	Dg	z3	L0.9 Dg	10L	72	135
vK005T: i oppet	7440-50-8	5	Dg	z5	55.1 Dg	103	74	134
vK005T: beaO	7429-93-1	5	Dg	z5	54.9 Dg	105	74	13L
vK005T: h nScl	7440-03-0	3	Dg	z3	55.1 Dg	107	74	138
vK005T: ZfEN	7440-LL-L	5	Dg	z5	105 Dg	103	74	134
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2181306)								
vK025T: u etNtC	7429-97-L	0.1	Dg	z0.1	1.47 Dg	105	L4	11L
EP004: Organic Matter (QCLot: 2171889)								
vP004: Toyl BtgaENI atrOe	----	0.5	%	z0.5	42.5 %	98.0	94	118
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2171394)								
vPOL: Toyl PolOklotEayOrmpkeEOs	----	0.1	Dg	z0.10	1.34 Dg	L3.7	55	125
EP068A: Organochlorine Pesticides (OC) (QCLot: 2171393)								
vPOL8: alpka-XHI	219-84-L	0.05	Dg	z0.05	0.5 Dg	97.1	53	122
vPOL8: He: aKlotoreXeEe (Hi X)	118-74-1	0.05	Dg	z0.05	0.5 Dg	94.1	50	123
vPOL8: r eye-XHI	219-85-7	0.05	Dg	z0.05	0.5 Dg	99.2	50	128
vPOL8: gaDDa-XHI	58-89-9	0.05	Dg	z0.05	0.5 Dg	98.3	54	123
vPOL8: Celje-XHI	219-8L-8	0.05	Dg	z0.05	0.5 Dg	90.L	51	122
vPOL8: HepaKlot	7L-44-8	0.05	Dg	z0.05	0.5 Dg	90.4	51	124
vPOL8: dICrE	209-00-3	0.05	Dg	z0.05	0.5 Dg	89.1	53	122
vPOL8: HepaKlot epO: rOe	1034-57-2	0.05	Dg	z0.05	0.5 Dg	90.8	54	12L
vPOL8: YaEs-i klotOaEe	5102-74-3	0.05	Dg	z0.05	0.5 Dg	90.9	52	12L
vPOL8: alpka-v EOscflaE	959-98-8	0.05	Dg	z0.05	0.5 Dg	97.2	52	122
vPOL8: Ns-i klotOaEe	5102-71-9	0.05	Dg	z0.05	0.5 Dg	91.0	53	127
vPOL8: MeICrE	L0-57-1	0.05	Dg	z0.05	0.5 Dg	97.1	49	123
vPOL8: 4.4'-MMW	73-55-9	0.05	Dg	z0.05	0.5 Dg	90.4	52	124
vPOL8: v EOHE	73-30-8	0.05	Dg	z0.05	0.5 Dg	90.3	45	141
vPOL8: r eye-v EOscflaE	22312-L5-9	0.05	Dg	z0.05	0.5 Dg	99.3	54	123
vPOL8: 4.4'-MMW	73-54-8	0.05	Dg	z0.05	0.5 Dg	88.4	53	12L
vPOL8: v EOHE alOsKOOe	7431-92-4	0.05	Dg	z0.05	0.5 Dg	74.0	49	125
vPOL8: v EOscflaE scflaE	1021-07-8	0.05	Dg	z0.05	0.5 Dg	93.3	49	143
vPOL8: 4.4'-MMT	50-39-2	0.3	Dg	z0.3	0.5 Dg	92.1	40	14L
vPOL8: v EOHE SeyeEe	52494-70-5	0.05	Dg	z0.05	0.5 Dg	93.3	51	127



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 PtoieNy : 117L12301

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Recovery Limits (%)	
				Result	LCS	Low	High	
EP068A: Organochlorine Pesticides (OC) (QCLot: 2171399) - continued								
v POL8: u eko: ONklot	73-42-5	0.3	DgGg	z0.3	0.5 DgGg	97.2	28	149
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2171393)								
v POL8: MNklotnos	L3-72-7	0.05	DgGg	z0.05	0.5 DgGg	50.1	25	127
v POL8: MeDeyE-A-DeKQ	919-8L-8	0.05	DgGg	z0.05	0.5 DgGg	73.7	3L.8	140
v POL8: u oEoNoyokos	L932-33-4	0.3	DgGg	z0.3	0.5 DgGg	107	10	185
v POL8: MDeykoaye	L0-51-5	0.05	DgGg	z0.05	0.5 DgGg	99.0	4L	144
v POL8: MaxEoE	222-41-5	0.05	DgGg	z0.05	0.5 DgGg	88.8	50	124
v POL8: i klotpOrifos-DeKQ	5598-12-0	0.05	DgGg	z0.05	0.5 DgGg	89.8	53	124
v POL8: PataKroE-DeKQ	398-00-0	0.3	DgGg	z0.3	0.5 DgGg	89.2	50	127
v POL8: u alayKroE	131-75-5	0.05	DgGg	z0.05	0.5 DgGg	91.0	4L	140
v POL8: FeEkrøE	55-28-9	0.05	DgGg	z0.05	0.5 DgGg	8L.0	50	124
v POL8: i klotpOrifos	3931-88-3	0.05	DgGg	z0.05	0.5 DgGg	89.4	53	124
v POL8: PataKroE	5L-28-3	0.3	DgGg	z0.3	0.5 DgGg	89L	47	129
v POL8: PitrDpkos-eyKQ	32505-41-1	0.05	DgGg	z0.05	0.5 DgGg	89.2	48	127
v POL8: i klotfeEmEpkos	470-90-L	0.05	DgGg	z0.05	0.5 DgGg	93.1	48	142
v POL8: XtoDopkos-eyKQ	4834-78-L	0.05	DgGg	z0.05	0.5 DgGg	90.5	53	12L
v POL8: FeEaDrpkos	33334-93-L	0.05	DgGg	z0.05	0.5 DgGg	78.8	27	12L
v POL8: PtoKrofos	24L42-4L-4	0.05	DgGg	z0.05	0.5 DgGg	89.2	50	12L
v POL8: vkrøE	5L2-13-3	0.05	DgGg	z0.05	0.5 DgGg	94.3	50	12L
v POL8: i atr opkeEoykrøE	78L-19-L	0.05	DgGg	z0.05	0.5 DgGg	87.8	47	128
v POL8: dxrEpkos u eyKQ	8L-50-0	0.05	DgGg	z0.05	0.5 DgGg	97.7	19.L	170
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 2171236)								
v P074: XeEeEe	71-42-3	0.3	DgGg	z0.3	1 DgGg	92.3	75	131
v P074: TolceEe	108-88-2	0.5	DgGg	z0.5	1 DgGg	101	7L	134
v P074: vkrøEeEeEe	100-41-4	0.5	DgGg	z0.5	1 DgGg	95.9	74	118
v P074: Dey- & pata-6DeEe	108-28-2	0.5	DgGg	z0.5	3 DgGg	101	75	131
v P074: AyGeEe	10L-43-2							
v P074: 100-43-5	100-43-5	0.5	DgGg	z0.5	1 DgGg	L8.L	L4	130
v P074: otko-6DeEe	95-47-L	0.5	DgGg	z0.5	1 DgGg	99.8	77	131
v P074: IsoptopOr eEeEe	98-83-8	0.5	DgGg	z0.5	1 DgGg	98.4	74	130
v P074: E-TopOr eEeEe	102-L5-1	0.5	DgGg	z0.5	1 DgGg	8L.5	L5	117
v P074: 1.2.5-TitDeKOr eEeEe	108-L7-8	0.5	DgGg	z0.5	1 DgGg	88.4	L5	117
v P074: seNXcyOr eEeEe	125-98-8	0.5	DgGg	z0.5	1 DgGg	93.3	L7	117
v P074: 1.3.4-TitDeKOr eEeEe	95-L2-L	0.5	DgGg	z0.5	1 DgGg	89.3	LL	117
v P074: yeyXcyOr eEeEe	98-0L-L	0.5	DgGg	z0.5	1 DgGg	90.2	L8	11L
v P074: p-IsotopOyIceEe	99-87-L	0.5	DgGg	z0.5	1 DgGg	93.0	L4	117
v P074: E-XcyOr eEeEe	104-51-8	0.5	DgGg	z0.5	1 DgGg	83.0	59	115
EP074B: Oxygenated Compounds (QCLot: 2171236)								
v P074: VIEG dNeyøe	108-05-4	5	DgGg	z5	10 DgGg	74.4	40	128



Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report		
					Spike Concentration	Spike Recovery (%)	Recovery Limits (%)
				Result	LCS	Low	High
EP074B: Oxygenated Compounds (QCLot: 2171236) - continued							
v P074: 3-XcyaEoEe (u v #)	78-92-2	5	DgGg	z5	10 DgGg	94.9	L1
v P074: 4-u eyQ-3-peEaEoEe (u IX#)	108-10-1	5	DgGg	z5	10 DgGg	85.4	L2
v P074: 3-He: aEoEe (u X#)	591-78-L	5	DgGg	z5	10 DgGg	94.4	L2
EP074C: Sulfonated Compounds (QCLot: 2171236)							
v P074: i atr oE QscifcE	75-15-0	0.5	DgGg	z0.5	1 DgGg	L3.7	57
EP074D: Fumigants (QCLot: 2171236)							
v P074: 3.3-MNklotoptopaEe	594-30-7	0.5	DgGg	z0.5	1 DgGg	= 140	51
v P074: 1.3-MNklotoptopaEe	78-87-5	0.5	DgGg	z0.5	1 DgGg	92.0	72
v P074: Ns-1.2-MNklotoptopGeEe	100L1-01-5	0.5	DgGg	z0.5	1 DgGg	75.7	59
v P074: yaEs-1.2-MNklotoptopGeEe	100L1-03-L	0.5	DgGg	z0.5	1 DgGg	L9.5	53
v P074: 1.3-Mir toDoeyKaEe (v MX)	10L-92-4	0.5	DgGg	z0.5	1 DgGg	100	L8
EP074E: Halogenated Aliphatic Compounds (QCLot: 2171236)							
v P074: MNklotoficotoDeyKaEe	75-71-8	5	DgGg	z5	10 DgGg	78.1	24
v P074: i klotDeyKaEe	74-87-2	5	DgGg	z5	10 DgGg	85.1	53
v P074: VIEQ NklotOe	75-01-4	5	DgGg	z5	10 DgGg	87.4	47
v P074: XtoDoDeyKaEe	74-82-9	5	DgGg	z5	10 DgGg	83.L	29
v P074: i klotDeyKaEe	75-00-2	5	DgGg	z5	10 DgGg	93.8	42
v P074: TtklotoficotoDeyKaEe	75-L9-4	5	DgGg	z5	10 DgGg	97.8	L1
v P074: 1.1-MNklotoyKeEe	75-25-4	0.5	DgGg	z0.5	1 DgGg	LL.2	L3
v P074: loObDeyKaEe	74-88-4	0.5	DgGg	z0.5	1 DgGg	LL.2	47
v P074: yaEs-1.3-MNklotoyKeEe	15L-L0-5	0.5	DgGg	z0.5	1 DgGg	8L.2	L9
v P074: 1.1-MNklotoyKaEe	75-24-2	0.5	DgGg	z0.5	1 DgGg	89.9	70
v P074: Ns-1.3-MNklotoyKeEe	15L-59-3	0.5	DgGg	z0.5	1 DgGg	90.L	73
v P074: 1.1.1-TtklotoyKaEe	71-55-L	0.5	DgGg	z0.5	1 DgGg	83.7	L4
v P074: 1.1-MNklotoptopGeEe	5L2-58-L	0.5	DgGg	z0.5	1 DgGg	89.2	71
v P074: i atr oE TeyaNklotOe	5L-32-5	0.5	DgGg	z0.5	1 DgGg	7L.4	51
v P074: 1.3-MNklotoyKaEe	107-0L-3	0.5	DgGg	z0.5	1 DgGg	91.L	70
v P074: TtklotoyKeEe	79-01-L	0.5	DgGg	z0.5	1 DgGg	91.2	71
v P074: Mir toDoDeyKaEe	74-95-2	0.5	DgGg	z0.5	1 DgGg	9L.1	70
v P074: 1.1.3-TtklotoyKaEe	79-00-5	0.5	DgGg	z0.5	1 DgGg	108	72
v P074: 1.2-MNklotoptopaEe	143-38-9	0.5	DgGg	z0.5	1 DgGg	99.1	75
v P074: TeyaNklotoyKeEe	137-18-4	0.5	DgGg	z0.5	1 DgGg	101	71
v P074: 1.1.3-TeyaNklotoyKaEe	L20-30-L	0.5	DgGg	z0.5	1 DgGg	91.1	54
v P074: yaEs-1.4-MNklototo-3-r cyeEe	110-57-L	0.5	DgGg	z0.5	1 DgGg	93.2	4L
v P074: Ns-1.4-MNklototo-3-r cyeEe	147L-11-5	0.5	DgGg	z0.5	1 DgGg	114	31.8
v P074: 1.1.3.3-TeyaNklotoyKaEe	79-24-5	0.5	DgGg	z0.5	1 DgGg	10L	71
v P074: 1.3.2-TtklotoptopaEe	9L-18-4	0.5	DgGg	z0.5	1 DgGg	85.0	70
v P074: PeEaNklotoyKaEe	7L-01-7	0.5	DgGg	z0.5	1 DgGg	L8.8	40
v P074: 1.3-Mir toDo-2-NklotoptopaEe	9L-13-8	0.5	DgGg	z0.5	1 DgGg	84.7	41



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Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report		
					Spike Concentration	Spike Recovery (%)	Recovery Limits (%)
				Result	LCS	Low	High
EP074F: Halogenated Aromatic Compounds (QCLot: 2171236)							
v P074: i klotor eXeEe	108-90-7	0.5	DgEg	z0.5	105	78	130
v P074: XtoDor eXeEe	108-8L-1	0.5	DgEg	z0.5	91.1	L8	11L
v P074: 3-i klotopkeEe	95-49-8	0.5	DgEg	z0.5	93.0	L7	117
v P074: 4-i klotopkeEe	10L-42-4	0.5	DgEg	z0.5	88.7	L7	115
v P074: 1.3.2-TriKlotor eXeEe	87-L1-L	0.5	DgEg	z0.5	90.3	L0	130
EP074G: Trihalomethanes (QCLot: 2171236)							
v P074: i klotofotD	L7-LL-2	0.5	DgEg	z0.5	90.9	71	131
v P074: XtoDor eXeEe	75-37-4	0.5	DgEg	z0.5	8L.5	L0	108
v P074: Mtr toDor klotodeYkaEe	134-48-1	0.5	DgEg	z0.5	92.4	48	104
v P074: XtoDofotD	75-35-3	0.5	DgEg	z0.5	88.9	40	10L
EP075A: Phenolic Compounds (QCLot: 2171396)							
v P075: PkeEol	108-95-3	0.5	DgEg	z0.5	93.5	28	128
v P075: 3-i klotopkeEol	95-57-8	0.5	DgEg	z0.5	75.2	29	139
v P075: 3-u eYQpkeEol	95-48-7	0.5	DgEg	z0.5	78.8	22	123
v P075: 2- & 4-u eYQpkeEol	1219-77-2	0.5	DgEg	z1.0	---	---	---
v P075: 3-hYklopkeEol	88-75-5	0.5	DgEg	z0.5	93.1	25	121
v P075: 3.4-MD eYQpkeEol	105-L7-9	0.5	DgEg	z0.5	81.0	21	121
v P075: 3.4-MNKlotopkeEol	130-82-3	0.5	DgEg	z0.5	94.9	10	125
v P075: 3.L-MNKlotopkeEol	87-L5-0	0.5	DgEg	z0.5	80.4	25	122
v P075: 4-i klotot-2-u eYQpkeEol	59-50-7	0.5	DgEg	z0.5	81.0	2L	123
v P075: 3.4.L-TriKlotopkeEol	88-0L-3	0.5	DgEg	z0.5	93.4	29	142
v P075: 3.4.5-TriKlotopkeEol	95-95-4	0.5	DgEg	z0.5	70.9	24	128
v P075: PeEjNKlotopkeEol	87-8L-5	1.0	DgEg	z1	108	20.3	143
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 2171396)							
v P075: h apkykaleEe	91-30-2	0.5	DgEg	z0.5	88.9	14	12L
					---	---	---
					80.2	29	138



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Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
				Result	Concentration	Spike Recovery (%)		Recovery Limits (%)	
						LCS	Low	High	
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 2171396) - continued									
v P075: 3-u eKlEapkykaleEe	91-57-L	0.5	DgEg	z0.5	---	---	---	---	---
v P075: 3-i klotoEapkykaleEe	91-58-7	0.5	DgEg	---	3.5 DgEg	78.2	---	40	12L
v P075: dNlEapkykOleEe	308-9L-8	0.5	DgEg	z0.5	---	---	---	---	---
v P075: dNlEapkykeEe	82-23-9	0.5	DgEg	z0.5	---	---	---	---	---
v P075: FlcoteEe	8L-72-7	0.5	DgEg	z0.5	---	---	---	---	---
v P075: PkeEaEYkteEe	85-01-8	0.5	DgEg	z0.5	---	---	---	---	---
v P075: dEYktaNlEe	130-13-7	0.5	DgEg	z0.5	---	---	---	---	---
v P075: FlcotaEYkeEe	30L-44-0	0.5	DgEg	z0.5	---	---	---	---	---
v P075: PQeEe	139-00-0	0.5	DgEg	z0.5	---	---	---	---	---
v P075: h-3-FlcoteEG dNlEaDlOe	52-9L-2	0.5	DgEg	z0.5	---	---	---	---	---
v P075: XeEx(a)EYktaNlEe	5L-55-2	0.5	DgEg	z0.5	---	---	---	---	---
v P075: i klGseEe	318-01-9	0.5	DgEg	z0.5	---	---	---	---	---
v P075: XeExo(r) & XeExo(S)flcotaEYkeEe	305-99-3 307-08-9	1	DgEg	z1	---	---	---	---	---
v P075: 7-13-MDeYkOreEx(a)EYktaNlEe	57-97-L	0.5	DgEg	z0.5	---	---	---	---	---
v P075: XeExo(a)pQeEe	50-23-8	0.5	DgEg	z0.5	---	---	---	---	---
v P075: 2-u eYkNkoleEYkteEe	5L-49-5	0.5	DgEg	---	---	---	---	---	---
v P075: lEOeEO(1.3.2.N)PQeEe	192-29-5	0.5	DgEg	z0.5	---	---	---	---	---
v P075: MlreEx(a.k)EYktaNlEe	52-70-2	0.5	DgEg	z0.5	---	---	---	---	---
v P075: XeExo(g.k.n)petQeEe	191-34-3	0.5	DgEg	z0.5	---	---	---	---	---
v P075: AcD of PdHs	----	0.5	DgEg	z0.5	---	---	---	---	---

EP075C: Phthalate Esters (QCLot: 2171396)



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Method: Compound				Method Blank (MB) Report				Laboratory Control Spike (LCS) Report			
Method	Compound	CAS Number	LOR	Unit	Result	Spike Concentration	LCS	Recovery (%)	Low	High	
EP075C: Phthalate Esters (QCLot: 2171396) - continued											
v P075:	MDeykD pkykalaye	121-11-2	0.5	Dg	z0.5	3.5 Dg	83.4	40	40	143	
v P075:	MeykD pkykalaye	84-LL-3	0.5	Dg	z0.5	3.5 Dg	85.1	48	48	140	
v P075:	MhEr cyD pkykalaye	84-74-3	0.5	Dg	z0.5	3.5 Dg	95.4	28	28	1L9	
v P075:	XcyD reExD pkykalaye	85-L8-7	0.5	Dg	z0.5	3.5 Dg	93.L	43	43	140	
v P075:	r s(3-ekOke; D) pkykalaye	117-81-7	0.5	Dg	z5.0	3.5 Dg	113	47	47	155	
v P075:	MhE-olNyD pkykalaye	117-84-0	0.5	Dg	z0.5	3.5 Dg	91.3	47	47	127	
EP075D: Nitrosamines (QCLot: 2171396)											
v P075:	h-h nyosoDeykOeykDaDfEe	10595-95-L	0.5	Dg	z0.5	3.5 Dg	95.L	1L.3	1L.3	12L	
v P075:	h-h nyosoOeykDaDfEe	55-18-5	0.5	Dg	z0.5	3.5 Dg	85.7	22	22	123	
v P075:	h-h nyosopOtoirOfEe	920-55-3	0.5	Dg	z1.0	3.5 Dg	87.1	37.7	37.7	120	
v P075:	h-h nyosoDotpkolrEe	59-89-3	0.5	Dg	z0.5	3.5 Dg	113	22	22	121	
v P075:	h-h nyosoChE-rtopDaDfEe	L31-L4-7	0.5	Dg	z0.5	3.5 Dg	8L.0	2L	2L	137	
v P075:	h-h nyosopipetrOfEe	100-75-4	0.5	Dg	z0.5	3.5 Dg	8L.5	25	25	138	
v P075:	h-h nyosoOr cyDaDfEe	934-1L-2	0.5	Dg	z0.5	3.5 Dg	87.L	27	27	129	
v P075:	h-h nyosoOpkeEG & MpkkeDaDfEe	8L-20-L 133-29-4	0.5	Dg	z1.0	3.5 Dg	79.2	43	43	124	
v P075:	u eykapOrEe	91-80-5	0.5	Dg	z0.5	3.5 Dg	= 18.7	34.4	34.4	142	
EP075E: Nitroaromatics and Ketones (QCLot: 2171396)											
v P075:	3-PInBlrEe	109-0L-8	0.5	Dg	z0.5	3.5 Dg	90.5	10	10	128	
v P075:	d NyopkeEoEe	98-8L-3	0.5	Dg	z0.5	3.5 Dg	77.3	25	25	138	
v P075:	h nyor eXeEe	98-95-2	0.5	Dg	z0.5	3.5 Dg	81.3	2L	2L	137	
v P075:	IsopkotoEe	78-59-1	0.5	Dg	z0.5	3.5 Dg	82.7	40	40	12L	



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Method: Compound				Method Blank (MB) Report				Laboratory Control Spike (LCS) Report			
Method	Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	LCS	Low	High	Recovery Limits (%)
EP075E: Nitroaromatics and Ketones (QC Lot: 2171396) - continued											
v P075:	3-L-MEjtoyceEe	L0L-30-3	0.5	DgŒg	z1.0	3.5 DgŒg	79.7	43	140		
v P075:	3.4-MEjtoyceEe	131-14-3	0.5	DgŒg	z1.0	3.5 DgŒg	85.3	4L	140		
v P075:	1-h apky GaD ŒEe	124-23-7	0.5	DgŒg	z0.5	3.5 DgŒg	= 4.4	10	84		
v P075:	4-h jtoceEe-h-o, ŒEe	5L-57-5	0.5	DgŒg	z0.5	3.5 DgŒg	L0.1	17.7	152		
v P075:	5-h jtoceEe-o-jlcrŒEe	99-55-8	0.5	DgŒg	z0.5	3.5 DgŒg	74.4	27	135		
v P075:	dxor eXeEe	102-22-2	1	DgŒg	z1	3.5 DgŒg	9L.1	4L	140		
v P075:	1.2.5-TŒEjor eXeEe	99-25-4	0.5	DgŒg	z0.5	3.5 DgŒg	80.L	13.L	151		
v P075:	PkeEaEjŒE	L3-44-3	0.5	DgŒg	z0.5	3.5 DgŒg	74.9	48	143		
v P075:	4-dDŒor pkeEG	93-L7-1	0.5	DgŒg	z0.5	3.5 DgŒg	13.0	10	97		
v P075:	PeEjŒklotŒor eXeEe	83-L8-8	0.5	DgŒg	z0.5	3.5 DgŒg	91.5	47	129		
v P075:	PtoEaD ŒEe	32950-58-5	0.5	DgŒg	z0.5	3.5 DgŒg	92.L	45	122		
v P075:	MŒEj GaD ŒEaxor eXeEe	L0-11-7	0.5	DgŒg	z0.5	3.5 DgŒg	84.L	43	12L		
v P075:	i klotŒor eXŒEjEe	510-15-L	0.5	DgŒg	z0.5	3.5 DgŒg	L7.7	41	141		
EP075F: Haloethers (QC Lot: 2171396)											
v P075:	XŒs(3-NklotŒkŒO) eXket	111-44-4	0.5	DgŒg	z0.5	3.5 DgŒg	71.5	2L	14L		
v P075:	XŒs(3-NklotŒkŒo, C) DExkaEe	111-91-1	0.5	DgŒg	z0.5	3.5 DgŒg	84.5	40	12L		
v P075:	4-i klotŒkŒEg pkeEO eXket	7005-73-2	0.5	DgŒg	z0.5	3.5 DgŒg	80.8	4L	12L		
v P075:	4-XtoDopkeEG pkeEO eXket	101-55-2	0.5	DgŒg	z0.5	3.5 DgŒg	77.3	44	140		
EP075G: Chlorinated Hydrocarbons (QC Lot: 2171396)											
v P075:	1.2-MŒklotŒor eXeEe	541-72-1	0.5	DgŒg	z0.5	3.5 DgŒg	74.8	25	133		
v P075:	1.4-MŒklotŒor eXeEe	10L-4L-7	0.5	DgŒg	z0.5	3.5 DgŒg	84.4	2L	135		



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Acrr-u aYn : SOIL				Method Blank (MB) Report			Laboratory Control Spike (LCS) Report		
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	LCS	Low	High
EP075G: Chlorinated Hydrocarbons (QCLot: 2171396) - continued									
v P075: 1,3-MNklotor eXeEe	95-50-1	0.5	DgEg	z0.5	3.5 DgEg	81.7	---	27	132
v P075: He; aNklotoeKaEe	L7-73-1	0.5	DgEg	z0.5	3.5 DgEg	73.L	---	22	132
v P075: 1,3,4-TiNklotor eXeEe	130-83-1	0.5	DgEg	z0.5	3.5 DgEg	77.3	---	2L	123
v P075: He; aNklotoptopOeEe	1888-71-7	0.5	DgEg	z0.5	3.5 DgEg	82.5	---	3L.L	127
v P075: He; aNklotor cyOeEe	87-L8-2	0.5	DgEg	z0.5	3.5 DgEg	80.1	---	40	120
v P075: He; aNklotonNNopeEyaOeEe	77-47-4	0.5	DgEg	z3.5	3.5 DgEg	42.9	---	17.2	141
v P075: PeEaNklotor eXeEe	L08-92-5	0.5	DgEg	z0.5	3.5 DgEg	82.2	---	4L	12L
v P075: He; aNklotor eXeEe (Hi X)	118-74-1	0.5	DgEg	z1.0	5 DgEg	80.3	---	40	143
EP075H: Anilines and Benzidines (QCLot: 2171396)									
v P075: dEriEe	L3-52-2	0.5	DgEg	z0.5	3.5 DgEg	21.5	---	10	114
v P075: 4-i klotoaEriEe	10L-47-8	0.5	DgEg	z0.5	3.5 DgEg	1L.3	---	10	102
v P075: 3-h NtoaEriEe	88-74-4	0.5	DgEg	z1.0	3.5 DgEg	8L.5	---	40	143
v P075: 2-h NtoaEriEe	99-09-3	0.5	DgEg	z1.0	3.5 DgEg	44.L	---	32.2	135
v P075: Mir eXofictaE	123-L4-9	0.5	DgEg	z0.5	3.5 DgEg	89.1	---	4L	124
v P075: 4-h NtoaEriEe	100-01-L	0.5	DgEg	z0.5	3.5 DgEg	74.9	---	28	123
v P075: i atr axole	8L-74-8	0.5	DgEg	z0.5	3.5 DgEg	8L.1	---	44	124
v P075: 2,2'-MNklotor eXrOeEe	91-94-1	0.5	DgEg	z0.5	3.5 DgEg	30.1	---	10	134
EP075I: Organochlorine Pesticides (QCLot: 2171396)									
v P075: alpKa-XHi	219-84-L	0.5	DgEg	z0.5	3.5 DgEg	88.7	---	50	124
v P075: r eye-XHi	219-85-7	0.5	DgEg	z0.5	3.5 DgEg	93.3	---	47	125
v P075: gaDDa-XHi	58-89-9	0.5	DgEg	z0.5	3.5 DgEg	9L.2	---	50	127



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 WotSBtOet : v u 1301553
 i rreEy : KBbMWR dAAABi Id TvA
 PtojeNy : 117L12301

Method: Compound		CAS Number	LOR	Unit	Method Blank (MB) Report			Laboratory Control Spike (LCS) Report		
Method	Compound				Result	Concentration	Spike Recovery (%)	Low	High	
EP075I: Organochlorine Pesticides (QCLot: 2171396) - continued										
v P075: Celje-XHI		219-8L-8	0.5	Dg	z0.5	3.5 Dg	94.8	48	12L	
v P075: HepyaNklot		7L-44-8	0.5	Dg	z0.5	3.5 Dg	88.3	40	128	
v P075: dIQtrE		209-00-3	0.5	Dg	z0.5	3.5 Dg	89.2	44	140	
v P075: HepyaNklot epo; rOe		1034-57-2	0.5	Dg	z0.5	3.5 Dg	85.8	45	129	
v P075: alpka-vEOscifaE		959-98-8	0.5	Dg	z0.5	3.5 Dg	100	4L	143	
v P075: 4.4'-MMW		73-55-9	0.5	Dg	z0.5	3.5 Dg	87.3	70	120	
v P075: MeIQtrE		L0-57-1	0.5	Dg	z0.5	3.5 Dg	97.2	47	129	
v P075: vEOtrE		73-30-8	0.5	Dg	z0.5	3.5 Dg	97.2	43	143	
v P075: r eye-vEOscifaE		22312-L5-9	0.5	Dg	z0.5	3.5 Dg	92.5	47	141	
v P075: 4.4'-MMM		73-54-8	0.5	Dg	z0.5	3.5 Dg	8L.4	43	14L	
v P075: vEOscifaE scifaye		1021-07-8	0.5	Dg	z0.5	3.5 Dg	84.2	41	141	
v P075: 4.4'-MMT		50-39-2	0.5	Dg	z1.0	3.5 Dg	87.L	19.L	148	
EP075J: Organophosphorus Pesticides (QCLot: 2171396)										
v P075: MNklotrmos		L3-72-7	0.5	Dg	z0.5	3.5 Dg	77.2	31.9	121	
v P075: MDeykoeaye		L0-51-5	0.5	Dg	z0.5	3.5 Dg	90.5	28	143	
v P075: MaxEoeE		222-41-5	0.5	Dg	z0.5	3.5 Dg	98.5	2L	122	
v P075: i klotpQrtos-DeykQ		5598-12-0	0.5	Dg	z0.5	3.5 Dg	87.5	25	142	
v P075: u alayrOe		131-75-5	0.5	Dg	z0.5	3.5 Dg	90.9	25	142	
v P075: FeEkrOe		55-28-9	0.5	Dg	z0.5	3.5 Dg	85.8	35.1	125	
v P075: i klotpQrtos		3931-88-3	0.5	Dg	z0.5	3.5 Dg	92.5	2L	123	



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 WotSBtOet : v u 1301553
 i IreEy : KBbWR dAABi Id TvA
 PtoIeNy : 117L12301

Acrc-u aYn : SOIL				Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	LCS	Low	High
EP075J: Organophosphorus Pesticides (QCLot: 2171396) - continued									
v P075: PntDpkos-eykD	32505-41-1	0.5	DgGg	z0.5	3.5 DgGg	89.5	---	2L	125
v P075: i klotfeEmEpkos	470-90-L	0.5	DgGg	z0.5	3.5 DgGg	89.1	---	25	128
v P075: PtoYknofos	24L42-4L-4	0.5	DgGg	z0.5	3.5 DgGg	94.3	---	27	125
v P075: vYknoE	5L2-13-3	0.5	DgGg	z0.5	3.5 DgGg	88.L	---	28	127
EP080/074: Total Petroleum Hydrocarbons (QCLot: 2171235)									
v P080: i L- i 9 FtaiNyoe	----	10	DgGg	z10	23 DgGg	101	---	70	122
EP080/074: Total Petroleum Hydrocarbons (QCLot: 2175834)									
v P071: i 10- i 14 FtaiNyoe	----	50	DgGg	z50	544 DgGg	94.3	---	55	132
v P071: i 15- i 38 FtaiNyoe	----	100	DgGg	z100	1981 DgGg	10L	---	73	124
v P071: i 39- i 2L FtaiNyoe	----	100	DgGg	z100	818 DgGg	9L.4	---	71	142
v P071: i 10- i 2L FtaiNyoe (scD)	----	50	DgGg	z50	----	----	---	----	----
EP080/074: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2171235)									
v P080: i L- i 10 FtaiNyoe	----	10	DgGg	z10	27 DgGg	103	---	70	120
EP080/074: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2175834)									
v P071: > i 10- i 1L FtaiNyoe	----	50	DgGg	z50	870 DgGg	104	---	L9	132
v P071: > i 1L- i 24 FtaiNyoe	----	100	DgGg	z100	3495 DgGg	100	---	71	124
v P071: > i 24- i 40 FtaiNyoe	----	100	DgGg	z100	3L2 DgGg	79.4	---	L2	142
v P071: > i 10- i 40 FtaiNyoe (scD)	----	100	DgGg	z100	----	----	---	----	----
EP216: Perchlorate by LC/MS (QCLot: 2175836)									
v P31L: PetiKlotaye	7L01-90-2	10	µgGg	z10.0	35 µgGg	98.L	---	5L	120
EP231: Perfluorooctyl Acids and Sulfonates. (QCLot: 2175573)									
v P321: PFBA	17L2-32-1	0.0005	DgGg	z0.0005	0.005 DgGg	L9.1	---	54	14L
v P321: PFBD	225-L7-1	0.0005	DgGg	z0.0005	0.005 DgGg	72.7	---	54	124
v P321: L:3 FicotoyeloDet AcifoEaye (L:3 FyA)	37L19-97-3	0.005	DgGg	z0.005	.035 DgGg	73.3	---	5L	128



Matrix Spike (MS) Report

The quality of the sample is not guaranteed. The purpose of this report is to provide information on the recovery of the spiked sample. The recovery of the spiked sample is not guaranteed. The recovery of the spiked sample is not guaranteed.

Acronym: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report		
				Spike Concentration	Spike Recovery (%)	Recovery Limits (%)
EG005T: Total Metals by ICP-AES (QCLot: 2181305)						
v u 1301441-003	dEoEDocs					
		v K005T: dtseEN	7440-28-3	50 DgGg	7L.L	70 120
		v K005T: i aCDreD	7440-42-9	50 DgGg	100	70 120
		v K005T: i ktODreD	7440-47-2	50 DgGg	82.5	70 120
		v K005T: i oppet	7440-50-8	50 DgGg	103	70 120
		v K005T: beaO	7429-93-1	50 DgGg	83.5	70 120
		v K005T: h rNSeI	7440-03-0	50 DgGg	101	70 120
		v K005T: ZrEN	7440-LL-L	50 DgGg	132	70 120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2181306)						
v u 1301441-003	dEoEDocs	v K025T: u etNtIC	7429-97-L	5.0 DgGg	102	5L 133
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2171394)						
v u 1301441-002	dEoEDocs	v P0LL: TojAl PolOKlotrEajeOrnpkeEUs	----	1.34 DgGg	87.8	55 123
EP068A: Organochlorine Pesticides (OC) (QCLot: 2171393)						
v u 1301441-003	dEoEDocs					
		v P0L8: gaDDa-XHi	58-89-9	0.5 DgGg	5L.7	20 139
		v P0L8: HepylKlot	7L-44-8	0.5 DgGg	54.0	33.3 139
		v P0L8: dIQrE	209-00-3	0.5 DgGg	40.2	35 138
		v P0L8: MleQrE	L0-57-1	0.5 DgGg	48.7	2L 123
		v P0L8: v EQrE	73-30-8	0.5 DgGg	48.3	23 128
		v P0L8: 4.4'-MMT	50-39-2	0.5 DgGg	42.1	31.8 140
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2171393)						
v u 1301441-003	dEoEDocs					
		v P0L8: MxtEoE	222-41-5	0.5 DgGg	49.1	29 139
		v P0L8: i klotpQrfoS-DejK	5598-12-0	0.5 DgGg	51.3	29 13L
		v P0L8: PhtDpkos-ejK	32505-41-1	0.5 DgGg	49.3	28 120
		v P0L8: XtoDopkos-ejK	4834-78-L	0.5 DgGg	43.4	25 114
		v P0L8: PtoyrfoS	24L42-4L-4	0.5 DgGg	47.2	29 135
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 2171236)						
v u 1301553-003	dLPTLQ003					
		v P074: XeExeEe	71-42-3	3 DgGg	114	L4 13L
		v P074: ToIceEe	108-88-2	3 DgGg	137	L5 121
EP074E: Halogenated Aliphatic Compounds (QCLot: 2171236)						
v u 1301553-003	dLPTLQ003					
		v P074: 1.1-MNklotoeKeEe	75-25-4	3 DgGg	L8.L	50 134
		v P074: TrtNklotoeKeEe	79-01-L	3 DgGg	105	L0 133
EP074F: Halogenated Aromatic Compounds (QCLot: 2171236)						
v u 1301553-003	dLPTLQ003					
		v P074: i klotor eExeEe	108-90-7	3 DgGg	135	L9 139
EP075A: Phenolic Compounds (QCLot: 2171396)						



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 WotSBtOet : v u 1301553
 i lreEy : KBbMR dAABi l dTvA
 PtojeNy : 117L12301

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report			
				Spike Concentration	Spike Recovery (%)		
					MS	Low	High
EP075A: Phenolic Compounds (QCLot: 2171396) - continued							
v u 1301441-004	dEoEDocs	v P075: PkeEol	108-95-3	5 DgG	7L.0	32.7	119
		v P075: 3-i klotopkeEol	95-57-8	5 DgG	LL.7	21.1	11L
		v P075: 3-h ttopkeEol	88-75-5	5 DgG	75.8	1L.4	115
		v P075: 4-i kloto-2-u ekOpkeEol	59-50-7	5 DgG	93.7	33.2	133
		v P075: PeEyaNklotopkeEol	87-8L-5	5 DgG	83.5	17.L	143
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 2171396)							
v u 1301441-004	dEoEDocs	v P075: dNEapkykeEe	82-23-9	5 DgG	72.7	35.4	133
		v P075: PqEeEe	139-00-0	5 DgG	74.5	14.L	137
EP075D: Nitrosamines (QCLot: 2171396)							
v u 1301441-004	dEoEDocs	v P075: h-h yosoOhe-ptopCladIEe	L31-L4-7	5 DgG	L4.2	17.8	110
EP075E: Nitroaromatics and Ketones (QCLot: 2171396)							
v u 1301441-004	dEoEDocs	v P075: 3,4-MEtoyoIceEe	131-14-3	5 DgG	70.5	38.2	113
EP075G: Chlorinated Hydrocarbons (QCLot: 2171396)							
v u 1301441-004	dEoEDocs	v P075: 1,4-MNklotor eExeEe	10L-4L-7	5 DgG	L7.7	32	113
		v P075: 1,3,4-TInklotor eExeEe	130-83-1	5 DgG	L0.9	13.9	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2171235)							
v u 1301553-003	dLPTL G003	v P080: i L - i 9 FtalNpE	----	38 DgG	100	49	137
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2175834)							
v u 1301497-004	dEoEDocs	v P071: i 10 - i 14 FtalNpE	----	544 DgG	90.3	54	132
		v P071: i 15 - i 38 FtalNpE	----	1981 DgG	104	74	124
		v P071: i 39 - i 2L FtalNpE	----	818 DgG	9L.4	L2	142
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2171235)							
v u 1301553-003	dLPTL G003	v P080: i L - i 10 FtalNpE	----	22 DgG	100	70	120
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2175834)							
v u 1301497-004	dEoEDocs	v P071: > i 10 - i 1L FtalNpE	----	870 DgG	98.L	54	132
		v P071: > i 1L - i 24 FtalNpE	----	3495 DgG	99.3	74	124
		v P071: > i 24 - i 40 FtalNpE	----	3L2 DgG	87.5	L2	142
EP216: Perchlorate by LC/MS (QCLot: 2175836)							
v u 1301441-001	dEoEDocs	v P31L: PeNklotaye	7L01-90-2	35 µgG	97.3	70	120
EP231: Perfluorooctyl Acids and Sulfonates. (QCLot: 2175573)							
v u 1301441-001	dEoEDocs	v P321: PFBA	17L2-32-1	0.005 DgG	= hoyMeyelDEeO	54	14L
		v P321: PFBD	225-L7-1	0.005 DgG	L7.0	54	124
		v P321: L:3 FicotoyeloDet ActloEaye (L:3 FYA)	37L19-97-3	.035 DgG	L1.9	5L	128



Environmental Division

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: EM1201552	Page	: 1 of 2
Client	: GOLDER ASSOCIATES	Laboratory	: Environmental Division Melbourne
Contact	: Niamh McCormack	Contact	: Samantha Smith
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Telephone	: +61 0. -- 63 ., 00	Telephone	: +615 5, 42 2644
Facsimile	: +61 0. -- 63 ., 01	Facsimile	: +615 5, 42 2601
Project	: 11761. 301	QC Level	: NEPM 1222 Schedule B(.) and ALS QCS. requirement
Site	: F 5wIC	Date Samples Received	: 14 FEB 2013
C5DE: number	: - 166	Issue Date	: 3 FEB 2013
Sampler	: RM	NoVof samples received	: 13
Order number	: GA5MELB . . 3, 02	NoVof samples analysed	: .
Quote number	: ME10, 413		

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 Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers



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 Work Order : EM1301 , , 3
 Client : GOLDR ASSOCIATES
 Project : 11761 . 301

Analysis Holding Time Compliance

The following report summarises e/traction K preparation and analysis times and compares 8th recommended holding times. Dates reported represent first date of e/traction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the analysis aliquot was taken. Elapsed period to analysis represents number of days from sampling. Here no e/traction K digestion is involved or period from e/traction K digestion. Here this is present. For composite samples, sampling date is assumed to be that of the oldest sample contributing to the composite. Sample date for laboratory produced leachates is assumed as the completion date of the leaching process. Outliers for holding time are based on USEPA SW - 469 APHA9 AS and NEPM (1222)VA listing of breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according to the analytes being determined on the resulting solution. For non-volatile analytes, the holding time compliance assessment compares the leachate date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days), Mercury (3- days); other metals (1-0 days). A recorded breach therefore does not guarantee a breach for all non-volatile parameters.

Matrix : SOIL Evaluation: * & Holding time breach x ✓ & Within holding time ✓

Method	Container / Client Sample ID(s)	Sample Date	Extraction / Preparation		Evaluation	Analysis		
			Date extracted	Due for extraction		Date analysed	Due for analysis	
EA055: Moisture Content								
Soil Glass Jar - Unpreserved	A6PT-180039	13-FEB-2012	----	----	----	16-FEB-2012	37-FEB-2013	✓
A6PT6180039								
A6PT1018001								
EG005T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved	A6PT-180039	13-FEB-2012	23-FEB-2012	11-AUG-2013	✓	27-FEB-2012	11-AUG-2013	✓
A6PT6180039								
A6PT1018001								
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved	A6PT-180039	13-FEB-2012	23-FEB-2012	13-MAR-2013	✓	24-FEB-2012	13-MAR-2013	✓
A6PT6180039								
A6PT1018001								
EP004: Organic Matter								
Soil Glass Jar - Unpreserved	A6PT-180039	13-FEB-2012	16-FEB-2012	30-FEB-2013	✓	16-FEB-2012	1-MAR-2013	✓
A6PT6180039								
A6PT1018001								
EP066: Polychlorinated Biphenyls (PCB)								
Soil Glass Jar - Unpreserved	A6PT-180039	13-FEB-2012	17-FEB-2012	37-FEB-2013	✓	20-FEB-2012	3-MAR-2013	✓
A6PT6180039								
A6PT1018001								
EP068A: Organochlorine Pesticides (OC)								
Soil Glass Jar - Unpreserved	A6PT-180039	13-FEB-2012	17-FEB-2012	37-FEB-2013	✓	20-FEB-2012	3-MAR-2013	✓
A6PT6180039								
A6PT1018001								
EP068B: Organophosphorus Pesticides (OP)								
Soil Glass Jar - Unpreserved	A6PT-180039	13-FEB-2012	17-FEB-2012	37-FEB-2013	✓	20-FEB-2012	3-MAR-2013	✓
A6PT6180039								
A6PT1018001								
EP074A: Monocyclic Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved	A6PT-180039	13-FEB-2012	16-FEB-2012	37-FEB-2013	✓	17-FEB-2012	37-FEB-2013	✓
A6PT6180039								
A6PT1018001								



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 Work Order : EM1301 , , 3
 Client : GOLDER ASSOCIATES
 Project : 11761 . 301

Matrix : SOIL Evaluation: * & Holding time breach x ✓ & Within holding time ✓

Method		Sample Date		Extraction / Preparation		Analysis	
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074B: Oxygenated Compounds							
Soil Glass Jar - Unpreserved							
A6PT- I80039	A6PT- I80039	16-FEB-2012	37FEB53013	✓	17-FEB-2012	37FEB53013	✓
A6PT10I8001							
EP074C: Sulfonated Compounds							
Soil Glass Jar - Unpreserved							
A6PT- I80039	A6PT- I80039	16-FEB-2012	37FEB53013	✓	17-FEB-2012	37FEB53013	✓
A6PT10I8001							
EP074D: Fumigants							
Soil Glass Jar - Unpreserved							
A6PT- I80039	A6PT- I80039	16-FEB-2012	37FEB53013	✓	17-FEB-2012	37FEB53013	✓
A6PT10I8001							
EP074E: Halogenated Aliphatic Compounds							
Soil Glass Jar - Unpreserved							
A6PT- I80039	A6PT- I80039	16-FEB-2012	37FEB53013	✓	17-FEB-2012	37FEB53013	✓
A6PT10I8001							
EP074F: Halogenated Aromatic Compounds							
Soil Glass Jar - Unpreserved							
A6PT- I80039	A6PT- I80039	16-FEB-2012	37FEB53013	✓	17-FEB-2012	37FEB53013	✓
A6PT10I8001							
EP074G: Trihalomethanes							
Soil Glass Jar - Unpreserved							
A6PT- I80039	A6PT- I80039	16-FEB-2012	37FEB53013	✓	17-FEB-2012	37FEB53013	✓
A6PT10I8001							
EP075A: Phenolic Compounds							
Soil Glass Jar - Unpreserved							
A6PT- I80039	A6PT- I80039	17-FEB-2012	37FEB53013	✓	20-FEB-2012	3-5MAR53013	✓
A6PT10I8001							
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved							
A6PT- I80039	A6PT- I80039	17-FEB-2012	37FEB53013	✓	20-FEB-2012	3-5MAR53013	✓
A6PT10I8001							
EP075C: Phthalate Esters							
Soil Glass Jar - Unpreserved							
A6PT- I80039	A6PT- I80039	17-FEB-2012	37FEB53013	✓	20-FEB-2012	3-5MAR53013	✓
A6PT10I8001							
EP075D: Nitrosamines							
Soil Glass Jar - Unpreserved							
A6PT- I80039	A6PT- I80039	17-FEB-2012	37FEB53013	✓	20-FEB-2012	3-5MAR53013	✓
A6PT10I8001							
EP075E: Nitroaromatics and Ketones							
Soil Glass Jar - Unpreserved							
A6PT- I80039	A6PT- I80039	17-FEB-2012	37FEB53013	✓	20-FEB-2012	3-5MAR53013	✓
A6PT10I8001							



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 Work Order : EM1301 , , 3
 Client : GOLDER ASSOCIATES
 Project : 11761 . 301

Matrix : SOIL Evaluation: * & Holding time breach x ✓ & Within holding time ✓

Method	Sample Date	Extraction / Preparation		Analysis	
		Date extracted	Due for extraction	Date analysed	Due for analysis
EP075F: Haloethers					
Soil Glass Jar - Unpreserved	13-FEB-2012	17-FEB-2012	37FEB53013	20-FEB-2012	3-MAR53013
A6PT6I80039					
A6PT10I8001					
EP075G: Chlorinated Hydrocarbons					
Soil Glass Jar - Unpreserved	13-FEB-2012	17-FEB-2012	37FEB53013	20-FEB-2012	3-MAR53013
A6PT6I80039					
A6PT10I8001					
EP075H: Anilines and Benzidines					
Soil Glass Jar - Unpreserved	13-FEB-2012	17-FEB-2012	37FEB53013	20-FEB-2012	3-MAR53013
A6PT6I80039					
A6PT10I8001					
EP075I: Organochlorine Pesticides					
Soil Glass Jar - Unpreserved	13-FEB-2012	17-FEB-2012	37FEB53013	20-FEB-2012	3-MAR53013
A6PT6I80039					
A6PT10I8001					
EP075J: Organophosphorus Pesticides					
Soil Glass Jar - Unpreserved	13-FEB-2012	17-FEB-2012	37FEB53013	20-FEB-2012	3-MAR53013
A6PT6I80039					
A6PT10I8001					
EP080/071: Total Petroleum Hydrocarbons					
Soil Glass Jar - Unpreserved	13-FEB-2012	16-FEB-2012	37FEB53013	17-FEB-2012	37FEB53013
A6PT6I80039					
A6PT10I8001					
Soil Glass Jar - Unpreserved	13-FEB-2012	21-FEB-2012	37FEB53013	22-FEB-2012	015APR53013
A6PT6I80039					
A6PT10I8001					
EP080/071: Total Recoverable Hydrocarbons - NIEPM 2010 Draft					
Soil Glass Jar - Unpreserved	13-FEB-2012	16-FEB-2012	37FEB53013	17-FEB-2012	37FEB53013
A6PT6I80039					
A6PT10I8001					
Soil Glass Jar - Unpreserved	13-FEB-2012	21-FEB-2012	37FEB53013	22-FEB-2012	015APR53013
A6PT6I80039					
A6PT10I8001					
EP216: Perchlorate by LC/MS					
Soil Glass Jar - Unpreserved	13-FEB-2012	21-FEB-2012	135MAR53013	21-FEB-2012	315MAR53013
A6PT6I80039					
A6PT10I8001					
EP231: Perfluorooctyl Acids and Sulfonates.					
Soil Glass Jar - Unpreserved	13-FEB-2012	21-FEB-2012	115AUG53013	21-FEB-2012	015APR53013
A6PT6I80039					
A6PT10I8001					



Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed 8 (in the analytical lot(s) in which the submitted sample(s) 8 as (here) processed) / Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers

Matrix : SOIL

Evaluation: * & Quality Control frequency not 8 (in specification) ✓ & Quality Control frequency 8 (in specification) ✓

Quality Control Sample Type Analytical Methods	Method	Count			Rate (%)		Evaluation	Quality Control Specification
		QC	Regular	Actual	Expected			
Laboratory Duplicates (DUP)								
Moisture Content	EA0 , , 510.	3	30	10.0	10.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Organic Matter	EP004	3	13	16.7	10.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Perchlorate in Soils and Sediments by LCM/MS	EP316	1	7	14.3	10.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Perfluorooctyl Acids and Sulfonates by LCM/MS/MS	EP3. 1	3	14	14.3	10.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Pesticides by GC/MS	EP06-	3	11	18.2	10.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Polychlorinated Biphenyls (PCB)	EP066	3	11	18.2	10.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Semivolatile Organic Compounds	EP07.	3	11	18.2	10.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Total Mercury by FIMS	EG0 , , T	3	30	10.0	10.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Total Metals by ICP/AES	EG00, T	3	30	10.0	10.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
TPH 5Semivolatile Fraction	EP071	1	7	14.3	10.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
TPH volatiles/BTEX	EP0-0	1	,	20.0	10.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
volatiles Organic Compounds	EP074	1	6	16.7	10.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Laboratory Control Samples (LCS)								
Organic Matter	EP004	1	13	8.3	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Perchlorate in Soils and Sediments by LCM/MS	EP316	1	7	14.3	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Perfluorooctyl Acids and Sulfonates by LCM/MS/MS	EP3. 1	1	14	7.1	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Pesticides by GC/MS	EP06-	1	11	9.1	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Polychlorinated Biphenyls (PCB)	EP066	1	11	9.1	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Semivolatile Organic Compounds	EP07.	1	11	9.1	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Total Mercury by FIMS	EG0 , , T	1	30	5.0	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Total Metals by ICP/AES	EG00, T	1	30	5.0	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
TPH 5Semivolatile Fraction	EP071	1	7	14.3	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
TPH volatiles/BTEX	EP0-0	1	,	20.0	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
volatiles Organic Compounds	EP074	1	6	16.7	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Method Blanks (MB)								
Organic Matter	EP004	1	13	8.3	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Perchlorate in Soils and Sediments by LCM/MS	EP316	1	7	14.3	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Perfluorooctyl Acids and Sulfonates by LCM/MS/MS	EP3. 1	1	14	7.1	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Pesticides by GC/MS	EP06-	1	11	9.1	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Polychlorinated Biphenyls (PCB)	EP066	1	11	9.1	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Semivolatile Organic Compounds	EP07.	1	11	9.1	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Total Mercury by FIMS	EG0 , , T	1	30	5.0	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Total Metals by ICP/AES	EG00, T	1	30	5.0	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
TPH 5Semivolatile Fraction	EP071	1	7	14.3	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
TPH volatiles/BTEX	EP0-0	1	,	20.0	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
volatiles Organic Compounds	EP074	1	6	16.7	5.0	✓	NEPM 1222 Schedule B() and ALS QCS. requirement	
Matrix/ Spikes (MS)								
Perchlorate in Soils and Sediments by LCM/MS	EP316	1	7	14.3	5.0	✓	ALS QCS. requirement	
Perfluorooctyl Acids and Sulfonates by LCM/MS/MS	EP3. 1	1	14	7.1	5.0	✓	ALS QCS. requirement	



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Matrix : SOIL Evaluation: * & Quality Control frequency not 8 ithin specification x ✓ & Quality Control frequency 8 ithin specification ✓

Analytical Methods	Method	Count		Rate (%)		Evaluation	Quality Control Specification
		QC	Regular	Actual	Expected		
Pesticides by GCMS	EP06-	1	11	9.1	5.0	✓	ALS QCS. requirement
Polychlorinated Biphenyls (PCB)	EP066	1	11	9.1	5.0	✓	ALS QCS. requirement
Semivolatile Organic Compounds	EP07,	1	11	9.1	5.0	✓	ALS QCS. requirement
Total Mercury by FIMS	EG0., T	1	30	5.0	5.0	✓	ALS QCS. requirement
Total Metals by ICPAES	EG00, T	1	30	5.0	5.0	✓	ALS QCS. requirement
TPH 5Semivolatile Fraction	EP071	1	7	14.3	5.0	✓	ALS QCS. requirement
TPH volatilesTEX	EP0-0	1	,	20.0	5.0	✓	ALS QCS. requirement
volatile Organic Compounds	EP074	1	6	16.7	5.0	✓	ALS QCS. requirement



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Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA 9101.1 and NENM Mn house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided in the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA0 , 510.	SOIL	A gravimetric procedure based on 80% loss over a 13 hour drying period at 10. 510. degrees C. This method is compliant with NEPM (3010 Draft) Schedule B. () Section 7M and Table 1 (14 day holding time).
Total Metals by ICP-AES	EG00, T	SOIL	(APHA 31st ed). 130X USEPA SW - 46 56010 (ICPAES) Metals are determined following an appropriate acid digestion of the soil. The ICP-AES technique ionises samples in a plasma emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix-matched standards. This method is compliant with NEPM (1222) Schedule B. ()
Total Mercury by FIMS	EG0 , T	SOIL	AS 10909 (FIMS) (Cold vapour generation) AAS) FIMS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl ₂ which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1222) Schedule B. ()
Organic Matter	EP004	SOIL	AS 1324 (Dichromate oxidation method after Walkley and Black) This method is compliant with NEPM (1222) Schedule B. () (Method 10.)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	(USEPA SW - 46 5- 370B) E/ tracts are analysed by Capillary GC/MS and quantification is by comparison against an established , point calibration curve. This method is compliant with NEPM (1222) Schedule B. () (Method , 04)
Pesticides by GC/MS	EP06-	SOIL	(USEPA SW - 46 5- 370B) E/ tracts are analysed by Capillary GC/MS and quantification is by comparison against an established , point calibration curve. This technique is compliant with NEPM (1222) Schedule B. () (Method , 049 0.)
TPH 5 Semivolatile Fraction	EP071	SOIL	(USEPA SW - 46 5- 01, A) Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 5C. 6. This method is compliant with NEPM (1222) Schedule B. () (Method , 06M)
volatile Scan for Unknowns	EP073	SOIL	(USEPA SW - 46 5- 360B) E/ tracts are analysed by Purge and Trap Capillary GC/MS and unknowns are identified by comparison of peaks with the NIST library. Semi-quantification is by comparison with the closest eluting internal standard.
Semivolatile Scan for Unknowns	EP07.	SOIL	(USEPA SW - 46 5- 360B) E/ tracts are analysed by Capillary GC/MS and unknowns are identified by comparison of peaks with the NIST library. Semi-quantification is by comparison with the closest eluting internal standard.
volatile Organic Compounds	EP074	SOIL	(USEPA SW - 46 5- 360B) E/ tracts are analysed by Purge and Trap Capillary GC/MS. Quantification is by comparison against an established , point calibration curve. This method is compliant with NEPM (1222) Schedule B. () (Method , 01)
Semivolatile Organic Compounds	EP07,	SOIL	(USEPA SW - 46 5- 370B) E/ tracts are analysed by Capillary GC/MS and quantification is by comparison against an established , point calibration curve. This technique is compliant with NEPM (1222) Schedule B. () (Method , 03)
TPH volatiles BTEX	EP0-0	SOIL	(USEPA SW - 46 5- 360B) E/ tracts are analysed by Purge and Trap Capillary GC/MS. Quantification is by comparison against an established , point calibration curve. This method is compliant with NEPM (1222) Schedule B. () (Method , 01)
Perchlorate in Soils and Sediments by LC/MS	EP316	SOIL	US EPA Method 6- , 0- , g of sample is extracted with 3, mL of 80% acetic acid filtered through a 0. 2 µm filter (to extend extract holding time) and analysed by LC/MS in ESI (negative) mode.
Perfluorooctyl Acids and Sulfonates by LC/MS/MS	µEP3. 1	SOIL	In-house. A portion of soil is soaked in sodium hydroxide followed by extraction with methanol. The extract is neutralised with HCl and an aliquot taken to dryness. Made up in mobile phase. Analysis is by LC/MS/MS. ESI Negative Mode using MRMV.

Preparation Methods

Method

Matrix

Method Descriptions



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Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN62	SOIL	USEPA 3003 ModVHot Block Acid Digestion 10g of sample is heated 8 ith Nitric and Hydrochloric acids9then cooledV Pero/ ide is added and samples heated and cooled again before being filtered and bulked to volume for analysisV Digest is appropriate for determination of selected metals in sludge9sediments9and soilsVThis method is compliant 8 ith NEPM (1222) Schedule B.() (Method 303)
Organic Matter	EP004PR	SOIL	AS13-24VM 512270 Dichromate o/ idation method after Walkley and BlackVThis method is compliant 8 ith NEPM (1222) Schedule B.() (Method 10.)
Sample E/ traction for Perchlorate	EP316PR	SOIL	US EPA 6- , 0V
Sample E/ traction for Perfluoroalkyl Compounds	EP3. 1PR	SOIL	In5House
Methanolic E/ traction of Soils for Purge and Trap	ORG16	SOIL	(USEPA SW - 46 5. 0. 0A) , g of solid is shaken 8 ith surrogate and 10mL methanol prior to analysis by Purge and Trap 5 GC/MSV
Tumbler E/ traction of Solids (Option A 5 Concentrating)	ORG17A	SOIL	In5house9Mechanical agitation (tumbler)V30g of sample9Na3SO4 and surrogate are e/ tracted 8 ith 1, 0mL 1:1 DCM/acetone by end over end tumbleV The solvent is decanted9dehydrated and concentrated (by * D) to the desired volume for analysisV
Tumbler E/ traction of Solids (Option B 5 Non-concentrating)	ORG17B	SOIL	In5house9Mechanical agitation (tumbler)V10g of sample9Na3SO4 and surrogate are e/ tracted 8 ith 30mL 1:1 DCM/acetone by end over end tumbleV The solvent is transferred directly to a GC vial for analysisV



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Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report Surrogate recovery limits are static and based on USEPA SW-46 or ALS QWIENK - (in the absence of specific USEPA limits) This report displays QC Outliers (breaches) only

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix : SOIL

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP074D: Fumigants	3, 70631500,	555	2,2-Dichloropropane	245305	140 %	151.0%	Recovery greater than upper control limit
EP07, D: Nitrosamines	3, 70 . . , 500-	555	Methapyriene	215 05	1- 7 %	344514. %	Recovery less than lower control limit
EP07, E: Nitroaromatics and * etones	3, 70 . . , 500-	555	1-Naphthylamine	1. 45 35	44 %	105-4%	Recovery less than lower control limit
Matrix Spike (MS) Recoveries							
EP3. 1: Perfluorooctyl Acids and SulfonatesV	EM13014415001	Anonymous	PFOS	176. 53. 51	Not Determined	555	MS recovery not determined, background level greater than or equal to 4x spike level.

- For all matrices, no Method Blank value outliers occur.
- For all matrices, no Duplicate outliers occur.

Regular Sample Surrogates

- For all regular sample matrices, no surrogate recovery outliers occur.

Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective E/ fraction KP preparation and/or Analysis component is/are displayed.

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers exist.



CHAIN OF CUSTODY

No 8166

GOLDER ASSOCIATES PTY LTD
BUILDING 7, BOTANICCA CORPORATE PARK, 570 - 588 SWAN STREET
RICHMOND VIC 3121

(03) 8862 3500
Tel:
(03) 8862 3501
Fax:

* OBSERVATIONS	SAMPLE DATE	SAMPLE ID TAA XXX/MQ/N	SAMPLE TYPE	SAMPLE DEPTH (m)	No. OF CONTAINERS	Metals (As, Cd, Cr (total), Cu, Hg, Ni, Pb, Zn)	Total Petroleum Hydrocarbons (TPH)	Benzene, Toluene, Ethyl benzene, Xylenes (BTEX)	Polycyclic Aromatic Hydrocarbons (PAH) (Standard 16)	Organochlorine Pesticides (OCP)	Organophosphorus Pesticides (OPP)	Polychlorinated Biphenyls (PCB)	EPA Victoria Publication 448.3 Table 2 Screen (no ASLP testing)	EPA Victoria Publication 448.3 Table 3 Screen (incl. ASLP testing)	PCO/PCPA	VOC	BVC	#OC	Rect/Loc
1	13/2	APT6/2001	SOIL	0.2-0.5	6	X	X	X	X	X	X	X	X	X					Rect/Loc
2	1/	APT6/2002		1.2-1.5	6	X	X	X	X	X	X	X	X	X					
3		APT7/2001		0.2-0.5	9	X	X	X	X	X	X	X	X	X					
4		APT7/2001		0.2-0.5	9	X	X	X	X	X	X	X	X	X					
5		APT7/2002		1.2-1.5	9	X	X	X	X	X	X	X	X	X					
6		APT1/2001		0.3-0.6	6	X	X	X	X	X	X	X	X	X					
7		APT8/2001		0.3-0.6	6	X	X	X	X	X	X	X	X	X					
8		APT8/2002		0.8-1.1	5	X	X	X	X	X	X	X	X	X					
9		APT7/2001		0.1-0.4	5	X	X	X	X	X	X	X	X	X					
10		APT9/2002		0.7-1.0	5	X	X	X	X	X	X	X	X	X					
11		APT9/2001		0.8-0.8	5	X	X	X	X	X	X	X	X	X					
12		TBK/2701		-	2	X	X	X	X	X	X	X	X	X					

Special Instructions:

Environmental Division
Melbourne
R.T Work Order
EM1201552

TURN AROUND TIME REQUIRED
 1 Working Day
 2 Working Days
 3 Working Days
 4 Working Days
 5 Working Days (standard)

Relinquished by: Gail Appals Date: 14/2/12 Time: 13:30 Organisation: Golder Associates
 Received by: WAIKEN 637 Date: 14/2/12 Time: 14:2:12 Organisation: WAIKEN 637

Relinquished by: Gail Appals Date: 14/2/12 Time: 5:45 Organisation: Golder Associates
 Received by: WAIVER 637 Date: 14/2/12 Time: 14:2:12 Organisation: WAIVER 637

RECEIVING LABORATORY TO CONFIRM RECEIPT OF ANALYTICAL SCHEDULE BY RETURN FAX TO: (03) 8862 3501

Observations to Assist Analysis and O&S
 C - Expected to be Highly Contaminated
 N - NAPL Sample
 HS - Expected High Salinity
 HOC - Expected High Total Organic Carbon
 S - Sheen
 O - Oily/Oilous

Original (white) - Laboratory
 Duplicate (yellow) - Project File
 Triplicate (pink) - COC Book

Date: 3:55pm
 Forms F012B RLB Apr08



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order : **EM12014G4**
 y ǿi r : g L O D R E A S C C O I T S I E C
 y i r f u r : a c e v N M u y b r F u h
 S A A t s I I : a e : d : O d B : X 0 5 6
 O D A C P : 5 9 3 5 0 , 3 - - : k 8 F i : k r 9 w 0 N v i A 9 R y I . : 1 2 1
 H S W T H d w c : W E K T : R y 9 S U K T w s f N S . : 1 2 2
 a i v u u b v F u h @ P a s t u v I F D
 a + X 1 : 0 . : - - X 2 : . 3 0 0
 a + X 1 : 0 . : - - X 2 : . 3 0 1
 a 1 1 5 X 1 . 2 0 1 : 7 , R y
 a G S , M E F O . . : 2 3 0 6
 a , , , ,
 a , , , ,
 a 7 , R y
 Q D r s i D v L s b : a M E / 0 3 4 / 1 2

TNC: ǿp br: I Dpǿ sAsI : F i t : p l s n C D I : ǿp br (I) : 8 0 N r N C : ǿs ǿ s i u s i : w s i D a i : F p p a : r : r N S : I F v p a s () : F i : I D l v ǿ s A I : S a p P F s : o r N C : ǿp br: N f n s : L s s i : u N s u h s A : F i A : F p p b n s A : o t ǿ F i s i :

- TNC: y s t r ǿ F s : o S i F a l C u i r F C I : r N s : o a 8 ǿ P : ǿ o b v F C i g
- G s i s t r F a y v v s i r i
 - S i F a r ǿ F a w s i D a i
 - k D b P F r s : y i r b a f ǿ ǿ

c S T S : S u u b s A ǿ A f F L ǿ r t t : - 2 3
 S u u b s A ǿ A o b u v p a ǿ i u s : 8 0 N
 W d / N y : 1 5 0 2 3 1



Signatories

TNC: A u d v s i r : N F I : L s s i : s a u r b i ǿ F a i : I ǿ i s A : L t : r N s : F D N ǿ s A : I ǿ F r ǿ s i : ǿ A ǿ F r s A : L s a 8 I : E a u r b i ǿ : I ǿ ǿ P : N F I : L s s i
 u F ǿ s A : D r : ǿ u v p a ǿ i u s : 8 0 N p b u s A D ǿ s i : I p s u ǿ s A : ǿ : 2 1 : y 7 w r e F b r : 1 1 1

Position	Accreditation Category
ksi C b v ǿ F i ǿ y N s v ǿ r	M s a D ǿ s : v ǿ F F i ǿ I
ksi C b k s v ǿ a f ǿ : v i r d v s i r y N s v ǿ r	M s a D ǿ s : v ǿ F F i ǿ I
ksi C b k s v ǿ a f ǿ : v i r d v s i r y N s v ǿ r	M s a D ǿ s : d ǿ F F i ǿ I
f L ǿ r t t : M F I F P s b , d ǿ F F i ǿ I	k t A i s t : d ǿ F F i ǿ I
ksi C b d ǿ F F i ǿ y N s v ǿ r	M s a D ǿ s : v ǿ F F i ǿ I
ksi C b d ǿ F F i ǿ y N s v ǿ r	M s a D ǿ s : d ǿ F F i ǿ I

Environmental Division Melbourne

Part of the **ALS Laboratory Group**

4:WSI f#mAvKpbcPnF#;RV:SD r#f#; 151

I e+6-133549www-00:7Fxl+X1..-3466X01:;a a s.gb.ocs.t#^

A Campbell Brothers Limited Company





eFFS g . : 013
 W th:d bAsb g EM1201353
 y aSi r g Gd f mEw:Skkd y N\$TEK
 e b jsur q 115X1: 201:7, RY

General Comments

TN\$: Fi Fa @Fa pb usADbsl : D sA: Lt: rN\$: Eln@ i v si rFa m@CCi : NFns : Lssi : Asnsa psA: db v : sl rFL@N\$A: @rsb FrCi Fai : b\$u Pi @sA: pb usADbsl : l DuN Fi : rN I s: pDL@N\$A: Lt: rN\$: Uk EeS9 SeHS9 Sk: Fi A: c EeMI: V : N DI s

Asnsa psA:pb usADbsl :Fbs:sv pat sA:C:rN\$:Flj si us: oA uDv si rsAl rFi AFBW : blt:u@si rbsqDsl rI

WN\$bs:v @rDz:Asrsbv @FrCi :rNI:Lssi:psbv bv sA@bsl D@l :Fbs:tsbp bsA: i :F:Att:8 s@N:LFI @I

WN\$bs:F:tsbp bsA:aIl :rNI:(<)bsl D@r:C:N@N\$bnFI :rN\$:fd w@rN@:v Ft:Ls:ADs:r :N@Nv @rDz:u l rsi r@CI D@@Gsi rI Fv p@:(tsADusA:8 s@N:sv pat sA): bv Fitt@:@rsbsbsl usl

WN\$bs:rN\$:fd w: oF:tsbp bsA:bsl D@rA@bsd :db v : l rI AFB:fd w@rN@:v Ft:Ls:ADs:r :N@Nv @rDz:u l rsi r@CI D@@Gsi rI Fv p@:(tsADusA:8 s@N:sv pat sA): bv Fitt@:@rsbsbsl usl

WN\$bi :l Fv p@:P:r@ s:Qo bv FrCi :@i : r:pb n@SALt:rN\$:u@Si r@l Fv p@:P:AFrsI :Fbs:l N 8 i :8@N Dr:F:r@ s:u v p i si rI:Y :rN\$li s:C:l rFi usl rN\$:r@ s:u v p i si rI:FI :Lssi :FI l Dv sAlL:rN\$:@FL @Fr tt:o bpb usl l @:P:pD@p l sl l

Kst:g y SK:c Dv Lsb=y Sk:tsP@r@t:i Dv Lsb@ v :AFFLFI s:v F@:rF@SALt:y Nsv @FaSLl r@FurI :k sbn@sl I:TN\$:y Nsv @FaSLl r@FurI :k sbn@S:C:F:A@CCi : @rN\$:Sv sb@Fi:y Nsv @Fak u@rt l
 f d w:=f @ @: @bsp brCP

P:=:TNC:bsl D@r:C:u v p DsA:db v :@A@Q@F@Fi Fa rs:AsrsurC:l:l:Fr: bFL ns:rN\$:@nsa @bsp brCP

- E/ 0- 5: EM12014G4_ 5 / srtinu sr gs^ p.e required di.ution prior to sns.ygig due to ^ strix interferenm@gt DOA vs.ueg hsve ceen sdju@ted sm@ordinb.y+
- E/ 0G4: @Cur^ of / S' 7ig the gu^ of the HCE/ S 1- priority / S' g
- E/ 281: / UOS F / UOC regu.tg sre reported sg sn sbbrebst of .inesr snd crsmhed igo^ erg+Mstrix gpikE ren@very not deter^ ined for / UOC due to hihb csnkbround .eve. of tsrbet sns.yte+
- / ernth.orsteg snd / UOC& UOS m@nduntied cy SDC Cydney, NSI S simmreditstion no+524, gite no 10w11+



eFFS
 W th:d bAsb
 y aSi r
 e b jsur

g 4: 013
 g EM1201353
 g Gd f mEw:Skkd y V\$TEK
 g 115X1: 201:7,Ry

Analytical Results

Compound	Client sampling date / time		Client sample ID	
	CAS Number	LOR	Unit	Unit
ES002 : p' (Col.g@)				
p' ° s.ue	011	pH:UI G	G*	- 4
ES044: Moigtur e l ontent				
Moigtur e l ontent (dried) 108Z @	110	µ	2w*	1w9
EL0041 : l ots. Mets.g cy T / \$SEC				
Srgenim	5440.-, -2	3	v P/hP	<3
l sd^ iu^	5440.4, .6	1	v P/hP	<1
l hro^ iu^	5440.45, .	2	v P/hP	9G
l opper	5440.30,-	3	v P/hP	w
Desd	54. 6.62,1	3	v P/hP	12
Nirnte.	5440.02,0	2	v P/hP	11
Binm	5440.XX,X	3	v P/hP	11
EL0841 : l ots. Aenovser.sc.e Mernury cy UTMc				
Mernury	54. 6.65,X	011	v P/hP	<011
E/ 009: OrbsnimMstter				
l ots. Orbsniml srcon	013	µ	<013	14
E/ 0- - : / o.ymh.orinsted z ipheny.g (/ l z @				
l ots. / o.ymh.orinsted cipheny.g	010	v P/hP	<010	<010
E/ 0- 5S: Orbsnonrh.orine / egtimdeg (OI @				
s.phs& ' l	. 16,-4,X	0103	v P/hP	<0103
' exsmh.orocen`ene (' l z @	11,-,54,1	0103	v P/hP	<0103
cets& ' l	. 16,-3,5	0103	v P/hP	<0103
bs^ ^ s& ' l	3,-, 6,6	0103	v P/hP	<0103
de.ts& ' l	. 16,-X,-	0103	v P/hP	<0103
' eptsrh.or	5X44,-	0103	v P/hP	<0103
S.drin	.06,00,2	0103	v P/hP	<0103
' eptsrh.or epoxide	1024,35,.	0103	v P/hP	<0103
trsnng h.ordsne	310.,54,2	0103	v P/hP	<0103
s.phs&Endogu.fsn	636.6,-	0103	v P/hP	<0103
nig h.ordsne	310.,51,6	0103	v P/hP	<0103
Rie.drin	X0,35,1	0103	v P/hP	<0103
9-9VRRR	52,33,6	0103	v P/hP	<0103
Endrin	52,20,-	0103	v P/hP	<0103
cets&Endogu.fsn	...21.,X3,6	0103	v P/hP	<0103
9-9VRRR	52,34,-	0103	v P/hP	<0103
Endrin s.dehyde	5421,6, .4	0103	v P/hP	<0103
Endogu.fsn gu.fste	10. 1,05,-	0103	v P/hP	<0103
9-9VRRR	30,26,.	012	v P/hP	<012



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 g EM1201353
 g Gd f mEw:Skkd y NTEK
 g 115X1: 201:7,Ry

Analytical Results

kDL, Mft&: COD

Compound	CAS Number	LOR	Unit	Client sampling date / time		Client sample ID								
				SG 1&002	SG 2&001	SG 9&002	SG 4&001	SG - &002						
E/ 0-5S: Orbsnonh.orine / egtimdeg (OI @) continued														
Endrin ketone	3, 464, 50, 3	0103	v P/hp	<0103	<0103	<0123	<0103	<0103	14, 7EO, 2012: 13g00	14, 7EO, 2012: 13g00	14, 7EO, 2012: 13g00	EM12014G&3005	EM12014G&300W	EM12014G&3012
Methoxyrh.or	52, 4, , 3	012	v P/hp	<012	<012	<110	<012	<012						
E/ 0-5z: Orbsnophogphorug / egtimdeg (OI @)														
Rimh.orvog	X2.5, . 5	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
Re^ eton3C3^ ethy.	616, - X-	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
Monomrotophog	X62, , 22, 4	012	v P/hp	<012	<012	<110	<012	<012						
Ri^ ethoste	X0, 31, 3	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
Ris inon	... , 41, 3	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
I h.orpryrifog3^ ethy.	336, . 1, 0	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
/ srsthion3^ ethy.	26, . 00, 0	012	v P/hp	<012	<012	<110	<012	<012						
Ms.sthion	121, 53, 3	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
Uenthion	33, . - , 6	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
I h.orpryrifog	2621, - , 2	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
/ srsthion	3X, . - , 2	012	v P/hp	<012	<012	<110	<012	<012						
/ iri^ phog&thy.	2, 303, 41, 1	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
I h.orfenvinphog	450, 60, X	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
z ro^ ophog&thy.	4, 24, 5, - , X	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
Uens^ iphog	22224, 62, X	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
/ rothiofog	. 4X4, . 4X, 4	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
Ethion	3X, . 12, 2	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
I srcophenothion	5- X, 16, X	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
S' inphog Methy.	- X, 30, 0	0103	v P/hp	<0103	<0103	<0123	<0103	<0103						
E/ 0GS: Mononymimsro^ stim' ydronsrong														
zen`ene	51, 4, . 2	012	v P/hp	<012	<012	<012	<012	<012						
I o.uene	10, - , - , .	013	v P/hp	<013	<013	<013	<013	<013						
Ethy.cent`ene	100, 41, 4	013	v P/hp	<013	<013	<013	<013	<013						
^ ets3F psrs&ky.ene	10, - , - , . : 10X, 42, .	013	v P/hp	<013	<013	<013	<013	<013						
Cyrene	100, 42, 3	013	v P/hp	<013	<013	<013	<013	<013						
ortho&ky.ene	63, 45, X	013	v P/hp	<013	<013	<013	<013	<013						
gpropy.cent`ene	6, - , 2, -	013	v P/hp	<013	<013	<013	<013	<013						
n3 ropy.cent`ene	10, . , X3, 1	013	v P/hp	<013	<013	<013	<013	<013						
1-6&3 ri^ ethy.cent`ene	10, . , X5, -	013	v P/hp	<013	<013	<013	<013	<013						
gent&uty.cent`ene	1, 3, 6, -	013	v P/hp	<013	<013	<013	<013	<013						
1-2&3 ri^ ethy.cent`ene	63, X, X	013	v P/hp	<013	<013	<013	<013	<013						
tert&uty.cent`ene	6, - , 0X, X	013	v P/hp	<013	<013	<013	<013	<013						
p3gpropy.to.uene	66, - 5, X	013	v P/hp	<013	<013	<013	<013	<013						
n&uty.cent`ene	104, 31, -	013	v P/hp	<013	<013	<013	<013	<013						
E/ 0Gz: Oxybensted I o^ poundg														



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g X: 013
 g EM1201353
 g Gd f mEw:Skkd y 5TEK
 g 115X1: 201:7,RY

Analytical Results

kDL, Mft&: COD

Compound	CAS Number	LOR	Unit	Client sampling date / time				Client sample ID
				SG 12002	SG 22001	SG 92002	SG 42001	
E/ 0G3z : Oxybensted o^ poundg 3l ontinued								
° iny. Sreiste	10-,03,4	3	v P/hP	<03	<03	<03	<03	<03
2& utsnone (MEJ@	5-,6, . .	3	v P/hP	<03	<03	<03	<03	<03
93Methy. 2& pentsnone (Mz J@	10-,10,1	3	v P/hP	<03	<03	<03	<03	<03
23 exsnone (Mz J@	361,5-,X	3	v P/hP	<03	<03	<03	<03	<03
E/ 0G9l : Cu.fonsted o^ poundg								
I srcon digu.fide	53,13,0	013	v P/hP	<03	<03	<03	<03	<03
E/ 0G9R: Uu^ lbsntg								
2&Rinh. oropropsne	364,20,5	013	v P/hP	<03	<03	<03	<03	<03
1&Rinh. oropropsne	5-,5,3	013	v P/hP	<03	<03	<03	<03	<03
rng31-6Rinh. oropropy.ene	100X1,01,3	013	v P/hP	<03	<03	<03	<03	<03
trsnng31-6Rinh. oropropy.ene	100X1,02,X	013	v P/hP	<03	<03	<03	<03	<03
1&Ricro^ oethsne (ERz@	10X6,4	013	v P/hP	<03	<03	<03	<03	<03
E/ 0G9E: ' s.obensted S.iphstiml o^ poundg								
Rinh. orodif.uoro^ ethsne	53,51,-	3	v P/hP	<03	<03	<03	<03	<03
I h.oro^ ethsne	54-,5,.	3	v P/hP	<03	<03	<03	<03	<03
° iny. nh.oride	53,01,4	3	v P/hP	<03	<03	<03	<03	<03
z ro^ o^ ethsne	54-,6	3	v P/hP	<03	<03	<03	<03	<03
I h.oroethsne	53,00,.	3	v P/hP	<03	<03	<03	<03	<03
I rinh. orof.uoro^ ethsne	53,X6,4	3	v P/hP	<03	<03	<03	<03	<03
1+Rinh. oroethsne	53.,3,4	013	v P/hP	<03	<03	<03	<03	<03
Todo^ ethsne	54-,4	013	v P/hP	<03	<03	<03	<03	<03
trsnng31-2Rinh. oroethsne	13X,X0,3	013	v P/hP	<03	<03	<03	<03	<03
1+Rinh. oroethsne	53.,4,.	013	v P/hP	<03	<03	<03	<03	<03
rng31-2Rinh. oroethsne	13X,36,2	013	v P/hP	<03	<03	<03	<03	<03
1+1Rinh. oroethsne	51,33,X	013	v P/hP	<03	<03	<03	<03	<03
1+Rinh. oropropy.ene	3X.,3-,X	013	v P/hP	<03	<03	<03	<03	<03
I srcon I etrsnh.oride	3X,2.,3	013	v P/hP	<03	<03	<03	<03	<03
1&Rinh. oroethsne	105,0X,2	013	v P/hP	<03	<03	<03	<03	<03
I rinh. oroethsne	56,01,X	013	v P/hP	<03	<03	<03	<03	<03
Ricro^ o^ ethsne	54,63,.	013	v P/hP	<03	<03	<03	<03	<03
1+2Rinh. oroethsne	56,00,3	013	v P/hP	<03	<03	<03	<03	<03
1&Rinh. oropropsne	142,2-,6	013	v P/hP	<03	<03	<03	<03	<03
I etrsnh.oroethsne	125,1-,4	013	v P/hP	<03	<03	<03	<03	<03
1+1&2 etrsnh.oroethsne	X 0,20,X	013	v P/hP	<03	<03	<03	<03	<03
trsnng31-9Rinh. oro2&3utene	110,35,X	013	v P/hP	<03	<03	<03	<03	<03
rng31-9Rinh. oro2&3utene	145X,11,3	013	v P/hP	<03	<03	<03	<03	<03
1+2&2&3 etrsnh.oroethsne	56.,4,3	013	v P/hP	<03	<03	<03	<03	<03
1&2&3 rinh. oropropsne	6X,1-,4	013	v P/hP	<03	<03	<03	<03	<03



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g 5: 013
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 g 115X1: 2017,Ry

Analytical Results

kDL, Mft&: COD

Compound	CAS Number	LOR	Client sampling date / time		Client sample ID									
			SG 12002	SG 22001	SG 92002	SG 42001	SG - 2002							
E/ 0G9E: ' s.obensted S.iphsstiml o^ poundg 3l ontinued														
/ entsnth.oroethsne	5X,01,5	013	v P/hP	<013	<013	<013	<013	<013	14,7EO,2012:13g00	14,7EO,2012:13g00	14,7EO,2012:13g00	EM12014G43005	EM12014G4300w	EM12014G43012
123Ricro^ o33m.oropropsne	6X,12,-	013	v P/hP	<013	<013	<013	<013	<013	EM12014G43008	EM12014G43005	EM12014G4300w	EM12014G43005	EM12014G4300w	EM12014G43012
E/ 0G9U: ' s.obensted S.ro^ stiml o^ poundg														
I h.rocen' ene	10-,60,5	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
z ro^ ocen' ene	10-,X,1	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
23 h.oro.to.uene	63,46,-	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
93 h.oro.to.uene	10X,4,4	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
1243 rinh.rocen' ene	-5,X1,X	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
E/ 0G9L: rih.s.o^ ethsne														
I h.orofoor^	X5,XX.	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
z ro^ odinh.oro^ ethsne	53,25,4	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
Ricro^ oinh.oro^ ethsne	124,4,1	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
z ro^ ofor^	53,23,2	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
E/ 0G4S: / heno.iml o^ poundg														
/ heno.	10-,63,2	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
23 h.orpheno.	63,35,-	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
23Methy.pheno.	63,4-,5	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
83F 93Methy.pheno.	1,16,55,.	013	v P/hP	<110	<110	<110	<110	<110	<110	<110	<110	<110	<110	<110
23Nitrophen.	--,53,3	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
243Ri^ ethy.pheno.	103,X5,6	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
243Rinh.orpheno.	120-,2	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
2+ 3Rinh.orpheno.	-5,X3,0	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
93 h.oro33Methy.pheno.	36,30,5	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
24+ 3 rinh.orpheno.	--,0X2	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
2443 rinh.orpheno.	63,63,4	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
/ entsnth.orpheno.	-5-,X3	1	v P/hP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
E/ 0G4z: / o.ynumesr S.ro^ stiml ydronsrcong														
Nsphths.ene	61,20,.	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
23Methy.nsphts.ene	61,35,X	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
23 h.oronsphts.ene	61,3-,5	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
Srensphthy.ene	20-,6X,-	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
Srensphthene	--,2,6	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
Uuorene	-X,5,5	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
/ hensnthrene	-3,01,-	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
Snthrsnene	120,12,5	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
Uuorsnthene	20X,44,0	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
/ yrene	126,00,0	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013
N33Luoreny.Snets^ ide	3,6X.	013	v P/hP	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013	<013



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g - : 013
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 g 115X1: 201:7,RY

Analytical Results

kDL, Mft&: COD

Compound	CAS Number	LOR	Unit	Client sampling date / time					Client sample ID
				SG I 12002	SG I 22001	SG I 92002	SG I 42001	SG I - 2002	
E/ 0Gz : / o.ynmesr Stro^ stim' ydronsrcong 3l ontinued									
zen` (s@nthsrne	3X,33..	013	v P/hp	<013	<013	<013	<013	<013	<013
l hrygene	21- ,01,6	013	v P/hp	<013	<013	<013	<013	<013	<013
zen` o(c@	203,66,2,205,0-,6	1	v P/hp	<1	<1	<1	<1	<1	<1
zen` o(k@uorsnthene									
G423i^ ethy, cen` (s@nthsrne	35,65,X	013	v P/hp	<013	<013	<013	<013	<013	<013
zen` o(s@yrene	30., 2,-	013	v P/hp	<013	<013	<013	<013	<013	<013
83Methy.ntho.snthrene	3X,46,3	013	v P/hp	<013	<013	<013	<013	<013	<013
Tdeno(128mi@yrene	16., .6,3	013	v P/hp	<013	<013	<013	<013	<013	<013
Ricen` (s@nthsrne	3., 50.,	013	v P/hp	<013	<013	<013	<013	<013	<013
zen` o(b+h@ery,ene	161,24,2	013	v P/hp	<013	<013	<013	<013	<013	<013
^: Cu^ of / S' g	013	v P/hp	<013	<013	<013	<013	<013	<013
E/ 0C4 : / hths.ste Egtger									
Ri^ ethy. phths.ste	1., 1,11.,	013	v P/hp	<013	<013	<013	<013	<013	<013
Riethy. phths.ste	- 4,XX,2	013	v P/hp	<013	<013	<013	<013	<013	<013
Ri3i3uty. phths.ste	- 4,54,2	013	v P/hp	<013	<013	<013	<013	<013	<013
zuty. cen` y. phths.ste	- 3,X,5	013	v P/hp	<013	<013	<013	<013	<013	<013
cig(23thy.hexy.@hths.ste	115,-1,5	013	v P/hp	<310	<310	<310	<310	<310	<310
Ri3i3nty,phths.ste	115,-4,0	013	v P/hp	<013	<013	<013	<013	<013	<013
E/ 0C4R: Nitrogs^ ineg									
NNitrogo^ ethy. ethy.s^ ine	10363,63,X	013	v P/hp	<013	<013	<013	<013	<013	<013
NNitrogo^ ethy.s^ ine	33,1-,3	013	v P/hp	<013	<013	<013	<013	<013	<013
NNitrogo^ro.idine	6, 0,33,2	013	v P/hp	<110	<110	<110	<110	<110	<110
NNitrogo^ orpho.ine	36,- 6,2	013	v P/hp	<013	<013	<013	<013	<013	<013
NNitrogo^i3i3propy.s^ ine	X21,X4,5	013	v P/hp	<013	<013	<013	<013	<013	<013
NNitrogo^iperidine	100,53,4	013	v P/hp	<013	<013	<013	<013	<013	<013
NNitrogo^icuty.s^ ine	624,1X,	013	v P/hp	<013	<013	<013	<013	<013	<013
NNitrogo^dipheny. F	- X, 0,X:122., 6,4	013	v P/hp	<110	<110	<110	<110	<110	<110
Ripheny.s^ ine									
Methsypri.ene	61,- 0,3	013	v P/hp	<013	<013	<013	<013	<013	<013
E/ 0GE: Nitrosgro^ sting snd J etoneg									
23 im.ine	106,0X,-	013	v P/hp	<013	<013	<013	<013	<013	<013
Snetophenone	6-, X,2	013	v P/hp	<013	<013	<013	<013	<013	<013
Nitrocen` ene	6- 63.,	013	v P/hp	<013	<013	<013	<013	<013	<013
Thophorone	5-, 36,1	013	v P/hp	<013	<013	<013	<013	<013	<013
2+ 3Rinitroto.uene	X0X,20,2	013	v P/hp	<110	<110	<110	<110	<110	<110
2+ 3Rinitroto.uene	121,14,2	013	v P/hp	<110	<110	<110	<110	<110	<110
13Nspthy.s^ ine	1. 4., 2,5	013	v P/hp	<013	<013	<013	<013	<013	<013
93Nitroquino.ineN3xide	3X,35,3	013	v P/hp	<013	<013	<013	<013	<013	<013



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 W th:d bAsb
 y 43i r
 e b jsur

g 6: 013
 g EM1201353
 g Gd f mEw:Skkd y 6TEK
 g 115X1: 201:7,RY

Analytical Results

Compound	CAS Number	LOR	Unit	Client sampling date / time					Client sample ID
				SG I 12002	SG I 22001	SG I 92002	SG I 42001	SG I - 2002	
E/ 0G4E: Nitrosro [^] sting snd J etoneg 8l ontinued									
43Nitro3o3o.uidine	66,33,-	013	v P/hP	<013	<013	<013	<013	<013	<013
S' ocen' ene	10.....	1	v P/hP	<1	<1	<1	<1	<1	<1
1443 rinitrocen' ene	66.. 3,4	013	v P/hP	<013	<013	<013	<013	<013	<013
/ hensretin	X2,44,2	013	v P/hP	<013	<013	<013	<013	<013	<013
93S [^] inocipheny.	62,X5,1	013	v P/hP	<013	<013	<013	<013	<013	<013
/ entsnth.oronitrocen' ene	- 2,X,-	013	v P/hP	<013	<013	<013	<013	<013	<013
/ rons [^] ide	2. 630,3,- 3	013	v P/hP	<013	<013	<013	<013	<013	<013
Ri [^] ethy.s [^] inos' ocen' ene	X0,11,5	013	v P/hP	<013	<013	<013	<013	<013	<013
I h.orocen' iste	310,13,X	013	v P/hP	<013	<013	<013	<013	<013	<013
E/ 0G4U: ' s.oetherg									
z ig(23th.oroethy. ether	111,44,4	013	v P/hP	<013	<013	<013	<013	<013	<013
z ig(23th.oroethoxy ether	111,61,1	013	v P/hP	<013	<013	<013	<013	<013	<013
93 h.oropheny. pheny. ether	5003,52,.	013	v P/hP	<013	<013	<013	<013	<013	<013
93 ro [^] opheny. pheny. ether	101,33,.	013	v P/hP	<013	<013	<013	<013	<013	<013
E/ 0G4L: I h.orinsted' ydronsrong									
143Rinh.orocen' ene	341,5, .1	013	v P/hP	<013	<013	<013	<013	<013	<013
143Rinh.orocen' ene	10X 4X,5	013	v P/hP	<013	<013	<013	<013	<013	<013
143Rinh.orocen' ene	63,30,1	013	v P/hP	<013	<013	<013	<013	<013	<013
' exsmth.oroethsne	X5,52,1	013	v P/hP	<013	<013	<013	<013	<013	<013
1443 Rinh.orocen' ene	120,- 2,1	013	v P/hP	<013	<013	<013	<013	<013	<013
' exsmth.oroopropy.ene	1-- ,51,5	013	v P/hP	<013	<013	<013	<013	<013	<013
' exsmth.oroocutsdiene	- 5,X, .	013	v P/hP	<013	<013	<013	<013	<013	<013
' exsmth.oroymopentsdiene	55,45,4	013	v P/hP	<213	<213	<213	<213	<213	<213
/ entsnth.orocen' ene	X0- ,6, ,3	013	v P/hP	<013	<013	<013	<013	<013	<013
' exsmth.orocen' ene (I z @	11- ,54,1	013	v P/hP	<110	<110	<110	<110	<110	<110
E/ 0G4' : Sni.ineg snd z en' idineg									
Sni.ine	X2,3, .	013	v P/hP	<013	<013	<013	<013	<013	<013
93 h.orosni.ine	10X 45,-	013	v P/hP	<013	<013	<013	<013	<013	<013
23Nitrosni.ine	- ,54,4	013	v P/hP	<110	<110	<110	<110	<110	<110
83Nitrosni.ine	66,06,2	013	v P/hP	<110	<110	<110	<110	<110	<110
Ricen' ofursn	1. 2,X4,6	013	v P/hP	<013	<013	<013	<013	<013	<013
93Nitrosni.ine	100,01,X	013	v P/hP	<013	<013	<013	<013	<013	<013
I srce' o.e	- X 54,-	013	v P/hP	<013	<013	<013	<013	<013	<013
84VRinh.orocen' idine	61,64,1	013	v P/hP	<013	<013	<013	<013	<013	<013
E/ 0G4I: Orbsnoth.orine / egtintdeg									
s.phs3' l	. 16,- 4,X	013	v P/hP	<013	<013	<013	<013	<013	<013
cets3' l	. 16,- 3,5	013	v P/hP	<013	<013	<013	<013	<013	<013
bs [^] ^ s3' l	3- , - 6,6	013	v P/hP	<013	<013	<013	<013	<013	<013



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g 10: 013
 g EM1201353
 g Gd f mEw:Skkd y VTEK
 g 115X1: 201:7,RY

Analytical Results

kDL, Mft&: COD

Compound	CAS Number	LOR	Unit	Client sampling date / time					Client sample ID
				SG I 1&002	SG I 2&001	SG I 9&002	SG I 4&001	SG I - &002	
E/ 0&T Orbsnomh.orine / egtimideg 3l ontinued									
de.ts& ' i	. 16,- X,-	013	v P/hp	<013	<013	<013	<013	<013	<013
' eptsnmh.or	5X.44,-	013	v P/hp	<013	<013	<013	<013	<013	<013
S.drln	.06.00.2	013	v P/hp	<013	<013	<013	<013	<013	<013
' eptsnmh.or epoxide	1024.35..	013	v P/hp	<013	<013	<013	<013	<013	<013
s.phs&ndogu.fsn	636.6,-	013	v P/hp	<013	<013	<013	<013	<013	<013
9&VRRE	52.33.6	013	v P/hp	<013	<013	<013	<013	<013	<013
Rie.drln	X0.35.1	013	v P/hp	<013	<013	<013	<013	<013	<013
Endrin	52.20,-	013	v P/hp	<013	<013	<013	<013	<013	<013
cets&ndogu.fsn	. . 21.,X3.6	013	v P/hp	<013	<013	<013	<013	<013	<013
9&VRRR	52.34,-	013	v P/hp	<013	<013	<013	<013	<013	<013
Endogu.fsn gu.fste	10. 1.05,-	013	v P/hp	<013	<013	<013	<013	<013	<013
9&VRRI	30.26..	013	v P/hp	<110	<110	<110	<110	<110	<110
E/ 0&X: Orbsnophoghorug / egtimideg									
Rlmh.orvog	X2.5. .5	013	v P/hp	<013	<013	<013	<013	<013	<013
Ri^ ethoste	X0.31.3	013	v P/hp	<013	<013	<013	<013	<013	<013
Ris^ ion	. . . ,41.3	013	v P/hp	<013	<013	<013	<013	<013	<013
I h.orpyrifog^ ethy.	336-, 1. , 0	013	v P/hp	<013	<013	<013	<013	<013	<013
Ms.sthion	121.53.3	013	v P/hp	<013	<013	<013	<013	<013	<013
Uenthion	33. - ,6	013	v P/hp	<013	<013	<013	<013	<013	<013
I h.orpyrifog	2621,- ,2	013	v P/hp	<013	<013	<013	<013	<013	<013
/ iri^ phog&thy.	2. 303.41.1	013	v P/hp	<013	<013	<013	<013	<013	<013
I h.orfenvinphog	450.60.X	013	v P/hp	<013	<013	<013	<013	<013	<013
/ rothiofog	.4X.,4X.4	013	v P/hp	<013	<013	<013	<013	<013	<013
Ethion	3X., 12.2	013	v P/hp	<013	<013	<013	<013	<013	<013
E/ 050&G: i lots. / etro.eu^ ' ydronsrong									
I - 31 wUrsntion	''''	10	v P/hp	<10	<10	<10	<10	<10	<10
I 10 31 19 Ursntion	''''	30	v P/hp	<30	<30	<30	<30	<30	<30
I 14 31 25 Ursntion	''''	100	v P/hp	<100	<100	<100	<100	<100	<100
I 2w31 8- Ursntion	''''	100	v P/hp	<100	<100	<100	<100	<100	<100
^: I 10 31 8- Ursntion (gu^ @	''''	30	v P/hp	<30	<30	<30	<30	<30	<30
E/ 050&G: i lots. Aermoversc.e ' ydronsrong 3NE/ M 2010 Rrsft									
I - 31 10 Ursntion	''''	10	v P/hp	<10	<10	<10	<10	<10	<10
>I 10 31 1- Ursntion	''''	30	v P/hp	<30	<30	<30	<30	<30	<30
>I 1- 31 89 Ursntion	''''	100	v P/hp	<100	<100	<100	<100	<100	<100
>I 89 31 90 Ursntion	''''	100	v P/hp	<100	<100	<100	<100	<100	<100
^: >I 10 31 90 Ursntion (gu^ @	''''	30	v P/hp	<30	<30	<30	<30	<30	<30
E/ 21- : / ermh.orste cy DI &MC									
/ ermh.orste	5X01.60..	1010	%P/hp	<1010	<1010	<1010	<1010	<1010	<1010



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W th:d bAsb
y 4Si r
e b jsur

g 11: 013
g EM1201353
g Gd f mEw:Skkd y 8TEK
g 115X1: 201:7,Ry

Analytical Results

kDL, MfIt&: COD

Compound	CAS Number	LOR	Unit	Client sampling date / time	SG I 1&002	SG I 2&001	SG I 9&002	SG I 4&001	SG I - &002
E/ 2&1: / erf.uorootny. Smdg snd Cu.fonsteg+									
/ UOC	15X.,2.,1	010003	v P/hP	14,7EO,2012:13g00	<010003	<010003	<010003	0-0100-	0-012w
/ UOS	. . 3,X5,1	010003	v P/hP	14,7EO,2012:13g00	<010003	<010003	<010003	<010003	<010003
-:2 Uuorote.o^ er Cu.fonste (-:2	25X16,65,2	01003	v P/hP	14,7EO,2012:13g00	<01003	<01003	<01003	<01003	<01003
UC@									
E/ 0- - C: / I z Currobste									
Rensnh.rocipheny.	2031,24,.	011	µ	14,7EO,2012:13g00	52-8	G&8	W4-0	52+*	W1-5
E/ 0- 5C: Orbsnoh.orine / egtimide Currobste									
Ricro^ o&RE	21X3,5.,2	011	µ	14,7EO,2012:13g00	55+4	52-0	W1-5	W2-8	109
E/ 0- 5I: Orbsnophoghorug / egtimide Currobste									
REU	5- ,4,-,-	011	µ	14,7EO,2012:13g00	W1+4	5- -2	54+5	W2-9	102
E/ 0G&C: ° OI Currobste									
1-2&Rinh.oroethsne&R9	150X0,05,0	011	µ	14,7EO,2012:13g00	-GG	--&G	G1+	G&+I	54-8
I o.uene&R5	20. 5,2X,3	011	µ	14,7EO,2012:13g00	G&+9	G&+5	G&+0	G- +I	50+*
9& ro^ of.uorocen` ene	4X0,00,4	011	µ	14,7EO,2012:13g00	G&+5	- W*	G&+I	G- W	G- 0
E/ 0G&C: Smd Extrstsc.e Currobste									
2&J.uoropheno.	. X5,12,4	011	µ	14,7EO,2012:13g00	G&+*	4Gw	58+5	G&+5	- 1-5
/ heno.3&I-	1. 125,-,-,.	011	µ	14,7EO,2012:13g00	- 2-5	4Ww	G1+	- 8-6	48-0
2&I h.orpheno.&R9	6. 631,5.,X	011	µ	14,7EO,2012:13g00	--&5	4- +	G1+2	- 8+I	9W4I
2-9+&3 ricro^ opheno.	11- ,56,X	011	µ	14,7EO,2012:13g00	G&+5	G&+9	59+0	G&+2	G&+4
E/ 0G&I: z sge&Neutr. Extrstsc.e Currobste									
Nitroce` ene&R4	41X3,X0,0	011	µ	14,7EO,2012:13g00	- 8+4	48&2	G- 8	G&+0	- 2-8
1-2&Rinh.rocen` ene&R9	2166,X6,1	011	µ	14,7EO,2012:13g00	- 1+4	41+0	G&+8	-- +*	- 2-W
2&J.uorocipheny.	. 21,X0,-	011	µ	14,7EO,2012:13g00	- W9	- 4+4	G&+9	G&+9	G&+5
Snthrsme&3I10	1516,0X,-	011	µ	14,7EO,2012:13g00	10-	108	102	W&H	109
9&I erpheny.&3I19	151- ,31,0	011	µ	14,7EO,2012:13g00	Ww&5	W0+9	Ww*	100	105
E/ 050C: I / ° I EK Currobste									
1-2&Rinh.oroethsne&R9	150X0,05,0	011	µ	14,7EO,2012:13g00	- 4-6	- 4+*	G&+0	G&+0	59+4
I o.uene&R5	20. 5,2X,3	011	µ	14,7EO,2012:13g00	G- +*	G&+5	Gw&9	51+*	54+5
9& ro^ of.uorocen` ene	4X0,00,4	011	µ	14,7EO,2012:13g00	Gw&0	G&+0	50+2	51+5	5- -0



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 W th:d bAsb
 y 6i r
 e b jsur

g 12: 013
 g EM1201353
 g Gd f mEW:Skkd y 6TEK
 g 115X1: 201:7,Ry

Analytical Results

kDL, MFB&: COD

Compound	CAS Number	Client sampling date / time		SG GZG01	Unit	LOR	Client sample ID
		14,7EO,2012:13g00	EM12014G:3014				
ES044: Moisture content							
Moisture content (dried) 108Z @		110	μ	<110			3333
E/ 0G9S: MononymimSro^ stim' ydronsrong							
zen`ene	51,4,2	012	v P/hp	<012			3333
I o.uene	10-,-,-,	013	v P/hp	<013			3333
Ethy.cen`ene	100,41,4	013	v P/hp	<013			3333
^ ets3F psrs3ky.ene	10-,-,-,10X,42,.	013	v P/hp	<013			3333
Cyrene	100,42,3	013	v P/hp	<013			3333
ortho3ky.ene	63,45,X	013	v P/hp	<013			3333
3popropy.cen`ene	6-,-,2,-	013	v P/hp	<013			3333
n3 ropy.cen`ene	10, ,X3,1	013	v P/hp	<013			3333
1843 ri^ ethy.cen`ene	10-,-,X5,-	013	v P/hp	<013			3333
gen&uty.cen`ene	1,3,6,-,-	013	v P/hp	<013			3333
12493 ri^ ethy.cen`ene	63,X,X	013	v P/hp	<013			3333
fert&uty.cen`ene	6-,-,0XX	013	v P/hp	<013			3333
p3popropy.to.uene	66,-5,X	013	v P/hp	<013			3333
n&uty.cen`ene	104,31,-	013	v P/hp	<013			3333
E/ 0G9z : Oxybensted I o^ poundg							
°iny. Smetste	10-,-,03,4	3	v P/hp	<3			3333
2& utsnone (MEJ @	5-,-,6,.,	3	v P/hp	<3			3333
93Methy.2&pentstone (Mz J @	10-,-,10,1	3	v P/hp	<3			3333
23 exsnone (Mz J @	361,5,-,X	3	v P/hp	<3			3333
E/ 0G9l : Cu.fonsted I o^ poundg							
I srcon digu.fide	53,13,0	013	v P/hp	<013			3333
E/ 0G9R: Uu^ ibsntg							
22&3Rimh.ororopsne	364,20,5	013	v P/hp	<013			3333
12&3Rimh.ororopsne	5-,-,5,3	013	v P/hp	<013			3333
rig31&3Rimh.ororopy.ene	100X1,01,3	013	v P/hp	<013			3333
trsn31&3Rimh.ororopy.ene	100X1,02,X	013	v P/hp	<013			3333
12&3Ricro^ oethsne (ERz @	10X6,4	013	v P/hp	<013			3333
E/ 0G9E: ' s.obensted S.iphsstiml o^ poundg							
Rimh.oro dif.uoro^ ethsne	53,51,-	3	v P/hp	<3			3333
I h.oro^ ethsne	54,-,5,.	3	v P/hp	<3			3333
°iny. rth.oride	53,01,4	3	v P/hp	<3			3333
z ro^ o^ ethsne	54,-,-,6	3	v P/hp	<3			3333
I h.oroethsne	53,00,.	3	v P/hp	<3			3333
I rimh.oro f.uoro^ ethsne	53,X6,4	3	v P/hp	<3			3333
14&3Rimh.oroethene	53,.,3,4	013	v P/hp	<013			3333



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 W th:d bAsb
 y 481 r
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g 1.: 013
 g EM1201353
 g Gd f mEw:Skk d y 8TEK
 g 115X1: 201:7,Ry

Analytical Results

kDL, MFt&: COD

Compound	Client sampling date / time		Client sample ID	SG I G2G01	14,7EO,2012:13g00	3333	3333	3333	3333
	CAS Number	LOR							
E/ 0G9E: ' s.obensted S.iphsstiml o^ poundg 31 ontinued									
Todo^ ethsne	54,-,-,4	013	v P/hP	<013					3333
trsnng31-423Rinh.oroethene	13X.X0,3	013	v P/hP	<013					3333
1413Rinh.oroethsne	53.,4.,	013	v P/hP	<013					3333
rtng31-423Rinh.oroethene	13X.36,2	013	v P/hP	<013					3333
14143 Rinh.oroethsne	51,33,X	013	v P/hP	<013					3333
1413Rinh.oroopropylene	3X.,3-,X	013	v P/hP	<013					3333
I srcon I etrsnh.oride	3X.2.,3	013	v P/hP	<013					3333
1-423Rinh.oroethsne	105.0X,2	013	v P/hP	<013					3333
I rinh.oroethene	56.01,X	013	v P/hP	<013					3333
Ricro^ o^ ethsne	54.63.,	013	v P/hP	<013					3333
141423 Rinh.oroethsne	56.00,3	013	v P/hP	<013					3333
1-423Rinh.oroopropsne	142,2-,6	013	v P/hP	<013					3333
I etrsnh.oroethene	125,1-,4	013	v P/hP	<013					3333
141423 etrsnh.oroethsne	X 0,20,X	013	v P/hP	<013					3333
trsnng31-423Rinh.oro23:utene	110,35,X	013	v P/hP	<013					3333
rtng31-423Rinh.oro23:utene	145X 11,3	013	v P/hP	<013					3333
141423 etrsnh.oroethsne	56., 4,3	013	v P/hP	<013					3333
1-423 Rinh.oroopropsne	6X,1-,4	013	v P/hP	<013					3333
/ entsnh.oroethsne	5X,01,5	013	v P/hP	<013					3333
1-423Ricro^ o333h.oroopropsne	6X,12,-	013	v P/hP	<013					3333
' exsnh.oroacutdsiene	-5,X,.,	013	v P/hP	<013					3333
E/ 0G9U: ' s.obensted Sro^ stiml o^ poundg									
I h.oroecen`ene	10-,60,5	013	v P/hP	<013					3333
z ro^ ocen`ene	10-,X,1	013	v P/hP	<013					3333
23 h.oroeto.uene	63,46,-	013	v P/hP	<013					3333
93 h.oroeto.uene	10X,4.,4	013	v P/hP	<013					3333
1-423Rinh.oroecen`ene	34,1,5.,1	013	v P/hP	<013					3333
1-423Rinh.oroecen`ene	10X,4X,5	013	v P/hP	<013					3333
1-423Rinh.oroecen`ene	63,30,1	013	v P/hP	<013					3333
1-423 Rinh.oroecen`ene	120-,2,1	013	v P/hP	<013					3333
1-423 Rinh.oroecen`ene	-5,X1,X	013	v P/hP	<013					3333
E/ 0G9L: ' I rih.s.o^ ethsneg									
I h.orofofor^	X5,XX.	013	v P/hP	<013					3333
z ro^ odinh.oro^ ethsne	53,25,4	013	v P/hP	<013					3333
Ricro^ oinh.oro^ ethsne	124,4-,1	013	v P/hP	<013					3333
z ro^ ofor^	53,23,2	013	v P/hP	<013					3333
E/ 0G9: ' Nspth.s.ene									
Nspth.s.ene	61,20,.	3	v P/hP	<3					3333



eFFS
 W th:d bAsb
 y 6Si r
 e b jsur
 g 14: 013
 g EM1201353
 g Gd f mEw:Skkd y V8TEK
 g 115X1: 201:7,RY

Analytical Results

k DL, MfIt&: COD

Compound	CAS Number	LOR	Client sample ID	
			Client sampling date / time	Unit
E/ 0G9C: ° OI Currobsteg			SG I G2G01	3333
1-23Rimh.oroethsne3R9	150X0,05,0	011	14,7EO,2012:13g00	3333
I o.uene3R5	20.5,2X,3	011	EM12014G43014	3333
9& ro^ of.uorocen`ene	4X0,00,4	011		
			WG2	3333
			W0-2	3333
			5W4	3333



eFFS
 W th:d tAsb
 y fSi r
 e b jsur
 g 13: 013
 g EM1201353
 g Gd f mEW:Skkd y VTEK
 g 115X1: 2017,Ry

Surrogate Control Limits

Compound	CAS Number	Recovery Limits (%)	
		Low	High
E/ 0- - C: / I z Currobste			
Remnth. orocipheny.	2031,24,,	..	1..
E/ 0- -5C: Orbsnomh. orine / egtimide Currobste			
Ricro^ oRRE	21X33.5.,2	261-	14X
E/ 0- -5I : Orbsnophoghporug / egtimide Currobste			
REU	5-,4,-,	2.15	14X
E/ 0C9C: ° OI Currobste			
1e3Rimh. oroethsneR9	150X0,05,0	X2	122
I o. ueneR5	20. 5.2X,3	X4	120
9z ro^ of. urocen` ene	4X0,00,4	XX	124
E/ 0G4C: Sniid Extrtsmsc.e Currobste			
23J. uoropheno.	. X5,12,4	14	12X
/ heno.3d-	1. 125,-,-,	1212	122
23 h. oropheno. R9	6. 631,5.,X	1412	125
29+ 3 ricro^ opheno.	11-,56,X	1214	1..
E/ 0C4I : z sgeNeutrs. Extrtsmsc.e Currobste			
Nitrocent. eneR4	41X3,X0,0	1214	12-
1e3Rimh. orocen` eneR9	2166,X6,1	111X	10-
23J. uorocipheny.	. 21,X0,-	1-15	125
SnthrsmeR10	1516,0X,-	2-13	142
93 erpheny. R19	151-,31,0	231-	1.-
E/ 050C: I / ° @ I EK Currobste			
1e3Rimh. oroethsneR9	150X0,05,0	35	126
I o. ueneR5	20. 5.2X,3	3-	120
9z ro^ of. urocen` ene	4X0,00,4	3X	12X

Environmental Division

QUALITY CONTROL REPORT

Work Order	: EM12015G5	Page	: 1 of 31
Client	: L O D R E A S C C O I T E C	Laboratory	: Environmental Division Melbourne
Contact	: Niamh McCormack	Contact	: Samantha Smith
Address	: P O BOX 6079 Building 7, 570-588 Swan St, Richmond, VIC. 2131 HAWTHORN WEST VIC, AUSTRALIA 2133	Address	: 4 Westall Rd Springvale VIC Australia 2171
E-mail	: nmccormack@golder.com.au	E-mail	: samantha.smith@alsglobal.com
Telephone	: +61 02 8863 2500	Telephone	: +61-2-8549 9644
Facsimile	: +61 02 8863 2501	Facsimile	: +61-2-8549 9601
Project	: 117612301 F-VIC	QC Level	: NEPM 1999 Schedule B(2) and ALS QCS2 requirement
Site	: F-VIC	Date Samples Received	: 15-FEB-2013
C-O-C number	: ----	Issue Date	: 37-FEB-2013
Sampler	: ----	No. of samples received	: 15
Order number	: KA-MELB 223509	No. of samples analysed	: 6
Quote number	: ME05403		

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 Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report/ Relative Percentage Difference (RPD), and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report/ Recovery and Acceptance Limits
- Matrix; Spike (MS) Report/ Recovery and Acceptance Limits



NATA Accredited Laboratory 835

Accredited for compliance with
ISO/IEC 17035.

WORLD RECOGNISED
ACCREDITATION

Signatories

This document has been electronically signed by the authorised signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 31 CFR Part 11.

Signatories	Position	Accreditation Category
Dilani Fernando	Senior Inorganic Chemist	Melbourne Inorganics
Nancy Wang	Senior Semivolatle Instrument Chemist	Melbourne Inorganics
Nancy Wang	Senior Semivolatle Instrument Chemist	Melbourne Organics
Phalak Inthaksono	Laboratory Manager - Organics	Sydney Organics
Xingbin Lin	Senior Organic Chemist	Melbourne Inorganics
Xingbin Lin	Senior Organic Chemist	Melbourne Organics



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Work Order : EM1301575
Client : KOLDER ASSOCIATES
Project : 117612301 F-VIC

General Comments

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

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

Where a reported less than (z) result is higher than the LOR, this may be due to primary sample e; track@diligestate dilution and@r 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 matri; interference.

#ey :

Anonymous < Refers to samples which are not specifically part of this work order but formed part of the QC process lot
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

RPD < Relative Percentage Difference

= < Indicates failed QC



Page : 2 of 31
 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-ENG38 and are dependent on the magnitude of results in comparison to the level of reporting: Result z 10 times LOR:- No Limit/ Result between 10 and 30 times LOR:- 0% - 50%/ Result > 30 times LOR:- 0% - 30%.

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
Sub-Matrix: : COD									
ES002 : st iCor(Q7 u8 Do): 21Ga001 7									
EM1301550-001	Anonymous	EA003: pH Value	---	0.1	pH Unit	9.1	9.1	0.0	0% - 30%
ES055: Mo(Q)bre oy(ey) u8 Do): 21Ga0PG7									
EM1301575-003	A7PT1G003	EA055-102: Moisture Content (dried @ 102°C)	---	1.0	%	39.6	39.0	3.3	0% - 30%
EM1301590-004	Anonymous	EA055-102: Moisture Content (dried @ 102°C)	---	1.0	%	9.2	11.3	18.0	0% - 50%
EL005i : i o) - (Me) - (Q8c I v8EC u8 Do): 2161P4G7									
EB1304189-001	Anonymous	EK005T: Cadmium	7440-42-9	1	mg/kg	z1	z1	0.0	No Limit
		EK005T: Chromium	7440-47-2	3	mg/kg	14	13	30.3	No Limit
		EK005T: Nickel	7440-03-0	3	mg/kg	z3	3	0.0	No Limit
		EK005T: Arsenic	7440-28-3	5	mg/kg	z5	z5	0.0	No Limit
		EK005T: Copper	7440-50-8	5	mg/kg	z5	z5	0.0	No Limit
		EK005T: Lead	7429-93-1	5	mg/kg	z5	z5	0.0	No Limit
		EK005T: Zinc	7440-66-6	5	mg/kg	z5	5	0.0	No Limit
EM1301807-001	Anonymous	EK005T: Cadmium	7440-42-9	1	mg/kg	z1	z1	0.0	No Limit
		EK005T: Chromium	7440-47-2	3	mg/kg	15	15	0.0	No Limit
		EK005T: Nickel	7440-03-0	3	mg/kg	13	12	10.0	No Limit
		EK005T: Arsenic	7440-28-3	5	mg/kg	64	61	2.8	0% - 50%
		EK005T: Copper	7440-50-8	5	mg/kg	25	35	24.2	No Limit
		EK005T: Lead	7429-93-1	5	mg/kg	51	71	22.8	0% - 50%
		EK005T: Zinc	7440-66-6	5	mg/kg	118	115	3.7	0% - 30%
EL0a8i : i o) - (Aego9e-8(e Mergbr8c hTMC u8 Do): 2161P467									
EB1304189-001	Anonymous	EK025T: Mercury	7429-97-6	0.1	mg/kg	z0.1	z0.1	0.0	No Limit
EM1301807-001	Anonymous	EK025T: Mercury	7429-97-6	0.1	mg/kg	z0.1	0.1	0.0	No Limit
EV00P: O(B-yrg M-)er u8 Do): 21G1661 7									
EM1301497-001	Anonymous	EP004: Total Organic Carbon	----	0.5	%	3.1	3.1	0.0	No Limit
EM1301575-008	A7PT4G003	EP004: Total Organic Carbon	----	0.5	%	0.7	0.6	0.0	No Limit
EV044: vo(cgp(ory) - jed mspeyc(Qv) m7 u8 Do): 21G3GPG7									
EM1301575-003	A7PT1G003	EP066: Total Polychlorinated biphenyls	----	0.10	mg/kg	z0.10	z0.10	0.0	No Limit
EM1301757-004	Anonymous	EP066: Total Polychlorinated biphenyls	----	0.10	mg/kg	z0.10	z0.10	0.0	No Limit
EV046S: O(B-yogp(orye veQ)gdeQLOI 7 u8 Do): 21G3GPG7									
EM1301575-003	A7PT1G003	EP068: alpha-BHC	219-84-6	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: He: achlorobenzene (HCB)	118-74-1	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: beta-BHC	219-85-7	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: delta-BHC	219-86-8	0.05	mg/kg	z0.05	z0.05	0.0	No Limit



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
EM1301575-003	A7PT1G003	Ev046S: OrB-yogp(ornye veQjgnteQLOI 7 u8 Do): 21GGPG Fgoyjybed							
		EP068: Heptachlor	76-44-8	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Aldrin	209-00-3	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Heptachlor epo; ide	1034-57-2	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: trans-Chlordane	5102-74-3	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: cis-Chlordane	5102-71-9	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: 4,4'-DDE	73-55-9	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Endrin	73-30-8	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: beta-Endosulfan	22312-65-9	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: 4,4'-DDD	73-54-8	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Endrin aldehyde	7431-92-4	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1021-07-8	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Endrin ketone	52494-70-5	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: 4,4'-DDT	50-39-2	0.3	mg/kg	z0.3	z0.3	0.0	No Limit
		EP068: Metho; ychlor	73-42-5	0.3	mg/kg	z0.3	z0.3	0.0	No Limit
EM1301575-004	Anonymous	EP068: alpha-BHC	219-84-6	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: He; achlorobexene (HCB)	118-74-1	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: beta-BHC	219-85-7	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: delta-BHC	219-86-8	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Aldrin	209-00-3	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Heptachlor epo; ide	1034-57-2	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: trans-Chlordane	5102-74-3	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: cis-Chlordane	5102-71-9	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: 4,4'-DDE	73-55-9	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Endrin	73-30-8	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: beta-Endosulfan	22312-65-9	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: 4,4'-DDD	73-54-8	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Endrin aldehyde	7431-92-4	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1021-07-8	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Endrin ketone	52494-70-5	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: 4,4'-DDT	50-39-2	0.3	mg/kg	z0.3	z0.3	0.0	No Limit
		EP068: Metho; ychlor	73-42-5	0.3	mg/kg	z0.3	z0.3	0.0	No Limit
Ev046r: OrB-yospoQs:porbQveQjgnteQLOv 7 u8 Do): 21GGPG7	A7PT1G003	EP068: Dichlorvos	63-72-7	0.05	mg/kg	z0.05	z0.05	0.0	No Limit



Page : 5 of 31
 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
EM1301575-003	Ev046m: OrB-yospoQs porbQveQigndeQuov7 uB Doj: 21G33Pz Fgoy jrybed A7PT1G003	EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Diaxinon	222-41-5	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-12-0	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Malathion	131-75-5	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Fenthion	55-28-9	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Chlorpyrifos	3931-88-3	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	32505-41-1	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4834-78-6	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Fenamiphos	33334-93-6	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Prothiofos	24642-46-4	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Ethion	562-13-3	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Axinphos Methyl	86-50-0	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Monocrotophos	6932-33-4	0.3	mg/kg	z0.3	z0.3	0.0	No Limit
		EP068: Parathion-methyl	398-00-0	0.3	mg/kg	z0.3	z0.3	0.0	No Limit
		EP068: Parathion	56-28-3	0.3	mg/kg	z0.3	z0.3	0.0	No Limit
		EP068: Dichlorvos	63-72-7	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Diaxinon	222-41-5	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-12-0	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Malathion	131-75-5	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Fenthion	55-28-9	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Chlorpyrifos	3931-88-3	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	32505-41-1	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4834-78-6	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Fenamiphos	33334-93-6	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Prothiofos	24642-46-4	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Ethion	562-13-3	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Axinphos Methyl	86-50-0	0.05	mg/kg	z0.05	z0.05	0.0	No Limit
		EP068: Monocrotophos	6932-33-4	0.3	mg/kg	z0.3	z0.3	0.0	No Limit
		EP068: Parathion-methyl	398-00-0	0.3	mg/kg	z0.3	z0.3	0.0	No Limit
		EP068: Parathion	56-28-3	0.3	mg/kg	z0.3	z0.3	0.0	No Limit
EM1301575-004	Anonymous								
EM1301575-003	Ev0GPS: Moyoqcg(tg SroH-) tjt t cdrog- r8oyQ uB Doj: 21G20257 A7PT1G003	EP074: Benzene	71-42-3	0.3	mg/kg	z0.3	z0.3	0.0	No Limit



Page : 6 of 31
 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Laboratory sample ID	Client sample ID	Method/Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
EV0GFS: Moyogcg(rg SroH -)rg t cdrog- r8oyQ uB Do): 21G20257 Fgoyjybed									
EM1301575-003	A7PT1G003	EP074: Toluene	108-88-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: Ethylbenzene	100-41-4	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: meta- & para-Xylene	108-28-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: Styrene	106-43-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: ortho-Xylene	100-43-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: Isopropylbenzene	95-47-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: n-Propylbenzene	98-83-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1,2,5-Trimethylbenzene	102-65-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: sec-Butylbenzene	108-67-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1,3,4-Trimethylbenzene	125-98-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: tert-Butylbenzene	95-62-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: p-Isopropyltoluene	98-06-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: n-Butylbenzene	99-87-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
EV0GFR: OxcBey-)ed oH sobyqQ uB Do): 21G20257									
EM1301575-003	A7PT1G003	EP074: Vinyl Acetate	108-05-4	5	mg/kg	z5	z5	0.0	No Limit
		EP074: 3-Butanone (ME#)	78-92-2	5	mg/kg	z5	z5	0.0	No Limit
		EP074: 4-Methyl-3-pentanone (MIB#)	108-10-1	5	mg/kg	z5	z5	0.0	No Limit
		EP074: 3-He: anone (MB#)	591-78-6	5	mg/kg	z5	z5	0.0	No Limit
EV0GPI : Cb(foy-)ed oH sobyqQ uB Do): 21G20257									
EM1301575-003	A7PT1G003	EP074: Carbon disulfide	75-15-0	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
EV0GPR: hbHrB-y)Q uB Do): 21G20257									
EM1301575-003	A7PT1G003	EP074: 3,3-Dichloropropane	594-30-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1,3-Dichloropropane	78-87-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: cis-1,2-Dichloropropylene	10061-01-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: trans-1,2-Dichloropropylene	10061-03-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1,3-Dibromoethane (EDB)	106-92-4	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
EV0GPE: t -(oBey-)ed S(rs-p-)rg oH sobyqQ uB Do): 21G20257									
EM1301575-003	A7PT1G003	EP074: 1,1-Dichloroethene	75-25-4	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: Iodomethane	74-88-4	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: trans-1,3-Dichloroethene	156-60-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1,1-Dichloroethane	75-24-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: cis-1,3-Dichloroethene	156-59-3	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1,1,1-Trichloroethane	71-55-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1,1-Dichloropropylene	562-58-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-32-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1,3-Dichloroethane	107-06-3	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: Dibromomethane	74-95-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
Ev0GPE: t - (oBay-)ed S(sp-)g I oH soby dQ uB I Do): 21G20257 Fgo y) y bed									
EM1301575-003	A7PT1G003	EP074: 1.1.3-Trichloroethane	79-00-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1.2-Dichloropropane	143-38-9	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: Tetrachloroethene	137-18-4	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1.1.1.3-Tetrachloroethane	620-30-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: trans-1.4-Dichloro-3-butene	110-57-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: cis-1.4-Dichloro-3-butene	1476-11-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1.1.3.3-Tetrachloroethane	79-24-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1.3.2-Trichloropropane	96-18-4	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1.3-Dibromo-2-chloropropane	96-13-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: He; a chlorobutadiene	87-68-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	z5	z5	0.0	No Limit
		EP074: Chloromethane	74-87-2	5	mg/kg	z5	z5	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	5	mg/kg	z5	z5	0.0	No Limit
		EP074: Bromomethane	74-82-9	5	mg/kg	z5	z5	0.0	No Limit
		EP074: Chloroethane	75-00-2	5	mg/kg	z5	z5	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	z5	z5	0.0	No Limit
Ev0GPh: t - (oBay-)ed StroH-)g I oH soby dQ uB I Do): 21G20257									
EM1301575-003	A7PT1G003	EP074: Chlorobenzene	108-90-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 3-Chlorotoluene	95-49-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-42-4	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1.2-Dichlorobenzene	541-72-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1.3-Dichlorobenzene	95-50-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1.3.4-Trichlorobenzene	130-83-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: 1.3.2-Trichlorobenzene	87-61-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
Ev0GPl: i rp- (oHe)p- yeQ uB I Do): 21G20257									
EM1301575-003	A7PT1G003	EP074: Chloroform	67-66-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: Bromodichloromethane	75-37-4	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: Dibromochloromethane	134-48-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP074: Bromoform	75-35-3	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
Ev0Gpt: N- sp)p- (eye uB I Do): 21G20257									
EM1301575-003	A7PT1G003	EP074: Naphthalene	91-30-2	5	mg/kg	z5	z5	0.0	No Limit
Ev0GSS: v psyo)g I oH soby dQ uB I Do): 21G33507									
EM1301575-003	A7PT1G003	EP075: Phenol	108-95-3	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 3-Chlorophenol	95-57-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 3-Methylphenol	95-48-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 2- & 4-Methylphenol	1219-77-2	0.5	mg/kg	z1.0	z1.0	0.0	No Limit



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			
						Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
Ev0G5S: vpeyo(tj oHsobyoQ uB Do): 21G3G507 Fgoyjybed									
EM1301575-003	A7PT1G003	EP075: 3-Nitrophenol	88-75-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 3,4-Dimethylphenol	105-67-9	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 3,4-Dichlorophenol	130-82-3	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 3,6-Dichlorophenol	87-65-0	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 4-Chloro-2-Methylphenol	59-50-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 3,4,6-Trichlorophenol	88-06-3	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 3,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Pentachlorophenol	87-86-5	1	mg/kg	z1	z1	0.0	No Limit
Ev0G5R: vocybg(e-r SroH - jg t cdrog-r8oyQ uB Do): 21G3G507									
EM1301575-003	A7PT1G003	EP075: Naphthalene	91-30-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 3-Methylnaphthalene	91-57-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 3-Chloronaphthalene	91-58-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Acenaphthylene	308-96-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Acenaphthene	82-23-9	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Fluorene	86-72-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Phenanthrene	85-01-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Anthracene	130-13-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Fluoranthene	306-44-0	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Pyrene	139-00-0	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: N-3-Fluorenyl Acetamide	52-96-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Benx(a)anthracene	56-55-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Chrysene	318-01-9	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 7,13-Dimethylbenx(a)anthracene	57-97-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Benxo(a)pyrene	50-23-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 2-Methylcholanthrene	56-49-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Indeno(1,3,2-cd)pyrene	192-29-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Dibenz(a,h)anthracene	52-70-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Benxo(g,h,i)perylene	191-34-3	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Sum of PAHs	----	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Benxo(b) & Benxo(k)fluoranthene	305-99-3	1	mg/kg	z1	z1	0.0	No Limit
			307-08-9						
Ev0G5I : v(p)-(-e EQerQ uB Do): 21G3G507									
EM1301575-003	A7PT1G003	EP075: Dimethyl phthalate	121-11-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Diethyl phthalate	84-66-3	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Di-n-butyl phthalate	84-74-3	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: bis(3-ethylhe; yl) phthalate	117-81-7	0.5	mg/kg	z5.0	z5.0	0.0	No Limit
		EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
Ev0G5R: N(j)roQ_H ryeQ uB Do): 21G3G507									



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Laboratory sample ID	Client sample ID	Method/Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
Ev0G6R: NjtroQ-H ryeQ uB I Do): 21G3G607 Fgoyjybed									
EM1301575-003	A7PT1G003	EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: N-Nitrosopyrrolidine	920-55-3	0.5	mg/kg	z1.0	z1.0	0.0	No Limit
		EP075: N-Nitrosomorpholine	59-89-3	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: N-Nitrosodi-n-propylamine	631-64-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: N-Nitrosodibutylamine	934-16-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: N-Nitrosodiphenyl & Diphenylamine	86-20-6	0.5	mg/kg	z1.0	z1.0	0.0	No Limit
		EP075: Methapyrilene	133-29-4						
		EP075: Methapyrilene	91-80-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
Ev0G6E: Njtro- roH - jgQ- yd KeJyeQ uB I Do): 21G3G607									
EM1301575-003	A7PT1G003	EP075: 3-Picoline	109-06-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Acetophenone	98-86-3	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Nitrobenzene	98-95-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Isophorone	78-59-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 3,6-Dinitrotoluene	606-30-3	0.5	mg/kg	z1.0	z1.0	0.0	No Limit
		EP075: 3,4-Dinitrotoluene	131-14-3	0.5	mg/kg	z1.0	z1.0	0.0	No Limit
		EP075: 1-Naphthylamine	124-23-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 1,2,5-Trinitrobenzene	99-25-4	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Phenacetin	63-44-3	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 4-Aminobiphenyl	93-67-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Pentachloronitrobenzene	83-68-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Pronamide	32950-58-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Dimethylaminoaxobenzene	60-11-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Chlorobenxilate	510-15-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Axobenzene	102-22-2	1	mg/kg	z1	z1	0.0	No Limit
Ev0G6h: t - (oe)perQ uB I Do): 21G3G607									
EM1301575-003	A7PT1G003	EP075: Bis(3-chloroethyl) ether	111-44-4	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Bis(3-chloroethoxy) methane	111-91-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 4-Chlorophenyl phenyl ether	7005-73-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 4-Bromophenyl phenyl ether	101-55-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
Ev0G6L: l p(ory-)ed t cdrog- r8oyQ uB I Do): 21G3G607									
EM1301575-003	A7PT1G003	EP075: 1,2-Dichlorobenzene	541-72-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 1,4-Dichlorobenzene	106-46-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 1,3-Dichlorobenzene	95-50-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: He: achloroethane	67-73-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 1,3,4-Trichlorobenzene	130-83-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Laboratory sample ID	Client sample ID	Method/Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
Ev0G5L : J plorry-)ed t cdrog-r8oyQ u8 I Do): 21G3G507 Fgoyjybed									
EM1301575-003	A7PT1G003	EP075: He: achloropropylene	1888-71-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: He: achlorobutadiene	87-68-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: He: achlorocyclopentadiene	77-47-4	0.5	mg/kg	z3.5	z3.5	0.0	No Limit
		EP075: Pentachlorobenzene	608-92-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: He: achlorobenzene (HCB)	118-74-1	0.5	mg/kg	z1.0	z1.0	0.0	No Limit
Ev0G5t : SyryryeQ- yd mayzndryeQ u8 I Do): 21G3G507									
EM1301575-003	A7PT1G003	EP075: Aniline	63-52-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 3-Nitroaniline	88-74-4	0.5	mg/kg	z1.0	z1.0	0.0	No Limit
		EP075: 2-Nitroaniline	99-09-3	0.5	mg/kg	z1.0	z1.0	0.0	No Limit
		EP075: Dibenzofuran	123-64-9	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Carbaxole	86-74-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 2,2'-Dichlorobenzidine	91-94-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
Ev0G5I OrB- yosg(orye veQjgndeQ u8 I Do): 21G3G507									
EM1301575-003	A7PT1G003	EP075: alpha-BHC	219-84-6	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: beta-BHC	219-85-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: gamma-BHC	58-89-9	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: delta-BHC	219-86-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Heptachlor	76-44-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Aldrin	209-00-3	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Heptachlor epoxide	1034-57-2	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 4,4'-DDE	73-55-9	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Dieldrin	60-57-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Endrin	73-30-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: beta-Endosulfan	22312-65-9	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 4,4'-DDD	73-54-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Endosulfan sulfate	1021-07-8	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: 4,4'-DDT	50-39-2	0.5	mg/kg	z1.0	z1.0	0.0	No Limit
Ev0G5J: OrB- yospoG5porbQveQjgndeQ u8 I Do): 21G3G507									
EM1301575-003	A7PT1G003	EP075: Dichlorvos	63-72-7	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Dimethoate	60-51-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Diaxinon	222-41-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Chlorpyrifos-methyl	5598-12-0	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Malathion	131-75-5	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Fenthion	55-28-9	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Chlorpyrifos	3931-88-3	0.5	mg/kg	z0.5	z0.5	0.0	No Limit
		EP075: Pirimphos-ethyl	32505-41-1	0.5	mg/kg	z0.5	z0.5	0.0	No Limit



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Sub-Matrix : COD		Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)		
Ev065J: OrB_yospo6sorbQveQjgrdeQ_üß Do): 21G3G507 Fgoyjybed											
EM1301575-003	A7PT1G003	EP075: Chlorfenvinphos	470-90-6	0.5	mgØg	z0.5	z0.5	0.0	No Limit		
		EP075: Prothiofos	24642-46-4	0.5	mgØg	z0.5	z0.5	0.0	No Limit		
		EP075: Ethion	562-13-3	0.5	mgØg	z0.5	z0.5	0.0	No Limit		
Ev060/0Gf: i o) - (ve)ro(ebH t cdrog-r8oyQ_üß Do): 21G202P7											
EM1301575-003	A7PT1G003	EP080: C6 - C9 Fraction	----	10	mgØg	z10	z10	0.0	No Limit		
Ev060/0Gf: i o) - (ve)ro(ebH t cdrog-r8oyQ_üß Do): 2161a157											
EB1304189-001	Anonymous	EP071: C15 - C38 Fraction	----	100	mgØg	1430	1380	10.7	0% - 50%		
		EP071: C39 - C26 Fraction	----	100	mgØg	250	210	13.5	No Limit		
		EP071: C10 - C14 Fraction	----	50	mgØg	5540	5420	3.0	0% - 30%		
		EP071: C10 - C26 Fraction (sum)	----	50	mgØg	7210	7030	4.0	0% - 30%		
EM1301812-002	Anonymous	EP071: C15 - C38 Fraction	----	100	mgØg	z100	z100	0.0	No Limit		
		EP071: C39 - C26 Fraction	----	100	mgØg	z100	z100	0.0	No Limit		
		EP071: C10 - C14 Fraction	----	50	mgØg	z50	z50	0.0	No Limit		
		EP071: C10 - C26 Fraction (sum)	----	50	mgØg	z50	z50	0.0	No Limit		
Ev060/0Gf: i o) - (Aeg9er-8(e t cdrog-r8oyQFNeyM 2010 Rr- f) _üß Do): 21G202P7											
EM1301575-003	A7PT1G003	EP080: C6 - C10 Fraction	----	10	mgØg	z10	z10	0.0	No Limit		
Ev060/0Gf: i o) - (Aeg9er-8(e t cdrog-r8oyQFNeyM 2010 Rr- f) _üß Do): 2161a157											
EB1304189-001	Anonymous	EP071: >C16 - C24 Fraction	----	100	mgØg	1070	920	14.1	No Limit		
		EP071: >C24 - C40 Fraction	----	100	mgØg	740	700	4.6	No Limit		
		EP071: >C10 - C16 Fraction	----	50	mgØg	6330	6070	3.4	0% - 30%		
		EP071: >C10 - C40 Fraction (sum)	----	50	mgØg	8020	7700	4.3	0% - 30%		
EM1301812-002	Anonymous	EP071: >C16 - C24 Fraction	----	100	mgØg	z100	z100	0.0	No Limit		
		EP071: >C24 - C40 Fraction	----	100	mgØg	z100	z100	0.0	No Limit		
		EP071: >C10 - C16 Fraction	----	50	mgØg	z50	z50	0.0	No Limit		
		EP071: >C10 - C40 Fraction (sum)	----	50	mgØg	z50	z50	0.0	No Limit		
Ev214: vergp(or-)e 8c Df /MC_üß Do): 21Ga1P27											
EM1301575-003	A7PT1G003	EP316: Perchlorate	7601-90-2	10.0	µgØg	z10.0	z10.0	0.0	No Limit		
Ev2a1: verf(boroog)c(SgrnQ_yd Ch(foy-)eQ_üß Do): 21G55Ga7											
EM1301441-001	Anonymous	EP321: PFOS	1762-32-1	0.0005	mgØg	0.387	0.379	2.0	0% - 30%		
		EP321: PFOA	225-67-1	0.0005	mgØg	0.0076	0.0085	10.9	0% - 50%		
		EP321: 6:3 Fluorotelomer Sulfonate (6:3 FtS)	37619-97-3	0.005	mgØg	0.026	0.039	30.2	No Limit		
EM1301575-009	A7PT5G001	EP321: PFOS	1762-32-1	0.0005	mgØg	0.0006	0.0007	17.8	No Limit		
		EP321: PFOA	225-67-1	0.0005	mgØg	z0.0005	z0.0005	0.0	No Limit		
		EP321: 6:3 Fluorotelomer Sulfonate (6:3 FtS)	37619-97-3	0.005	mgØg	z0.005	z0.005	0.0	No Limit		



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method G Laboratory Blank refers to an analyte free matrix; to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix; spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix : **COB**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
				Result	Concentration	Spike Recovery (%)	LCS	Low	High
EL 005i : i o) - (Me) - (Q8c T vFSEC u I Do): 2161P4G7									
EK005T: Arsenic	7440-28-3	5	mgØg	z5	12.6 mgØg	130	74	123	
EK005T: Cadmium	7440-42-9	1	mgØg	z1	3.8 mgØg	108	71	132	
EK005T: Chromium	7440-47-2	3	mgØg	z3	60.9 mgØg	114	72	135	
EK005T: Copper	7440-50-8	5	mgØg	z5	55.1 mgØg	111	74	134	
EK005T: Lead	7429-93-1	5	mgØg	z5	54.9 mgØg	114	74	136	
EK005T: Nickel	7440-03-0	3	mgØg	z3	55.1 mgØg	117	74	138	
EK005T: Zinc	7440-66-6	5	mgØg	z5	105 mgØg	99.1	74	134	
EL 0a5i : i o) - (Aego9er-8(e Mergbrc 8c hTMC u I Do): 2161P467									
EK025T: Mercury	7429-97-6	0.1	mgØg	z0.1	1.47 mgØg	102	64	116	
Ev 00P: O'B- yrg M-)er u I Do): 21Gf68l 7									
EP004: Total Organic Carbon	----	0.5	%	z0.5	42.5 %	98.0	94	118	
Ev 044: vo(egp(ory-)ed ms peyc(Q,u m7 u I Do): 21GGP67									
EP066: Total Polychlorinated biphenyls	----	0.1	mgØg	z0.10	1.34 mgØg	86.4	55	125	
Ev 046S: O'B- yogp(ory)e ve Q,mgfæQ, 7 u I Do): 21GGP67									
EP068: alpha-BHC	219-84-6	0.05	mgØg	z0.05	0.5 mgØg	96.7	53	122	
EP068: He: achlorobenzene (HCB)	118-74-1	0.05	mgØg	z0.05	0.5 mgØg	92.0	50	123	
EP068: beta-BHC	219-85-7	0.05	mgØg	z0.05	0.5 mgØg	79.2	50	128	
EP068: gamma-BHC	58-89-9	0.05	mgØg	z0.05	0.5 mgØg	92.1	54	123	
EP068: delta-BHC	219-86-8	0.05	mgØg	z0.05	0.5 mgØg	88.3	51	122	
EP068: Heptachlor	76-44-8	0.05	mgØg	z0.05	0.5 mgØg	98.4	51	124	
EP068: Aldrin	209-00-3	0.05	mgØg	z0.05	0.5 mgØg	93.4	53	122	
EP068: Heptachlor epox: ide	1034-57-2	0.05	mgØg	z0.05	0.5 mgØg	94.5	54	126	
EP068: trans-Chlordane	5102-74-3	0.05	mgØg	z0.05	0.5 mgØg	93.4	52	126	
EP068: alpha-Endosulfan	959-98-8	0.05	mgØg	z0.05	0.5 mgØg	97.6	52	122	
EP068: cis-Chlordane	5102-71-9	0.05	mgØg	z0.05	0.5 mgØg	93.8	53	127	
EP068: Dieldrin	60-57-1	0.05	mgØg	z0.05	0.5 mgØg	92.1	49	123	
EP068: 4,4'-DDE	73-55-9	0.05	mgØg	z0.05	0.5 mgØg	87.3	52	124	
EP068: Endrin	73-30-8	0.05	mgØg	z0.05	0.5 mgØg	100	45	141	
EP068: beta-Endosulfan	22312-65-9	0.05	mgØg	z0.05	0.5 mgØg	98.5	54	123	
EP068: 4,4'-DDD	73-54-8	0.05	mgØg	z0.05	0.5 mgØg	90.6	53	126	
EP068: Endrin aldehyde	7431-92-4	0.05	mgØg	z0.05	0.5 mgØg	81.2	49	125	
EP068: Endosulfan sulfate	1021-07-8	0.05	mgØg	z0.05	0.5 mgØg	97.8	49	143	
EP068: 4,4'-DDT	50-39-2	0.3	mgØg	z0.3	0.5 mgØg	104	40	146	
EP068: Endrin ketone	52494-70-5	0.05	mgØg	z0.05	0.5 mgØg	92.4	51	127	



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Sub-Matri : COD	Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
						Spike Concentration	Spike Recovery (%)	Recovery Limits (%)	
Ev046S: OrB- yopg(ormye veQjrgnteQLOI 7 uB Do): 21GCGPGR FgoyIyIybed									
EP068: Metho; ychlor		73-42-5	0.3	mgØg	z0.3	0.5 mgØg	100	28	149
Ev046mt. OrB- yospoGeporbQveQjrgnteQLOv7 uB Do): 21GCGPGR									
EP068: Dichlorvos		63-72-7	0.05	mgØg	z0.05	0.5 mgØg	81.5	25	127
EP068: Demeton-S-methyl		919-86-8	0.05	mgØg	z0.05	0.5 mgØg	58.5	36.8	140
EP068: Monocrotophos		6932-33-4	0.3	mgØg	z0.3	0.5 mgØg	80.7	10	185
EP068: Dimethoate		60-51-5	0.05	mgØg	z0.05	0.5 mgØg	99.1	46	144
EP068: Diaxinon		222-41-5	0.05	mgØg	z0.05	0.5 mgØg	96.4	50	124
EP068: Chlorpyrifos-methyl		5598-12-0	0.05	mgØg	z0.05	0.5 mgØg	94.6	53	124
EP068: Parathion-methyl		398-00-0	0.3	mgØg	z0.3	0.5 mgØg	96.3	50	127
EP068: Malathion		131-75-5	0.05	mgØg	z0.05	0.5 mgØg	95.3	46	140
EP068: Fenthion		55-28-9	0.05	mgØg	z0.05	0.5 mgØg	83.2	50	124
EP068: Chlorpyrifos		3931-88-3	0.05	mgØg	z0.05	0.5 mgØg	93.8	53	124
EP068: Parathion		56-28-3	0.3	mgØg	z0.3	0.5 mgØg	93.0	47	129
EP068: Pirimphos-ethyl		32505-41-1	0.05	mgØg	z0.05	0.5 mgØg	93.6	48	127
EP068: Chlorfenvinphos		470-90-6	0.05	mgØg	z0.05	0.5 mgØg	91.8	48	142
EP068: Bromophos-ethyl		4834-78-6	0.05	mgØg	z0.05	0.5 mgØg	92.7	53	126
EP068: Fenamiphos		33334-93-6	0.05	mgØg	z0.05	0.5 mgØg	79.0	27	126
EP068: Prothiofos		24642-46-4	0.05	mgØg	z0.05	0.5 mgØg	92.4	50	126
EP068: Ethion		562-13-3	0.05	mgØg	z0.05	0.5 mgØg	93.2	50	126
EP068: Carbophenothion		786-19-6	0.05	mgØg	z0.05	0.5 mgØg	91.2	47	128
EP068: Axinphos Methyl		86-50-0	0.05	mgØg	z0.05	0.5 mgØg	111	19.6	170
Ev0GpS: Moyogcg(Øg SroH -)Øg t cdrog- r8oyQ uB Do): 21G20257									
EP074: Benzene		71-42-3	0.3	mgØg	z0.3	1 mgØg	86.7	75	131
EP074: Toluene		108-88-2	0.5	mgØg	z0.5	1 mgØg	95.1	76	134
EP074: Ethylbenzene		100-41-4	0.5	mgØg	z0.5	1 mgØg	90.5	74	118
EP074: meta- & para-Xylene		108-28-2	0.5	mgØg	z0.5	3 mgØg	91.4	75	131
EP074: Styrene		106-43-2							
EP074: ortho-Xylene		100-43-5	0.5	mgØg	z0.5	1 mgØg	82.0	64	130
EP074: Isopropylbenzene		95-47-6	0.5	mgØg	z0.5	1 mgØg	91.5	77	131
EP074: n-Propylbenzene		98-83-8	0.5	mgØg	z0.5	1 mgØg	91.7	74	130
EP074: 1,2,5-Trimethylbenzene		102-65-1	0.5	mgØg	z0.5	1 mgØg	87.4	65	117
EP074: sec-Butylbenzene		108-67-8	0.5	mgØg	z0.5	1 mgØg	90.5	65	117
EP074: 1,3,4-Trimethylbenzene		125-98-8	0.5	mgØg	z0.5	1 mgØg	91.5	67	117
EP074: tert-Butylbenzene		95-62-6	0.5	mgØg	z0.5	1 mgØg	88.7	66	117
EP074: p-Isopropyltoluene		98-06-6	0.5	mgØg	z0.5	1 mgØg	91.0	68	116
EP074: n-Butylbenzene		99-87-6	0.5	mgØg	z0.5	1 mgØg	89.0	64	117
EP074: Vinyl Acetate		104-51-8	0.5	mgØg	z0.5	1 mgØg	80.2	59	115
EP074: Vinyl Acetate		108-05-4	5	mgØg	z5	10 mgØg	76.3	40	128



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)		
						LCS	Low	High
Ev0GPR: OxcBey - jed oH sobydyQ uB Doj: 21(20257 Fgoy)jybed								
EP074: 3-Butanone (ME#)	78-92-2	5	mgØg	z5	10 mgØg	98.2	61	142
EP074: 4-Methyl-3-pentanone (MIB#)	108-10-1	5	mgØg	z5	10 mgØg	86.8	62	127
EP074: 3-Hexanone (MB#)	591-78-6	5	mgØg	z5	10 mgØg	87.8	62	122
Ev0GPI : Cb(foy-)ed oH sobydyQ uB Doj: 21(20257								
EP074: Carbon disulfide	75-15-0	0.5	mgØg	z0.5	1 mgØg	63.8	57	131
Ev0GPR: hbH rB- y)Q uB Doj: 21(20257								
EP074: 3,3-Dichloropropane	594-30-7	0.5	mgØg	z0.5	1 mgØg	= 140	51	120
EP074: 1,3-Dichloropropane	78-87-5	0.5	mgØg	z0.5	1 mgØg	88.5	72	131
EP074: cis-1,2-Dichloropropylene	10061-01-5	0.5	mgØg	z0.5	1 mgØg	77.9	59	109
EP074: trans-1,2-Dichloropropylene	10061-03-6	0.5	mgØg	z0.5	1 mgØg	73.9	53	110
EP074: 1,3-Dibromoethane (EDB)	106-92-4	0.5	mgØg	z0.5	1 mgØg	94.3	68	130
Ev0GPE: t - (oBey-)ed S(isp-)jg oH sobydyQ uB Doj: 21(20257								
EP074: Dichlorodifluoromethane	75-71-8	5	mgØg	z5	10 mgØg	83.2	24	133
EP074: Chloromethane	74-87-2	5	mgØg	z5	10 mgØg	94.0	53	122
EP074: Vinyl chloride	75-01-4	5	mgØg	z5	10 mgØg	91.1	47	122
EP074: Bromomethane	74-82-9	5	mgØg	z5	10 mgØg	90.1	29	116
EP074: Chloroethane	75-00-2	5	mgØg	z5	10 mgØg	101	42	127
EP074: Trichlorofluoromethane	75-69-4	5	mgØg	z5	10 mgØg	75.3	61	136
EP074: 1,1-Dichloroethene	75-25-4	0.5	mgØg	z0.5	1 mgØg	63.1	63	134
EP074: Iodomethane	74-88-4	0.5	mgØg	z0.5	1 mgØg	60.3	47	116
EP074: trans-1,3-Dichloroethene	156-60-5	0.5	mgØg	z0.5	1 mgØg	85.0	69	119
EP074: 1,1-Dichloroethane	75-24-2	0.5	mgØg	z0.5	1 mgØg	91.2	70	130
EP074: cis-1,3-Dichloroethene	156-59-3	0.5	mgØg	z0.5	1 mgØg	87.4	73	130
EP074: 1,1,1-Trichloroethane	71-55-6	0.5	mgØg	z0.5	1 mgØg	84.4	64	113
EP074: 1,1-Dichloropropylene	562-58-6	0.5	mgØg	z0.5	1 mgØg	87.4	71	117
EP074: Carbon Tetrachloride	56-32-5	0.5	mgØg	z0.5	1 mgØg	79.0	51	106
EP074: 1,3-Dichloroethane	107-06-3	0.5	mgØg	z0.5	1 mgØg	90.0	70	136
EP074: Trichloroethene	79-01-6	0.5	mgØg	z0.5	1 mgØg	88.3	71	130
EP074: Dibromomethane	74-95-2	0.5	mgØg	z0.5	1 mgØg	84.2	70	133
EP074: 1,1,3-Trichloroethane	79-00-5	0.5	mgØg	z0.5	1 mgØg	94.2	72	135
EP074: 1,2-Dichloropropane	143-38-9	0.5	mgØg	z0.5	1 mgØg	94.5	75	135
EP074: Tetrachloroethene	137-18-4	0.5	mgØg	z0.5	1 mgØg	87.6	71	130
EP074: 1,1,1,3-Tetrachloroethane	620-30-6	0.5	mgØg	z0.5	1 mgØg	80.9	54	106
EP074: trans-1,4-Dichloro-3-butene	110-57-6	0.5	mgØg	z0.5	1 mgØg	89.0	46	113
EP074: cis-1,4-Dichloro-3-butene	1476-11-5	0.5	mgØg	z0.5	1 mgØg	= 124	31.8	117
EP074: 1,1,3,3-Tetrachloroethane	79-24-5	0.5	mgØg	z0.5	1 mgØg	97.5	71	121
EP074: 1,3,2-Trichloropropane	96-18-4	0.5	mgØg	z0.5	1 mgØg	111	70	124
EP074: Pentachloroethane	76-01-7	0.5	mgØg	z0.5	1 mgØg	72.2	40	94
EP074: 1,3-Dibromo-2-chloropropane	96-13-8	0.5	mgØg	z0.5	1 mgØg	82.7	41	112



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)		
						LCS	Low	High
Ev0GPE: t - (oBey-)ed S(ŝp-)ig oH sobyqQ ũB Do): 21G20257 Fgoy)jybed								
EP074: He: achlorobutadiene	87-68-2	0.5	mgŨg	z0.5	1 mgŨg	86.6	40	137
Ev0GPh: t - (oBey-)ed S(roH-)ig oH sobyqQ ũB Do): 21G20257								
EP074: Chlorobenzene	108-90-7	0.5	mgŨg	z0.5	1 mgŨg	94.4	78	130
EP074: Bromobenzene	108-86-1	0.5	mgŨg	z0.5	1 mgŨg	90.8	68	116
EP074: 3-Chlorotoluene	95-49-8	0.5	mgŨg	z0.5	1 mgŨg	90.3	67	117
EP074: 4-Chlorotoluene	106-42-4	0.5	mgŨg	z0.5	1 mgŨg	88.4	67	115
EP074: 1,2-Dichlorobenzene	541-72-1	0.5	mgŨg	z0.5	1 mgŨg	87.8	69	115
EP074: 1,4-Dichlorobenzene	106-46-7	0.5	mgŨg	z0.5	1 mgŨg	97.4	70	116
EP074: 1,3-Dichlorobenzene	95-50-1	0.5	mgŨg	z0.5	1 mgŨg	92.0	73	116
EP074: 1,3,4-Trichlorobenzene	130-83-1	0.5	mgŨg	z0.5	1 mgŨg	78.7	49	118
EP074: 1,3,2-Trichlorobenzene	87-61-6	0.5	mgŨg	z0.5	1 mgŨg	89.7	60	130
Ev0GPL: i rp- (oHe)p-yeQ ũB Do): 21G20257								
EP074: Chloroform	67-66-2	0.5	mgŨg	z0.5	1 mgŨg	85.2	71	131
EP074: Bromodichloromethane	75-37-4	0.5	mgŨg	z0.5	1 mgŨg	90.4	60	108
EP074: Dibromochloromethane	134-48-1	0.5	mgŨg	z0.5	1 mgŨg	91.7	48	104
EP074: Bromoform	75-35-3	0.5	mgŨg	z0.5	1 mgŨg	80.7	40	106
Ev0Gpt : N- sp)p- (eye ũB Do): 21G20257								
EP074: Naphthalene	91-30-2	5	mgŨg	z5	1 mgŨg	88.3	61	123
Ev0GGS: vpeyo(ŕg oH sobyqQ ũB Do): 21G20257								
EP075: Phenol	108-95-3	0.5	mgŨg	z0.5	3.5 mgŨg	95.4	28	128
EP075: 3-Chlorophenol	95-57-8	0.5	mgŨg	z0.5	3.5 mgŨg	78.6	29	139
EP075: 3-Methylphenol	95-48-7	0.5	mgŨg	z0.5	3.5 mgŨg	76.0	22	123
EP075: 2- & 4-Methylphenol	1219-77-2	0.5	mgŨg	z1.0	3.5 mgŨg	96.9	25	121
EP075: 3-Nitrophenol	88-75-5	0.5	mgŨg	z0.5	3.5 mgŨg	78.2	21	121
EP075: 3,4-Dimethylphenol	105-67-9	0.5	mgŨg	z0.5	3.5 mgŨg	93.2	10	125
EP075: 3,4-Dichlorophenol	130-82-3	0.5	mgŨg	z0.5	3.5 mgŨg	80.3	25	122
EP075: 3,6-Dichlorophenol	87-65-0	0.5	mgŨg	z0.5	3.5 mgŨg	83.5	26	123
EP075: 4-Chloro-2-Methylphenol	59-50-7	0.5	mgŨg	z0.5	3.5 mgŨg	92.0	29	142
EP075: 3,4,6-Trichlorophenol	88-06-3	0.5	mgŨg	z0.5	3.5 mgŨg	74.0	24	128
EP075: 3,4,5-Trichlorophenol	95-95-4	0.5	mgŨg	z0.5	3.5 mgŨg	108	20.3	143
EP075: Pentachlorophenol	87-86-5	1.0	mgŨg	z1	3.5 mgŨg	84.8	14	126
Ev0GSm: v(cybg(- r SroH -)ŕg t cdrog- r8oyQ ũB Do): 21G20257								
EP075: Naphthalene	91-30-2	0.5	mgŨg	z0.5	3.5 mgŨg	80.2	29	138
EP075: 3-Methylnaphthalene	91-57-6	0.5	mgŨg	z0.5	3.5 mgŨg	82.0	40	126
EP075: 3-Chloronaphthalene	91-58-7	0.5	mgŨg	z0.5	3.5 mgŨg	66.4	39.5	127
EP075: Acenaphthylene	308-96-8	0.5	mgŨg	z0.5	3.5 mgŨg	78.8	28	128
EP075: Acenaphthene	82-23-9	0.5	mgŨg	z0.5	3.5 mgŨg	80.8	45	122
EP075: Fluorene	86-72-7	0.5	mgŨg	z0.5	3.5 mgŨg	81.3	47	127



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Sub-Matrix : COB	Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
					Result	Concentration	Spike Recovery (%)		Recovery Limits (%)	
							LCS	Low	High	
Ev065m: v(cybg(e-r SroH -)jg t cdrog-r8oyQ uB Do): 21G03607 FgoyJybed										
EP075: Phenanthrene		85-01-8	0.5	mgØg	z0.5	3.5 mgØg	84.7	45	122	
EP075: Anthracene		130-13-7	0.5	mgØg	z0.5	3.5 mgØg	89.8	44	120	
EP075: Fluoranthene		306-44-0	0.5	mgØg	z0.5	3.5 mgØg	89.9	46	128	
EP075: Pyrene		139-00-0	0.5	mgØg	z0.5	3.5 mgØg	86.4	42	145	
EP075: N-3-Fluorenyl Acetamide		52-96-2	0.5	mgØg	z0.5	3.5 mgØg	87.4	42	142	
EP075: Benx(a)anthracene		56-55-2	0.5	mgØg	z0.5	3.5 mgØg	86.0	42	129	
EP075: Chrysene		318-01-9	0.5	mgØg	z0.5	3.5 mgØg	91.1	43	140	
EP075: Benxo(b) & Benxo(k)fluoranthene		305-99-3 307-08-9	1	mgØg	z1	5 mgØg	90.1	42	129	
EP075: 7,13-Dimethylbenx(a)anthracene		57-97-6	0.5	mgØg	z0.5	3.5 mgØg	87.8	40	154	
EP075: Benxo(a)pyrene		50-23-8	0.5	mgØg	z0.5	3.5 mgØg	86.3	28	128	
EP075: 2-Methylcholanthrene		56-49-5	0.5	mgØg	z0.5	3.5 mgØg	81.2	46	163	
EP075: Indeno(1,3,2.cd)pyrene		192-29-5	0.5	mgØg	z0.5	3.5 mgØg	110	49	159	
EP075: Dibenx(a,h)anthracene		52-70-2	0.5	mgØg	z0.5	3.5 mgØg	102	49	157	
EP075: Benxo(g,h,i)perylene		191-34-3	0.5	mgØg	z0.5	3.5 mgØg	132	48	158	
EP075: Sum of PAHs		----	0.5	mgØg	z0.5	----	----	---	----	
Ev066l : vpj(- e EQerQ uB Do): 21G03607										
EP075: Dimethyl phthalate		121-11-2	0.5	mgØg	z0.5	3.5 mgØg	82.8	40	143	
EP075: Diethyl phthalate		84-66-3	0.5	mgØg	z0.5	3.5 mgØg	85.9	48	140	
EP075: Di-n-butyl phthalate		84-74-3	0.5	mgØg	z0.5	3.5 mgØg	95.7	28	169	
EP075: Butyl benxyl phthalate		85-68-7	0.5	mgØg	z0.5	3.5 mgØg	93.0	43	140	
EP075: bis(3-ethylhe:yl) phthalate		117-81-7	0.5	mgØg	z5.0	3.5 mgØg	114	47	155	
EP075: Di-n-octylphthalate		117-84-0	0.5	mgØg	z0.5	3.5 mgØg	93.5	47	127	
Ev066R: NjroQ- H iyeQ uB Do): 21G03607										
EP075: N-Nitrosomethylethylamine		10595-95-6	0.5	mgØg	z0.5	3.5 mgØg	103	16.3	126	
EP075: N-Nitrosodiethylamine		55-18-5	0.5	mgØg	z0.5	3.5 mgØg	98.4	22	123	
EP075: N-Nitrosopyrrolidine		920-55-3	0.5	mgØg	z1.0	3.5 mgØg	90.3	37.7	120	
EP075: N-Nitrosomorpholine		59-89-3	0.5	mgØg	z0.5	3.5 mgØg	98.8	22	121	
EP075: N-Nitrosodi-n-propylamine		631-64-7	0.5	mgØg	z0.5	3.5 mgØg	86.4	26	137	
EP075: N-Nitrosopiperidine		100-75-4	0.5	mgØg	z0.5	3.5 mgØg	86.2	25	138	
EP075: N-Nitrosodibutylamine		934-16-2	0.5	mgØg	z0.5	3.5 mgØg	91.3	27	129	
EP075: N-Nitrosodiphenyl & Diphenylamine		86-20-6 133-29-4	0.5	mgØg	z1.0	3.5 mgØg	77.7	43	124	
EP075: Methapyrilene		91-80-5	0.5	mgØg	z0.5	3.5 mgØg	= 16.2	34.4	142	
Ev066E: Njro- roH -)jgQ- yd KeJyeQ uB Do): 21G03607										
EP075: 3-Picoline		109-06-8	0.5	mgØg	z0.5	3.5 mgØg	93.4	10	128	
EP075: Acetophenone		98-86-3	0.5	mgØg	z0.5	3.5 mgØg	75.4	25	138	
EP075: Nitrobenzene		98-95-2	0.5	mgØg	z0.5	3.5 mgØg	83.4	26	137	
EP075: Isophorone		78-59-1	0.5	mgØg	z0.5	3.5 mgØg	81.2	40	126	



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Recovery Limits (%)	
				Result	LCS	Low	High	
Ev065E: Njro-roH - jgQ-yd KejyeQ uB Do): 21G33507 Fgoyjybed								
EP075: 3,6-Dinitrotoluene	606-30-3	0.5	mgØg	z1.0	3.5 mgØg	80.4	43	140
EP075: 3,4-Dinitrotoluene	131-14-3	0.5	mgØg	z1.0	3.5 mgØg	77.6	46	140
EP075: 1-Naphthylamine	124-23-7	0.5	mgØg	z0.5	3.5 mgØg	= 4.5	10	84
EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mgØg	z0.5	3.5 mgØg	56.6	17.7	152
EP075: 5-Nitro-o-tolidine	99-55-8	0.5	mgØg	z0.5	3.5 mgØg	85.5	27	135
EP075: Axobenzene	102-22-2	1	mgØg	z1	3.5 mgØg	87.6	46	140
EP075: 1,2,5-Trinitrobenzene	99-25-4	0.5	mgØg	z0.5	3.5 mgØg	80.3	13.6	151
EP075: Phenacetin	63-44-3	0.5	mgØg	z0.5	3.5 mgØg	74.2	48	143
EP075: 4-Aminobiphenyl	93-67-1	0.5	mgØg	z0.5	3.5 mgØg	11.7	10	97
EP075: Pentachloronitrobenzene	83-68-8	0.5	mgØg	z0.5	3.5 mgØg	90.8	47	129
EP075: Pronamide	32950-58-5	0.5	mgØg	z0.5	3.5 mgØg	92.7	45	122
EP075: Dimethylaminoaxobenzene	60-11-7	0.5	mgØg	z0.5	3.5 mgØg	79.1	43	126
EP075: Chlorobenzilate	510-15-6	0.5	mgØg	z0.5	3.5 mgØg	70.2	41	141
Ev065h: t - (oe)perQ uB Do): 21G33507								
EP075: Bis(3-chloroethyl) ether	111-44-4	0.5	mgØg	z0.5	3.5 mgØg	84.1	26	146
EP075: Bis(3-chloroethoxy) methane	111-91-1	0.5	mgØg	z0.5	3.5 mgØg	75.8	40	126
EP075: 4-Chlorophenyl phenyl ether	7005-73-2	0.5	mgØg	z0.5	3.5 mgØg	80.1	46	126
EP075: 4-Bromophenyl phenyl ether	101-55-2	0.5	mgØg	z0.5	3.5 mgØg	74.5	44	140
Ev065L: l p(orry - jed t cdrog- r8oyQ uB Do): 21G33507								
EP075: 1,2-Dichlorobenzene	541-72-1	0.5	mgØg	z0.5	3.5 mgØg	74.4	25	133
EP075: 1,4-Dichlorobenzene	106-46-7	0.5	mgØg	z0.5	3.5 mgØg	81.0	26	135
EP075: 1,3-Dichlorobenzene	95-50-1	0.5	mgØg	z0.5	3.5 mgØg	73.5	27	132
EP075: He; achloroethane	67-73-1	0.5	mgØg	z0.5	3.5 mgØg	70.1	22	132
EP075: 1,3,4-Trichlorobenzene	130-83-1	0.5	mgØg	z0.5	3.5 mgØg	72.3	26	123
EP075: He; achloropropylene	1888-71-7	0.5	mgØg	z0.5	3.5 mgØg	82.6	36.6	127
EP075: He; achlorobutadiene	87-68-2	0.5	mgØg	z0.5	3.5 mgØg	78.1	40	120
EP075: He; achlorocyclopentadiene	77-47-4	0.5	mgØg	z3.5	3.5 mgØg	26.6	17.2	141
EP075: Pentachlorobenzene	608-92-5	0.5	mgØg	z0.5	3.5 mgØg	82.8	46	126
EP075: He; achlorobenzene (HCB)	118-74-1	0.5	mgØg	z1.0	5 mgØg	78.7	40	143
Ev065t: SyrytyeQ-yd meyznlryeQ uB Do): 21G33507								
EP075: Aniline	63-52-2	0.5	mgØg	z0.5	3.5 mgØg	34.9	10	114
EP075: 4-Chloroaniline	106-47-8	0.5	mgØg	z0.5	3.5 mgØg	18.2	10	102
EP075: 3-Nitroaniline	88-74-4	0.5	mgØg	z1.0	3.5 mgØg	90.2	40	143
EP075: 2-Nitroaniline	99-09-3	0.5	mgØg	z1.0	3.5 mgØg	45.7	32.2	135
EP075: Dibenxofuran	123-64-9	0.5	mgØg	z0.5	3.5 mgØg	79.7	46	124
EP075: 4-Nitroaniline	100-01-6	0.5	mgØg	z0.5	3.5 mgØg	67.1	28	123
EP075: Carbaxole	86-74-8	0.5	mgØg	z0.5	3.5 mgØg	85.7	44	124
EP075: 2,2'-Dichlorobenzidine	91-94-1	0.5	mgØg	z0.5	3.5 mgØg	30.7	10	134
Ev065T OrB-yogp(orrye veQjrydeQ uB Do): 21G33507								



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report				
				Result		Spike Concentration	Spike Recovery (%)		Recovery Limits (%)	
				Result	Result		LCS	Low	High	
Ev065T OrB-yogp(ornye veQjgndeQ u8 Do): 21G3G607 Fgoyjnybed										
EP075: alpha-BHC	219-84-6	0.5	mgØg	z0.5	z0.5	3.5 mgØg	86.4	50	124	
EP075: beta-BHC	219-85-7	0.5	mgØg	z0.5	z0.5	3.5 mgØg	91.0	47	125	
EP075: gamma-BHC	58-89-9	0.5	mgØg	z0.5	z0.5	3.5 mgØg	87.8	50	127	
EP075: delta-BHC	219-86-8	0.5	mgØg	z0.5	z0.5	3.5 mgØg	95.0	48	126	
EP075: Heptachlor	76-44-8	0.5	mgØg	z0.5	z0.5	3.5 mgØg	87.7	40	128	
EP075: Aldrin	209-00-3	0.5	mgØg	z0.5	z0.5	3.5 mgØg	91.3	44	140	
EP075: Heptachlor epo; ide	1034-57-2	0.5	mgØg	z0.5	z0.5	3.5 mgØg	86.6	45	129	
EP075: alpha-Endosulfan	959-98-8	0.5	mgØg	z0.5	z0.5	3.5 mgØg	96.8	46	143	
EP075: 4,4'-DDE	73-55-9	0.5	mgØg	z0.5	z0.5	3.5 mgØg	87.8	70	120	
EP075: Dieldrin	60-57-1	0.5	mgØg	z0.5	z0.5	3.5 mgØg	96.0	47	129	
EP075: Endrin	73-30-8	0.5	mgØg	z0.5	z0.5	3.5 mgØg	96.0	43	143	
EP075: beta-Endosulfan	22312-65-9	0.5	mgØg	z0.5	z0.5	3.5 mgØg	94.6	47	141	
EP075: 4,4'-DDD	73-54-8	0.5	mgØg	z0.5	z0.5	3.5 mgØg	84.1	43	146	
EP075: Endosulfan sulfate	1021-07-8	0.5	mgØg	z0.5	z0.5	3.5 mgØg	82.9	41	141	
EP075: 4,4'-DDT	50-39-2	0.5	mgØg	z1.0	z1.0	3.5 mgØg	86.6	19.6	148	
Ev065J: OrB-yospoQsporbQveQjgndeQ u8 Do): 21G3G607										
EP075: Dieldrin	63-72-7	0.5	mgØg	z0.5	z0.5	3.5 mgØg	81.6	31.9	121	
EP075: Dimethoate	60-51-5	0.5	mgØg	z0.5	z0.5	3.5 mgØg	90.3	28	143	
EP075: Diaxion	222-41-5	0.5	mgØg	z0.5	z0.5	3.5 mgØg	98.8	26	122	
EP075: Chlorpyrifos-methyl	5598-12-0	0.5	mgØg	z0.5	z0.5	3.5 mgØg	86.6	25	142	
EP075: Malathion	131-75-5	0.5	mgØg	z0.5	z0.5	3.5 mgØg	91.6	25	142	
EP075: Fenthion	55-28-9	0.5	mgØg	z0.5	z0.5	3.5 mgØg	83.0	35.1	125	
EP075: Chlorpyrifos	3931-88-3	0.5	mgØg	z0.5	z0.5	3.5 mgØg	90.4	26	123	
EP075: Pirimphos-ethyl	32505-41-1	0.5	mgØg	z0.5	z0.5	3.5 mgØg	89.2	26	125	
EP075: Chlorfenvinphos	470-90-6	0.5	mgØg	z0.5	z0.5	3.5 mgØg	87.3	25	128	
EP075: Prothiofos	24642-46-4	0.5	mgØg	z0.5	z0.5	3.5 mgØg	92.6	27	125	
EP075: Ethion	562-13-3	0.5	mgØg	z0.5	z0.5	3.5 mgØg	89.8	28	127	
Ev060/0Gt: i o)- (ve)ro(ebH t cdrog-r8oyQ u8 Do): 21C202P7										
EP080: C6 - C9 Fraction	----	10	mgØg	z10	z10	23 mgØg	102	70	122	
Ev060/0Gt: i o)- (ve)ro(ebH t cdrog-r8oyQ u8 Do): 2161a157										
EP071: C10 - C14 Fraction	----	50	mgØg	z50	z50	544 mgØg	85.5	55	132	
EP071: C15 - C38 Fraction	----	100	mgØg	z100	z100	1981 mgØg	98.4	73	124	
EP071: C39 - C26 Fraction	----	100	mgØg	z100	z100	818 mgØg	98.5	71	142	
EP071: C10 - C26 Fraction (sum)	----	50	mgØg	z50	z50	----	----	----	----	
Ev060/0Gt: i o)- (Aego9er-8(e t cdrog-r8oyQFNEvM 2010 Rr-f) u8 Do): 21C202P7										
EP080: C6 - C10 Fraction	----	10	mgØg	z10	z10	27 mgØg	103	70	120	
Ev060/0Gt: i o)- (Aego9er-8(e t cdrog-r8oyQFNEvM 2010 Rr-f) u8 Do): 2161a157										
EP071: >C10 - C16 Fraction	----	50	mgØg	z50	z50	870 mgØg	94.4	69	132	



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Sub-Matrix : COD				Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	LCS	Low	High
Ev060/0G1: i o) - (Aego9er-8(e t cdrog-r8oyQFNEM 2010 Rr-f) u8 Do): 2161a157 Fgoy)nybed									
EP071: >C16 - C24 Fraction	----	100	mgØg	z100	3495 mgØg	98.2	71	124	
EP071: >C24 - C40 Fraction	----	100	mgØg	z100	362 mgØg	84.0	62	142	
EP071: >C10 - C40 Fraction (sum)	----	100	mgØg	z100	----	----	----	----	
Ev214: vergp(or-je 8c D1 /MC u8 Do): 21Ga1P27									
EP316: Perchlorate	7601-90-2	10	µgØg	z10.0	35 µgØg	82.4	56	120	
Ev2a1: verf(boroog)c(SgrdQ- yd Cb(foy-)eQ u8 Do): 21G5Ga7									
EP321: PFOS	1762-32-1	0.0005	mgØg	z0.0005	0.005 mgØg	69.1	54	146	
EP321: PFOA	225-67-1	0.0005	mgØg	z0.0005	0.005 mgØg	72.7	54	124	
EP321: 6:3 Fluorotelomer Sulfonate (6:3 FTS)	37619-97-3	0.005	mgØg	z0.005	.035 mgØg	73.3	56	128	



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix : COD

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report		
				Spike Concentration	Spike Recovery (%) MS	Recovery Limits (%) Low High
EL005i : i o) - (Me) - (Q8c T v fSEC u Do): 2161P4G7						
EB1304189-003	Anonymous	EK005T: Arsenic	7440-28-3	50 mg@G	107	70 120
		EK005T: Cadmium	7440-42-9	50 mg@G	107	70 120
		EK005T: Chromium	7440-47-2	50 mg@G	99.8	70 120
		EK005T: Copper	7440-50-8	50 mg@G	100	70 120
		EK005T: Lead	7429-93-1	50 mg@G	103	70 120
		EK005T: Nickel	7440-03-0	50 mg@G	101	70 120
		EK005T: Zinc	7440-66-6	50 mg@G	132	70 120
EL0a5i : i o) - (Aego9e- 8(e Mergbrc 8c hTWC u Do): 2161P467						
EB1304189-003	Anonymous	EK025T: Mercury	7429-97-6	5.0 mg@G	96.2	56 133
Ev044: v o(cgp(ory- ed mspyc(Qw m7 u Do): 21GGP67						
EM1301575-008	A7PT4G003	EP066: Total Polychlorinated biphenyls	----	1.34 mg@G	90.9	55 123
Ev046S: OrB- y ogp(orye v oQjgdeQLOI 7 u Do): 21GGP67						
EM1301575-002	A7PT3G001	EP068: gamma-BHC	58-89-9	0.5 mg@G	113	20 139
		EP068: Heptachlor	76-44-8	0.5 mg@G	99.6	33.3 139
		EP068: Aldrin	209-00-3	0.5 mg@G	82.8	35 138
		EP068: Dieldrin	60-57-1	0.5 mg@G	99.8	26 123
		EP068: Endrin	73-30-8	0.5 mg@G	119	23 128
		EP068: 4,4'-DDT	50-39-2	0.5 mg@G	100	31.8 140
Ev046m: OrB- y o p o Q3porbQveQjgdeQLOv7 u Do): 21GGP67						
EM1301575-002	A7PT3G001	EP068: Dioxinon	222-41-5	0.5 mg@G	102	29 139
		EP068: Chlorpyrifos-methyl	5598-12-0	0.5 mg@G	95.5	29 136
		EP068: Pirimphos-ethyl	32505-41-1	0.5 mg@G	94.8	28 120
		EP068: Bromophos-ethyl	4834-78-6	0.5 mg@G	88.4	25 114
		EP068: Prothiofos	24642-46-4	0.5 mg@G	98.3	29 135
Ev0GFS: MoyoGcg(tg SroH -)tg t cdrog- r8oyQ u Do): 21G20257						
EM1301575-002	A7PT3G001	EP074: Benxene	71-42-3	3 mg@G	93.5	64 136
		EP074: Toluene	108-88-2	3 mg@G	97.8	65 121
Ev0GFE: t - (oBeey- ed S(res- jg oH sobyQ u Do): 21G20257						
EM1301575-002	A7PT3G001	EP074: 1,1-Dichloroethene	75-25-4	3 mg@G	78.0	50 134
		EP074: Trichloroethene	79-01-6	3 mg@G	88.3	60 133
Ev0GPh: t - (oBeey- ed SroH -)tg oH sobyQ u Do): 21G20257						
EM1301575-002	A7PT3G001	EP074: Chlorobenzene	108-90-7	3 mg@G	105	69 139
Ev0G6S: v p e y o (tg o H s o b y Q u Do): 21G3G607						



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 Work Order : EM1301575
 Client : KOLDER ASSOCIATES
 Project : 117612301 F-VIC

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report			
				Spike Concentration	Spike Recovery (%)		
					MS	Low	High
EM1301575-009	A7PT5G001	EP075: Phenol	108-95-3	5 mg/g	69.1	32.7	119
		EP075: 3-Chlorophenol	95-57-8	5 mg/g	59.9	21.1	116
		EP075: 3-Nitrophenol	88-75-5	5 mg/g	68.5	16.4	115
		EP075: 4-Chloro-2-Methylphenol	59-50-7	5 mg/g	91.1	33.2	133
		EP075: Pentachlorophenol	87-86-5	5 mg/g	86.7	17.6	143
EM1301575-009	A7PT5G001	EP075: Acenaphthene	82-23-9	5 mg/g	90.3	35.4	133
		EP075: Pyrene	139-00-0	5 mg/g	91.0	14.6	137
EM1301575-009	A7PT5G001	EP075: N-Nitrosodi-n-propylamine	6311-64-7	5 mg/g	50.8	17.8	110
EM1301575-009	A7PT5G001	EP075: 3,4-Dinitrotoluene	131-14-3	5 mg/g	92.4	38.2	113
EM1301575-009	A7PT5G001	EP075: 1,4-Dichlorobenzene	106-46-7	5 mg/g	59.1	32	113
EM1301575-009	A7PT5G001	EP075: 1,3,4-Trichlorobenzene	130-83-1	5 mg/g	52.8	13.9	111
EM1301575-002	A7PT3G001	EP080: C6 - C9 Fraction	----	38 mg/g	87.0	49	137
EB1304189-003	Anonymous	EP071: C10 - C14 Fraction	----	544 mg/g	= Not Determined	54	132
		EP071: C15 - C38 Fraction	----	1981 mg/g	92.6	74	124
		EP071: C39 - C26 Fraction	----	818 mg/g	86.3	62	142
EM1301575-002	A7PT3G001	EP080: C6 - C10 Fraction	----	22 mg/g	89.6	70	120
EB1304189-003	Anonymous	EP071: >C10 - C16 Fraction	----	870 mg/g	= Not Determined	54	132
		EP071: >C16 - C24 Fraction	----	3495 mg/g	85.2	74	124
		EP071: >C24 - C40 Fraction	----	362 mg/g	= Not Determined	62	142
EM1301575-003	A7PT1G003	EP316: Perchlorate	7601-90-2	35 µg/g	89.3	70	120
EM1301441-001	Anonymous	EP321: PFOS	1762-32-1	0.005 mg/g	= Not Determined	54	146
		EP321: PFOA	225-67-1	0.005 mg/g	67.0	54	124
		EP321: 6:3 Fluorotelomer Sulfonate (6:3 FtS)	37619-97-3	.035 mg/g	61.9	56	128



Environmental Division

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: EM1201575	Page	: 1 of 12
Client	: GOLDER ASSOCIATES	Laboratory	: Environmental Division Melbourne
Contact	: Niamh McCormack	Contact	: Samantha Smith
Address	: P O BOX 6207 Building 09, 025 -- S8 an St9Richmond9wICV. 131 HAWTHORN WEST wIC9AUSTRALIA . 133	Address	: 4 Westall Rd Springvale wIC Australia . 101
E5mail	: nmccormack@golder.com.au	E5mail	: samantha.smith@alsglobal.com
Telephone	: +61 2. -- 63 . . 22	Telephone	: +615 5 , 47 7644
Facsimile	: +61 2. -- 63 . . 21	Facsimile	: +615 5 , 47 7621
Project	: 11061 . 321 F5wIC	QC Level	: NEPM 1777 Schedule B(.) and ALS QCS . requirement
Site	: F5wIC	Date Samples Received	: 1, FEB5213
C5DC number	: 555	Issue Date	: 30FEB5213
Sampler	: 555	NoVof samples received	: 1,
Order number	: GA5MELB . . 3, 27	NoVof samples analysed	: 6
Quote number	: ME12, 413		

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 Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers



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 Work Order : EM1321_0,
 Client : GOLDER ASSOCIATES
 Project : 11061_321 F5wC

Analysis Holding Time Compliance

The following report summarises e/traction K preparation and analysis times and compares 8ith recommended holding timesV Dates reported represent first date of e/traction or analysis and precludes subsequent dilutions and rerunsV Information is also provided re the sample container (preservative) from 8hich the analysis aliquot 8as takenV Elapsed period to analysis represents number of days from sampling 8here no e/traction K digestion is involved or period from e/traction K digestion 8here this is presentV For composite samples9 sampling date is assumed to be that of the oldest sample contributing to the compositeV Sample date for laboratory produced leachates is assumed as the completion date of the leaching processV Outliers for holding time are based on USEPA SW - 469 APHA9 AS and NEPM (1777)V A listing of breaches is provided in the Summary of OutliersV

Holding times for leachate methods (e/cluding elutriates) vary according to the analytes being determined on the resulting solutionV For non 5volatile analytes9 the holding time compliance assessment compares the leach date 8ith the shortest analyte holding time for the equivalent soil methodV These soil holding times are: Organics (14 days)V Mercury (3- days) ; other metals (1-2 days)V A recorded breach therefore does not guarantee a breach for all non5volatile parametersV

Matrix : SOIL Evaluation: * & Holding time breach x ✓ & Within holding timeV

Method	Container / Client Sample ID(s)	Sample Date	Extraction / Preparation		Evaluation	Analysis		
			Date extracted	Due for extraction		Date analysed	Due for analysis	
EA002 : pH (Soils)								
Soil Glass Jar - Unpreserved	AOPT182219 AOPT482239 AOPT68223	14-FEB-2012	17-FEB-2012	31-FEB-2012	✓	17-FEB-2012	10-FEB-2013	✓
EA055: Moisture Content								
Soil Glass Jar - Unpreserved	AOPT182219 AOPT482239 AOPT682239	14-FEB-2012	----	5555	5555	17-FEB-2012	3-5-FEB-2013	✓
EG005T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved	AOPT182219 AOPT482239 AOPT68223	14-FEB-2012	23-FEB-2012	13-AUG-2012	✓	24-FEB-2012	13-AUG-2013	✓
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved	AOPT182219 AOPT482239 AOPT68223	14-FEB-2012	23-FEB-2012	1-5-MAR-2013	✓	24-FEB-2012	1-5-MAR-2013	✓
EP004: Organic Matter								
Soil Glass Jar - Unpreserved	AOPT182219 AOPT482239 AOPT68223	14-FEB-2012	16-FEB-2012	31-FEB-2012	✓	16-FEB-2012	1-5-MAR-2013	✓
EP066: Polychlorinated Biphenyls (PCB)								
Soil Glass Jar - Unpreserved	AOPT182219 AOPT482239 AOPT68223	14-FEB-2012	21-FEB-2012	3-5-FEB-2013	✓	22-FEB-2012	21-APR-2013	✓



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 Work Order : EM1321, 0,
 Client : GOLDER ASSOCIATES
 Project : 11061. 321 F5mC

Matri: SOIL Evaluation: * & Holding time breach x ✓ & Within holding time ✓

Method	Container / Client Sample ID(s)	Sample Date		Extraction / Preparation		Analysis		
		Date extracted	Due for extraction	Date analysed	Due for analysis	Evaluation	Evaluation	
EP068A: Organochlorine Pesticides (OC)								
Soil Glass Jar - Unpreserved								
AOPT1182239	AOPT3182219	21-FEB-2012	3-5FEB5213	22-FEB-2012	215APR5213	✓	✓	
AOPT4182239	AOPT, 182219							
AOPT6182239								
EP068B: Organophosphorus Pesticides (OP)								
Soil Glass Jar - Unpreserved								
AOPT1182239	AOPT3182219	21-FEB-2012	3-5FEB5213	22-FEB-2012	215APR5213	✓	✓	
AOPT4182239	AOPT, 182219							
AOPT6182239								
EP074A: Monocyclic Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved								
AOPT1182239	AOPT3182219	17-FEB-2012	3-5FEB5213	20-FEB-2012	3-5FEB5213	✓	✓	
AOPT4182239	AOPT, 182219							
AOPT6182239	AOPT018021							
EP074B: Oxygenated Compounds								
Soil Glass Jar - Unpreserved								
AOPT1182239	AOPT3182219	17-FEB-2012	3-5FEB5213	20-FEB-2012	3-5FEB5213	✓	✓	
AOPT4182239	AOPT, 182219							
AOPT6182239	AOPT018021							
EP074C: Sulfonated Compounds								
Soil Glass Jar - Unpreserved								
AOPT1182239	AOPT3182219	17-FEB-2012	3-5FEB5213	20-FEB-2012	3-5FEB5213	✓	✓	
AOPT4182239	AOPT, 182219							
AOPT6182239	AOPT018021							
EP074D: Fumigants								
Soil Glass Jar - Unpreserved								
AOPT1182239	AOPT3182219	17-FEB-2012	3-5FEB5213	20-FEB-2012	3-5FEB5213	✓	✓	
AOPT4182239	AOPT, 182219							
AOPT6182239	AOPT018021							
EP074E: Halogenated Aliphatic Compounds								
Soil Glass Jar - Unpreserved								
AOPT1182239	AOPT3182219	17-FEB-2012	3-5FEB5213	20-FEB-2012	3-5FEB5213	✓	✓	
AOPT4182239	AOPT, 182219							
AOPT6182239	AOPT018021							
EP074F: Halogenated Aromatic Compounds								
Soil Glass Jar - Unpreserved								
AOPT1182239	AOPT3182219	17-FEB-2012	3-5FEB5213	20-FEB-2012	3-5FEB5213	✓	✓	
AOPT4182239	AOPT, 182219							
AOPT6182239	AOPT018021							



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 Work Order : EM1321, 0,
 Client : GOLDER ASSOCIATES
 Project : 11061. 321 F5wC

Matrix : SOIL Evaluation: * & Holding time breach x ✓ & Within holding time ✓

Method		Sample Date		Extraction / Preparation		Analysis	
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074G: Trihalomethanes							
Soil Glass Jar - Unpreserved							
AOPT1182239	AOPT3182219	17-FEB-2012	3 - 5FEB5213	✓	20-FEB-2012	3 - 5FEB5213	✓
AOPT4182239	AOPT, 182219						
AOPT6182239	AOPT018021						
EP074H: Naphthalene							
Soil Glass Jar - Unpreserved							
AOPT018021	AOPT3182219	17-FEB-2012	3 - 5FEB5213	✓	20-FEB-2012	3 - 5FEB5213	✓
EP075A: Phenolic Compounds							
Soil Glass Jar - Unpreserved							
AOPT1182239	AOPT3182219	21-FEB-2012	3 - 5FEB5213	✓	22-FEB-2012	215APR5213	✓
AOPT4182239	AOPT, 182219						
AOPT618223							
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved							
AOPT1182239	AOPT3182219	21-FEB-2012	3 - 5FEB5213	✓	22-FEB-2012	215APR5213	✓
AOPT4182239	AOPT, 182219						
AOPT618223							
EP075C: Phthalate Esters							
Soil Glass Jar - Unpreserved							
AOPT1182239	AOPT3182219	21-FEB-2012	3 - 5FEB5213	✓	22-FEB-2012	215APR5213	✓
AOPT4182239	AOPT, 182219						
AOPT618223							
EP075D: Nitrosamines							
Soil Glass Jar - Unpreserved							
AOPT1182239	AOPT3182219	21-FEB-2012	3 - 5FEB5213	✓	22-FEB-2012	215APR5213	✓
AOPT4182239	AOPT, 182219						
AOPT618223							
EP075E: Nitroaromatics and Ketones							
Soil Glass Jar - Unpreserved							
AOPT1182239	AOPT3182219	21-FEB-2012	3 - 5FEB5213	✓	22-FEB-2012	215APR5213	✓
AOPT4182239	AOPT, 182219						
AOPT618223							
EP075F: Haloethers							
Soil Glass Jar - Unpreserved							
AOPT1182239	AOPT3182219	21-FEB-2012	3 - 5FEB5213	✓	22-FEB-2012	215APR5213	✓
AOPT4182239	AOPT, 182219						
AOPT618223							
EP075G: Chlorinated Hydrocarbons							
Soil Glass Jar - Unpreserved							
AOPT1182239	AOPT3182219	21-FEB-2012	3 - 5FEB5213	✓	22-FEB-2012	215APR5213	✓
AOPT4182239	AOPT, 182219						
AOPT618223							



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 Work Order : EM1321, 0,
 Client : GOLDER ASSOCIATES
 Project : 11061. 321 F5wC

Matri: SOIL Evaluation: * & Holding time breach x ✓ & Within holding time ✓

Method	Container / Client Sample ID(s)	Sample Date	Extraction / Preparation		Analysis		
			Date extracted	Due for extraction	Date analysed	Due for analysis	
EP075H: Anilines and Benzidines							
Soil Glass Jar - Unpreserved	AOPT3182219	14-FEB-2012	21-FEB-2012	3-5FEB5213	22-FEB-2012	215APR5213	✓
	AOPT1182239						
	AOPT4182239						
	AOPT618223						
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved	AOPT3182219	14-FEB-2012	21-FEB-2012	3-5FEB5213	22-FEB-2012	215APR5213	✓
	AOPT1182239						
	AOPT4182239						
	AOPT618223						
EP075J: Organophosphorus Pesticides							
Soil Glass Jar - Unpreserved	AOPT3182219	14-FEB-2012	21-FEB-2012	3-5FEB5213	22-FEB-2012	215APR5213	✓
	AOPT1182239						
	AOPT4182239						
	AOPT618223						
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved	AOPT3182219	14-FEB-2012	17-FEB-2012	3-5FEB5213	20-FEB-2012	3-5FEB5213	✓
	AOPT1182239						
	AOPT4182239						
	AOPT618223						
Soil Glass Jar - Unpreserved	AOPT3182219	14-FEB-2012	23-FEB-2012	3-5FEB5213	23-FEB-2012	2-5APR5213	✓
	AOPT1182239						
	AOPT4182239						
	AOPT618223						
EP080/071: Total Recoverable Hydrocarbons - NIEPM 2010 Draft							
Soil Glass Jar - Unpreserved	AOPT3182219	14-FEB-2012	17-FEB-2012	3-5FEB5213	20-FEB-2012	3-5FEB5213	✓
	AOPT1182239						
	AOPT4182239						
	AOPT618223						
Soil Glass Jar - Unpreserved	AOPT3182219	14-FEB-2012	23-FEB-2012	3-5FEB5213	23-FEB-2012	2-5APR5213	✓
	AOPT1182239						
	AOPT4182239						
	AOPT618223						
EP216: Perchlorate by LC/MS							
Soil Glass Jar - Unpreserved	AOPT3182219	14-FEB-2012	17-FEB-2012	1-5MAR5213	17-FEB-2012	165MAR5213	✓
	AOPT1182239						
	AOPT4182239						
	AOPT618223						
EP231: Perfluorooxy/ Acids and Sulfonates.							
Soil Glass Jar - Unpreserved	AOPT3182219	14-FEB-2012	21-FEB-2012	13AUG5213	21-FEB-2012	215APR5213	✓
	AOPT1182239						
	AOPT4182239						
	AOPT618223						



Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed 8 (in the analytical lot(s) in which the submitted sample(s) 8 as (here) processed) Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers

Matrix : SOIL

Evaluation: * & Quality Control frequency not 8 (in specification) ✓ & Quality Control frequency 8 (in specification)

Quality Control Sample Type Analytical Methods	Method	Count			Rate (%)		Evaluation	Quality Control Specification
		QC	Regular	Actual	Expected			
Laboratory Duplicates (DUP)								
Moisture Content	EA2, , 5I2.	3	32	10.0	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Organic Matter	EP224	3	13	16.7	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Perchlorate in Soils and Sediments by LCM/MS	EP316	1		20.0	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Perfluorooctyl Acids and Sulfonates by LCM/MS/MS	EP3. 1	3	14	14.3	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Pesticides by GC/MS	EP26-	3	13	16.7	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
pH (1;)	EA223	1	-	12.5	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Polychlorinated Biphenyls (PCB)	EP266	3	1-	11.1	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Semivolatile Organic Compounds	EP20,	1	7	11.1	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Total Mercury by FIMS	EG2, , T	3	32	10.0	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Total Metals by ICP/AES	EG22, T	3	32	10.0	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
TPH 5Semivolatile Fraction	EP201	3	16	12.5	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
TPH volatiles/TEX	EP2- 2	1	6	16.7	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
volatile Organic Compounds	EP204	1	6	16.7	10.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Laboratory Control Samples (LCS)								
Organic Matter	EP224	1	13	8.3	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Perchlorate in Soils and Sediments by LCM/MS	EP316	1		20.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Perfluorooctyl Acids and Sulfonates by LCM/MS/MS	EP3. 1	1	14	7.1	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Pesticides by GC/MS	EP26-	1	13	8.3	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Polychlorinated Biphenyls (PCB)	EP266	1	1-	5.6	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Semivolatile Organic Compounds	EP20,	1	7	11.1	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Total Mercury by FIMS	EG2, , T	1	32	5.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Total Metals by ICP/AES	EG22, T	1	32	5.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
TPH 5Semivolatile Fraction	EP201	1	16	6.3	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
TPH volatiles/TEX	EP2- 2	1	6	16.7	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
volatile Organic Compounds	EP204	1	6	16.7	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Method Blanks (MB)								
Organic Matter	EP224	1	13	8.3	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Perchlorate in Soils and Sediments by LCM/MS	EP316	1		20.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Perfluorooctyl Acids and Sulfonates by LCM/MS/MS	EP3. 1	1	14	7.1	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Pesticides by GC/MS	EP26-	1	13	8.3	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Polychlorinated Biphenyls (PCB)	EP266	1	1-	5.6	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Semivolatile Organic Compounds	EP20,	1	7	11.1	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Total Mercury by FIMS	EG2, , T	1	32	5.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Total Metals by ICP/AES	EG22, T	1	32	5.0	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
TPH 5Semivolatile Fraction	EP201	1	16	6.3	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
TPH volatiles/TEX	EP2- 2	1	6	16.7	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
volatile Organic Compounds	EP204	1	6	16.7	5.0	✓	NEPM 1777 Schedule B() and ALS QCS. requirement	
Matrix/ Spikes (MS)								
Perchlorate in Soils and Sediments by LCM/MS	EP316	1		20.0	5.0	✓	ALS QCS. requirement	



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 Work Order : EM1321, 0,
 Client : GOLDER ASSOCIATES
 Project : 11061.321 F5wC

Matrix : SOIL Evaluation: * & Quality Control frequency not 8 ithin specification x ✓ & Quality Control frequency 8 ithin specification ✓

Quality Control Sample Type		Method	Count		Rate (%)		Evaluation	Quality Control Specification
Analytical Methods	QC		Regular	Actual	Expected			
Matrix/ Spikes (MS) 5Continued								
Perfluorooctyl Acids and Sulfonates by LCM/SM/MS		EP3.1	1	14	7.1	5.0	✓	ALS QCS. requirement
Pesticides by GC/MS		EP26-	1	13	8.3	5.0	✓	ALS QCS. requirement
Polychlorinated Biphenyls (PCB)		EP266	1	1-	5.6	5.0	✓	ALS QCS. requirement
Semivolatile Organic Compounds		EP20,	1	7	11.1	5.0	✓	ALS QCS. requirement
Total Mercury by FIMS		EG2. , T	1	32	5.0	5.0	✓	ALS QCS. requirement
Total Metals by ICP-AES		EG22, T	1	32	5.0	5.0	✓	ALS QCS. requirement
TPH 5Semivolatile Fraction		EP201	1	16	6.3	5.0	✓	ALS QCS. requirement
TPH volatilesBTEX		EP2-2	1	6	16.7	5.0	✓	ALS QCS. requirement
volatile Organic Compounds		EP204	1	6	16.7	5.0	✓	ALS QCS. requirement



Page : - of 12
 Work Order : EM1321_0,
 Client : GOLDR ASSOCIATES
 Project : 11061_321 F5mC

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA9APH9AS and NEPM9n house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided in the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
pH (1,)	EA223	SOIL	(APHA 31st ed) pH is determined on soil samples after a 1; soil after leach. This method is compliant with NEPM (1777) Schedule B. (Method 12.)
Moisture Content	EA2, , 5f2.	SOIL	A gravimetric procedure based on 8 hours drying period at 12. 5f2, degrees C. This method is compliant with NEPM (3212 Draft) Schedule B. (Section 0M and Table 1 (14 day holding time).)
Total Metals by ICP5AES	EG22, T	SOIL	(APHA 31st ed) ICPAES technique ionises samples in a plasma emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix standards. This method is compliant with NEPM (1777) Schedule B. ()
Total Mercury by FIMS	EG2, T	SOIL	AS . . , 29APHA 31st ed) Cold vapour generation (SnCl3) FIMS is an automated flameless atomic absorption technique. Mercury in solids are determined using an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl3 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1777) Schedule B. ()
Organic Matter	EP224	SOIL	AS 13- 74M 51770) Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM (1777) Schedule B. () (Method 12,)
Polychlorinated Biphenyls (PCB)	EP266	SOIL	(USEPA SW - 46 5- 302B) E/ tracts are analysed by Capillary GC/MS and quantification is by comparison against an established, point calibration curve. This method is compliant with NEPM (1777) Schedule B. () (Method , 24)
Pesticides by GCMS	EP26-	SOIL	(USEPA SW - 46 5- 302B) E/ tracts are analysed by Capillary GC/MS and quantification is by comparison against an established, point calibration curve. This technique is compliant with NEPM (1777) Schedule B. () (Method , 249 2,)
TPH 5Semi-volatile Fraction	EP201	SOIL	(USEPA SW - 46 5- 21, A) Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C12 5C. 6. This method is compliant with NEPM (1777) Schedule B. () (Method , 26M)
volatile Scan for Unknowns	EP203	SOIL	(USEPA SW - 46 5- 362B) E/ tracts are analysed by Purge and Trap Capillary GC/MS and unknowns are identified by comparison of peaks with the NIST library. Semi-quantification is by comparison with the closest eluting internal standard.
Semi-volatile Scan for Unknowns	EP20.	SOIL	(USEPA SW - 46 5- 362B) E/ tracts are analysed by Capillary GC/MS and unknowns are identified by comparison of peaks with the NIST library. Semi-quantification is by comparison with the closest eluting internal standard.
volatile Organic Compounds	EP204	SOIL	(USEPA SW - 46 5- 362B) E/ tracts are analysed by Purge and Trap Capillary GC/MS. Quantification is by comparison against an established, point calibration curve. This method is compliant with NEPM (1777) Schedule B. () (Method , 21)
Semi-volatile Organic Compounds	EP20,	SOIL	(USEPA SW - 46 5- 302B) E/ tracts are analysed by Capillary GC/MS and quantification is by comparison against an established, point calibration curve. This technique is compliant with NEPM (1777) Schedule B. () (Method , 23)
TPH volatiles TEX	EP2-2	SOIL	(USEPA SW - 46 5- 362B) E/ tracts are analysed by Purge and Trap Capillary GC/MS. Quantification is by comparison against an established, point calibration curve. This method is compliant with NEPM (1777) Schedule B. () (Method , 21)
Perchlorate in Soils and Sediments by LC/MS	EP316	SOIL	US EPA Method 6- , 2- , g of sample is extracted with 3, mL of 8 after acidified with acetic acid, filtered through 0.45 micron filter (to remove particulates) and analysed by LC/MS in ESI (negative) mode.



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 Work Order : EM1321, 0,
 Client : GOLDER ASSOCIATES
 Project : 11061, 321 F5mC

Analytical Methods	Method	Matrix	Method Descriptions
Perfluorooctyl Acids and Sulfonates by LCM/SM/S	µEP3. 1	SOIL	In 5 House V A portion of soil is soaked in sodium hydroxide followed by extraction 8 1/2 hours. The extract is neutralised with HCl and an aliquot taken to dryness. Analysis is by LCM/SM/S. Negative Mode using MRMV.
Preparation Methods	Method	Matrix	Method Descriptions
1.; solid KBr leach for soluble analytes	EN. 4	SOIL	12 g of soil is mixed with 2 mL of distilled water and tumbled overnight for 1 hour. Water soluble salts are leached from the soil by the continuous suspension. Samples are settled and the water filtered off for analysis.
Hot Block Digest for metals in soils sediments and sludges	EN67	SOIL	USEPA 3220 Method Hot Block Acid Digestion. 10g of sample is heated with Nitric and Hydrochloric acids then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge and sediments and soils. This method is compliant with NEPM (1777) Schedule B. (Method 323)
Organic Matter	EP224PR	SOIL	AS 13-74 Method 51770 Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM (1777) Schedule B. (Method 12,)
Sample Extraction for Perchlorate	EP316PR	SOIL	US EPA 600/4-91-010 Method 517.1
Sample Extraction for Perfluoroalkyl Compounds	EP3. 1PR	SOIL	In 5 House
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	(USEPA SW - 46 5. 2. 2A) , g of solid is shaken with surrogate and 12mL methanol prior to analysis by Purge and Trap 5 GC/MSV
Tumbler Extraction of Solids (Option A 5 Concentrating)	ORG10A	SOIL	In 5 House Mechanical agitation (tumbler) 32g of sample Na2SO4 and surrogate are extracted with 1, 2mL 1:1 DCM:Acetone by end of end tumbler. The solvent is decanted, dehydrated and concentrated (by * D) to the desired volume for analysis.
Tumbler Extraction of Solids (Option B 5 Non-concentrating)	ORG10B	SOIL	In 5 House Mechanical agitation (tumbler) 12g of sample Na2SO4 and surrogate are extracted with 32mL 1:1 DCM:Acetone by end of end tumbler. The solvent is transferred directly to a GC vial for analysis.



Page : 12 of 12
 Work Order : EM1321_0,
 Client : GOLDER ASSOCIATES
 Project : 11061_321 F5mC

Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report Surrogate recovery limits are static and based on USEPA SW-46 or ALS QWIENK - (in the absence of specific USEPA limits) This report displays QC Outliers (breaches) only

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix : SOIL

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP204D: Fumigants	3, 01467522,	5555	2,2-Dichloropropane	74520	142 %	151. 2%	Recovery greater than upper control limit
EP204E: Halogenated Aliphatic Compounds	3, 01467522,	5555	cis-1,4-Dichloro-2-butene	1406515,	1. 4 %	31V 510%	Recovery greater than upper control limit
EP20, D: Nitrosamines	3, 0- 3- - 522-	5555	Methapyrilene	715 25,	16V %	34V 514. %	Recovery less than lower control limit
EP20, E: Nitroaromatics and * etones	3, 0- 3- - 522-	5555	1-Naphthylamine	1. 45 30	4V %	125- 4%	Recovery less than lower control limit
Matrix Spike (MS) Recoveries							
EP2- 201: Total Petroleum Hydrocarbons	EB13241- 7023	Anonymous	C10 - C14 Fraction	5555	Not Determined	5555	MS recovery not determined, background level greater than or equal to 4x spike level.
EP2- 201: Total Recoverable Hydrocarbons 5NEPM 3	EB13241- 7023	Anonymous	>C10 - C16 Fraction	5555	Not Determined	5555	MS recovery not determined, background level greater than or equal to 4x spike level.
EP2- 201: Total Recoverable Hydrocarbons 5NEPM 3	EB13241- 7023	Anonymous	>C34 - C40 Fraction	5555	Not Determined	5555	MS recovery not determined, background level greater than or equal to 4x spike level.
EP3. 1: Perfluorooctyl Acids and SulfonatesV	EM1321441521	Anonymous	PFOS	106. 51	Not Determined	5555	MS recovery not determined, background level greater than or equal to 4x spike level.

- For all matrices, no Method Blank value outliers occur.
 - For all matrices, no Duplicate outliers occur.
- Regular Sample Surrogates**
- For all regular sample matrices, no surrogate recovery outliers occur.

Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective E/ fraction K/ fraction and/or Analysis component is/are displayed.

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

- No Quality Control Sample Frequency Outliers exist.

CERTIFICATE OF ANALYSIS

1 of 4

Client	GOLDER ASSOCIATES	Laboratory :	Environmental Division Melbourne
Contact	Niamh McCormack	Contact	LAB.MANAGER.EM McGrath
Address:	P O BOX 6079 Building 7, 570-588 Swan St, Richmond, VIC. 3121 HAWTHORN WEST VIC, AUSTRALIA 3122	Address:	4 Westall Rd Springvale VIC 3171 Australia
Project	117613201	Quote #	ME/054/12
Order #	GA-MELB 332509	Received:	14 Feb 2012
C-O-C #	- Not provided -	Issued	28 Feb 2012
Site	FISKVILLE	Number of Samples	
E-mail	nmccormack@golder.com.au	Received:	2
Phone	8862 3500	Analysed:	2
Fax	8862 3501		
E-mail	Melbourne.Enviro.Services@alsglobal.com		

Notes

- LOR = Limit of reporting
 I-TEF = International toxic equivalency factor
 I-TEQ = International toxic equivalence (pg/g)
 T = tetra Pe = penta Hx = hexa Hp =hepta O = octa CDD, dioxin = chlorinated dibenzo-p-dioxin
 1 I-TEQ(Zero) and WHO-TEQ(Zero) calculated treating <LOR as zero concentration (pg/g)
 2 I-TEQ(0.5 LOR) and WHO-TEQ(0.5 zero) calculated treating <LOR as 0.5 LOR concentration (pg/g)
 3 I-TEQ(LOR) and WHO-TEQ(LOR) calculated treating <LOR as LOR concentration (pg/g)
 4 Totals LORs are calculated by multiplying the number of peaks by the individual LOR per compound

Work order specific comments

Samples analysed 'as received', results reported on 'dry weight' basis.
 Dioxins/Furans conducted by ALS Brisbane, NATA Site No. 818.

WHO-TEF = World Health Organisation toxic equivalency factor
 WHO-TEQ = World Health Organisation toxic equivalence (pg/g)
 CDF, furan = chlorinated dibenzofuran

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NATA Accredited Laboratory - 825



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Accredited for compliance with ISO/IEC 17025

This document has been digitally signed by those names that appear on this report and are the authorised signatories. Digital signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatory
Peter Blow

Position
HRMS Chemist

Department
GC/HR-MS - NATA 825 (818 - Brisbane)

Client : GOLDER ASSOCIATES
Project : 117613201

Work Order : EM1201606
ALS Quote Reference : ME/054/12



ALS Environmental



Client : GOLDER ASSOCIATES
Project : 117613201

Work Order : EM1201606
ALS Quote Reference : ME/054/12

ANALYTICAL RESULTS FOR DIOXINS AND FURANS

Method Code EP300 Laboratory Sample ID: EM1201606001 Qc Lot Number: 2184402 Date Sampled: 10-Feb-2012
 Client Sample ID: A9HA1/3001 Moisture Content (%): Date Extracted: 24-Feb-2012
 Sample Mass (g): 10.0 Sample Matrix: SOIL Date Analysed: 24-Feb-2012

Compound	Conc (pg/g)	LOR pg/g	WHO-TEF	WHO-TEQ1 (zero)	WHO-TEQ2 (0.5 LOR)	WHO-TEQ3 (LOR)	I-TEF	I-TEQ1 (zero)	I-TEQ2 (0.5 LOR)	I-TEQ3 (LOR)	¹³ C ₁₂ Rec(%)
2378-TCDD	<0.5	0.5	1	0.00	0.25	0.50	1	0.00	0.25	0.50	51.4
12378-PeCDD	<2.5	2.5	1	0.00	1.26	2.52	0.5	0.00	0.63	1.26	47.5
123478-HxCDD	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	40.8
123678-HxCDD	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	72.8
123789-HxCDD	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	-
1234678-HpCDD	11.7	2.5	0.01	0.12	0.12	0.12	0.01	0.12	0.12	0.12	43.2
OCDD	821.0	10.1	0.0003	0.25	0.25	0.25	0.001	0.82	0.82	0.82	26.5
2378-TCDF	<0.5	0.5	0.1	0.00	0.03	0.05	0.1	0.00	0.03	0.05	45.8
12378-PeCDF	<2.5	2.5	0.03	0.00	0.04	0.08	0.05	0.00	0.06	0.13	41.2
23478-PeCDF	<2.5	2.5	0.3	0.00	0.38	0.76	0.5	0.00	0.63	1.26	40.4
123478-HxCDF	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	33.2
123678-HxCDF	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	58.2
234678-HxCDF	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	43.6
123789-HxCDF	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	34.6
1234678-HpCDF	<2.5	2.5	0.01	0.00	0.01	0.03	0.01	0.00	0.01	0.03	37.1
1234789-HpCDF	<2.5	2.5	0.01	0.00	0.01	0.03	0.01	0.00	0.01	0.03	26.4
OCDF	<5.0	5.0	0.0003	0.00	0.00	0.00	0.001	0.00	0.00	0.01	-
Total TEQ	-	-	-	0.36	3.22	6.08	-	0.94	3.45	5.95	-

Group Totals	Conc (pg/g)	LOR ⁴ pg/g	No. of Peaks
Tetra-Dioxins	<2.5	2.5	5
Penta-Dioxins	<17.6	17.6	7
Hexa-Dioxins	<7.6	7.6	3
Hepta-Dioxins	28.1	5.0	2
Octa-Dioxin	821.0	10.1	1
Tetra-Furans	7.2	3.0	6
Penta-Furans	<10.1	10.1	4
Hexa-Furans	<10.1	10.1	4
Hepta-Furans	<5.0	5.0	2
Octa-Furan	<5.0	5.0	1
PCDD/Fs	856.3		



Client : GOLDER ASSOCIATES
 Project : 117613201

Work Order : EM1201606
 ALS Quote Reference : ME/054/12

ANALYTICAL RESULTS FOR DIOXINS AND FURANS

Method Code EP300 Laboratory Sample ID: EM1201606002 Qc Lot Number: 2184403 Date Sampled: 10-Feb-2012
 Client Sample ID: A9HA2/3001 Moisture Content (%): Date Extracted: 24-Feb-2012
 Sample Mass (g): 10.0 Sample Matrix: SOIL Date Analysed: 24-Feb-2012

Compound	Conc (pg/g)	LOR pg/g	WHO-TEF	WHO-TEQ1 (zero)	WHO-TEQ2 (0.5 LOR)	WHO-TEQ3 (LOR)	I-TEF	I-TEQ1 (zero)	I-TEQ2 (0.5 LOR)	I-TEQ3 (LOR)	¹³ C ₁₂ Rec(%)
2378-TCDD	<0.5	0.5	1	0.00	0.25	0.50	1	0.00	0.25	0.50	22.7
12378-PeCDD	<2.5	2.5	1	0.00	1.25	2.50	0.5	0.00	0.63	1.25	21.9
123478-HxCDD	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	18.9
123678-HxCDD	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	35.3
123789-HxCDD	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	-
1234678-HpCDD	22.5	2.5	0.01	0.23	0.23	0.23	0.01	0.23	0.23	0.23	21.7
OCDD	1350.0	10.0	0.0003	0.41	0.41	0.41	0.001	1.35	1.35	1.35	16.6
2378-TCDF	<0.5	0.5	0.1	0.00	0.03	0.05	0.1	0.00	0.03	0.05	20.6
12378-PeCDF	<2.5	2.5	0.03	0.00	0.04	0.08	0.05	0.00	0.06	0.13	19.4
23478-PeCDF	<2.5	2.5	0.3	0.00	0.38	0.75	0.5	0.00	0.63	1.25	18.3
123478-HxCDF	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	15.2
123678-HxCDF	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	30.3
234678-HxCDF	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	21.2
123789-HxCDF	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	16.4
1234678-HpCDF	2.9	2.5	0.01	0.03	0.03	0.03	0.01	0.03	0.03	0.03	19.7
1234789-HpCDF	<2.5	2.5	0.01	0.00	0.01	0.03	0.01	0.00	0.01	0.03	13.2
OCDF	<5.0	5.0	0.0003	0.00	0.00	0.00	0.001	0.00	0.00	0.01	-
Total TEQ	-	-	-	0.66	3.48	6.31	-	1.60	4.08	6.56	-

Group Totals	Conc (pg/g)	LOR ⁴ pg/g	No. of Peaks
Tetra-Dioxins	<1.5	1.5	3
Penta-Dioxins	<17.5	17.5	7
Hexa-Dioxins	<15.0	15.0	6
Hepta-Dioxins	50.9	5.0	2
Octa-Dioxin	1350.0	10.0	1
Tetra-Furans	10.2	4.5	9
Penta-Furans	<12.5	12.5	5
Hexa-Furans	<12.5	12.5	5
Hepta-Furans	6.0	5.0	2
Octa-Furan	<5.0	5.0	1
PCDD/Fs	1417.1		



ALS Environmental

QUALITY CONTROL REPORT

Client	GOLDER ASSOCIATES	Laboratory :	Environmental Division Melbourne	1 of 4
Contact	Niamh McCormack	Contact	LAB.MANAGER.EM McGrath	Work Order: EM1201606
Address:	P O BOX 6079 Building 7, 570-588 Swan St, Richmond, VIC. 3121 HAWTHORN WEST	Address:	Springvale VIC 3171 Australia	
VIC, AUSTRALIA 3122				
Project	117613201	Quote #	ME/054/12	Received: 14 Feb 2012
Order #	GA-MELB 332509			Issued 28 Feb 2012
C-O-C #	- Not provided -			
Site	FISKVILLE			
E-mail	nmccormack@golder.com.au	E-mail	Melbourne.Enviro.Services@alsg	Number of Samples
Phone	8862 3500	Phone	+61-3-8549 9600	Received: 2
Fax	8862 3501	Fax	+61-3-8549 9601	Analysed: 3

Samples analysed 'as received', results reported on 'dry weight' basis.

Work order specific comments

Dioxins/Furans conducted by ALS Brisbane, NATA Site No. 818.

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Accredited for compliance with ISO/IEC 17025

This document has been digitally signed by those names that appear on this report and are the authorised signatories. Digital signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatory	Position	Department
Peter Blow	HRMS Chemist	GC/HR-MS - NATA 825 (818 - Brisbane)

Client : GOLDER ASSOCIATES
 Project : 117613201

Work Order : EM1201606
 ALS Quote Reference : ME/054/12



Quality Control Report Laboratory Duplicates (DUP)

	Original Result	Duplicate Result
Laboratory Sample Id :	EM1201412001	2586240-007
Client Sample Id :	Anonymous	Anonymous
Sample Mass (g) :	10.0	10.0
Qc Lot Number :	2184403	2184403
Moisture Content (%) :		

Compound	Conc pg/g	LOR pg/g	Conc pg/g	LOR pg/g	RPD (%)
2378-TCDD	<0.5	0.5	<0.5	0.5	-
12378-PeCDD	<2.5	2.5	<2.5	2.5	-
123478-HxCDD	<2.5	2.5	<2.5	2.5	-
123678-HxCDD	<2.5	2.5	<2.5	2.5	-
123789-HxCDD	<2.5	2.5	<2.5	2.5	-
1234678-HpCDD	3.7	2.5	3.0	2.5	20.9
OCDD	84.5	10.1	81.9	10.0	3.1
2378-TCDF	<0.5	0.5	<0.5	0.5	-
12378-PeCDF	<2.5	2.5	<2.5	2.5	-
23478-PeCDF	<2.5	2.5	<2.5	2.5	-
123478-HxCDF	<2.5	2.5	<2.5	2.5	-
123678-HxCDF	<2.5	2.5	<2.5	2.5	-
234678-HxCDF	<2.5	2.5	<2.5	2.5	-
123789-HxCDF	<2.5	2.5	<2.5	2.5	-
1234678-HpCDF	<2.5	2.5	<2.5	2.5	-
1234789-HpCDF	<2.5	2.5	<2.5	2.5	-
OCDF	<5.0	5.0	<5.0	5.0	-

Group Totals	Conc pg/g	LOR pg/g	Conc pg/g	LOR pg/g	RPD (%)
Tetra-Dioxins	1.6	1.5	1.3	1.0	20.7
Penta-Dioxins	<2.5	2.5	<2.5	2.5	-
Hexa-Dioxins	<2.5	2.5	<2.5	2.5	-
Hepta-Dioxins	9.0	5.0	6.9	5.0	26.4
Octa-Dioxin	84.5	10.1	81.9	10.0	3.1
Tetra-Furans	4.4	1.0	3.2	2.0	31.6
Penta-Furans	<2.5	2.5	<2.5	2.5	-
Hexa-Furans	<5.0	5.0	<2.5	2.5	-
Hepta-Furans	<2.5	2.5	<2.5	2.5	-
Octa-Furan	<5.0	5.0	<5.0	5.0	-
PCDD/Fs	99.5		93.3		6.4

Notes

LOR = Limit of reporting

T = tetra

Pe = penta

Hx = hexa

Hp = hepta

O = octa

CDD, dioxin = chlorinated dibenzo-p-dioxin

CDF, furan = chlorinated dibenzofuran

RPD = relative per cent difference

Permitted ranges for RPD are dependant upon the magnitude of the result in comparison to the LOR.

Result < 10x LOR, no limit, result between 10x and 20x LOR, 50%; result > 20x LOR, 20%

- = Where results are less than the LOR, no RPD is reported.

Client : GOLDER ASSOCIATES
Project : 117613201

Work Order : EM1201606
ALS Quote Reference : ME/054/12



Quality Control Results Laboratory Control Samples(LCS)

Laboratory Sample Id : 2586240-010
QC Lot Number : 2184403
Sample Mass (g) : 2.0
Sample Name : BCR 529 Sandy soil

Compound	Conc pg/g	Lower 1 pg/g	Upper 1 pg/g	¹³ C ¹² Rec(%)	Lower 2 (%)	Upper 2 (%)
2378-TCDD	4120.0	3900	5100	68.8	25	164
12378-PeCDD	449.0	390	490	81.1	25	181
123478-HxCDD	952.0	900	1500	70.7	32	141
123678-HxCDD	4780.0	4500	6300	77.2	28	130
123789-HxCDD	2800.0	2600	3400	-	-	-
2378-TCDF	77.9	65	91	60.3	24	169
12378-PeCDF	121.0	110	170	67.6	24	185
23478-PeCDF	343.0	290	430	66.4	21	178
123478-HxCDF	3370.0	2900	3900	56.0	26	152
123678-HxCDF	1020.0	940	1240	71.0	26	123
234678-HxCDF	398.0	330	410	61.7	28	136
123789-HxCDF	434.0	12	32	73.8	29	147

Notes

1. Acceptable concentration limits are as quoted on the analytical certificate for the certified reference material
2. Acceptable recovery limits are derived from EPA1613 Revision B

T = tetra
Pe = penta
Hx = hexa
Hp = hepta
O = octa



Client : GOLDER ASSOCIATES
 Project : 117613201

Work Order : EM1201606
 ALS Quote Reference : ME/054/12

ALS Environmental

Quality Control Report Method Blank (MB)

Laboratory Sample ID: 2586240-001
 Sample Mass (g) : 10.0
 Qc Lot Number : 2184403

Sample Matrix: SOIL
 Date Extracted: 24-Feb-2012
 Date Analysed: 24-Feb-2012

Compound	Conc pg/g	LOR pg/g	WHO-TEF	WHO-TEQ ₁ (zero)	WHO-TEQ ₂ (0.5 LOR)	WHO-TEQ ₃ (LOR)	I-TEF	I-TEQ ₁ (zero)	I-TEQ ₂ (0.5 LOR)	I-TEQ ₃ (LOR)	¹³ C ₁₂ Rec(%)
2378-TCDD	<0.5	0.5	1	0.00	0.25	0.50	1	0.00	0.25	0.50	50.8
12378-PeCDD	<2.5	2.5	1	0.00	1.25	2.50	0.5	0.00	0.63	1.25	72.2
123478-HxCDD	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	60.4
123678-HxCDD	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	84.5
123789-HxCDD	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	-
1234678-HpCD	<2.5	2.5	0.01	0.00	0.01	0.03	0.01	0.00	0.01	0.03	74.6
OCDD	<10.0	10.0	0.0003	0.00	0.00	0.00	0.001	0.00	0.01	0.01	68.4
2378-TCDF	<0.5	0.5	0.1	0.00	0.03	0.05	0.1	0.00	0.03	0.05	45.7
12378-PeCDF	<2.5	2.5	0.03	0.00	0.04	0.08	0.05	0.00	0.06	0.13	54.0
23478-PeCDF	<2.5	2.5	0.3	0.00	0.38	0.75	0.5	0.00	0.63	1.25	54.5
123478-HxCDF	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	43.6
123678-HxCDF	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	58.5
234678-HxCDF	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	54.2
123789-HxCDF	<2.5	2.5	0.1	0.00	0.13	0.25	0.1	0.00	0.13	0.25	57.6
1234678-HpCD	<2.5	2.5	0.01	0.00	0.01	0.03	0.01	0.00	0.01	0.03	52.4
1234789-HpCD	<2.5	2.5	0.01	0.00	0.01	0.03	0.01	0.00	0.01	0.03	54.7
OCDF	<5.0	5.0	0.0003	0.00	0.00	0.00	0.001	0.00	0.00	0.01	-
TEQ_(WHO)				0.00	2.89	5.72	TEQ_(I)	0.00	2.55	5.04	

Group Totals	Conc pg/g	LOR ₄ pg/g	No. of Peaks
Tetra-Dioxins	<0.5	0.5	1
Penta-Dioxins	<2.5	2.5	1
Hexa-Dioxins	<2.5	2.5	1
Hepta-Dioxins	<5.0	5.0	2
Octa-Dioxin	<10.0	10.0	1
Tetra-Furans	<0.5	0.5	1
Penta-Furans	<2.5	2.5	1
Hexa-Furans	<2.5	2.5	1
Hepta-Furans	<2.5	2.5	1
Octa-Furan	<5.0	5.0	1
PCDD/Fs	0.00		

Notes

- LOR = Limit of reporting
- I-TEF = International toxic equivalency factor
- I-TEQ = International toxic equivalence (pg/g)
- WHO-TEF = World Health Organistaion toxic equivalency factor
- WHO-TEQ = World Health Organisation toxic equivalence (pg/g)
- T = tetra
- Pe = penta
- Hx = hexa
- Hp =hepta
- O = octa
- CDD, dioxin = chlorinated dibenzo-p-dioxin
- CDF, furan = chlorinated dibenzofuran
- 1 I-TEQ_(zero) and WHO-TEQ_(zero) calculated treating <LOR as zero concentration (pg/g)
- 2 I-TEQ_(0.5 LOR) and WHO-TEQ_(0.5 LOR) calculated treating <LOR as 50% LoR concentration (pg/g)
- 3 I-TEQ_(LOR) and WHO-TEQ_(LOR) calculated treating <LOR as LoR concentration (pg/g)
- 4 Totals LORs are calculated by multiplying the number of peaks by the individual LOR per compound

ANALYTICAL RESULTS SHEET

EP-072

**Volatile Scan for Unknowns
(20 Largest Peaks > LOR)**

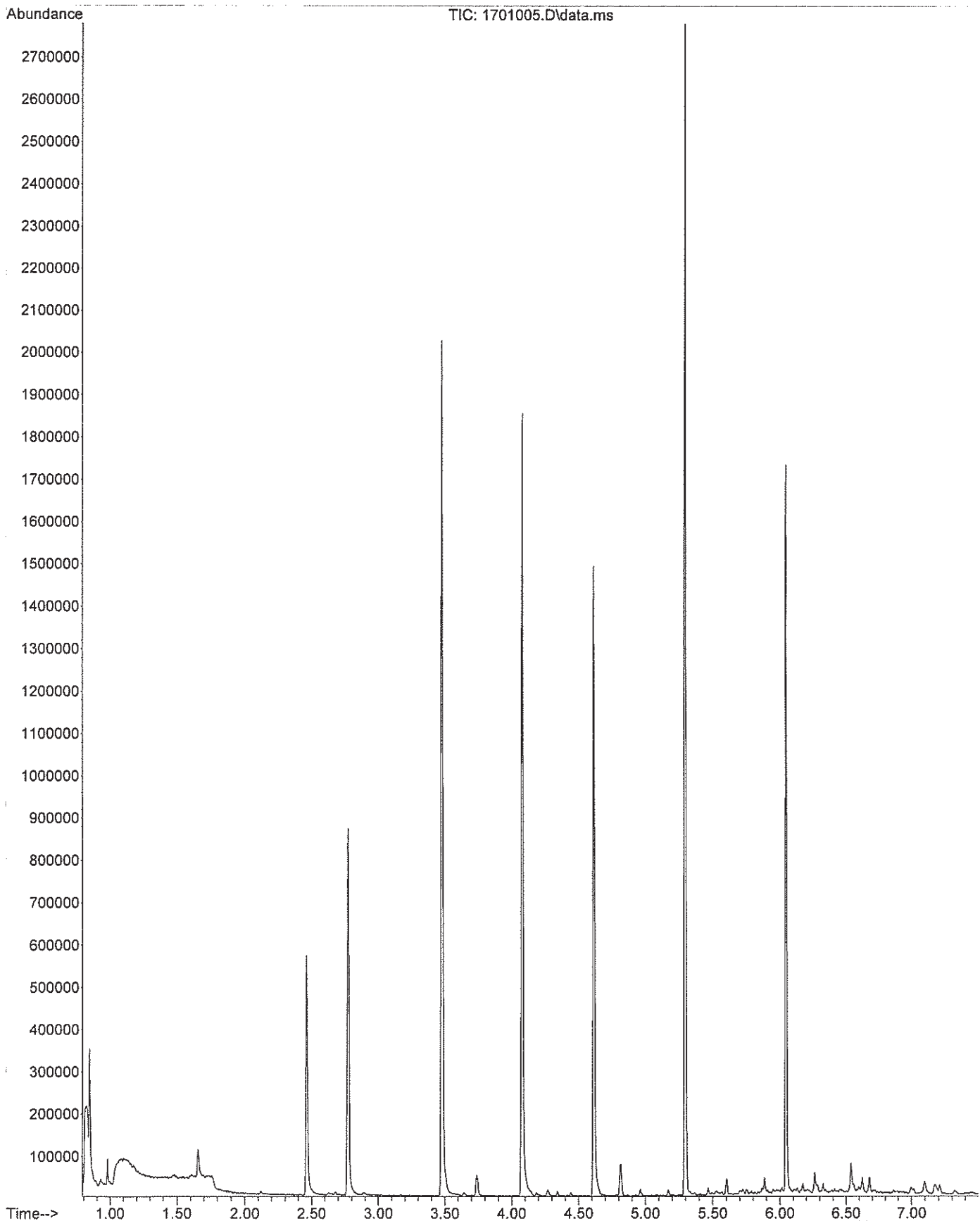
Batch No.: EM1201711 Units : mg/kg
 Sample I.D. : MB Analyst SP
 Client I.D. : Initials:
 Sample Amt (g) : 5 Final Volume (mL): 10
 Matrix : Soil Extract Dilution : 1: 1

Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1		No VOC detected above LOR			1

- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	2.77	1,4-Difluorobenzene	779376	50
2	4.08	Chlorobenzene-d5	1666526	50
3	5.30	1,4-Dichlorobenzene-d4	2066091	50
4	6.05	Napthalene-d8	1143428	50

File :C:\msdchem\1\DATA\2578474\1701005.D
Operator : GW
Acquired : 21 Feb 2012 2:08 pm using AcqMethod FASTVOC.M
Instrument : VO5
Sample Name: 2578474_2
Misc Info :
Vial Number: 17



ANALYTICAL RESULTS SHEET

EP-072

Volatile Scan for Unknowns (20 Largest Peaks > LOR)

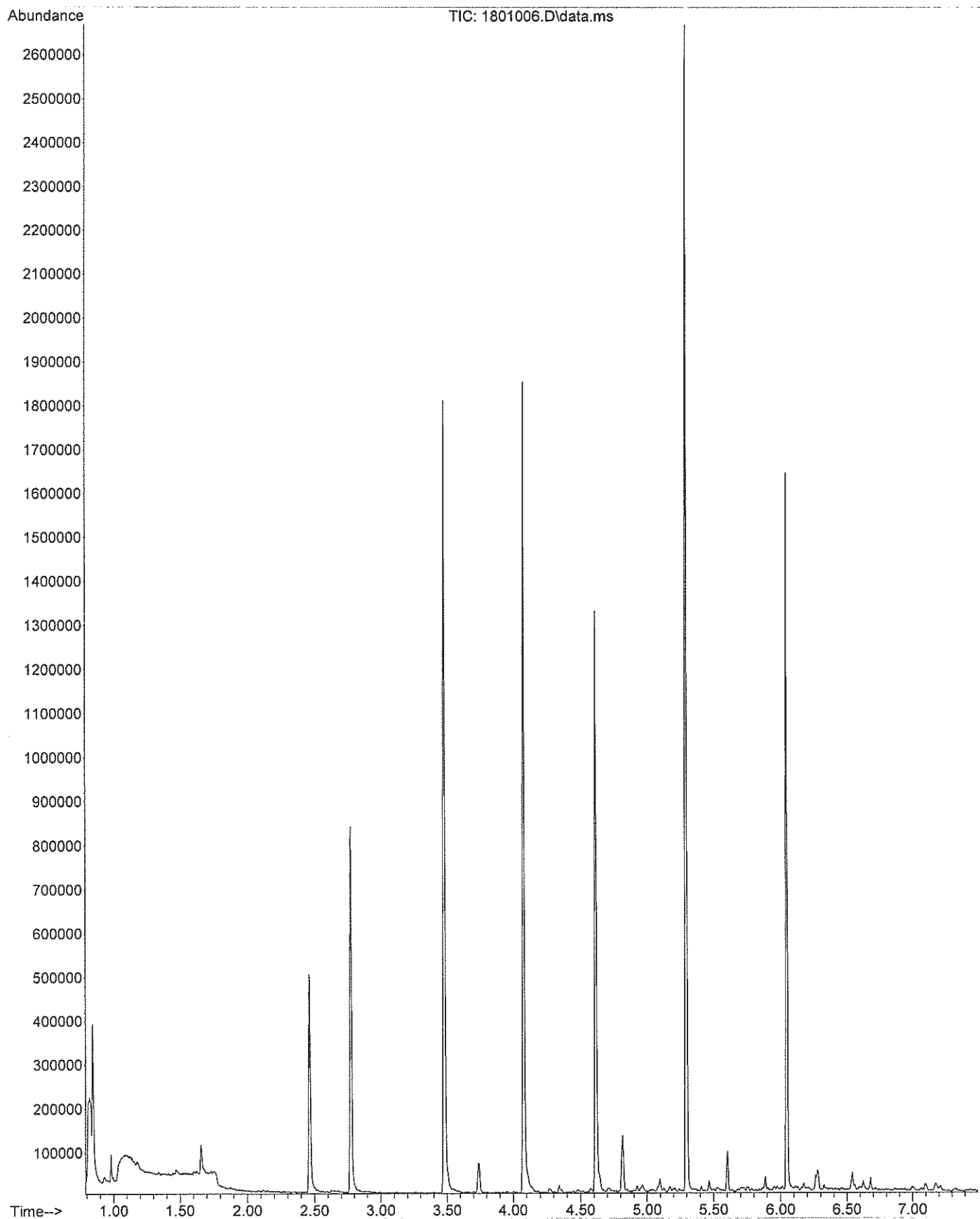
Batch No.:	EM1201711	Units : mg/kg	
Sample I.D. :	1	Analyst	SP
Client I.D. :	A8HA2\2001	Initials:	
Sample Amt (g) :	5.21	Final Volume (mL):	10
Matrix : Soil		Extract Dilution :	1: 1

Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1		No VOC detected above LOR			1

- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	2.77	1,4-Difluorobenzene	758035	50
2	4.08	Chlorobenzene-d5	1629282	50
3	5.30	1,4-Dichlorobenzene-d4	1976095	50
4	6.05	Napthalene-d8	1114764	50

File :C:\msdchem\1\DATA\2578474\1801006.D
Operator : GW
Acquired : 21 Feb 2012 2:26 pm using AcqMethod FASTVOC.M
Instrument : V05
Sample Name: 2578474_3
Misc Info : A8HA2\2001
Vial Number: 18



ANALYTICAL RESULTS SHEET

EP-072

**Volatile Scan for Unknowns
(20 Largest Peaks > LOR)**

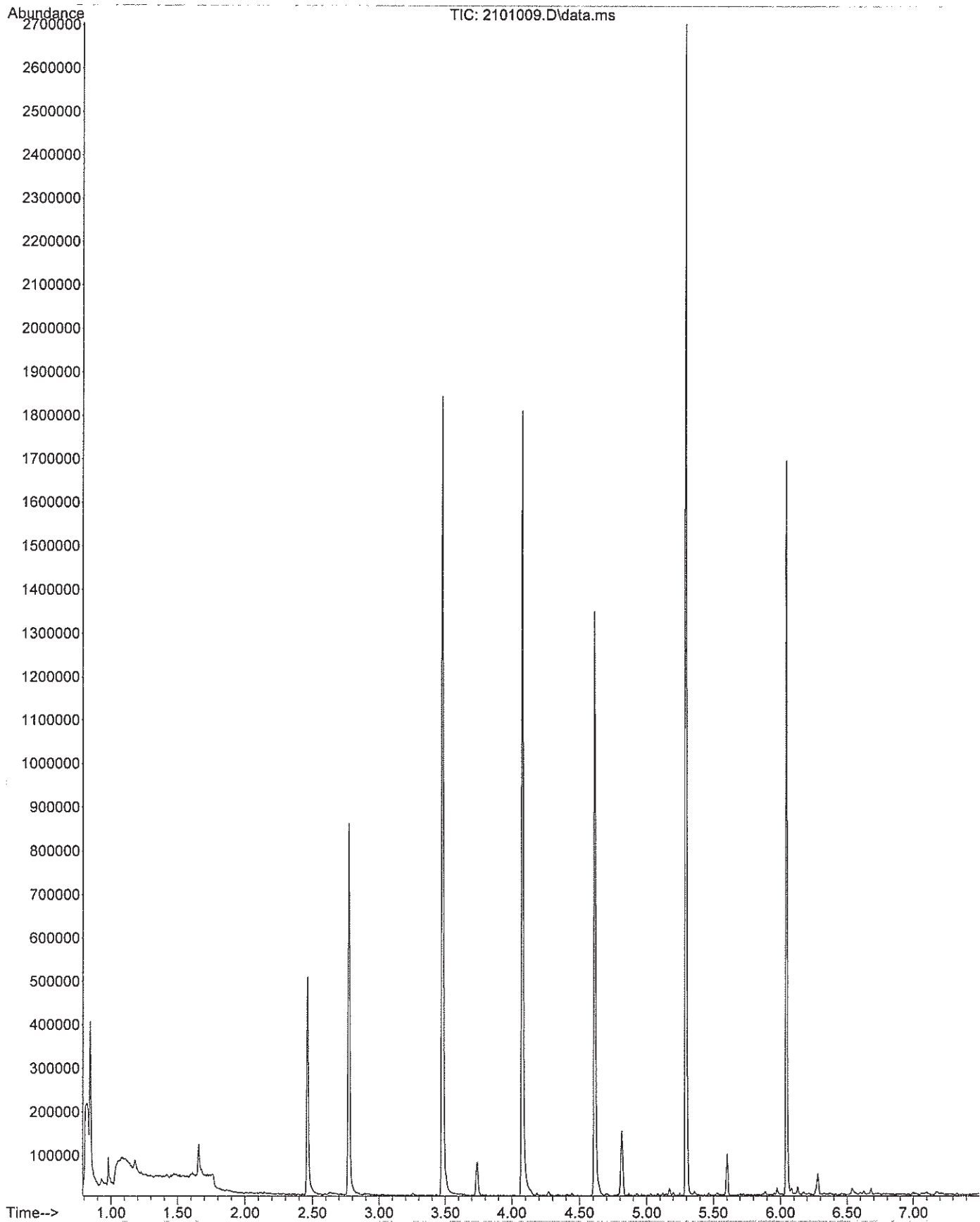
Batch No.:	EM1201711	Units :	mg/kg
Sample I.D. :	2	Analyst	SP
Client I.D. :	A8HA4\2001	Initials:	
Sample Amt (g) :	5.29	Final Volume (mL):	10
Matrix : Soil		Extract Dilution :	1: 1

	Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1			No VOC detected above LOR			1
2						
3						
4						
5						
6						
7						
8						
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- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	2.77	1,4-Difluorobenzene	754829	50
2	4.08	Chlorobenzene-d5	1637794	50
3	5.30	1,4-Dichlorobenzene-d4	1996688	50
4	6.05	Napthalene-d8	1100740	50

File :C:\msdchem\1\DATA\2578474\2101009.D
Operator : GW
Acquired : 21 Feb 2012 3:18 pm using AcqMethod FASTVOC.M
Instrument : V05
Sample Name: 2578474_6
Misc Info : A8HA4\2001
Vial Number: 21



ANALYTICAL RESULTS SHEET

EP-072

**Volatile Scan for Unknowns
(20 Largest Peaks > LOR)**

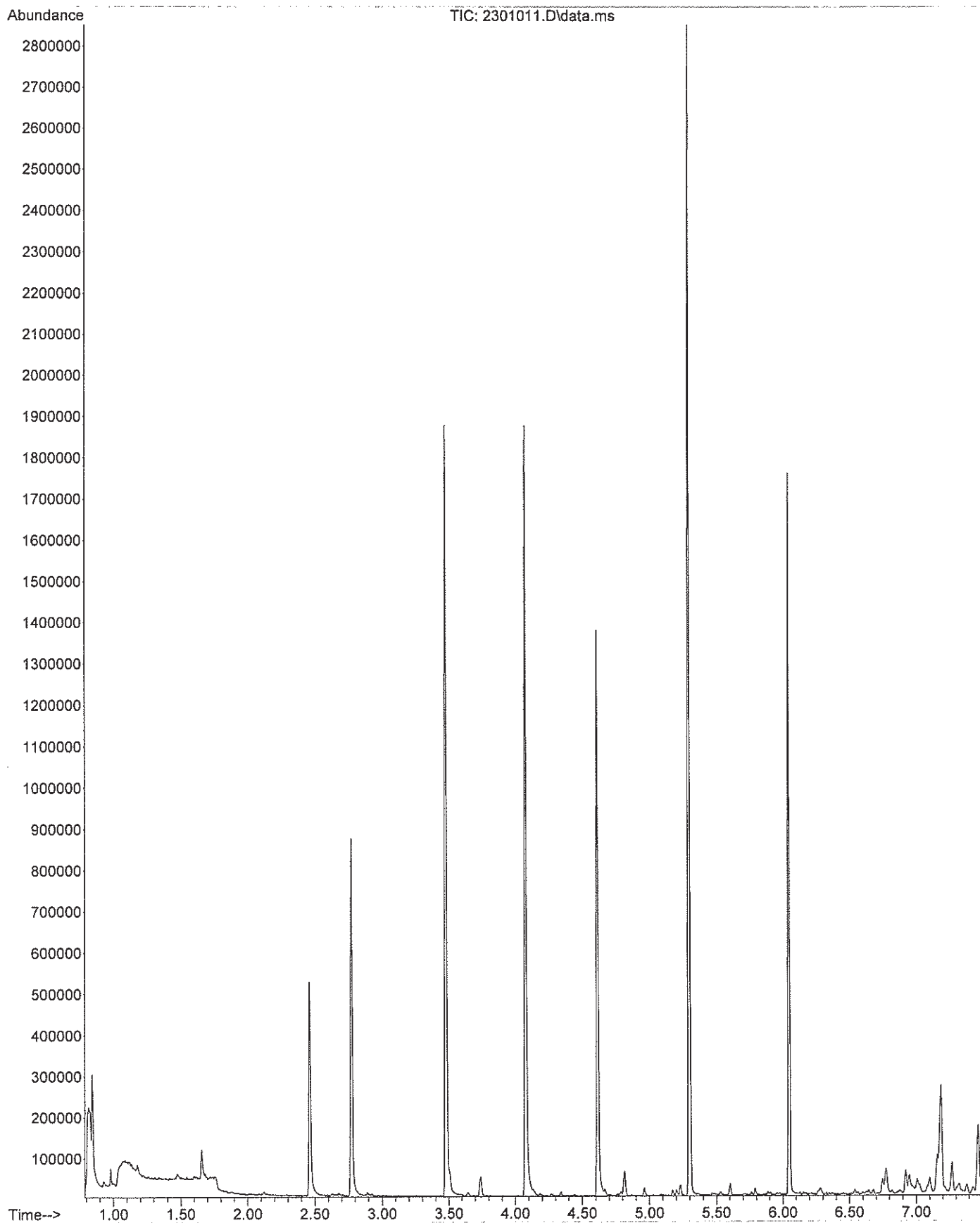
Batch No.:	EM1201711	Units : mg/kg
Sample I.D. :	6	Analyst SP
Client I.D. :	A8HA42001	Initials:
Sample Amt (g) :	5.26	Final Volume (mL): 10
Matrix : Soil		Extract Dilution : 1: 1

Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1 7.19	95	1H-Cycloprop[e]azulene, decahydro-1,1,7-trimethyl-4-methylene-, [1aR--(1a.alpha.,4a.beta.,7.alpha.,7a.beta.,7b.alpha.)]-	372257	1.52	4
2 7.47	90	Azulene, 1,2,3,5,6,7,8,8a-octahydro-1,4-dimethyl-7-(1-methylethenyl)-, [1S-(1.alpha.,7.alpha.,8a.beta.)]-	201402	0.82	4

- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	2.77	1,4-Difluorobenzene	785599	50
2	4.08	Chlorobenzene-d5	1648847	50
3	5.30	1,4-Dichlorobenzene-d4	2048831	50
4	6.05	Napthalene-d8	1164680	50

File :C:\msdchem\1\DATA\2578474\2301011.D
Operator : GW
Acquired : 21 Feb 2012 3:52 pm using AcqMethod FASTVOC.M
Instrument : V05
Sample Name: 2578474_8
Misc Info : A8HA4\2001
Vial Number: 23



ANALYTICAL RESULTS SHEET

EP-072

**Volatile Scan for Unknowns
(20 Largest Peaks > LOR)**

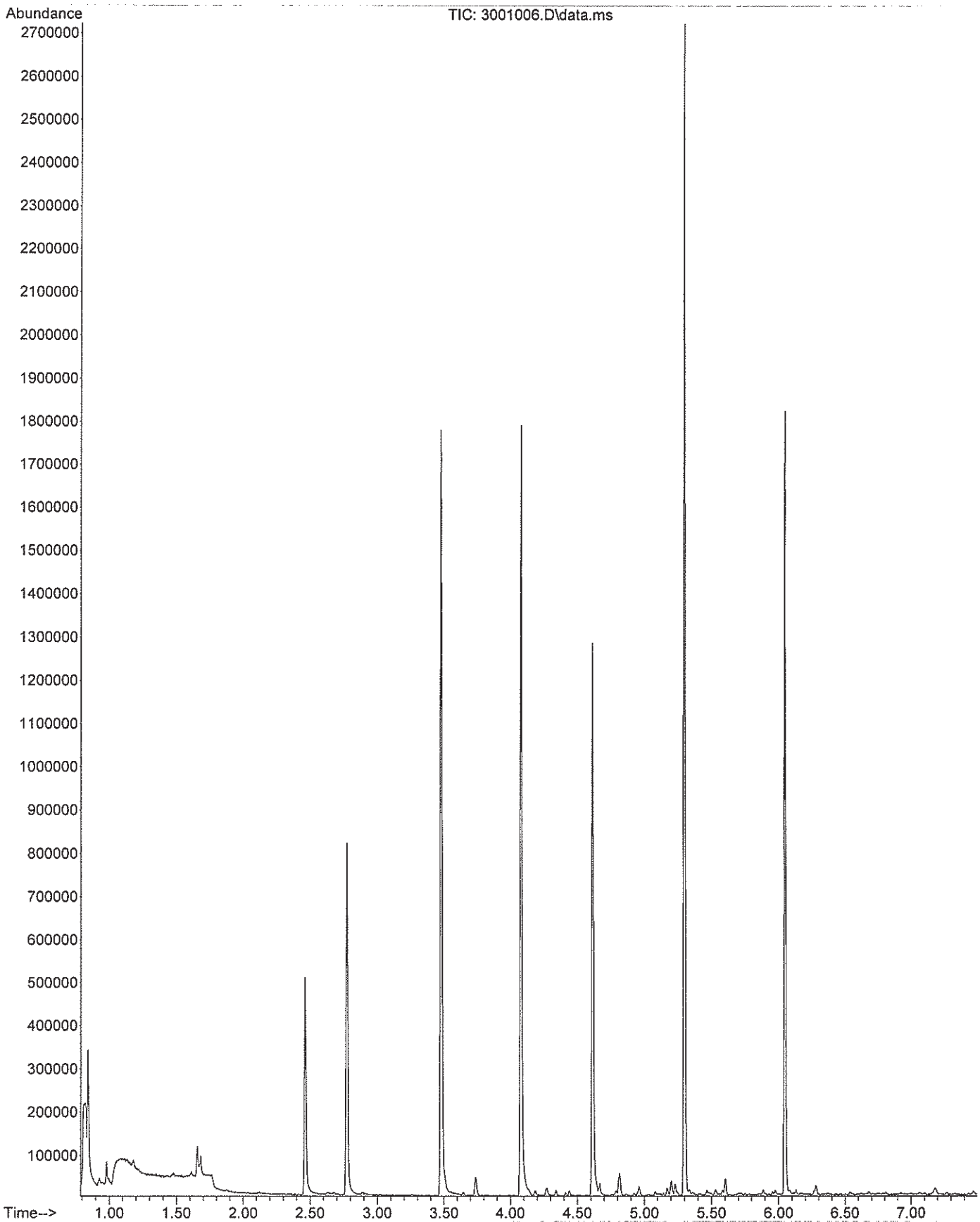
Batch No.:	EM1201711	Units :	mg/kg
Sample I.D. :	4	Analyst	SP
Client I.D. :	A8HA5\2801	Initials:	
Sample Amt (g) :	5.5	Final Volume (mL):	10
Matrix : Soil		Extract Dilution :	1: 1

Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1		No VOC detected above LOR			1
2					
3					
4					
5					
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- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	2.77	1,4-Difluorobenzene	733411	50
2	4.08	Chlorobenzene-d5	1597561	50
3	5.30	1,4-Dichlorobenzene-d4	1985154	50
4	6.05	Napthalene-d8	1209465	50

File :C:\msdchem\1\DATA\2578474\3001006.D
Operator : GW
Acquired : 21 Feb 2012 6:05 pm using AcqMethod FASTVOC.M
Instrument : VO5
Sample Name: 2578474_9
Misc Info : A8HA5\2801
Vial Number: 30



ANALYTICAL RESULTS SHEET

EP-072

**Volatile Scan for Unknowns
(20 Largest Peaks > LOR)**

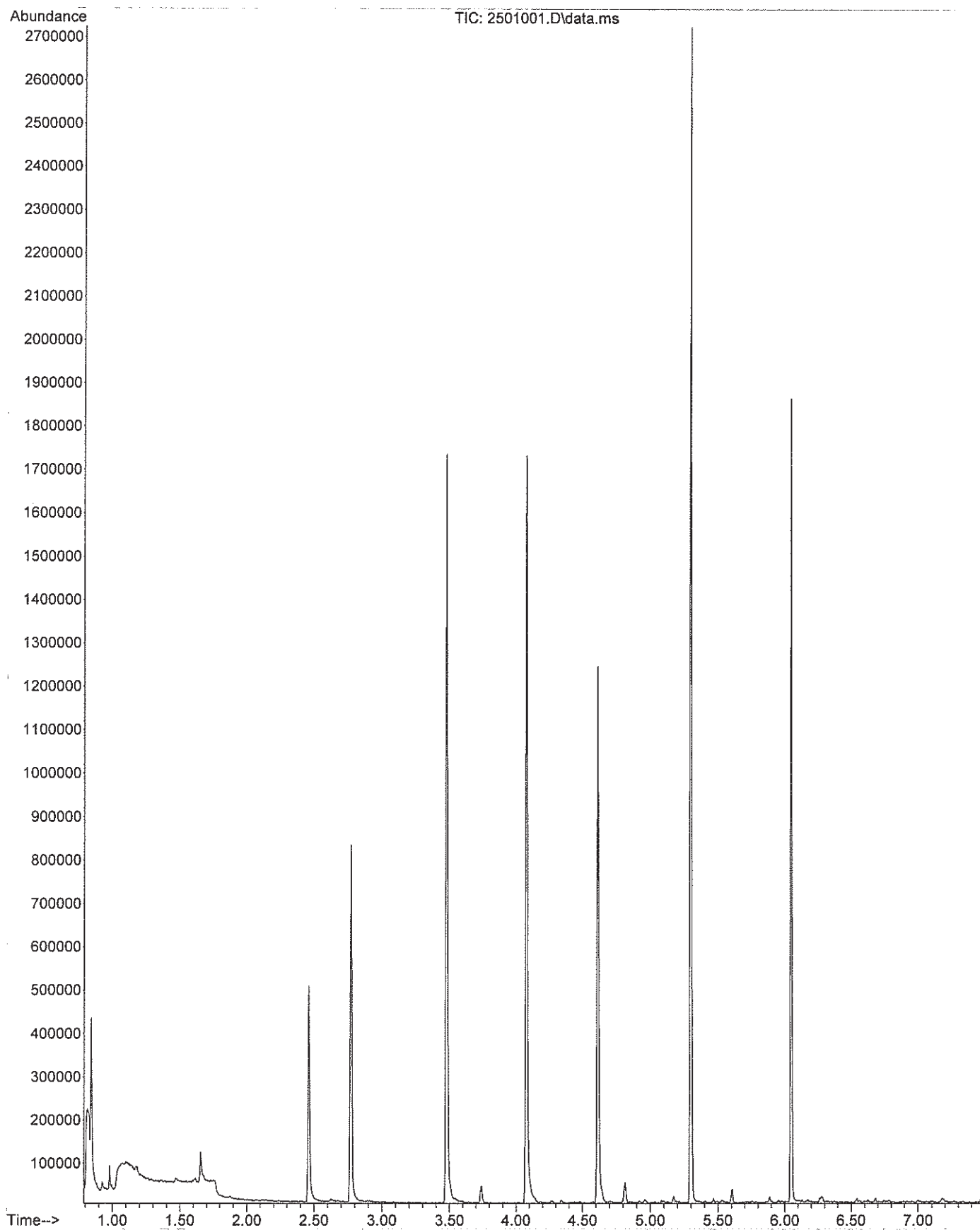
Batch No.:	EM1201711	Units :	mg/kg
Sample I.D. :	5	Analyst	SP
Client I.D. :	A8HTB\2701	Initials:	
Sample Amt (g) :	5.21	Final Volume (mL):	10
Matrix : Soil		Extract Dilution :	1: 1

	Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1			No VOC detected above LOR			1
2						
3						
4						
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- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	2.77	1,4-Difluorobenzene	718400	50
2	4.08	Chlorobenzene-d5	1583358	50
3	5.30	1,4-Dichlorobenzene-d4	1944191	50
4	6.05	Napthalene-d8	1177399	50

File :C:\msdchem\1\DATA\2578474\2501001.D
Operator : GW
Acquired : 21 Feb 2012 4:39 pm using AcqMethod FASTVOC.M
Instrument : VO5
Sample Name: 2578474_10
Misc Info : A8HTB\2701
Vial Number: 25



ANALYTICAL RESULTS SHEET

EP-073

**Semivolatile Scan for Unknowns
(20 Largest Peaks > LOR)**

SHEET413/1

Batch No.: EM1201711

Units : mg/kg

Sample I.D. : 1

Client I.D. : A8HA212001

Analyst : AW

Sample Amt (g) : 20.7

Final Volume (mL): 5

Matrix : Soil

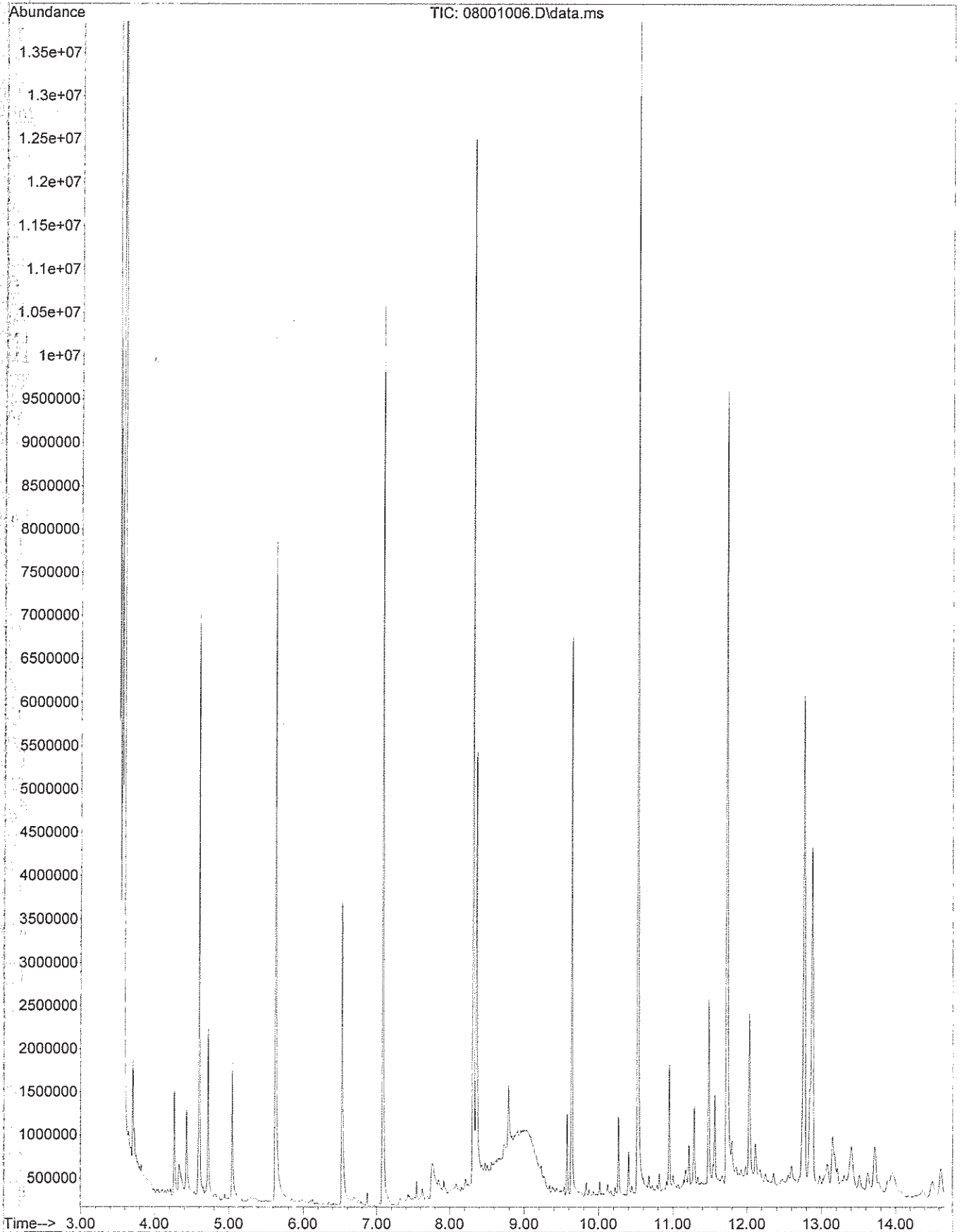
Extract Dilution : 1: 1

Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1	98	tetratetracontane	2414000	0.9	6
2	96	eicosane isomer	2485168	1.0	6
3	96	substituted naphthalene	9274223	3.6	6
4	96	substituted alkene	8265068	3.2	6
5					
6					
7					
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- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	4.60	1,4-Dichlorobenzene-d4	5564065	20
2	5.63	Naphthalene-d8	9128053	20
3	7.08	Acenaphthene-d10	10392952	20
4	8.31	Phenanthrene-d10	11325963	20
5	10.52	Chrysene-d12	14618416	20
6	11.72	Perylene-d12	12558330	20

File : D:\MSDCHEM\1\DATA\2581531\08001006.D
Operator : SV15
Acquired : 23 Feb 2012 5:41 pm using AcqMethod FASTSVOC.M
Instrument : SV-15
Sample Name: 2581531_10
Misc Info : A8HA2\2001
Vial Number: 80



ANALYTICAL RESULTS SHEET

EP-073

**Semivolatile Scan for Unknowns
(20 Largest Peaks > LOR)**

SHEET413/1

Batch No.: EM1201711

Units : mg/kg

Sample I.D. : 2

Client I.D. : A8HA4\2001

Analyst : AW

Sample Amt (g) : 20.4

Final Volume (mL): 5

Matrix : Soil

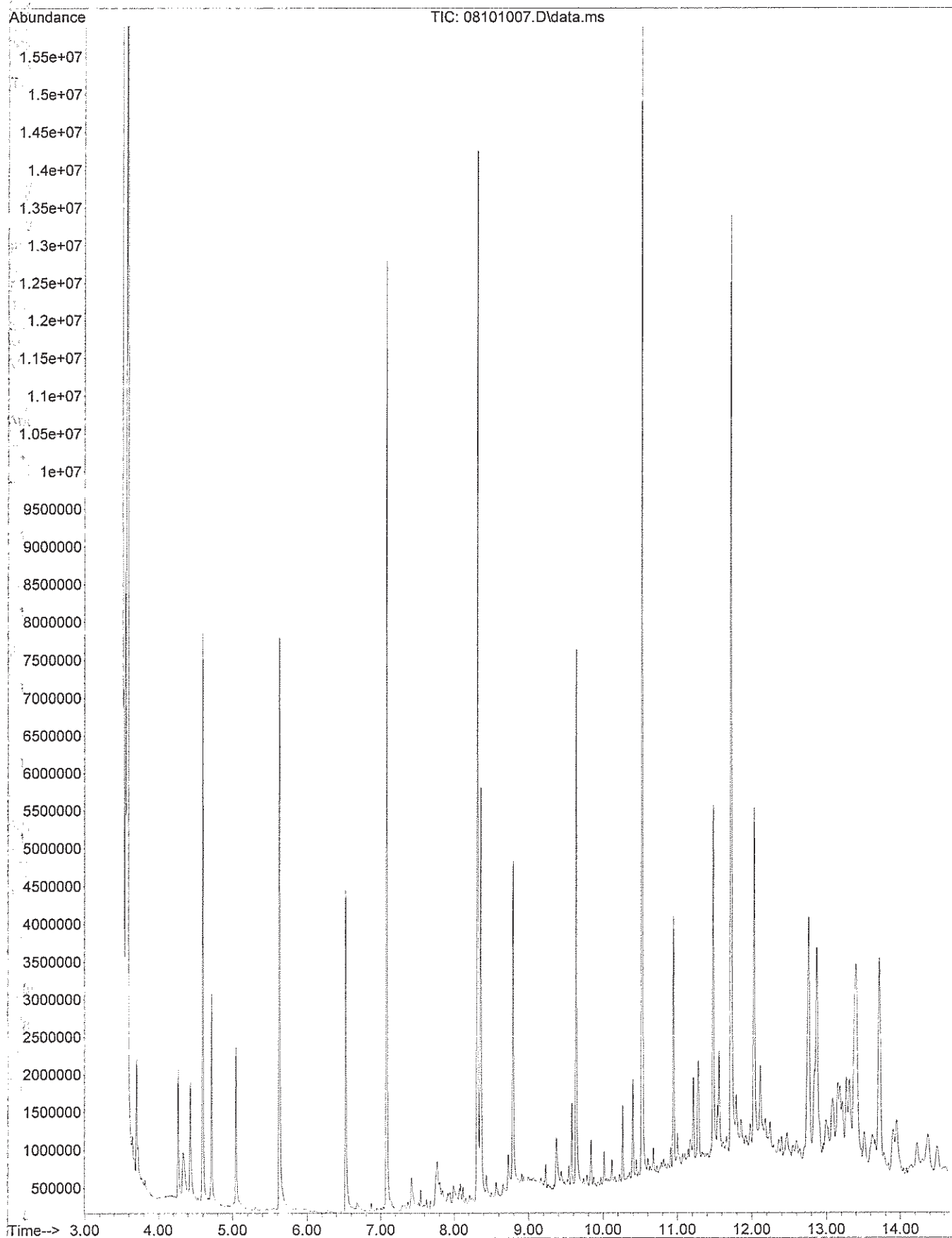
Extract Dilution : 1: 1

Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1	95	hexadecanoic acid	4810961	1.8	4
2	91	dotriacontane	3159147	1.0	5
3	89	hexatriacontane isomer	5387882	1.8	6
4	95	hexatriacontane isomer	5900391	2.0	6
5	95	nonadecane	6565743	2.2	6
6	95	stigmastenone	5611774	1.9	6
7					
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- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	4.60	1,4-Dichlorobenzene-d4	6179963	20
2	5.63	Naphthalene-d8	8830498	20
3	7.08	Acenaphthene-d10	11219426	20
4	8.31	Phenanthrene-d10	13001500	20
5	10.52	Chrysene-d12	14823883	20
6	11.72	Perylene-d12	14752702	20

File : D:\MSDCHEM\1\DATA\2581531\08101007.D
Operator : SV15
Acquired : 23 Feb 2012 6:00 pm using AcqMethod FASTSVOC.M
Instrument : SV-15
Sample Name: 2581531_11
Misc Info : A8HA4\2001
Vial Number: 81



ANALYTICAL RESULTS SHEET

EP-073

**Semivolatile Scan for Unknowns
(20 Largest Peaks > LOR)**

SHEET413/1

Batch No.: EM1201711

Units : mg/kg

Sample I.D. : 3

Client I.D. : A8HA5\2001

Analyst : AW

Sample Amt (g) : 22.5

Final Volume (mL): 5

Matrix : Soil

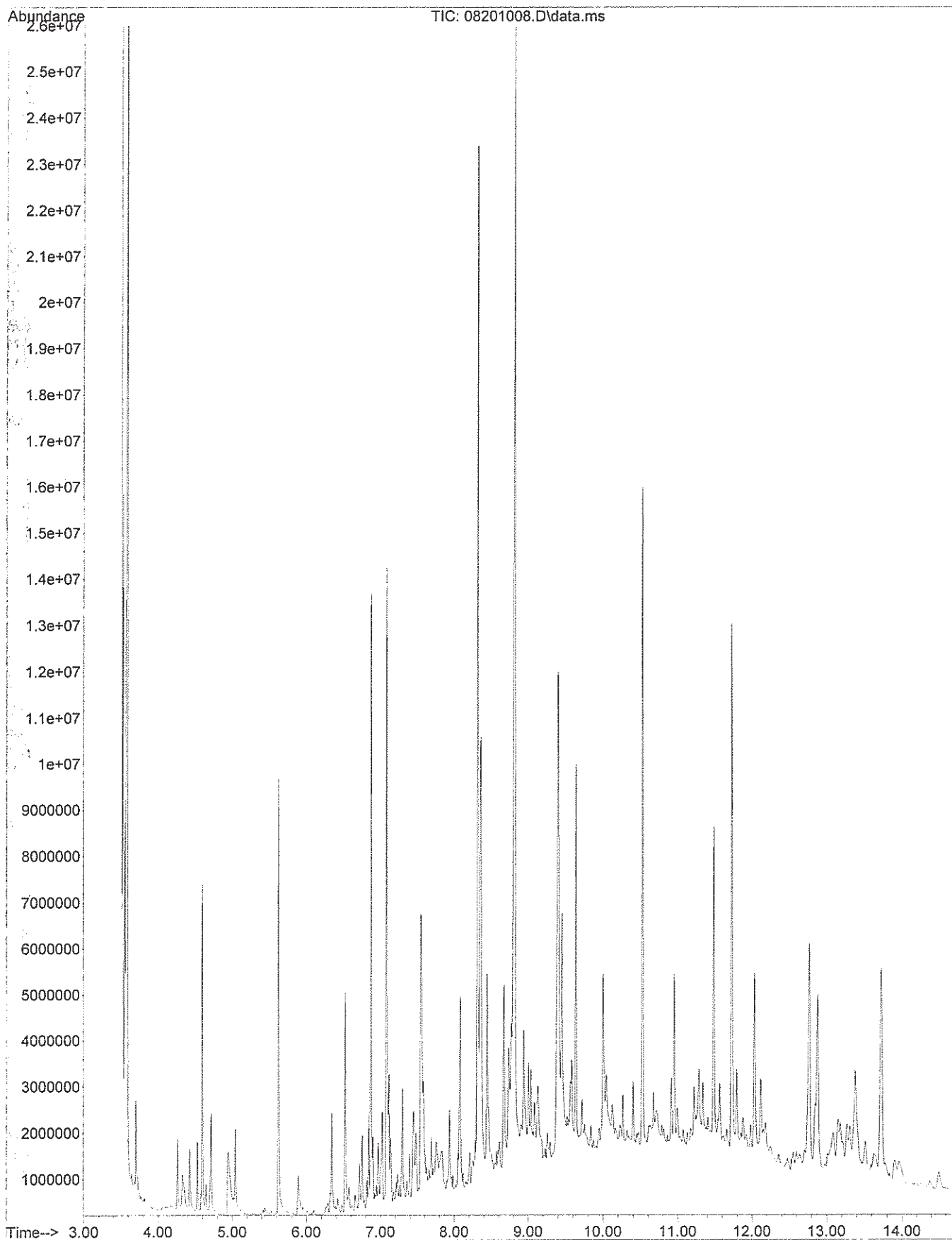
Extract Dilution : 1: 1

	Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1	6.869	99	Substituted cycloprop[e]azulene isomer	11467225	4.1	3
2	7.294	95	Bishydroxyethyldodecanamide	2614353	0.9	3
3	7.545	83	Globulol	12876507	4.6	3
4	7.935	93	Tetradecanoic acid isomer	2239653	0.8	3
5	8.081	98	Tetradecanoic acid isomer	5693857	1.1	4
6	8.442	97	Pentadecanoic acid	6495033	1.3	4
7	8.67	93	Hexadecanoic acid isomer	5630864	1.1	4
8	8.734	90	Hexadecenoic acid isomer	3641048	0.7	4
9	8.815	95	Hexadecanoic acid isomer	38551471	7.8	4
10	9.008	98	Heptadecanoic acid isomer	1805850	0.5	5
11	9.13	95	Heptadecanoic acid isomer	3788267	1.1	5
12	9.398	97	Oleic acid	19167050	5.7	5
13	9.451	98	Octadecanoic acid	6205725	1.9	5
14	9.999	86	Cyclododecanone	4385706	1.3	5
15	10.949	95	Octadecane	3476752	1.0	5
16	11.485	95	Hexatriacontane isomer	6926088	2.3	6
17	12.033	95	Hexatriacontane isomer	5069714	1.7	6
18	12.767	86	Substituted cycloprop[e]azulene isomer	8933216	3.0	6
19	13.723	97	Stigmastenone	10283856	3.4	6
20						

- 1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.
- 2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.
- 3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	4.60	1,4-Dichlorobenzene-d4	5586165	20
2	5.63	Naphthalene-d8	8017217	20
3	7.08	Acenaphthene-d10	12490838	20
4	8.31	Phenanthrene-d10	22085794	20
5	10.52	Chrysene-d12	14845253	20
6	11.72	Perylene-d12	13259505	20

File :D:\MSDCHEM\1\DATA\2581531\08201008.D
Operator : SV15
Acquired : 23 Feb 2012 6:19 pm using AcqMethod FASTSVOC.M
Instrument : SV-15
Sample Name: 2581531_12
Misc Info : A8HA5\2001
Vial Number: 82



ANALYTICAL RESULTS SHEET

EP-073

**Semivolatile Scan for Unknowns
(20 Largest Peaks > LOR)**

SHEET413/1

Batch No.: EM1201711

Units : mg/kg

Sample I.D. : 4

Client I.D. : A8HA512801

Analyst : AW

Sample Amt (g) : 21.8

Final Volume (mL): 5

Matrix : Soil

Extract Dilution : 1: 1

	Retention Time (min)	Unknown Match Quality (%)	COMPOUND tentatively identified from Library Search (NBS49K)	Compound Area	Estimated Amount	IS #
1	12.033	98	Hexatriacontane	3088844	1.1	6
2	12.779	89	Methoxyfriedooleanene	31308869	11.3	6
3	12.884	n/a	Unknown compound	23233170	8.4	6
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

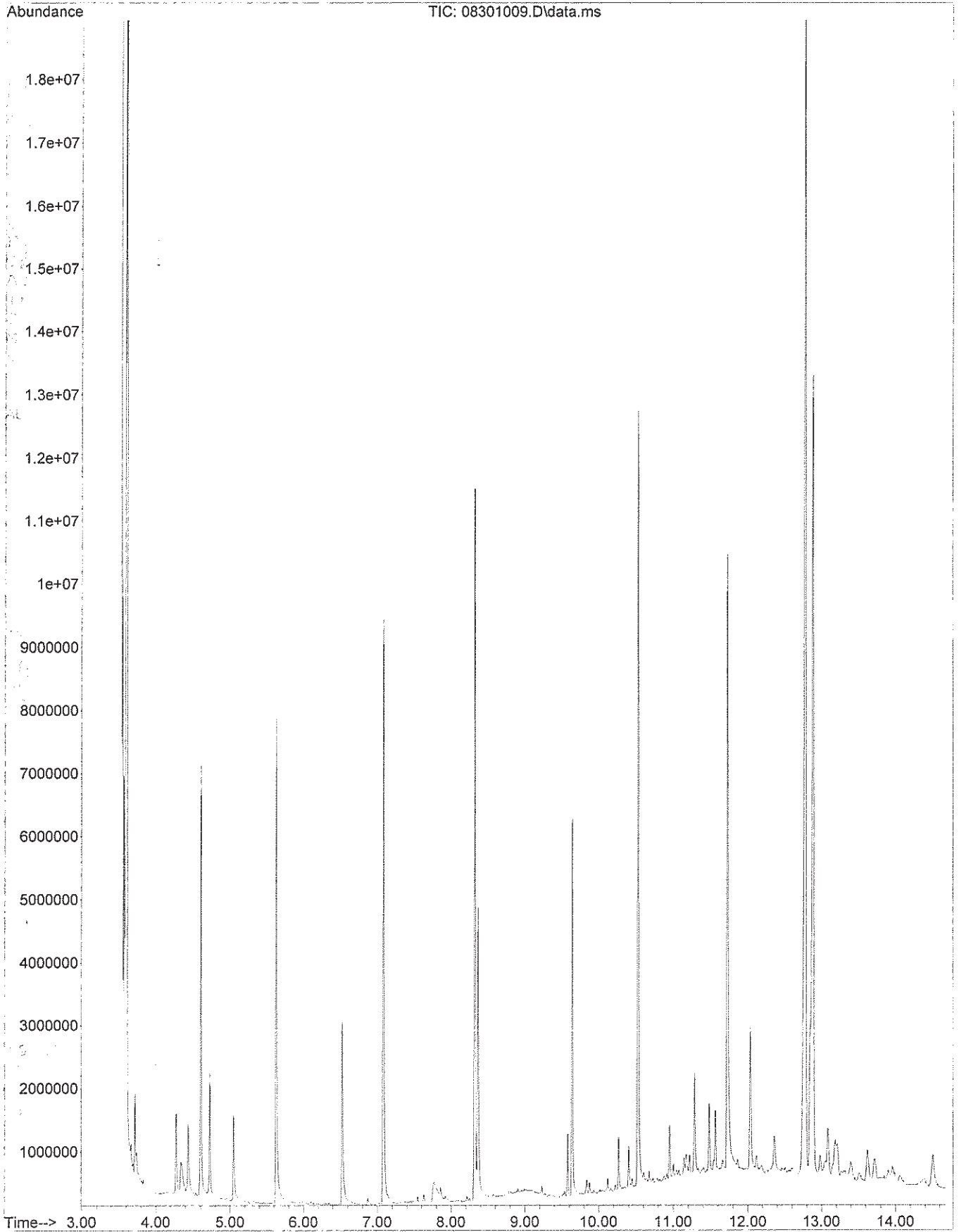
1) The "Unknown Match Quality" is a value representing the probability that the unknown is correctly identified from a reference spectrum. An N/A in this field indicates that a generalized compound category has been inserted due to low spectra matches.

2) The estimated concentration is based on an assumed 1:1 response ratio with the closest eluting Internal Standard.

3) The level of reporting (LOR) is equal to one tenth of the concentration of the associated internal standard, which is equivalent to 0.5 mg/kg.

IS #	R.T.	Internal Standard	Area	Amount ng/uL
1	4.60	1,4-Dichlorobenzene-d4	5687866	20
2	5.63	Naphthalene-d8	8124133	20
3	7.08	Acenaphthene-d10	9764385	20
4	8.31	Phenanthrene-d10	10413412	20
5	10.52	Chrysene-d12	13520722	20
6	11.72	Perylene-d12	12693327	20

File : D:\MSDCHEM\1\DATA\2581531\08301009.D
Operator : SV15
Acquired : 23 Feb 2012 6:37 pm using AcqMethod FASTSVOC.M
Instrument : SV-15
Sample Name: 2581531_13
Misc Info : A8HA5\2801
Vial Number: 83



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: EM1201711		
Yi r	PGOLDER ASSOCIATES		
Y : i rUr	Pc Cv NjMuy : br 7uh		
SAAb aa	Ps gf god Bg036 ODDed egp30, o-- gk 87i grgvvDnv : i AgRvY lg 121 HSWTHd wc gWEK TgrYy gSUK TwSf Nsg 122		
E, v 7E	Pi v uu: bv 7uh@e: fAl blu: v 17D		
Ti f pN i l	P+X1g. g - X2g o00		
57ua0 E	P+X1g. g - X2g o01		
sb j l ur	P113X1. 201		
d bAl t g Dv L i b	PGS, MEf Og . 2o06		
Y, d, y g Dv L i b	P, , , ,		
k 7v pif b	PwH		
k G	P5gRy		
QD. ri g Dv L i b	PME/0o4/12		

TNag b p: bg adpI bal Al ag 7i t g pb nCdag b p: br(a)g 8dng rNag b l d i ul l gwl adfag 7ppif g r: g rN g a7v pif (a)g 7ag adL v D i Alg Sifg p7el ag : g rNag b p: bg N7nl g L i l i g uN uhl Ag 7i Ag 7ppb ni Ag : t b f 7al lg

TNag l brD7ri g gi 7f eAg: i r7CagN g: f: 8Ceg: bv 7rCi P

- G i l l b r i g : v v i i r a
- S i 7 f e r D 7 f v i a d f a
- k D b e 7 r i g : i r b i g O e a



Signatories


Position	Accreditation Category
Kl i C b y : b e 7 i O g N v G r	Mi E: D o l g y : b e 7 i O a
Mi r 7 f g t l 7 v g l 7 A l b	Mi E: D o l g y : b e 7 i O a
Kl i C b k l v O : F r f e g v a r t D v l i r g N v G r	Mi E: D o l g t b e 7 i O a
f 7 L : b r : t g M 7 i 7 e l t g g t b e 7 i O a	k t A l t g t b e 7 i O a
c : i , M i r 7 f g t l 7 v g l 7 A l b	Mi E: D o l g y : b e 7 i O a
Kl i C b y b e 7 i O g N v G r	Mi E: D o l g t b e 7 i O a

c STS Suid Ad Af 7L: br: t g 2o
Suid Ad Ag: t g: v p f e i ul f O n g
W d N e y g f 302o l



Environmental Division Melbourne
Part of the **ALS Laboratory Group**

49VI ar7IlgvAq pbcen7ff qYv gDatzfGg 131
Tel. +61-3-8549 9600 g7xlgfX1. . - 0466X01gwww.alsglobal.com
A Campbell Brothers Limited Company





s 7el P . g go
 W: bhgi bAl b P EM1201311
 y fDi r P Gd f mEW\$kkd y \$TEK
 s b j j ur P 113X1: 201

General Comments

TN g 7i 7f 7f 7f 7f pb ul ADh ag Dal Ag Lt g rN g Ei n 0 i v i i r 7f m 0 a C i g N 7 n l g L i i g A l n l F p l Ag b v g l ar 7 L 7 a N Ag C r l b 7 r C i 7 f 7 f g b u r e i 0 i Ag pb ul ADh ag a Du N y 7 ag r N a l g p D L 7 a N Ag Lt g r N g UK Es S 9 S s HS 9 S k g 7 i Ag c Es M l g v g N Dal .
 A l n l F p l Ag pb ul ADh ag 7 f g v p F t l Ag 0 g N 7 L a l i u l g g A u D v l i r A 9 a 7 i A 7 b A ag t d t g u b i r g h i q D i ar t
 W N l d g r : 0 a r D h g l r l b v 0 7 r C i g N 7 a g l i i g l b : b v l A 9 h a D F a g 7 h g t p : b i Ag i 7 f 7 f a 0 i
 W N l d g r p : b i A g f a a g i 7 i g < > g h a D F a g 7 h a 0 i t g N g N g d w 9 N a g y 7 i g l g a D g r g u 0 7 h g 7 v p l F g x i d 7 u r A 0 l a r 7 i r g A 0 C i g i 7 i A : t u p a D 0 0 C i r g 7 v p l F g : b 7 i 7 f 7 f a 0 i
 W N l d g N g d w g 7 f p : b i A g h a D F a g 7 h a 0 i t g N g N g d w 9 N a g y 7 i g l g a D g r g u 0 7 h g 7 v p l F g x i d 7 u r A 0 l a r 7 i r g A 0 C i g i 7 i A : t u p a D 0 0 C i r g 7 v p l F g : b 7 i 7 f 7 f a 0 i
 W N l g 7 v p l F e g 0 i g : b v 7 r C i g 9 a g : r p b n 0 l A g l t g N g u b e i 9 a 7 v p l F e g 7 i a g 7 h g N 8 i g 0 0 N D g 7 g 0 i g r : v p : i i i r i g 7 g N a l g 0 a r 7 i u l a g N g 0 i g r : v p : i i i r i g 7 a g l i i g 7 a a D v l A g l t g N g 7 L : 7 r : t g : t p b u l a e 0 e g D p : a l
 K l t g P y S k g D v L l t 9 e g S k g t e 0 a r t g D v L l t 9 b v g 7 r 7 L 7 a l g r 7 0 r 7 0 i A g l t g N v 0 7 f 7 L a r 7 u r a g l b n 0 l a i g N g N v 0 7 f 7 L a r 7 u r a g l b n 0 l 9 0 7 g 0 a 0 C i g g N g S v l 0 0 7 i g N v 0 7 f 7 L : u 0 r t i
 f d w 9 f 0 0 g t p : b 0 e
 A g 7 N 9 a g t a D F a g 7 h a 0 i t g N g N v g 0 A 0 0 7 f 7 i 7 f 7 r i g l r i u r C i a g 7 r g b 7 L : n l g N g f n l f g t p : b 0 e

- EP066/068: EM1201711_1-3 Particular samples required dilution prior to analysis due to matrix interferences. LOR values have been adjusted accordingly.
- EP076: 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- EP321: PFOA & PFOS results are reported as an aggregate of linear and branched isomers. Matrix spike recovery not determined for PFOA & PFOS due to high background level of target analytes.
- Perchlorates and PFOS/PFOA conducted by ALS Sydney, NATA accreditation no. 825, site no 10911.



s 7el P 4g, glo
 W: bhgi bAI b P EM1201311
 y fD: i r P Gd f mEWg\$kkd y V\$TEK
 s b j j ur P 113X1: 201

Analytical Results

Compound	CAS Number	Client sampling date / time		LOR	Unit	Client sample ID								
		A8HA212001	A8HA412001			A8HA512001	A8HA512801	A8HTB12701						
EA002 : pH (Soils)														
pH Value		011			pH	6.9		6.5		6.5		6.5		6.5
EA055: Moisture Content														
Moisture Content (dried @ 103°C)		110			%	22.9	19.2	18.9	29.0					<110
EG005T: Total Metals by ICP-AES														
Arsenic	3440.-, -2	0			v e/he	10	<0	6	<0					****
Cadmium	3440.4, .6	1			v e/he	<1	<1	<1	<1					****
Chromium	3440.43, .	2			v e/he	62	24	58	43					****
Copper	3440.00, -	0			v e/he	7	<0	7	6					****
Lead	34.6, 62, 1	0			v e/he	17	8	19	18					****
Nickel	3440.02, 0	2			v e/he	12	6	12	8					****
Zinc	3440.XX, X	0			v e/he	14	14	14	7					****
EG035T: Total Recoverable Mercury by FIMS														
Mercury	34.6, 63, X	011			v e/he	<011	<011	<011	<011					****
EP004: Organic Matter														
Total Organic Carbon		010			%	2.2	3.2	2.7	1.4					****
EP066: Polychlorinated Biphenyls (PCB)														
Total Polychlorinated biphenyls		010			v e/he	<0120	<0120	<0120	<0110					****
EP068A: Organochlorine Pesticides (OC)														
alpha-BHC	.16, -4, X	0100			v e/he	<0110	<0110	<0110	<0100					****
Hexachlorobenzene (HCB)	11-, .34, 1	0100			v e/he	<0110	<0110	<0110	<0100					****
beta-BHC	.16, -0, 3	0100			v e/he	<0110	<0110	<0110	<0100					****
gamma-BHC	0-, -6, 6	0100			v e/he	<0110	<0110	<0110	<0100					****
delta-BHC	.16, -X, -	0100			v e/he	<0110	<0110	<0110	<0100					****
Heptachlor	3X, 44, -	0100			v e/he	<0110	<0110	<0110	<0100					****
Aldrin	.06, 00, 2	0100			v e/he	<0110	<0110	<0110	<0100					****
Heptachlor epoxide	1024, 03, .	0100			v e/he	<0110	<0110	<0110	<0100					****
trans-Chlordane	010, .34, 2	0100			v e/he	<0110	<0110	<0110	<0100					****
alpha-Endosulfan	606, 6, -	0100			v e/he	<0110	<0110	<0110	<0100					****
cis-Chlordane	010, .31, 6	0100			v e/he	<0110	<0110	<0110	<0100					****
Dieldrin	X0, 03, 1	0100			v e/he	<0110	<0110	<0110	<0100					****
4,4'-DDE	32, 00, 6	0100			v e/he	<0110	<0110	<0110	<0100					****
Endrin	32, 20, -	0100			v e/he	<0110	<0110	<0110	<0100					****
beta-Endosulfan	...21, ., X0, 6	0100			v e/he	<0110	<0110	<0110	<0100					****
4,4'-DDD	32, 04, -	0100			v e/he	<0110	<0110	<0110	<0100					****
Endrin aldehyde	3421, 6, 4	0100			v e/he	<0110	<0110	<0110	<0100					****
Endosulfan sulfate	10, 1, 03, -	0100			v e/he	<0110	<0110	<0110	<0100					****
4,4'-DDT	00, 26, .	012			v e/he	<014	<014	<014	<012					****



s 7el
 W: bhgi bAl b
 y fD: i r
 s b j j ur

 P og_ glo
 P EM1201311
 P Gd f mEw\$kk d y N\$TEK
 P 113X1: 201

Analytical Results

k DL, M7rt&: SOIL

Client sample ID

Client sampling date / time

CAS Number

LOR

Unit

Compound	A8HA22001 1o,5EO,2012gtoR0 EM1201711-001	A8HA42001 1o,5EO,2012gtoR0 EM1201711-002	A8HA52001 1o,5EO,2012gtoR0 EM1201711-003	A8HA52801 1o,5EO,2012gtoR0 EM1201711-004	A8HTB2701 1o,5EO,2012gtoR0 EM1201711-005
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EP068A: Organochlorine Pesticides (OC) - Continued

Endrin ketone	0.464,30,0	0100	v e/he	<0110	<0100	<0110	<0100	<0110	<0100	<0110
Methoxychlor	32,4,0	012	v e/he	<014	<014	<014	<014	<014	<012	<014

EP068B: Organophosphorus Pesticides (OP)

Dichlorvos	X2,3,3	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0110
Demeton-S-methyl	616,-X-	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0110
Monocrotophos	X62,22,4	012	v e/he	<014	<014	<014	<014	<014	<012	<014	<012
Dimethoate	X0,01,0	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0100
Diazinon	...41,0	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0100
Chlorpyrifos-methyl	006,1,0	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0100
Parathion-methyl	26,-00,0	012	v e/he	<014	<014	<014	<014	<014	<012	<014	<012
Malathion	121,30,0	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0100
Fenthion	00,-,6	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0100
Chlorpyrifos	2621,-,2	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0100
Parathion	oX,-,2	012	v e/he	<014	<014	<014	<014	<014	<012	<014	<012
Pirimphos-ethyl	2,00,41,1	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0100
Chlorfenvinphos	430,60,X	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0100
Bromophos-ethyl	4-24,3,-X	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0100
Fenamiphos	22224,62,X	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0100
Prothiofos	.4X4,4X,4	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0100
Ethion	oX,12,2	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0100
Carbophenothion	3-X,16,X	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0100
Azinphos Methyl	-X,00,0	0100	v e/he	<0110	<0110	<0110	<0110	<0110	<0100	<0110	<0100

EP074A: Monocyclic Aromatic Hydrocarbons

Benzene	31,4,2	012	v e/he	<012	<012	<012	<012	<012	<012	<012	<012
Toluene	10,-,,-	010	v e/he	<010	<010	<010	<010	<010	<010	<010	<010
Ethylbenzene	100,41,4	010	v e/he	<010	<010	<010	<010	<010	<010	<010	<010
meta- & para-Xylene	10,-,,-,g0X,42,.	010	v e/he	<010	<010	<010	<010	<010	<010	<010	<010
Styrene	100,42,0	010	v e/he	<010	<010	<010	<010	<010	<010	<010	<010
ortho-Xylene	60,43,X	010	v e/he	<010	<010	<010	<010	<010	<010	<010	<010
Isopropylbenzene	6,-,2,-	010	v e/he	<010	<010	<010	<010	<010	<010	<010	<010
n-Propylbenzene	10,.,Xo,1	010	v e/he	<010	<010	<010	<010	<010	<010	<010	<010
1,3,5-Trimethylbenzene	10,-,X3,-	010	v e/he	<010	<010	<010	<010	<010	<010	<010	<010
sec-Butylbenzene	1,.,o,6,-	010	v e/he	<010	<010	<010	<010	<010	<010	<010	<010
1,2,4-Trimethylbenzene	6o,X,X	010	v e/he	<010	<010	<010	<010	<010	<010	<010	<010
tert-Butylbenzene	6,-,0X,X	010	v e/he	<010	<010	<010	<010	<010	<010	<010	<010
p-Isopropyltoluene	66,-,3,X	010	v e/he	<010	<010	<010	<010	<010	<010	<010	<010
n-Butylbenzene	104,o1,-	010	v e/he	<010	<010	<010	<010	<010	<010	<010	<010

EP074B: Oxygenated Compounds



s 7el
 W: bhgi bAl b
 y fD: l r
 s b j l ur
 P Xg glo
 P EM1201311
 P Gd f mEWg\$kk dy V\$TEK
 P 113X1: 201

Analytical Results

Compound	CAS Number	Client sampling data / time		Client sample ID	A8HA212001 10,5EO,2012gloR0 EM1201711-001	A8HA412001 10,5EO,2012gloR0 EM1201711-002	A8HA512001 10,5EO,2012gloR0 EM1201711-003	A8HA512801 10,5EO,2012gloR0 EM1201711-004	A8HTB12701 10,5EO,2012gloR0 EM1201711-005
		LOR	Unit						
EP074B: Oxygenated Compounds - Continued									
Vinyl Acetate	10-,0o,4	0	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
2-Butanone (MEK)	3-,6,.,.	0	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
4-Methyl-2-pentanone (MIBK)	10-,10,1	0	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
2-Hexanone (MBK)	o61,3-,X	0	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
EP074C: Sulfonated Compounds									
Carbon disulfide	3o,1o,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
EP074D: Fumigants									
2,2-Dichloropropane	o64,2o,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
1,2-Dichloropropane	3-,3,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
cis-1,3-Dichloropropylene	100X1,01,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
trans-1,3-Dichloropropylene	100X1,02,X	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
1,2-Dibromoethane (EDB)	10X6,4	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	3o,31,-	0	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Chloromethane	34-,3,.	0	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Vinyl chloride	3o,01,4	0	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Bromomethane	34-,.,6	0	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Chloroethane	3o,00,.	0	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Trichlorofluoromethane	3o,X6,4	0	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
1,1-Dichloroethene	3o.,o4	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Iodomethane	34-,.,4	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
trans-1,2-Dichloroethene	1oX,X0,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
1,1-Dichloroethane	3o.,4,.	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
cis-1,2-Dichloroethene	1oX,o6,2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
1,1,1-Trichloroethane	31,oo,X	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
1,1-Dichloropropylene	oX,.,o,X	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Carbon Tetrachloride	oX,2,.,o	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
1,2-Dichloroethane	103,0X,2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Trichloroethene	36,01,X	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Dibromomethane	34,6o.,	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
1,1,2-Trichloroethane	36,00,o	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
1,3-Dichloropropane	142,2,6	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Tetrachloroethene	123,1-,4	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
1,1,1,2-Tetrachloroethane	X 0,20,X	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
trans-1,4-Dichloro-2-butene	110,o3,X	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
cis-1,4-Dichloro-2-butene	143X,11,o	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
1,1,2,2-Tetrachloroethane	36.,4,o	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
1,2,3-Trichloropropane	6X,1-,4	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo



s 7el
 W: bhgi bAl b
 y fD: l r
 s b j j ur

P 3g, glo
 P EM1201311
 P Gd f mEw\$kk d y N\$TEK
 P 113X1: 201

Analytical Results

k DL, M7rtb&: SOIL

Compound	CAS Number	LOR	Client sampling date / time		A8HA212001 10,5EO,2012gtoR00 EM1201711-001	A8HA412001 10,5EO,2012gtoR00 EM1201711-002	A8HA512001 10,5EO,2012gtoR00 EM1201711-003	A8HA512801 10,5EO,2012gtoR00 EM1201711-004	A8HTB12701 10,5EO,2012gtoR00 EM1201711-005
			Unit	Unit					
EP074E: Halogenated Aliphatic Compounds - Continued									
Pentachloroethane	3X,01,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
1,2-Dibromo-3-chloropropane	6X,12,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Hexachlorobutadiene	-3,X,..	0lo	v e/he	****	****	****	****	****	<0lo
EP074F: Halogenated Aromatic Compounds									
Chlorobenzene	10,-,60,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Bromobenzene	10,-,X,1	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
2-Chlorotoluene	60,46,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
4-Chlorotoluene	10X,4,4	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
1,3-Dichlorobenzene	041,3,1	0lo	v e/he	****	****	****	****	****	<0lo
1,4-Dichlorobenzene	10X,4X,3	0lo	v e/he	****	****	****	****	****	<0lo
1,2-Dichlorobenzene	60,00,1	0lo	v e/he	****	****	****	****	****	<0lo
1,2,4-Trichlorobenzene	120,-,2,1	0lo	v e/he	****	****	****	****	****	<0lo
1,2,3-Trichlorobenzene	-3,X1,X	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
EP074G: Trihalomethanes									
Chloroform	X3,XX,	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Bromodichloromethane	30,23,4	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Dibromochloromethane	124,4,1	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
Bromoform	30,20,2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	<0lo
EP074H: Naphthalene									
Naphthalene	61,20,.	0	v e/he	****	****	****	****	****	<0
EP075A: Phenolic Compounds									
Phenol	10,-,60,2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
2-Chlorophenol	60,03,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
2-Methylphenol	60,4,-,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
3- & 4-Methylphenol	1,16,33,.	0lo	v e/he	<110	<110	4.6	<110	<110	****
2-Nitrophenol	-,-,30,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
2,4-Dimethylphenol	100,X3,6	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
2,4-Dichlorophenol	120,-,.,2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
2,6-Dichlorophenol	-3,X0,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
4-Chloro-3-Methylphenol	06,00,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
2,4,6-Trichlorophenol	-,-,0X2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
2,4,5-Trichlorophenol	60,60,4	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Pentachlorophenol	-3,-X0	1	v e/he	<1	<1	<1	<1	<1	****
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	61,20,.	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
2-Methylnaphthalene	61,03,X	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
2-Chloronaphthalene	61,0,-,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****



s 7el P - g glo
 W: bhgi bAl b P EM1201311
 y fDi r P Gd f mEw\$kk d y N\$TEK
 s b j j ur P 113X1: 201

Analytical Results

k DL, M7rtb: SOIL

Compound	Client sampling date / time		Client sample ID					
	CAS Number	LOR	Unit	A8HA212001 10,5EO,2012gtoR0 EM1201711-001	A8HA412001 10,5EO,2012gtoR0 EM1201711-002	A8HA512001 10,5EO,2012gtoR0 EM1201711-003	A8HA512801 10,5EO,2012gtoR0 EM1201711-004	A8HTB12701 10,5EO,2012gtoR0 EM1201711-005
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Acenaphthylene	20-,6X,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Acenaphthene	-...2,6	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Fluorene	-X3, ,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Phenanthrene	-o,01,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Anthracene	120,12,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Fluoranthene	20X,44,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Pyrene	126,00,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
N-2-Fluorenyl Acetamide	o,6X,	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Benz(a)anthracene	oXoo.,	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Chrysene	21-,01,6	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Benzo(b) & Benzo(k)fluoranthene	20o,66,2g03,0-,6	1	v e/he	<1	<1	<1	<1	****
7-12-Dimethylbenz(a)anthracene	o3,63,X	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Benzo(a)pyrene	o0.,2,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
3-Methylcholanthrene	oX,46,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Indeno(1,2,3.cd)pyrene	16.,,6,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Dibenz(a,h)anthracene	o.,30.,	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Benzo(g,h,i)perylene	161,24,2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Sum of PAHs	****	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
EP075C: Phthalate Esters								
Dimethyl phthalate	1.,1,11.,	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Diethyl phthalate	-4,XX,2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Di-n-butyl phthalate	-4,34,2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Butyl benzyl phthalate	-o,X, ,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
bis(2-ethylhexyl) phthalate	113,-1,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
Di-n-octylphthalate	113,-4,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
EP075D: Nitrosamines								
N-Nitrosomethylethylamine	10o6o,6o,X	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
N-Nitrosodiethylamine	oo,1,-,o	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
N-Nitrosopyrrolidine	6,0,oo,2	0lo	v e/he	<110	<110	<110	<110	****
N-Nitrosomorpholine	o6,-6,2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
N-Nitrosodi-n-propylamine	X21,X4,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
N-Nitrosopiperidine	100,3o,4	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
N-Nitrosodibutylamine	624,1X.,	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
N-Nitrosodiphenyl & Diphenylamine	-X.,0,Xg,22.,,6,4	0lo	v e/he	<110	<110	<110	<110	****
Methapyrene	61,-,0,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	****
EP075E: Nitroaromatics and Ketones								



s 7el P 6g, glo
 W: bhgi bAl b P EM1201311
 y fD: l r P Gd f mEw\$kk d y N\$TEK
 s b j j ur P 113X1: 201

Analytical Results

k DL, M7rt&: SOIL

Compound	CAS Number	LOR	Client sampling date / time		Client sample ID					
			Unit	EM1201711-001	EM1201711-002	EM1201711-003	EM1201711-004	EM1201711-005		
EP075E: Nitroaromatics and Ketones - Continued										
2-Picoline	106,0X,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	10,5EO,2012gtoR0	A8HTB2701
Acetophenone	6-, -X2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	10,5EO,2012gtoR0	A8HA52801
Nitrobenzene	6-, 6o.,	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	10,5EO,2012gtoR0	A8HA52801
Isophorone	3-, 06,1	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	10,5EO,2012gtoR0	A8HA52801
2,6-Dinitrotoluene	XOX,20,2	0lo	v e/he	<110	<110	<110	<110	<110	EM1201711-003	A8HA52801
2,4-Dinitrotoluene	121,14,2	0lo	v e/he	<110	<110	<110	<110	<110	EM1201711-004	A8HA52801
1-Naphthylamine	1, 4., 2,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	EM1201711-005	A8HTB2701
4-Nitroquinoline-N-oxide	oXo3,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
5-Nitro-o-toluidine	66,oo,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
Azobenzene	10,.,.,.,.	1	v e/he	<1	<1	<1	<1	<1		
1,3,5-Trinitrobenzene	66., o,4	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
Phenacetin	X2,44,2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
4-Aminobiphenyl	62,X3,1	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
Pentachloronitrobenzene	-2,X,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
Promamide	2, 6o0,o,-,o	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
Dimethylaminoazobenzene	X0,11,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
Chlorobenzilate	o10,1o,X	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
EP075F: Haloethers										
Bis(2-chloroethyl) ether	111,44,4	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
Bis(2-chloroethoxy) methane	111,61,1	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
4-Chlorophenyl phenyl ether	300o,32.,	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
4-Bromophenyl phenyl ether	101,oo.,	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
EP075G: Chlorinated Hydrocarbons										
1,3-Dichlorobenzene	o41,3, ,1	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
1,4-Dichlorobenzene	10X,4X,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
1,2-Dichlorobenzene	6o,oo,1	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
Hexachloroethane	X3,32,1	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
1,2,4-Trichlorobenzene	120,-2,1	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
Hexachloropropylene	1-,-, ,31,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
Hexachlorobutadiene	-3,X,.,	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
Hexachlorocyclopentadiene	33,43,4	0lo	v e/he	<2lo	<2lo	<2lo	<2lo	<2lo		
Pentachlorobenzene	X0-, 6, ,o	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
Hexachlorobenzene (HCB)	11-, 34,1	0lo	v e/he	<110	<110	<110	<110	<110		
EP075H: Anilines and Benzidines										
Aniline	X2.o, .,	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
4-Chloroaniline	10X,43,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo		
2-Nitroaniline	-,-,34,4	0lo	v e/he	<110	<110	<110	<110	<110		
3-Nitroaniline	66,06,2	0lo	v e/he	<110	<110	<110	<110	<110		



s 7el P 10g glo
 W: bngi bAl b P EM1201311
 y fC: l r P Gd f mEWg\$kkd y N\$TEK
 s b j j ur P 113Xl: 201

Analytical Results

k DL, M7rt&: SOIL

Compound	CAS Number	Client sampling date / time		Client sample ID	Client sampling date / time				
		LOR	Unit		A8HA212001 10,5EO,2012gloR00 EM1201711-001	A8HA412001 10,5EO,2012gloR00 EM1201711-002	A8HA512001 10,5EO,2012gloR00 EM1201711-003	A8HA512801 10,5EO,2012gloR00 EM1201711-004	A8HTB12701 10,5EO,2012gloR00 EM1201711-005
EP075H: Anilines and Benzidines - Continued									
Dibenzofuran	1,2,X4,6	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
4-Nitroaniline	100,01,X	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Carbazole	-X,34,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
3,3'-Dichlorobenzidine	61,64,1	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
EP075I: Organochlorine Pesticides									
alpha-BHC	.16,-4,X	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
beta-BHC	.16,-0,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
gamma-BHC	0,-,6,6	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
delta-BHC	.16,-X,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Heptachlor	3X,44,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Aldrin	.06,00,2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Heptachlor epoxide	1024,03,.	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
alpha-Endosulfan	606,6,-,	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
4,4'-DDE	32,00,6	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Dieldrin	X0,03,1	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Endrin	32,20,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
beta-Endosulfan	. .21,,X0,6	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
4,4'-DDD	32,04,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Endosulfan sulfate	10,1,03,-	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
4,4'-DDT	00,26,.	0lo	v e/he	<110	<110	<110	<110	<110	****
EP075J: Organophosphorus Pesticides									
Dichlorvos	X2,3, ,3	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Dimethoate	X0,01,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Diazinon	. . . ,41,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Chlorpyrifos-methyl	006-,1,,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Malathion	121,30,0	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Fenthion	00,-,6	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Chlorpyrifos	2621,-,-,2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Pirimphos-ethyl	2,000,41,1	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Chlorfenvinphos	430,60,X	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Prothiofos	.4X4, ,4X,4	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
Ethion	0X, ,12,2	0lo	v e/he	<0lo	<0lo	<0lo	<0lo	<0lo	****
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	****	10	v e/he	<10	<10	<10	<10	<10	****
C10 - C14 Fraction	****	00	v e/he	<00	<00	<00	<00	<00	****
C15 - C28 Fraction	****	100	v e/he	<100	<100	140	<100	<100	****
C29 - C36 Fraction	****	100	v e/he	<100	<100	<100	<100	<100	****
%GC10 - C36 Fraction (sum)	****	00	v e/he	<00	<00	140	<00	<00	****



s 7el P 11g_glo
 W: bngi bAI b P EM1201311
 y fC: i r P Gd f mEw\$kk d y N\$TEK
 s b j j ur P 113X1: 201

Analytical Results

Compound	CAS Number	LOR	Unit	Client sampling date / time				Client sample ID
				A8HA22001	A8HA42001	A8HA52001	A8HA52801	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	10	10	v e/he	<10	<10	<10	<10	A8HTB2701
>C10 - C16 Fraction	00	00	v e/he	<00	<00	<00	<00	1o,5EO,2012gloR00
>C16 - C34 Fraction	100	100	v e/he	<100	<100	200	<100	1o,5EO,2012gloR00
>C34 - C40 Fraction	100	100	v e/he	<100	<100	<100	<100	EM1201711-004
>C40 - C40 Fraction (sum)	00	00	v e/he	<00	<00	200	<00	EM1201711-003
EP216: Perchlorate by LC/MS								
Perchlorate	3X01,60,.	1010	%e/he	<1010	<1010	<1010	<1010	EM1201711-004
EP231: Perfluorooctyl Acids and Sulfonates.								
PFOS	13X.,2.,1	010000	v e/he	0.0044	0.0012	0.0016	0.0316	EM1201711-004
PFOA	. . o,X3,1	010000	v e/he	<010000	<010000	<010000	<010000	EM1201711-003
6:2 Fluorotelomer Sulfonate (6:2 FtS)	23X16,63,2	01000	v e/he	<01000	<01000	<01000	<01000	EM1201711-002
EP066S: PCB Surrogate								
Decachlorobiphenyl	20o1,24,.	011	µ	80.2	83.4	88.7	80.6	EM1201711-002
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21Xoo,3.,2	011	µ	97.1	96.0	99.2	87.3	EM1201711-002
EP068T: Organophosphorus Pesticide Surrogate								
DEF	3- ,4,-,-	011	µ	89.3	91.4	99.6	85.5	EM1201711-003
EP074S: VOC Surrogates								
1,2-Dichloroethane-D4	130X0,03,0	011	µ	82.2	84.3	86.8	87.6	EM1201711-003
Toluene-D8	20. 3,2X,o	011	µ	83.7	85.3	85.3	83.3	EM1201711-004
4-Bromofluorobenzene	4X0,00,4	011	µ	88.8	89.6	87.4	87.7	EM1201711-003
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	.X3,12,4	011	µ	90.8	97.0	101	78.5	EM1201711-003
Phenol-d6	1. 123,-,-,.	011	µ	67.0	81.0	82.0	75.1	EM1201711-004
2-Chlorophenol-D4	6. 6o1,3, ,X	011	µ	73.6	89.1	79.1	76.0	EM1201711-003
2,4,6-Tribromophenol	11- ,36,X	011	µ	98.3	97.5	95.0	98.6	EM1201711-003
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	41Xo,X0,0	011	µ	78.9	85.6	80.9	71.9	EM1201711-003
1,2-Dichlorobenzene-D4	2166,X6,1	011	µ	73.9	80.0	71.6	71.2	EM1201711-004
2-Fluorobiphenyl	.21,X0,-	011	µ	81.4	86.8	93.9	77.0	EM1201711-003
Anthracene-d10	131f6,0X,-	011	µ	105	99.4	95.3	103	EM1201711-003
4-Terphenyl-d14	131- ,o1,0	011	µ	100	97.9	84.9	98.5	EM1201711-003
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	130X0,03,0	011	µ	83.1	84.7	87.7	88.2	EM1201711-003
Toluene-D8	20. 3,2X,o	011	µ	81.4	82.9	83.0	81.3	EM1201711-004
4-Bromofluorobenzene	4X0,00,4	011	µ	85.8	87.4	86.3	85.1	EM1201711-003



s 7el P 12g glo
 W: bhgi bAI b P EM1201311
 y fC: i r P Gd f mEWg\$kk d y N\$TEK
 s b j j ur P 113X1: 201

Analytical Results

k DL, M7rt&: WATER

Compound	CAS Number	Client sampling date / time		Client sample ID	LOR	Unit	A8HA525150212	10.5EO.2012gloR0	EM1201711-006				
EG020T: Total Metals by ICP-MS													
Arsenic	3440.-.,2	01001			v e/f	<01001							
Cadmium	3440.4.,6	010001			v e/f	<010001							
Chromium	3440.43.,	01001			v e/f	<01001							
Copper	3440.o0,-	01001			v e/f	<01001							
Nickel	3440.02,0	01001			v e/f	<01001							
Lead	34.6.62,1	01001			v e/f	<01001							
Zinc	3440.XX,X	01000			v e/f	<01000							
EG035T: Total Recoverable Mercury by FIMS													
Mercury	34.6.63,X	010001			v e/f	<010001							
EP072: Volatile Scan for Unknowns													
Dummy Analyte		0			%e/f	<0							
EP074A: Monocyclic Aromatic Hydrocarbons													
Benzene	31.4.,2	1			%e/f	<1							
Toluene	10.-,.-.,	2			%e/f	<2							
Ethylbenzene	100.41,4	2			%e/f	<2							
meta- & para-Xylene	10.-,.-.,,g0X,42.,	2			%e/f	<2							
Styrene	100.42,0	0			%e/f	<0							
ortho-Xylene	60.43,X	2			%e/f	<2							
Isopropylbenzene	6.-,2,-	0			%e/f	<0							
n-Propylbenzene	10.,X0,1	0			%e/f	<0							
1,3,5-Trimethylbenzene	10.-,X3,-	0			%e/f	<0							
sec-Butylbenzene	1.0.6,-	0			%e/f	<0							
1,2,4-Trimethylbenzene	60.X,X	0			%e/f	<0							
tert-Butylbenzene	6.-0XX	0			%e/f	<0							
p-Isopropyltoluene	66.-3,X	0			%e/f	<0							
n-Butylbenzene	104.01,-	0			%e/f	<0							
EP074B: Oxygenated Compounds													
Vinyl Acetate	10.-,00,4	00			%e/f	<00							
2-Butanone (MEK)	3.-6.,.	00			%e/f	<00							
4-Methyl-2-pentanone (MIBK)	10.-,10,1	00			%e/f	<00							
2-Hexanone (MBK)	061,3-,X	00			%e/f	<00							
EP074C: Sulfonated Compounds													
Carbon disulfide	30.10,0	0			%e/f	<0							
EP074D: Fumigants													
2,2-Dichloropropane	064,20,3	0			%e/f	<0							
1,2-Dichloropropane	3.-,3,0	0			%e/f	<0							
cis-1,3-Dichloropropylene	100X1,01,0	0			%e/f	<0							



s 7el
 W: bhgi bA l b
 y fC: i r
 s b j j ur
 P 1. g glo
 P EM1201311
 P Gd f mEWgSkk d y NTEK
 P 113X1: 201

Analytical Results

k DL, M7rt&: WATER

Compound	Client sampling date / time		Client sample ID	Client sampling date / time	
	CAS Number	LOR		Unit	Unit
EP074D: Fumigants - Continued					
trans-1,3-Dichloropropylene	100X1,02,X	0	%/f	<0	****
1,2-Dibromoethane (EDB)	10X6,4	0	%/f	<0	****
EP074E: Halogenated Aliphatic Compounds					
Dichlorodifluoromethane	30,31,-	00	%/f	<00	****
Chloromethane	34,-3,.	00	%/f	<00	****
Vinyl chloride	30,01,4	00	%/f	<00	****
Bromomethane	34,-,6	00	%/f	<00	****
Chloroethane	30,00,.	00	%/f	<00	****
Trichlorofluoromethane	30,X6,4	00	%/f	<00	****
1,1-Dichloroethene	30,.,0,4	0	%/f	<0	****
Iodomethane	34,-,4	0	%/f	<0	****
trans-1,2-Dichloroethene	10X,X0,0	0	%/f	<0	****
1,1-Dichloroethane	30,.,4,.	0	%/f	<0	****
cis-1,2-Dichloroethene	10X06,2	0	%/f	<0	****
1,1,1-Trichloroethane	31,00,X	0	%/f	<0	****
1,1-Dichloropropylene	0X,0-,X	0	%/f	<0	****
Carbon Tetrachloride	0X2,0	0	%/f	<0	****
1,2-Dichloroethane	103,0X,2	0	%/f	<0	****
Trichloroethene	36,01,X	0	%/f	<0	****
Dibromomethane	34,60,.	0	%/f	<0	****
1,1,2-Trichloroethane	36,00,0	0	%/f	<0	****
1,3-Dichloropropane	142,2,-6	0	%/f	<0	****
Tetrachloroethene	123,1,-4	0	%/f	<0	****
1,1,1,2-Tetrachloroethane	X0,20,X	0	%/f	<0	****
trans-1,4-Dichloro-2-butene	110,03,X	0	%/f	<0	****
cis-1,4-Dichloro-2-butene	143X11,0	0	%/f	<0	****
1,1,2,2-Tetrachloroethane	36,.,4,0	0	%/f	<0	****
1,2,3-Trichloropropane	6X,1,-4	0	%/f	<0	****
Pentachloroethane	3X01,3	0	%/f	<0	****
1,2-Dibromo-3-chloropropane	6X,12,-	0	%/f	<0	****
Hexachlorobutadiene	-3,X,.,	0	%/f	<0	****
EP074F: Halogenated Aromatic Compounds					
Chlorobenzene	10,-60,3	0	%/f	<0	****
Bromobenzene	10,-,X,1	0	%/f	<0	****
2-Chlorotoluene	60,46,-	0	%/f	<0	****
4-Chlorotoluene	10X4,4	0	%/f	<0	****
1,3-Dichlorobenzene	041,3,1	0	%/f	<0	****
1,4-Dichlorobenzene	10X4X,3	0	%/f	<0	****



s 7el P 14g_glo
 W: bhgi bAl b P EM1201311
 y fC'i r P Gd f mEw\$kkd y V\$TEK
 s b j j ur P 113X1: 201

Analytical Results

k DL, M7rtb&: WATER

Compound	CAS Number	Client sampling date / time		Client sample ID
		LOR	Unit	
EP074F: Halogenated Aromatic Compounds - Continued				
1,2-Dichlorobenzene	60,00,1	0	%ef	<0
1,2,4-Trichlorobenzene	120,-2,1	0	%ef	<0
1,2,3-Trichlorobenzene	-3,X1,X	0	%ef	<0
EP074G: Trihalomethanes				
Chloroform	X3,XX.	0	%ef	<0
Bromodichloromethane	30,23,4	0	%ef	<0
Dibromochloromethane	124,4,-1	0	%ef	<0
Bromoform	30,20,2	0	%ef	<0
EP074H: Naphthalene				
Naphthalene	61,20,.	3	%ef	<3
EP074S: VOC Surrogates				
1,2-Dichloroethane-D4	130X0,03,0	011	µ	111
Toluene-D8	20,3,2X,0	011	µ	98.6
4-Bromofluorobenzene	4X0,00,4	011	µ	89.7



s 7el P 1og glo
 W: bngi bAI b P EM1201311
 y fC: i r P Gd f mEWgSkk d y NTEK
 s b j j ur P 113X1: 201

Surrogate Control Limits

k D.,M7rtf: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2001,24,,	..	1..
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21Xoo,3.,2	26l-	14X
EP068T: Organophosphorus Pesticide Surrogate			
DEF	3-,4,-,	2. l3	14X
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	130X0,03,0	X2	122
Toluene-D8	20. 3.2X,o	X4	120
4-Bromofluorobenzene	4X0,00,4	XX	124
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	. X3,12,4	14	12X
Phenol-d6	1. 123,-,-,	12l2	122
2-Chlorophenol-D4	6. 6o1,3.,X	14l2	123
2,4,6-Tribromophenol	11-,36,X	12l4	1..
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	41Xo,X0,0	12l4	12-
1,2-Dichlorobenzene-D4	2166,X6,1	11lX	10-
2-Fluorobiphenyl	. 21,X0,-	1- l3	123
Anthracene-d10	1316,0X,-	2- lo	142
4-Terphenyl-d14	131-,o1,0	2ol-	1.-
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	130X0,03,0	o3	126
Toluene-D8	20. 3.2X,o	o-	120
4-Bromofluorobenzene	4X0,00,4	oX	12X
k D.,M7rtf: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	130X0,03,0	32	1. 2
Toluene-D8	20. 3.2X,o	34	12-
4-Bromofluorobenzene	4X0,00,4	30	1. 2

Environmental Division

QUALITY CONTROL REPORT

Work Order	: EM1201511	Page	: 1 of 27
Client	: GOLDER ASSOCIATES	Laboratory	: Environmental Division Melbourne
Contact	: Niamh McCormack	Contact	: Samantha Smith
Address	: P O BOX 6079 Building 7, 570-588 Swan St, Richmond, VIC. 3121 HAWTHORN WEST VIC, AUSTRALIA 3122	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: nmccormack@golder.com.au	E-mail	: samantha.smith@alsglobal.com
Telephone	: +61 03 8862 3500	Telephone	: +61-3-8549 9644
Facsimile	: +61 03 8862 3501	Facsimile	: +61-3-8549 9601
Project	: 117613201	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: F VIC	Date Samples Received	: 17-FEB-2012
C-O-C number	: ----	Issue Date	: 27-FEB-2012
Sampler	: RH	No. of samples received	: 6
Order number	: GA-MELB 332509	No. of samples analysed	: 6
Quote number	: ME/054/12		

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 Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD), and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits



NATA Accredited Laboratory 825

Accredited for compliance with
ISO/IEC 17025.

WORLD RECOGNISED
ACCREDITATION

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Dilani Fernando	Senior Inorganic Chemist	Melbourne Inorganics
Eric Chau	Metals Team Leader	Melbourne Inorganics
Nancy Wang	Senior Semivolatle Instrument Chemist	Melbourne Organics
Phalak Inthaksono	Laboratory Manager - Organics	Sydney Organics
Varsha Ho Wing	Non-Metals Team Leader	Melbourne Inorganics
Xingbin Lin	Senior Organic Chemist	Melbourne Organics



Page : 2 of 27
Work Order : EM1201711
Client : GOLDR ASSOCIATES
Project : 117613201

General Comments

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

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

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

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

Key :
Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
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
RPD = Relative Percentage Difference
= Indicates failed QC



Page : 3 of 27
 Work Order : EM1201711
 Client : GOLDR ASSOCIATES
 Project : 117613201

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR:- No Limit; Result between 10 and 20 times LOR:- 0% - 50%; Result > 20 times LOR:- 0% - 20%.

Sub-Matrix: SOIL		Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)		
EA002 : i s tSouf Q17 C Lo3 215) a02Q											
EM1201711-001	A8HA212001	EA002: pH Value	----	0.1	pH Unit	6.9	6.8	1.4	0% - 20%		
EA011 : Moif 3bre Coy3y3 t7 C Lo3 215) 02PQ											
EM1201707-031	Anonymous	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	10.7	8.3	25.2	No Limit		
EM1201711-002	A8HA412001	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	19.2	22.9	17.5	0% - 20%		
EG001 T: To3-nMe3-1f 8c ICvFAES t7 C Lo3 21555aPQ											
EM1201592-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit		
		EG005T: Chromium	7440-47-3	2	mg/kg	30	37	19.2	0% - 50%		
		EG005T: Nickel	7440-02-0	2	mg/kg	26	17	38.9	No Limit		
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	8	26.6	No Limit		
		EG005T: Copper	7440-50-8	5	mg/kg	22	16	33.5	No Limit		
		EG005T: Lead	7439-92-1	5	mg/kg	17	19	11.1	No Limit		
		EG005T: Zinc	7440-66-6	5	mg/kg	44	32	31.9	No Limit		
EM1201686-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit		
		EG005T: Chromium	7440-47-3	2	mg/kg	4	5	33.5	No Limit		
		EG005T: Nickel	7440-02-0	2	mg/kg	4	5	30.0	No Limit		
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit		
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.0	No Limit		
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit		
		EG005T: Zinc	7440-66-6	5	mg/kg	23	30	29.3	No Limit		
EG0al T: To3-nRe6o4er-8re Mer6brc 8c glIMS t7 C Lo3 2155590Q											
EM1201686-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit		
Ev009: Orh-yu6 M-33er t7 C Lo3 215) 29PQ											
EM1201711-001	A8HA212001	EP004: Total Organic Carbon	----	0.5	%	2.2	2.2	0.0	No Limit		
Ev0) : vorc6B0ory-3ed pu Beycrl tvCpQ17 C Lo3 215559mQ											
EM1201575-002	Anonymous	EP066: Total Polychlorinated biphenyls	----	0.10	mg/kg	<0.10	<0.10	0.0	No Limit		
EM1201757-004	Anonymous	EP066: Total Polychlorinated biphenyls	----	0.10	mg/kg	<0.10	<0.10	0.0	No Limit		
Ev0) mA: Orh-yo6B0orye ve 36tel tOCQ17 C Lo3 2155595Q											
EM1201575-002	Anonymous	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		



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 Work Order : EM1201711
 Client : GOLDR ASSOCIATES
 Project : 117613201

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
						Original Result	Duplicate Result	RPD (%)	
EM1201575-004	Anonymous	EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4,4'-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP068: 4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP068: 4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP068: 4,4'-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit		
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit		
EM1201575-002	Anonymous	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit



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 Work Order : EM1201711
 Client : GOLDR ASSOCIATES
 Project : 117613201

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)	
						Original Result	Duplicate Result	RPD (%)		
EM1201575-002	Ev01 mp: Orh-yoi Bo(i Borb(ve(36ide(t0vQt7 C Lo3 21 55595Q F6oy 3ybed	Anonymous								
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	<0.2	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	<0.2	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	<0.2	No Limit
		EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	<0.05	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	<0.2	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	<0.2	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	<0.2	No Limit
EM1201757-004	Anonymous									
Ev059A: Moyo6c6n6 Aroh - 36 s cdro6- r8oy(17 C Lo3 2151 P51Q										
EM1201711-001	A8HA22001									
		EP074: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	<0.2	No Limit
		EP074: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	<0.5	No Limit
		EP074: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	<0.5	No Limit



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 Client : GOLDR ASSOCIATES
 Project : 117613201

Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Method/Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)	
EM1201711-001	A8HA22001	Ev059A: Moyo6c6n6 AroH - 36 s cdfro6- r8oy(t7 C Lo3 215l P51Q F6oy3aybed EP074: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			106-42-3							
			100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			98-82-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			103-65-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			108-67-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			135-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			95-63-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			98-06-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EM1201711-001	A8HA22001	Ev059p: Oxchey- 3ad CoH i obydl(t7 C Lo3 215l P51Q EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	0.0	No Limit	
			78-93-3	5	mg/kg	<5	<5	0.0	No Limit	
			108-10-1	5	mg/kg	<5	<5	0.0	No Limit	
			591-78-6	5	mg/kg	<5	<5	0.0	No Limit	
			75-15-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			594-20-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			78-87-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			10061-01-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			10061-02-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			106-93-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EM1201711-001	A8HA22001	Ev059D: gbH ur- y3(t7 C Lo3 215l P51Q EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			594-20-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			78-87-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			10061-01-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			10061-02-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			106-93-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			75-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			74-88-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			156-60-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			75-34-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EM1201711-001	A8HA22001	Ev059E: s - r0hey- 3ad Anti B- 36 CoH i obydl(t7 C Lo3 215l P51Q EP074: 1,1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			74-88-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			156-60-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			75-34-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			156-59-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			71-55-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			563-58-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			56-23-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			107-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			79-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EM1201711-001	A8HA22001	Ev059F: Trichloroethene EP074: Dibromomethane	79-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			74-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			79-00-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			142-28-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			75-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			74-88-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			156-60-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			75-34-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			156-59-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			71-55-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EM1201711-001	A8HA22001	Ev059G: Carbon Tetrachloride EP074: 1,2-Dichloroethane	563-58-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			56-23-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			107-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			79-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			74-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			79-00-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			142-28-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			75-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			74-88-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			156-60-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	



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 Work Order : EM1201711
 Client : GOLDR ASSOCIATES
 Project : 117613201

Sub-Matrix: SOIL		Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)		
Ev059E: s - mhey- 3d AroH - 36 CoH i obydl(t7 C Lo3 215I P51QF6oy3ybed											
EM1201711-001	A8HA212001	EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: 1,1,1,2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: trans-1,4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: cis-1,4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: 1,1,2,2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: 1,2,3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: 1,2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	0.0	No Limit		
		EP074: Chloromethane	74-87-3	5	mg/kg	<5	<5	0.0	No Limit		
		EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	<5	0.0	No Limit		
		EP074: Bromomethane	74-83-9	5	mg/kg	<5	<5	0.0	No Limit		
		EP074: Chloroethane	75-00-3	5	mg/kg	<5	<5	0.0	No Limit		
		EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	0.0	No Limit		
Ev059G: TrLB- mHeB- ye(t7 C Lo3 215I P51Q											
EM1201711-001	A8HA212001	EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: 1,3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: 1,4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: 1,2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: 1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: 1,2,3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
Ev059s: N- i B3E- meye t7 C Lo3 215I P51Q											
EM1201711-001	A8HA212001	EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
Ev051A: v Bayon6 CoH i obydl(t7 C Lo3 21555I 0Q											
EM1201575-002	Anonymous	EP074: Naphthalene	91-20-3	5	mg/kg	<5	<5	0.0	No Limit		
		EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<1.0	<1.0	0.0	No Limit		
		EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: 2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		



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 Client : GOLDR ASSOCIATES
 Project : 117613201

Sub-Matrix: SOIL		Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)		
Ev05J A: v Bayon6 CoHj oby(t7 C Lo3 215551 0QF6oy3ybed											
EM1201575-002	Anonymous	EP075: 2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: 2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: 4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: 2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: 2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	<1	0.0	No Limit		
Ev05I p: voreyb6re-r AroH -36 s cdro6-r8oy(t7 C Lo3 215551 0Q											
EM1201575-002	Anonymous	EP075: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: 7,12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Indeno(1,2,3-cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Sum of PAHs	---	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Benzo(b) & Benzo(k)fluoranthene	205-99-2	1	mg/kg	<1	<1	0.0	No Limit		
			207-08-9								
Ev05I C: v B3B- n 3E I 3ar(t7 C Lo3 215551 0Q											
EM1201575-002	Anonymous	EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: bis(2-ethylhexyl) phthalate	117-81-7	0.5	mg/kg	<5.0	<5.0	0.0	No Limit		
		EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
Ev05I D: Ni8ro(- H Iye(t7 C Lo3 215551 0Q											
EM1201575-002	Anonymous	EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		
		EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		



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 Work Order : EM1201711
 Client : GOLDR ASSOCIATES
 Project : 117613201

Sub-Matrix: SOIL		Method: Compound		Laboratory Duplicate (DUP) Report			
Laboratory sample ID	Client sample ID	CAS Number	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
Ev05j D: Nitro(-H)ye(17 C Lo3 215551 00F6oy3y)bed							
EM1201575-002	Anonymous						
		EP075: N-Nitrosopyrrolidine	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: N-Nitrosomorpholine	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodi-n-propylamine	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopiperidine	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodibutylamine	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiphenyl & Diphenylamine	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Methapyriline	mg/kg	<0.5	<0.5	0.0	No Limit
Ev05j E: Nitro-roH - 36(- yd Ke&ye(17 C Lo3 215551 0Q							
EM1201575-002	Anonymous						
		EP075: 2-Picoline	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acetophenone	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Nitrobenzene	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Isophorone	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2,6-Dinitrotoluene	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 2,4-Dinitrotoluene	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 1-Naphthylamine	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroquinoline-N-oxide	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 5-Nitro-o-toluidine	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1,3,5-Trinitrobenzene	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenacetin	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Aminobiphenyl	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachloronitrobenzene	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pronamide	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethylaminoazobenzene	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorobenzilate	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Azobenzene	mg/kg	<1	<1	0.0	No Limit
Ev05j G: s - me33er(17 C Lo3 215551 0Q							
EM1201575-002	Anonymous						
		EP075: Bis(2-chloroethyl) ether	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Bis(2-chloroethoxy) methane	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chlorophenyl phenyl ether	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Bromophenyl phenyl ether	mg/kg	<0.5	<0.5	0.0	No Limit
Ev05j G: CBory- 3d s cdro6- r8oy(17 C Lo3 215551 0Q							
EM1201575-002	Anonymous						
		EP075: 1,3-Dichlorobenzene	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1,4-Dichlorobenzene	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1,2-Dichlorobenzene	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloroethane	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1,2,4-Trichlorobenzene	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloropropylene	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobutadiene	mg/kg	<0.5	<0.5	0.0	No Limit



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 Client : GOLDR ASSOCIATES
 Project : 117613201

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			
						Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
Ev05l G: CB0ryy- 3d s cdro6- r8oy(t7 C Lo3 21555l 0QF6oy3ybed									
EM1201575-002	Anonymous	EP075: Hexachlorocyclopentadiene	77-47-4	0.5	mg/kg	<2.5	<2.5	0.0	No Limit
		EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
Ev05l s : Ayuye(- yd peyziyie(t7 C Lo3 21555l 0Q									
EM1201575-002	Anonymous	EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3,3'-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
Ev05l l: Orh- yo6B0ryy ve(36ide(t7 C Lo3 21555l 0Q									
EM1201575-002	Anonymous	EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4,4'-DDE	72-55-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4,4'-DDD	72-54-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4,4'-DDT	50-29-3	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
Ev05l J: Orh- yoi Bo(i Borb(ve(36ide(t7 C Lo3 21555l 0Q									
EM1201575-002	Anonymous	EP075: Dichlorvos	62-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit



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 Client : GOLDR ASSOCIATES
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Sub-Matrix: SOIL									
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
Ev05J: Orh-yoi Bo(i Borb(ve(36ide(t7 C Lo3 21555) 0Q F6oy 3y bed									
EM1201575-002	Anonymous	EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
Ev0n0/051: To3-nve30eBH s cdro6-r8oy(t7 C Lo3 2151) P50Q									
EM1201711-001	A8HA212001	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EM1201741-003	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
Ev0n0/051: To3-nve30eBH s cdro6-r8oy(t7 C Lo3 2155) 5Q									
EM1201723-032	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
Ev0n0/051: To3-nRe604er-8re s cdro6-r8oy(FNEvM 2010 Dr- f3 t7 C Lo3 2151) P50Q									
EM1201711-001	A8HA212001	EP080: C6 - C10 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EM1201741-003	Anonymous	EP080: C6 - C10 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
Ev0n0/051: To3-nRe604er-8re s cdro6-r8oy(FNEvM 2010 Dr- f3 t7 C Lo3 2155) 5Q									
EM1201723-032	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
Ev21) : ver6Bor-3e 8c LC/MS t7 C Lo3 21m) 02Q									
EM1201711-001	A8HA212001	EP216: Perchlorate	7601-90-3	10.0	µg/kg	<10.0	<10.0	0.0	No Limit
Ev2a1: verfboro063:nA6id(-yd Sbrfoy-3e(. t7 C Lo3 21m19) I Q									
EM1201711-001	A8HA212001	EP231: PFOS	1763-23-1	0.0005	mg/kg	0.249	0.234	6.2	0% - 20%
		EP231: PFOA	335-67-1	0.0005	mg/kg	0.0273	0.0259	5.0	0% - 20%
		EP231: 6:2 Fluorotelomer Sulfonate (6:2 FtS)	27619-97-2	0.005	mg/kg	<0.005	<0.005	0.0	No Limit
Sub-Matrix: WATER									
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG020T: To3-nMe3-1 8c ICvRMS t7 C Lo3 215P) a2Q									
EM1201696-005	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	1.19	1.26	5.8	0% - 20%
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	0.001	0.001	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	0.001	0.001	0.0	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	0.001	0.001	0.0	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.0	No Limit
EM1201711-006	A8HA525150212	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit



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 Client : GOLDR ASSOCIATES
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Sub-Matrix: WATER		Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)		
EG020T: To3-nMe3-1f 8c ICv RMS t7 C Lo3 215P) a2QF6oy3ybed											
EM1201711-006	A8HA525150212	EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.0	No Limit		
		EG020A-T: Zinc	7440-68-6	0.005	mg/L	<0.005	<0.005	0.0	No Limit		
EG0al T: To3-nRe6o4er-8re Mer6brc 8c gIMS t7 C Lo3 215) 1amQ											
EM1201646-001	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	0.0012	0.0012	0.0	0% - 50%		
EM1201701-001	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit		
Ev059A: Moyo6c6n6 AroH - 36 s cdro6- r8oy(t7 C Lo3 215P) 9PQ											
EM1201711-006	A8HA525150212	EP074: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit		
		EP074: Toluene	108-88-3	2	µg/L	<2	<2	0.0	No Limit		
		EP074: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit		
		EP074: meta- & para-Xylene	108-38-3	2	µg/L	<2	<2	0.0	No Limit		
			106-42-3								
		EP074: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit		
		EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit		
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,3,5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit		
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2,4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit		
Ev059p: Oxchey- 3ad CoH i obydl(t7 C Lo3 215P) 9PQ											
EM1201711-006	A8HA525150212	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit		
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit		
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit		
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit		
Ev059C: Sbrfoy- 3ad CoH i obydl(t7 C Lo3 215P) 9PQ											
EM1201711-006	A8HA525150212	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit		
Ev059D: gbH th- y3 t7 C Lo3 215P) 9PQ											
EM1201711-006	A8HA525150212	EP074: 2,2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: cis-1,3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: trans-1,3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit		
Ev059E: s- rphey- 3ad Ani B- 36 CoH i obydl(t7 C Lo3 215P) 9PQ											
EM1201711-006	A8HA525150212	EP074: 1,1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: trans-1,2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit		



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 Client : GOLDR ASSOCIATES
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Sub-Matrix: WATER		Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Client sample ID	Method/Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)		
Ev059E: s - mhey- 3ad AroH - 36 CoH i obydl (17 C Lo3 215P) 9PQF6oy3ybed											
EM1201711-006	A8HA525150212	EP074: cis-1,2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1,1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1,2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1,1,2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: trans-1,4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1,2,2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2,3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit		
Ev059G: Tr1B- 10He3B- ye(17 C Lo3 215P) 9PQ											
EM1201711-006	A8HA525150212	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2,4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2,3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit		
EM1201711-006	A8HA525150212	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit		



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 Client : GOLDER ASSOCIATES
 Project : 117613201

Sub-Matrix: WATER

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report			Recovery Limits (%)
				Original Result	Duplicate Result	RPD (%)	
EM1201711-006	A8HA525150212	EP074: Naphthalene	91-20-3	<7	<7	0.0	No Limit



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Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
				Result	Concentration	Spike Recovery (%)	LCS	Low	High
EG001 T: To3-nMe3-1 8c ICvFAES t7 CLo3 21555aPQ									
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	13.6 mg/kg	101	74	132	
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	2.8 mg/kg	85.9	71	123	
EG005T: Chromium	7440-47-3	2	mg/kg	<2	60.9 mg/kg	96.1	73	125	
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.1 mg/kg	96.1	74	124	
EG005T: Lead	7439-92-1	5	mg/kg	<5	54.9 mg/kg	97.9	74	126	
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.1 mg/kg	97.8	74	128	
EG005T: Zinc	7440-66-6	5	mg/kg	<5	105 mg/kg	94.7	74	124	
EG0a1 T: To3-nRe6o4er-8r Mer6brc 8c gIMS t7 CLo3 2155590Q									
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	1.47 mg/kg	100	64	116	
Ev009: Orh-y16 M-33er t7 CLo3 215)29PQ									
EP004: Total Organic Carbon	----	0.5	%	<0.5	43.5 %	108	94	118	
Ev0) : vorc6Boryr-3d pu Beyc1 tvCpQ17 CLo3 215559mQ									
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.10	1.24 mg/kg	86.4	55	135	
Ev0) mA: Orh-yo6Boryre ve(36ide1 tOCQ17 CLo3 2155595Q									
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	96.7	52	133	
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	93.0	50	132	
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	79.3	50	138	
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	93.1	54	132	
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.2	51	133	
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	98.4	51	134	
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	52	133	
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	94.5	54	136	
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	53	136	
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.6	53	133	
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.8	52	137	
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	93.1	49	132	
EP068: 4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.2	53	134	
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	100	45	141	
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	98.5	54	132	
EP068: 4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.6	52	136	
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	81.3	49	135	
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.8	49	142	
EP068: 4,4'-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	104	40	146	
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	93.4	51	137	



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 Work Order : EM1201711
 Client : GOLDR ASSOCIATES
 Project : 117613201

Sub-Matrix: SOIL		Method: Compound		CAS Number		LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
								Result	Spike Concentration		Spike Recovery (%)		Recovery Limits (%)
									Low	High			
Ev0) mA: Orfh- y06Brrnye ve(36ide(tOCQ7 CLo3 2155595Q F6oy3ybed		72-43-5		0.2	mg/kg	<0.2	100	38	149				
Ev0) mp: Orfh- y0i Bo(i Borb(ve(36ide(tOvQt7 CLo3 2155595Q		62-73-7		0.05	mg/kg	<0.05	81.5	35	137				
EP068: Dichlorvos		919-86-8		0.05	mg/kg	<0.05	58.5	26.8	140				
EP068: Demeton-S-methyl		6923-22-4		0.2	mg/kg	<0.2	80.7	10	185				
EP068: Monocrotophos		60-51-5		0.05	mg/kg	<0.05	99.1	46	144				
EP068: Dimethoate		333-41-5		0.05	mg/kg	<0.05	96.4	50	134				
EP068: Diazinon		5598-13-0		0.05	mg/kg	<0.05	94.6	52	134				
EP068: Chlorpyrifos-methyl		298-00-0		0.2	mg/kg	<0.2	96.2	50	137				
EP068: Parathion-methyl		121-75-5		0.05	mg/kg	<0.05	95.2	46	140				
EP068: Malathion		55-38-9		0.05	mg/kg	<0.05	82.3	50	134				
EP068: Fenthion		2921-88-2		0.05	mg/kg	<0.05	92.8	52	134				
EP068: Chlorpyrifos		56-38-2		0.2	mg/kg	<0.2	92.0	47	139				
EP068: Parathion		23505-41-1		0.05	mg/kg	<0.05	92.6	48	137				
EP068: Pirimphos-ethyl		470-90-6		0.05	mg/kg	<0.05	91.8	48	143				
EP068: Chlorfenvinphos		4824-78-6		0.05	mg/kg	<0.05	93.7	52	136				
EP068: Bromophos-ethyl		22224-92-6		0.05	mg/kg	<0.05	79.0	37	136				
EP068: Fenamiphos		34643-46-4		0.05	mg/kg	<0.05	93.4	50	136				
EP068: Prothiofos		563-12-2		0.05	mg/kg	<0.05	92.3	50	136				
EP068: Ethion		786-19-6		0.05	mg/kg	<0.05	91.3	47	138				
EP068: Carbophenothion		86-50-0		0.05	mg/kg	<0.05	111	19.6	170				
EP068: Azinphos Methyl													
Ev059A: M0y06c6n6 AroH - 36 s cdro6- r8oy(t7 CLo3 2151 P51Q													
EP074: Benzene		71-43-2		0.2	mg/kg	<0.2	91.6	75	121				
EP074: Toluene		108-88-3		0.5	mg/kg	<0.5	97.7	76	124				
EP074: Ethylbenzene		100-41-4		0.5	mg/kg	<0.5	96.2	74	118				
EP074: meta- & para-Xylene		108-38-3		0.5	mg/kg	<0.5	97.7	75	121				
EP074: 1,2,4-Trimethylbenzene		106-42-3											
EP074: Styrene		100-42-5		0.5	mg/kg	<0.5	97.1	64	120				
EP074: ortho-Xylene		95-47-6		0.5	mg/kg	<0.5	96.6	77	121				
EP074: Isopropylbenzene		98-82-8		0.5	mg/kg	<0.5	97.6	74	120				
EP074: n-Propylbenzene		103-65-1		0.5	mg/kg	<0.5	91.6	65	117				
EP074: 1,3,5-Trimethylbenzene		108-67-8		0.5	mg/kg	<0.5	92.7	65	117				
EP074: sec-Butylbenzene		135-98-8		0.5	mg/kg	<0.5	89.8	67	117				
EP074: 1,2,4-Trimethylbenzene		95-63-6		0.5	mg/kg	<0.5	93.9	66	117				
EP074: tert-Butylbenzene		98-06-6		0.5	mg/kg	<0.5	89.4	68	116				
EP074: p-Isopropyltoluene		99-87-6		0.5	mg/kg	<0.5	93.2	64	117				
EP074: n-Butylbenzene		104-51-8		0.5	mg/kg	<0.5	97.8	59	115				
Ev059p: Oxchey- 3d CoH i oby0(t7 CLo3 2151 P51Q													
EP074: Vinyl Acetate		108-05-4		5	mg/kg	<5	97.4	40	138				



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 Work Order : EM1201711
 Client : GOLDR ASSOCIATES
 Project : 117613201

Sub-Matrix: SOIL				Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	LCS	Low	High
Ev059p: Oxchey-3d CoH i obydl t7 CLo3 215l P51Q F6oy3y bed									
EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	10 mg/kg	91.9	61	143	
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	10 mg/kg	93.0	63	137	
EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	10 mg/kg	92.0	63	133	
Ev059C: Sbfioy-3d CoH i obydl t7 CLo3 215l P51Q									
EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	1 mg/kg	89.4	57	121	
Ev059D: g9H uh-y3 t7 CLo3 215l P51Q									
EP074: 2,2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	1 mg/kg	98.2	51	130	
EP074: 1,2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	1 mg/kg	94.3	73	121	
EP074: cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	1 mg/kg	93.6	59	109	
EP074: trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	1 mg/kg	93.0	52	110	
EP074: 1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	1 mg/kg	95.3	68	120	
Ev059E: s-rohey-3d Ani B-36 CoH i obydl t7 CLo3 215l P51Q									
EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	10 mg/kg	78.3	34	122	
EP074: Chloromethane	74-87-3	5	mg/kg	<5	10 mg/kg	95.0	52	133	
EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	10 mg/kg	89.9	47	133	
EP074: Bromomethane	74-83-9	5	mg/kg	<5	10 mg/kg	84.5	39	116	
EP074: Chloroethane	75-00-3	5	mg/kg	<5	10 mg/kg	95.7	43	137	
EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	10 mg/kg	92.8	61	126	
EP074: 1,1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	1 mg/kg	93.0	62	124	
EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	1 mg/kg	99.5	47	116	
EP074: trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	1 mg/kg	92.2	69	119	
EP074: 1,1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	1 mg/kg	91.2	70	120	
EP074: cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	1 mg/kg	92.8	72	120	
EP074: 1,1,1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	1 mg/kg	88.1	64	112	
EP074: 1,1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	1 mg/kg	94.9	71	117	
EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	1 mg/kg	84.1	51	106	
EP074: 1,2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	1 mg/kg	91.5	70	126	
EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	1 mg/kg	90.9	71	120	
EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	1 mg/kg	91.1	70	122	
EP074: 1,1,2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	1 mg/kg	91.3	73	125	
EP074: 1,3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	1 mg/kg	91.7	75	125	
EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	1 mg/kg	96.5	71	120	
EP074: 1,1,1,2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	1 mg/kg	87.6	54	106	
EP074: trans-1,4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	1 mg/kg	88.5	46	112	
EP074: cis-1,4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	1 mg/kg	99.6	21.8	117	
EP074: 1,1,2,2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	1 mg/kg	94.2	71	131	
EP074: 1,2,3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	1 mg/kg	93.5	70	134	
EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	1 mg/kg	79.4	40	94	
EP074: 1,2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	1 mg/kg	94.6	41	113	



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 Client : GOLDR ASSOCIATES
 Project : 117613201

Sub-Matrix: SOIL				Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	LCS	Low	High
Ev059E: s - røhey - 3ød Anj B - 3ø CoH i oby(t7 CLo3 215I P51QF60y3ybed									
EP074: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	1 mg/kg	97.3	40	40	127
Ev059g: s - røhey - 3ød AroH - 3ø CoH i oby(t7 CLo3 215I P51Q									
EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	1 mg/kg	94.7	78	78	120
EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	1 mg/kg	92.4	68	68	116
EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	1 mg/kg	95.8	67	67	117
EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	1 mg/kg	92.8	67	67	115
EP074: 1,3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	1 mg/kg	95.9	69	69	115
EP074: 1,4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	1 mg/kg	99.5	70	70	116
EP074: 1,2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	1 mg/kg	93.6	72	72	116
EP074: 1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	1 mg/kg	106	49	49	118
EP074: 1,2,3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	1 mg/kg	101	60	60	120
Ev059G: TrB- røH øX- ye(t7 CLo3 215I P51Q									
EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	1 mg/kg	92.3	71	71	121
EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	1 mg/kg	83.9	60	60	108
EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	1 mg/kg	83.6	48	48	104
EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	1 mg/kg	74.4	40	40	106
Ev059s: N- i BøB- røye t7 CLo3 215I P51Q									
EP074: Naphthalene	91-20-3	5	mg/kg	<5	1 mg/kg	102	61	61	132
Ev05I A: v Bøyonø CoH i oby(t7 CLo3 21555I 0Q									
EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	2.5 mg/kg	95.4	38	38	138
EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	2.5 mg/kg	78.6	39	39	129
EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	2.5 mg/kg	76.0	33	33	132
EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<1.0	2.5 mg/kg	96.9	35	35	131
EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	2.5 mg/kg	78.3	31	31	131
EP075: 2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	2.5 mg/kg	92.3	10	10	135
EP075: 2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	2.5 mg/kg	80.2	35	35	133
EP075: 2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	2.5 mg/kg	82.5	36	36	132
EP075: 4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5	2.5 mg/kg	93.0	39	39	143
EP075: 2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	2.5 mg/kg	74.0	34	34	138
EP075: 2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	2.5 mg/kg	108	30.2	30.2	142
EP075: Pentachlorophenol	87-86-5	1.0	mg/kg	<1	2.5 mg/kg	84.8	14	14	136
Ev05I p : v ørcyBøre - r AroH - 3ø s cdro6 - r8øy(t7 CLo3 21555I 0Q									
EP075: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2.5 mg/kg	80.3	39	39	128
EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	2.5 mg/kg	83.0	40	40	136
EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	2.5 mg/kg	66.4	29.5	29.5	137
EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2.5 mg/kg	78.8	38	38	138
EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2.5 mg/kg	80.8	45	45	133
EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	2.5 mg/kg	81.2	47	47	137



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 Work Order : EM1201711
 Client : GOLDR ASSOCIATES
 Project : 117613201

Sub-Matrix: SOIL	Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report		
					Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)
							LCS	Low	
Ev051 p : vortyb6re-r AroH - 3.6 s cdro6-r8oy(t7 CLo3 215551 0QF6oy3ybed									
EP075: Phenanthrene		85-01-8	0.5	mg/kg	<0.5	2.5 mg/kg	84.7	45	133
EP075: Anthracene		120-12-7	0.5	mg/kg	<0.5	2.5 mg/kg	89.8	44	130
EP075: Fluoranthene		206-44-0	0.5	mg/kg	<0.5	2.5 mg/kg	89.9	46	138
EP075: Pyrene		129-00-0	0.5	mg/kg	<0.5	2.5 mg/kg	86.4	43	145
EP075: N-2-Fluorenyl Acetamide		53-96-3	0.5	mg/kg	<0.5	2.5 mg/kg	87.4	43	143
EP075: Benz(a)anthracene		56-55-3	0.5	mg/kg	<0.5	2.5 mg/kg	86.0	43	139
EP075: Chrysene		218-01-9	0.5	mg/kg	<0.5	2.5 mg/kg	91.1	42	140
EP075: Benzo(b) & Benzo(k)fluoranthene		205-99-2 207-08-9	1	mg/kg	<1	5 mg/kg	90.1	43	139
EP075: 7,12-Dimethylbenz(a)anthracene		57-97-6	0.5	mg/kg	<0.5	2.5 mg/kg	87.8	40	154
EP075: Benzo(a)pyrene		50-32-8	0.5	mg/kg	<0.5	2.5 mg/kg	86.2	38	138
EP075: 3-Methylcholanthrene		56-49-5	0.5	mg/kg	<0.5	2.5 mg/kg	81.3	46	162
EP075: Indeno(1,2,3-cd)pyrene		193-39-5	0.5	mg/kg	<0.5	2.5 mg/kg	110	49	159
EP075: Dibenz(a,h)anthracene		53-70-3	0.5	mg/kg	<0.5	2.5 mg/kg	103	49	157
EP075: Benzo(g,h,i)perylene		191-24-2	0.5	mg/kg	<0.5	2.5 mg/kg	123	48	158
EP075: Sum of PAHs		----	0.5	mg/kg	<0.5	----	----	----	----
Ev051 C: vB3B-n 3 E(3r(t7 CLo3 215551 0Q									
EP075: Dimethyl phthalate		131-11-3	0.5	mg/kg	<0.5	2.5 mg/kg	83.8	40	142
EP075: Diethyl phthalate		84-66-2	0.5	mg/kg	<0.5	2.5 mg/kg	85.9	48	140
EP075: Di-n-butyl phthalate		84-74-2	0.5	mg/kg	<0.5	2.5 mg/kg	95.7	38	169
EP075: Butyl benzyl phthalate		85-68-7	0.5	mg/kg	<0.5	2.5 mg/kg	92.0	42	140
EP075: bis(2-ethylhexyl) phthalate		117-81-7	0.5	mg/kg	<5.0	2.5 mg/kg	114	47	155
EP075: Di-n-octylphthalate		117-84-0	0.5	mg/kg	<0.5	2.5 mg/kg	92.5	47	137
Ev051 D: NitrO(- H lye(t7 CLo3 215551 0Q									
EP075: N-Nitrosomethylethylamine		10595-95-6	0.5	mg/kg	<0.5	2.5 mg/kg	102	16.2	136
EP075: N-Nitrosodiethylamine		55-18-5	0.5	mg/kg	<0.5	2.5 mg/kg	98.4	33	132
EP075: N-Nitrosopyrrolidine		930-55-2	0.5	mg/kg	<1.0	2.5 mg/kg	90.2	27.7	130
EP075: N-Nitrosomorpholine		59-89-2	0.5	mg/kg	<0.5	2.5 mg/kg	98.8	33	131
EP075: N-Nitrosodi-n-propylamine		621-64-7	0.5	mg/kg	<0.5	2.5 mg/kg	86.4	36	127
EP075: N-Nitrosopiperidine		100-75-4	0.5	mg/kg	<0.5	2.5 mg/kg	86.3	35	128
EP075: N-Nitrosodibutylamine		924-16-3	0.5	mg/kg	<0.5	2.5 mg/kg	91.2	37	139
EP075: N-Nitrosodiphenyl & Diphenylamine		86-30-6 122-39-4	0.5	mg/kg	<1.0	2.5 mg/kg	77.7	42	134
EP075: Methapyriene		91-80-5	0.5	mg/kg	<0.5	2.5 mg/kg	# 16.3	24.4	143
Ev051 E: NitrO-roH- 3.6(- yd Ke3bye(t7 CLo3 215551 0Q									
EP075: 2-Picoline		109-06-8	0.5	mg/kg	<0.5	2.5 mg/kg	92.4	10	138
EP075: Acetophenone		98-86-2	0.5	mg/kg	<0.5	2.5 mg/kg	75.4	35	128
EP075: Nitrobenzene		98-95-3	0.5	mg/kg	<0.5	2.5 mg/kg	82.4	36	127
EP075: Isophorone		78-59-1	0.5	mg/kg	<0.5	2.5 mg/kg	81.3	40	136



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 Project : 117613201

Sub-Matrix: SOIL				Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	LCS	Low	High
Ev051 E: Nitr-o-roH - 36(- yd Ke3bye(t7 CLo3 215551 0QF6oy3ybed									
EP075: 2,6-Dinitrotoluene	606-20-2	0.5	mg/kg	<1.0	2.5 mg/kg	80.4	80.4	42	140
EP075: 2,4-Dinitrotoluene	121-14-2	0.5	mg/kg	<1.0	2.5 mg/kg	77.6	77.6	46	140
EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	2.5 mg/kg	# 4.5	# 4.5	10	84
EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	2.5 mg/kg	56.6	56.6	17.7	153
EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	2.5 mg/kg	85.5	85.5	37	125
EP075: Azobenzene	103-33-3	1	mg/kg	<1	2.5 mg/kg	87.6	87.6	46	140
EP075: 1,3,5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	2.5 mg/kg	80.2	80.2	12.6	151
EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	2.5 mg/kg	74.3	74.3	48	142
EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	2.5 mg/kg	11.7	11.7	10	97
EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	2.5 mg/kg	90.8	90.8	47	139
EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	2.5 mg/kg	93.7	93.7	45	133
EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	2.5 mg/kg	79.1	79.1	42	136
EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	2.5 mg/kg	70.3	70.3	41	141
Ev051 g: s - røe3Er(t7 CLo3 215551 0Q									
EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	2.5 mg/kg	84.1	84.1	36	146
EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	2.5 mg/kg	75.8	75.8	40	136
EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	2.5 mg/kg	80.1	80.1	46	136
EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	2.5 mg/kg	74.5	74.5	44	140
Ev051 G: CBörry - 3ed s cdro6- r8oy(t7 CLo3 215551 0Q									
EP075: 1,3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	2.5 mg/kg	74.4	74.4	35	122
EP075: 1,4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	2.5 mg/kg	81.0	81.0	36	125
EP075: 1,2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	2.5 mg/kg	72.5	72.5	37	123
EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	2.5 mg/kg	70.1	70.1	33	123
EP075: 1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	2.5 mg/kg	73.2	73.2	36	132
EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	2.5 mg/kg	83.6	83.6	26.6	137
EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	2.5 mg/kg	78.1	78.1	40	130
EP075: Hexachlorocyclopentadiene	77-47-4	0.5	mg/kg	<2.5	2.5 mg/kg	36.6	36.6	17.3	141
EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	2.5 mg/kg	83.8	83.8	46	136
EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<1.0	5 mg/kg	78.7	78.7	40	142
Ev051 s: Ayuyne(- yd peyzuliyey(t7 CLo3 215551 0Q									
EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	2.5 mg/kg	24.9	24.9	10	114
EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	2.5 mg/kg	18.3	18.3	10	103
EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<1.0	2.5 mg/kg	90.3	90.3	40	142
EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<1.0	2.5 mg/kg	45.7	45.7	23.3	125
EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	2.5 mg/kg	79.7	79.7	46	134
EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	2.5 mg/kg	67.1	67.1	38	132
EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	2.5 mg/kg	85.7	85.7	44	134
EP075: 3,3'-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	2.5 mg/kg	20.7	20.7	10	124
Ev051 l: Orh-yo6Ernyey vey 36ide(t7 CLo3 215551 0Q									



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Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report				
				Result	Concentration	Spike	Spike Recovery (%)		Recovery Limits (%)	
							LCS	Low	High	
Ev051 i: Orh- y06Eorye ve(36ide(t7 CLo3 21555l 0QF6oy3ybed										
EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	2.5 mg/kg	86.4	50	134		
EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	2.5 mg/kg	91.0	47	135		
EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	2.5 mg/kg	87.8	50	137		
EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	2.5 mg/kg	95.0	48	136		
EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	2.5 mg/kg	87.7	40	138		
EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	2.5 mg/kg	91.2	44	140		
EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	2.5 mg/kg	86.6	45	139		
EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	2.5 mg/kg	96.8	46	142		
EP075: 4,4'-DDE	72-55-9	0.5	mg/kg	<0.5	2.5 mg/kg	87.8	70	130		
EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	2.5 mg/kg	96.0	47	139		
EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	2.5 mg/kg	96.0	42	142		
EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	2.5 mg/kg	94.6	47	141		
EP075: 4,4'-DDD	72-54-8	0.5	mg/kg	<0.5	2.5 mg/kg	84.1	42	146		
EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	2.5 mg/kg	83.9	41	141		
EP075: 4,4'-DDT	50-29-3	0.5	mg/kg	<1.0	2.5 mg/kg	86.6	19.6	148		
Ev051 J: Orh- yoi Bo(i Borb(ve(36ide(t7 CLo3 21555l 0Q										
EP075: Dieldrin	62-73-7	0.5	mg/kg	<0.5	2.5 mg/kg	81.6	21.9	131		
EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	2.5 mg/kg	90.2	38	142		
EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	2.5 mg/kg	98.8	36	133		
EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	2.5 mg/kg	86.6	35	143		
EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	2.5 mg/kg	91.6	35	143		
EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	2.5 mg/kg	82.0	25.1	135		
EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	2.5 mg/kg	90.4	36	132		
EP075: Pirimiphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	2.5 mg/kg	89.3	36	135		
EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	2.5 mg/kg	87.2	35	138		
EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	2.5 mg/kg	93.6	37	135		
EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	2.5 mg/kg	89.8	38	137		
Ev0n0/051: To3-nve3oiebh s cdro6-r8oy(t7 CLo3 215l P50Q										
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	32 mg/kg	89.2	70	133		
Ev0n0/051: To3-nve3oiebh s cdro6-r8oy(t7 CLo3 2155l) 5Q										
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	544 mg/kg	79.0	55	123		
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	1981 mg/kg	93.0	72	134		
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	818 mg/kg	92.8	71	143		
EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----		
Ev0n0/051: To3-nRe6o4er-8re s cdro6-r8oy(FNEvM 2010 Dir- f3 t7 CLo3 215l P50Q										
EP080: C6 - C10 Fraction	----	10	mg/kg	<10	37 mg/kg	89.8	70	130		
Ev0n0/051: To3-nRe6o4er-8re s cdro6-r8oy(FNEvM 2010 Dir- f3 t7 CLo3 2155l) 5Q										
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	870 mg/kg	88.1	69	123		



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Sub-Matrix: SOIL				Method Blank (MB) Report				Laboratory Control Spike (LCS) Report			
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	Recovery Limits (%)	Result	Spike Concentration	Spike Recovery (%)	Recovery Limits (%)
Ev0n0/051: To3-nRe6o4er-8rē s cdro6-r8oy(FNEvM 2010 Dr- f3 t7 CLo3 21551) 5QF6oy3ybed											
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	2495 mg/kg	95.6	71	<100	2495 mg/kg	95.6	71
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	263 mg/kg	75.5	63	<100	263 mg/kg	75.5	63
EP071: >C10 - C40 Fraction (sum)	----	100	mg/kg	<100	----	----	----	<100	----	----	----
Ev21) : ver6Brp- 3ē 8c LC/MS t7 CLo3 21m1) 02Q											
EP216: Perchlorate	7601-90-3	10	µg/kg	<10.0	25 µg/kg	97.4	56	<10.0	25 µg/kg	97.4	56
Ev2a1: verfboro063:nA6td(-yd Sbrfoy- 3ē(. t7 CLo3 21m19l Q											
EP231: PFOS	1763-23-1	0.0005	mg/kg	<0.0005	0.005 mg/kg	85.8	54	<0.0005	0.005 mg/kg	85.8	54
EP231: PFOA	335-67-1	0.0005	mg/kg	<0.0005	0.005 mg/kg	57.7	54	<0.0005	0.005 mg/kg	57.7	54
EP231: 6:2 Fluorotelomer Sulfonate (6:2 FIS)	27619-97-2	0.005	mg/kg	<0.005	.025 mg/kg	76.8	56	<0.005	.025 mg/kg	76.8	56
Sub-Matrix: WATER											
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	Recovery Limits (%)	Result	Spike Concentration	Spike Recovery (%)	Recovery Limits (%)
EG020T: To3-nMe3-ř 8c ICvRMS t7 CLo3 215P) a2Q											
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	106	86	<0.001	0.1 mg/L	106	86
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	96.2	87	<0.0001	0.1 mg/L	96.2	87
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	101	87	<0.001	0.1 mg/L	101	87
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	100	88	<0.001	0.1 mg/L	100	88
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	103	90	<0.001	0.1 mg/L	103	90
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	99.1	89	<0.001	0.1 mg/L	99.1	89
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	101	82	<0.005	0.1 mg/L	101	82
EG0al T: To3-nRe6o4er-8rē Mer6brc 8c gIMS t7 CLo3 215) 1amQ											
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.0100 mg/L	97.4	69	<0.0001	0.0100 mg/L	97.4	69
Ev059A: M0yo6c6n6 AroH - 36 s cdro6-r8oy(t7 CLo3 215P) 9PQ											
EP074: Benzene	71-43-2	1	µg/L	<1	20 µg/L	91.5	79	<1	20 µg/L	91.5	79
EP074: Toluene	108-88-3	2	µg/L	<2	20 µg/L	89.4	80	<2	20 µg/L	89.4	80
EP074: Ethylbenzene	100-41-4	2	µg/L	<2	20 µg/L	84.9	79	<2	20 µg/L	84.9	79
EP074: meta- & para-Xylene	108-38-3	2	µg/L	<2	40 µg/L	82.8	80	<2	40 µg/L	82.8	80
EP074: Styrene	100-42-5	5	µg/L	<5	20 µg/L	84.9	74	<5	20 µg/L	84.9	74
EP074: ortho-Xylene	95-47-6	2	µg/L	<2	20 µg/L	85.8	81	<2	20 µg/L	85.8	81
EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	20 µg/L	82.4	80	<5	20 µg/L	82.4	80
EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	20 µg/L	90.8	70	<5	20 µg/L	90.8	70
EP074: 1,3,5-Trimethylbenzene	108-67-8	5	µg/L	<5	20 µg/L	84.9	71	<5	20 µg/L	84.9	71
EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	20 µg/L	89.6	72	<5	20 µg/L	89.6	72
EP074: 1,2,4-Trimethylbenzene	95-63-6	5	µg/L	<5	20 µg/L	87.1	73	<5	20 µg/L	87.1	73
EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	20 µg/L	87.8	73	<5	20 µg/L	87.8	73
EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	20 µg/L	87.5	71	<5	20 µg/L	87.5	71
EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	20 µg/L	90.3	65	<5	20 µg/L	90.3	65



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 Client : GOLDR ASSOCIATES
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Sub-Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) Report		
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	Recovery Limits (%)
						LCS	Low High
Ev059p: Oxchey-3d CoH i oby(t7 CLo3 215P) 9PQ							
EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	200 µg/L	118	57 131
EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	200 µg/L	104	69 135
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	200 µg/L	85.7	68 136
EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	200 µg/L	81.0	68 138
Ev059C: Sbrfoy-3ed CoH i oby(t7 CLo3 215P) 9PQ							
EP074: Carbon disulfide	75-15-0	5	µg/L	<5	20 µg/L	104	67 127
Ev059D: 9bH uh- y3 t7 CLo3 215P) 9PQ							
EP074: 2,2-Dichloropropane	594-20-7	5	µg/L	<5	20 µg/L	92.0	59 128
EP074: 1,2-Dichloropropane	78-87-5	5	µg/L	<5	20 µg/L	91.3	77 121
EP074: cis-1,3-Dichloropropylene	10061-01-5	5	µg/L	<5	20 µg/L	75.5	70 118
EP074: trans-1,3-Dichloropropylene	10061-02-6	5	µg/L	<5	20 µg/L	79.5	66 120
EP074: 1,2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	20 µg/L	79.7	78 124
Ev059E: s - røhey- 3ed Anu B- 3b CoH i oby(t7 CLo3 215P) 9PQ							
EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	200 µg/L	117	58 148
EP074: Chloromethane	74-87-3	50	µg/L	<50	200 µg/L	103	62 142
EP074: Vinyl chloride	75-01-4	50	µg/L	<50	200 µg/L	133	61 141
EP074: Bromomethane	74-83-9	50	µg/L	<50	200 µg/L	87.9	57 131
EP074: Chloroethane	75-00-3	50	µg/L	<50	200 µg/L	110	64 138
EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	200 µg/L	125	67 131
EP074: 1,1-Dichloroethene	75-35-4	5	µg/L	<5	20 µg/L	102	71 125
EP074: Iodomethane	74-88-4	5	µg/L	<5	20 µg/L	68.8	61 135
EP074: trans-1,2-Dichloroethene	156-60-5	5	µg/L	<5	20 µg/L	84.5	75 121
EP074: 1,1-Dichloroethane	75-34-3	5	µg/L	<5	20 µg/L	112	77 121
EP074: cis-1,2-Dichloroethene	156-59-2	5	µg/L	<5	20 µg/L	108	78 122
EP074: 1,1,1-Trichloroethane	71-55-6	5	µg/L	<5	20 µg/L	110	70 120
EP074: 1,1-Dichloropropylene	563-58-6	5	µg/L	<5	20 µg/L	113	74 122
EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	20 µg/L	100	57 123
EP074: 1,2-Dichloroethane	107-06-2	5	µg/L	<5	20 µg/L	122	75 125
EP074: Trichloroethene	79-01-6	5	µg/L	<5	20 µg/L	93.1	77 121
EP074: Dibromomethane	74-95-3	5	µg/L	<5	20 µg/L	93.8	76 122
EP074: 1,1,2-Trichloroethane	79-00-5	5	µg/L	<5	20 µg/L	89.7	78 126
EP074: 1,3-Dichloropropane	142-28-9	5	µg/L	<5	20 µg/L	92.2	79 125
EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	20 µg/L	81.6	76 122
EP074: 1,1,1,2-Tetrachloroethane	630-20-6	5	µg/L	<5	20 µg/L	76.5	65 119
EP074: trans-1,4-Dichloro-2-butene	110-57-6	5	µg/L	<5	20 µg/L	74.4	46 126
EP074: cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	20 µg/L	# 52.3	54 132
EP074: 1,1,2,2-Tetrachloroethane	79-34-5	5	µg/L	<5	20 µg/L	79.7	75 131
EP074: 1,2,3-Trichloropropane	96-18-4	5	µg/L	<5	20 µg/L	81.8	75 133
EP074: Pentachloroethane	76-01-7	5	µg/L	<5	20 µg/L	70.8	46 118



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Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
				Result	Concentration	Spike Recovery (%)	LCS	Low	High
Ev059E: s - røhey - 3ed Anj B - 3ø CoH i obydl t7 CLo3 215P) 9PQ F60y3ybed									
EP074: 1,2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	20 µg/L	69.2	54	124	
EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	20 µg/L	84.9	50	134	
Ev059g: s - røhey - 3ed AroH - 3ø CoH i obydl(t7 CLo3 215P) 9PQ									
EP074: Chlorobenzene	108-90-7	5	µg/L	<5	20 µg/L	88.9	81	121	
EP074: Bromobenzene	108-86-1	5	µg/L	<5	20 µg/L	92.7	75	119	
EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	20 µg/L	90.1	73	121	
EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	20 µg/L	92.0	72	120	
EP074: 1,3-Dichlorobenzene	541-73-1	5	µg/L	<5	20 µg/L	90.4	73	119	
EP074: 1,4-Dichlorobenzene	106-46-7	5	µg/L	<5	20 µg/L	92.3	74	120	
EP074: 1,2-Dichlorobenzene	95-50-1	5	µg/L	<5	20 µg/L	90.6	78	118	
EP074: 1,2,4-Trichlorobenzene	120-82-1	5	µg/L	<5	20 µg/L	79.9	56	128	
EP074: 1,2,3-Trichlorobenzene	87-61-6	5	µg/L	<5	20 µg/L	94.7	69	123	
Ev059G: TrB- røHeB- ye(t7 CLo3 215P) 9PQ									
EP074: Chloroform	67-66-3	5	µg/L	<5	20 µg/L	116	77	121	
EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	20 µg/L	85.6	69	117	
EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	20 µg/L	74.4	59	119	
EP074: Bromoform	75-25-2	5	µg/L	<5	20 µg/L	65.5	49	121	
Ev059s: N- i BøB- røye t7 CLo3 215P) 9PQ									
EP074: Naphthalene	91-20-3	7	µg/L	<7	20 µg/L	90.6	76	124	



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Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report		
				Spike Concentration	Spike Recovery (%) MS	Recovery Limits (%) Low High
EG001 T: To3-nMe3-rf 8c lcvFAES t7 CLo3 21555aPQ						
EM1201686-003	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	86.5	70 130
		EG005T: Cadmium	7440-43-9	50 mg/kg	89.8	70 130
		EG005T: Chromium	7440-47-3	50 mg/kg	89.2	70 130
		EG005T: Copper	7440-50-8	50 mg/kg	93.4	70 130
		EG005T: Lead	7439-92-1	50 mg/kg	89.7	70 130
		EG005T: Nickel	7440-02-0	50 mg/kg	90.1	70 130
		EG005T: Zinc	7440-66-6	50 mg/kg	88.1	70 130
EG0a1 T: To3-nRe6o4er-8re Mer6brc 8c glIMS t7 CLo3 2155590Q						
EM1201686-003	Anonymous	EG035T: Mercury	7439-97-6	5.0 mg/kg	86.3	56 122
Ev0)) : vort6B9ory-3ed pu Beycr(tvCpQr7 CLo3 215559nQ						
EM1201575-008	Anonymous	EP066: Total Polychlorinated biphenyls	----	1.24 mg/kg	90.9	55 132
Ev0) mA: Orh-yo6B9orye ve(36ide(tOCQr7 CLo3 2155595Q						
EM1201575-003	Anonymous	EP068: gamma-BHC	58-89-9	0.5 mg/kg	112	30 129
		EP068: Heptachlor	76-44-8	0.5 mg/kg	99.6	22.2 129
		EP068: Aldrin	309-00-2	0.5 mg/kg	83.8	25 128
		EP068: Dieldrin	60-57-1	0.5 mg/kg	99.8	36 132
		EP068: Endrin	72-20-8	0.5 mg/kg	119	32 138
		EP068: 4,4'-DDT	50-29-3	0.5 mg/kg	100	21.8 140
Ev0) mp: Orh-yoi Bo(i Borb(ve(36ide(tOVQt7 CLo3 2155595Q						
EM1201575-003	Anonymous	EP068: Diazinon	333-41-5	0.5 mg/kg	103	39 129
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	95.5	39 126
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	94.8	38 130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	88.4	35 114
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	98.2	39 125
Ev059A: Moy06c6n6 AroH - 36 s cdro6- r8oy(t7 CLo3 2151 P51Q						
EM1201711-002	A8HA42001	EP074: Benzene	71-43-2	2 mg/kg	90.6	64 126
		EP074: Toluene	108-88-3	2 mg/kg	94.8	65 131
Ev059E: s - r8hey- 3ed Ani B- 36 CoH i oby(t7 CLo3 2151 P51Q						
EM1201711-002	A8HA42001	EP074: 1,1-Dichloroethene	75-35-4	2 mg/kg	85.2	50 124
		EP074: Trichloroethene	79-01-6	2 mg/kg	90.5	60 122
Ev059g: s - r8hey- 3ed AroH - 36 CoH i oby(t7 CLo3 2151 P51Q						
EM1201711-002	A8HA42001	EP074: Chlorobenzene	108-90-7	2 mg/kg	95.2	69 129



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Sub-Matrix: SOIL				Matrix Spike (MS) Report			
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%) MS	Low	High
EM1201575-009	Anonymous	EP075: Phenol	108-95-2	5 mg/kg	69.1	23.7	119
		EP075: 2-Chlorophenol	95-57-8	5 mg/kg	59.9	31.1	116
		EP075: 2-Nitrophenol	88-75-5	5 mg/kg	68.5	16.4	115
		EP075: 4-Chloro-3-Methylphenol	59-50-7	5 mg/kg	91.1	22.3	122
		EP075: Pentachlorophenol	87-86-5	5 mg/kg	86.7	17.6	142
EM1201575-009	Anonymous	EP075: Acenaphthene	83-32-9	5 mg/kg	90.2	25.4	122
		EP075: Pyrene	129-00-0	5 mg/kg	91.0	14.6	127
EM1201575-009	Anonymous	EP075: N-Nitrosodi-n-propylamine	621-64-7	5 mg/kg	50.8	17.8	110
EM1201575-009	Anonymous	EP075: 2,4-Dinitrotoluene	121-14-2	5 mg/kg	93.4	28.3	112
EM1201575-009	Anonymous	EP075: 1,4-Dichlorobenzene	106-46-7	5 mg/kg	59.1	23	112
EM1201575-009	Anonymous	EP075: 1,2,4-Trichlorobenzene	120-82-1	5 mg/kg	53.8	12.9	111
EM1201711-002	A8HA42001	EP080: C6 - C9 Fraction	----	28 mg/kg	78.0	49	127
EM1201711-001	A8HA22001	EP071: C10 - C14 Fraction	----	544 mg/kg	82.6	54	123
		EP071: C15 - C28 Fraction	----	1981 mg/kg	95.4	74	134
		EP071: C29 - C36 Fraction	----	818 mg/kg	97.5	63	143
EM1201711-002	A8HA42001	EP080: C6 - C10 Fraction	----	33 mg/kg	79.1	70	130
EM1201711-001	A8HA22001	EP071: >C10 - C16 Fraction	----	870 mg/kg	90.5	54	123
		EP071: >C16 - C34 Fraction	----	2495 mg/kg	98.9	74	134
		EP071: >C34 - C40 Fraction	----	263 mg/kg	87.5	63	143
EM1201711-001	A8HA22001	EP216: Perchlorate	7601-90-3	25 µg/kg	91.8	70	130
EM1201711-001	A8HA22001	EP231: PFOS	1763-23-1	0.005 mg/kg	# Not Determined	54	146
		EP231: PFOA	335-67-1	0.005 mg/kg	# Not Determined	54	134
		EP231: 6:2 Fluorotelomer Sulfonate (6:2 FtS)	27619-97-2	.025 mg/kg	71.1	56	138
Sub-Matrix: WATER				Matrix Spike (MS) Report			
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%) MS	Low	High



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Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report			
				Spike Concentration	Recovery Limits (%)		
				Spike Recovery (%)	MS	Low	High
EG020T: To3-nMe3-rf 8c lCvRMS t7 CLo3 215P) a2Q							
EM1201696-005	Anonymous	EG020A-T: Arsenic	7440-38-2	1 mg/L	131	72	146
		EG020A-T: Cadmium	7440-43-9	0.25 mg/L	93.4	73	131
		EG020A-T: Chromium	7440-47-3	1 mg/L	84.0	65	131
		EG020A-T: Copper	7440-50-8	1 mg/L	95.3	71	125
		EG020A-T: Lead	7439-92-1	1 mg/L	96.7	68	130
		EG020A-T: Nickel	7440-02-0	1 mg/L	94.1	72	128
		EG020A-T: Zinc	7440-66-6	1 mg/L	95.6	67	129
EG0al T: To3-nRe6o4er-8 re Mer6brc 8 c gIMS t7 CLo3 215) 1anQ							
EM1201672-001	Anonymous	EG035T: Mercury	7439-97-6	0.0100 mg/L	95.1	70	130



Environmental Division

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: EM1201711	Page	: 1 of 11
Client	: GOLDER ASSOCIATES	Laboratory	: Environmental Division Melbourne
Contact	: Niamh McCormack	Contact	: Samantha Smith
Address	: P O BOX 6079 Building 7, 570-588 Swan St, Richmond, VIC. 3121 HAWTHORN WEST VIC, AUSTRALIA 3122	Address	: 4 Westall Rd Springvale VIC Australia 3171
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Telephone	: +61 03 8862 3500	Telephone	: +61-3-8549 9644
Facsimile	: +61 03 8862 3501	Facsimile	: +61-3-8549 9601
Project	: 117613201	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: F VIC	Date Samples Received	: 17-FEB-2012
C-O-C number	: ----	Issue Date	: 27-FEB-2012
Sampler	: RH	No. of samples received	: 6
Order number	: GA-MELB 332509	No. of samples analysed	: 6
Quote number	: ME/054/12		

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 Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers



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Analysis Holding Time Compliance

The following report summarises extraction / preparation and analysis times and compares with recommended holding times. Dates reported represent first date of extraction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the analysis aliquot was taken. Elapsed period to analysis represents number of days from sampling where no extraction / digestion is involved or period from extraction / digestion where this is present. For composite samples, sampling date is assumed to be that of the oldest sample contributing to the composite. Sample date for laboratory produced leachates is assumed as the completion date of the leaching process. Outliers for holding time are based on USEPA SW 846, APHA, AS and NEPM (1999). A listing of breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according to the analytes being determined on the resulting solution. For non-volatile analytes, the holding time compliance assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days), Mercury (28 days) & other metals (180 days). A recorded breach therefore does not guarantee a breach for all non-volatile parameters.

Matrix: **SOIL** Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method	Container / Client Sample ID(s)	Sample Date	Extraction / Preparation		Analysis	
			Date extracted	Due for extraction	Date analysed	Due for analysis
EA002 : pH (Soils)						
Soil Glass Jar - Unpreserved	A8HA5\2001,	15-FEB-2012	20-FEB-2012	22-FEB-2012	20-FEB-2012	✓
A8HA2\2001, A8HA5\2801						
EA055: Moisture Content						
Soil Glass Jar - Unpreserved	A8HA4\2001, A8HA5\2801,	15-FEB-2012	-----	-----	20-FEB-2012	✓
A8HA2\2001, A8HA5\2001, A8HTB\2701						
EG005T: Total Metals by ICP-AES						
Soil Glass Jar - Unpreserved	A8HA4\2001, A8HA5\2801	15-FEB-2012	21-FEB-2012	13-AUG-2012	22-FEB-2012	✓
A8HA2\2001, A8HA5\2001,						
EG035T: Total Recoverable Mercury by FIMS						
Soil Glass Jar - Unpreserved	A8HA4\2001, A8HA5\2801	15-FEB-2012	21-FEB-2012	14-MAR-2012	22-FEB-2012	✓
A8HA2\2001, A8HA5\2001,						
EP004: Organic Matter						
Soil Glass Jar - Unpreserved	A8HA4\2001, A8HA5\2801	15-FEB-2012	20-FEB-2012	22-FEB-2012	20-FEB-2012	✓
A8HA2\2001, A8HA5\2001,						
EP066: Polychlorinated Biphenyls (PCB)						
Soil Glass Jar - Unpreserved	A8HA4\2001, A8HA5\2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	22-FEB-2012	✓
A8HA2\2001, A8HA5\2001,						
EP068A: Organochlorine Pesticides (OC)						
Soil Glass Jar - Unpreserved	A8HA4\2001, A8HA5\2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	22-FEB-2012	✓
A8HA2\2001, A8HA5\2001,						
EP068B: Organophosphorus Pesticides (OP)						
Soil Glass Jar - Unpreserved	A8HA4\2001, A8HA5\2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	22-FEB-2012	✓
A8HA2\2001, A8HA5\2001,						



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Matrix: SOIL Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method	Sample Date	Extraction / Preparation		Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved A8HA4/2001, A8HA5/2801, A8HTB/2701	15-FEB-2012	20-FEB-2012	29-FEB-2012	✓	21-FEB-2012	29-FEB-2012	✓
EP074B: Oxygenated Compounds							
Soil Glass Jar - Unpreserved A8HA2/2001, A8HA5/2801, A8HTB/2701	15-FEB-2012	20-FEB-2012	29-FEB-2012	✓	21-FEB-2012	29-FEB-2012	✓
EP074C: Sulfonated Compounds							
Soil Glass Jar - Unpreserved A8HA4/2001, A8HA5/2801, A8HTB/2701	15-FEB-2012	20-FEB-2012	29-FEB-2012	✓	21-FEB-2012	29-FEB-2012	✓
EP074D: Fumigants							
Soil Glass Jar - Unpreserved A8HA2/2001, A8HA5/2801, A8HTB/2701	15-FEB-2012	20-FEB-2012	29-FEB-2012	✓	21-FEB-2012	29-FEB-2012	✓
EP074E: Halogenated Aliphatic Compounds							
Soil Glass Jar - Unpreserved A8HA2/2001, A8HA5/2801, A8HTB/2701	15-FEB-2012	20-FEB-2012	29-FEB-2012	✓	21-FEB-2012	29-FEB-2012	✓
EP074F: Halogenated Aromatic Compounds							
Soil Glass Jar - Unpreserved A8HA2/2001, A8HA5/2801, A8HTB/2701	15-FEB-2012	20-FEB-2012	29-FEB-2012	✓	21-FEB-2012	29-FEB-2012	✓
EP074G: Trihalomethanes							
Soil Glass Jar - Unpreserved A8HA2/2001, A8HA5/2801, A8HTB/2701	15-FEB-2012	20-FEB-2012	29-FEB-2012	✓	21-FEB-2012	29-FEB-2012	✓
EP074H: Naphthalene							
Soil Glass Jar - Unpreserved A8HA2/2001, A8HA5/2801, A8HTB/2701	15-FEB-2012	20-FEB-2012	29-FEB-2012	✓	21-FEB-2012	29-FEB-2012	✓
EP075A: Phenolic Compounds							
Soil Glass Jar - Unpreserved A8HA2/2001, A8HA5/2801,	15-FEB-2012	21-FEB-2012	29-FEB-2012	✓	22-FEB-2012	01-APR-2012	✓



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Matrix: SOIL Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method	Sample Date	Extraction / Preparation		Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved A8HA4'2001, A8HA2'2001, A8HA5'2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	✓	22-FEB-2012	01-APR-2012	✓
Soil Glass Jar - Unpreserved A8HA4'2001, A8HA2'2001, A8HA5'2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	✓	22-FEB-2012	01-APR-2012	✓
EP075C: Phthalate Esters							
Soil Glass Jar - Unpreserved A8HA4'2001, A8HA2'2001, A8HA5'2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	✓	22-FEB-2012	01-APR-2012	✓
EP075D: Nitrosamines							
Soil Glass Jar - Unpreserved A8HA4'2001, A8HA2'2001, A8HA5'2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	✓	22-FEB-2012	01-APR-2012	✓
EP075E: Nitroaromatics and Ketones							
Soil Glass Jar - Unpreserved A8HA4'2001, A8HA2'2001, A8HA5'2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	✓	22-FEB-2012	01-APR-2012	✓
EP075F: Haloethers							
Soil Glass Jar - Unpreserved A8HA4'2001, A8HA2'2001, A8HA5'2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	✓	22-FEB-2012	01-APR-2012	✓
EP075G: Chlorinated Hydrocarbons							
Soil Glass Jar - Unpreserved A8HA4'2001, A8HA2'2001, A8HA5'2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	✓	22-FEB-2012	01-APR-2012	✓
EP075H: Anilines and Benzidines							
Soil Glass Jar - Unpreserved A8HA4'2001, A8HA2'2001, A8HA5'2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	✓	22-FEB-2012	01-APR-2012	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved A8HA4'2001, A8HA2'2001, A8HA5'2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	✓	22-FEB-2012	01-APR-2012	✓
EP075J: Organophosphorus Pesticides							
Soil Glass Jar - Unpreserved A8HA4'2001, A8HA2'2001, A8HA5'2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	✓	22-FEB-2012	01-APR-2012	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved A8HA4'2001, A8HA2'2001, A8HA5'2801	15-FEB-2012	20-FEB-2012	29-FEB-2012	✓	21-FEB-2012	29-FEB-2012	✓
Soil Glass Jar - Unpreserved A8HA4'2001, A8HA2'2001, A8HA5'2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	✓	22-FEB-2012	01-APR-2012	✓



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Matrix: SOIL Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method	Sample Date	Extraction / Preparation		Analysis	
		Date extracted	Due for extraction	Evaluation	Due for analysis
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft					
Soil Glass Jar - Unpreserved A8HA4\2001, A8HA2\2001, A8HA5\2801	15-FEB-2012	20-FEB-2012	29-FEB-2012	✓	21-FEB-2012 29-FEB-2012
Soil Glass Jar - Unpreserved A8HA2\2001, A8HA5\2801	15-FEB-2012	21-FEB-2012	29-FEB-2012	✓	22-FEB-2012 01-APR-2012
EP216: Perchlorate by LC/MS					
Soil Glass Jar - Unpreserved A8HA2\2001, A8HA5\2801	15-FEB-2012	24-FEB-2012	14-MAR-2012	✓	24-FEB-2012 23-MAR-2012
EP231: Perfluorooxy Acids and Sulfonates.					
Soil Glass Jar - Unpreserved A8HA2\2001, A8HA5\2801	15-FEB-2012	27-FEB-2012	13-AUG-2012	✓	27-FEB-2012 07-APR-2012

Matrix: WATER Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method	Sample Date	Extraction / Preparation		Analysis	
		Date extracted	Due for extraction	Evaluation	Due for analysis
EG020T: Total Metals by ICP-MS					
Clear Plastic Bottle - Nitric Acid; Unfiltered A8HA5\25150212	15-FEB-2012	22-FEB-2012	13-AUG-2012	✓	22-FEB-2012 13-AUG-2012
Clear Plastic Bottle - Nitric Acid; Unfiltered A8HA5\25150212	15-FEB-2012	-----	-----	-----	20-FEB-2012 14-MAR-2012
EP072: Volatile Scan for Unknowns					
Amber VOC Vial- NaHSO4 or H2SO4 A8HA5\25150212	15-FEB-2012	22-FEB-2012	29-FEB-2012	✓	22-FEB-2012 07-MAR-2012
EP074A: Monocyclic Aromatic Hydrocarbons					
Amber VOC Vial- NaHSO4 or H2SO4 A8HA5\25150212	15-FEB-2012	22-FEB-2012	29-FEB-2012	✓	22-FEB-2012 29-FEB-2012
EP074B: Oxygenated Compounds					
Amber VOC Vial- NaHSO4 or H2SO4 A8HA5\25150212	15-FEB-2012	22-FEB-2012	29-FEB-2012	✓	22-FEB-2012 29-FEB-2012
EP074C: Sulfonated Compounds					
Amber VOC Vial- NaHSO4 or H2SO4 A8HA5\25150212	15-FEB-2012	22-FEB-2012	29-FEB-2012	✓	22-FEB-2012 29-FEB-2012
EP074D: Fumigants					
Amber VOC Vial- NaHSO4 or H2SO4 A8HA5\25150212	15-FEB-2012	22-FEB-2012	29-FEB-2012	✓	22-FEB-2012 29-FEB-2012
EP074E: Halogenated Aliphatic Compounds					
Amber VOC Vial- NaHSO4 or H2SO4 A8HA5\25150212	15-FEB-2012	22-FEB-2012	29-FEB-2012	✓	22-FEB-2012 29-FEB-2012



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Matrix: **WATER** Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method	Sample Date	Extraction / Preparation		Analysis		
		Date extracted	Due for extraction	Date analysed	Due for analysis	
EP074F: Halogenated Aromatic Compounds						
Amber VOC Vial- NaHSO4 or H2SO4 A8HA5\25150212	15-FEB-2012	22-FEB-2012	29-FEB-2012	22-FEB-2012	29-FEB-2012	✓
EP074G: Trihalomethanes						
Amber VOC Vial- NaHSO4 or H2SO4 A8HA5\25150212	15-FEB-2012	22-FEB-2012	29-FEB-2012	22-FEB-2012	29-FEB-2012	✓
EP074H: Naphthalene						
Amber VOC Vial- NaHSO4 or H2SO4 A8HA5\25150212	15-FEB-2012	22-FEB-2012	29-FEB-2012	22-FEB-2012	29-FEB-2012	✓



Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type Analytical Methods	Method	Count		Rate (%)		Evaluation	Quality Control Specification
		QC	Regular	Actual	Expected		
Laboratory Duplicates (DUP)							
Moisture Content	EA055-103	2	20	10.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Organic Matter	EP004	1	4	25.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Perchlorate in Soils and Sediments by LC/MS	EP216	1	4	25.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Perfluorooctyl Acids and Sulfonates by LC/MS/MS	EP231	1	4	25.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Pesticides by GC/MS	EP068	2	12	16.7	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
pH (1:5)	EA002	1	7	14.3	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	2	18	11.1	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Semivolatile Organic Compounds	EP075	1	9	11.1	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	8	12.5	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	2	20	10.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	10	10.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	2	11	18.2	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	8	12.5	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
Organic Matter	EP004	1	4	25.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Perchlorate in Soils and Sediments by LC/MS	EP216	1	4	25.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Perfluorooctyl Acids and Sulfonates by LC/MS/MS	EP231	1	4	25.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Pesticides by GC/MS	EP068	1	12	8.3	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	1	18	5.6	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Semivolatile Organic Compounds	EP075	1	9	11.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	8	12.5	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	20	5.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	10	10.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	11	9.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	8	12.5	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
Organic Matter	EP004	1	4	25.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Perchlorate in Soils and Sediments by LC/MS	EP216	1	4	25.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Perfluorooctyl Acids and Sulfonates by LC/MS/MS	EP231	1	4	25.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Pesticides by GC/MS	EP068	1	12	8.3	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	1	18	5.6	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Semivolatile Organic Compounds	EP075	1	9	11.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	8	12.5	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	20	5.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	10	10.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	11	9.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	8	12.5	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)							
Perchlorate in Soils and Sediments by LC/MS	EP216	1	4	25.0	5.0	✓	ALS QCS3 requirement



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Matrix: **SOIL** Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Analytical Methods	Method	Count		Rate (%)		Evaluation	Quality Control Specification
		QC	Regular	Actual	Expected		
Matrix Spikes (MS) - Continued							
Perfluorooctyl Acids and Sulfonates by LC/MS/MS	EP231	1	4	25.0	5.0	✓	ALS QCS3 requirement
Pesticides by GC/MS	EP068	1	12	8.3	5.0	✓	ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	1	18	5.6	5.0	✓	ALS QCS3 requirement
Semivolatile Organic Compounds	EP075	1	9	11.1	5.0	✓	ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	8	12.5	5.0	✓	ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	20	5.0	5.0	✓	ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	10	10.0	5.0	✓	ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	11	9.1	5.0	✓	ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	8	12.5	5.0	✓	ALS QCS3 requirement

Matrix: **WATER** Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Analytical Methods	Method	Count		Rate (%)		Evaluation	Quality Control Specification
		QC	Regular	Actual	Expected		
Laboratory Duplicates (DUP)							
Total Mercury by FIMS	EG035T	2	17	11.8	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	2	8	25.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	1	100.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
Total Mercury by FIMS	EG035T	1	17	5.9	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	1	8	12.5	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	1	100.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
Total Mercury by FIMS	EG035T	1	17	5.9	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	1	8	12.5	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	1	100.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Scan for Unknowns	EP072	1	1	100.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)							
Total Mercury by FIMS	EG035T	1	17	5.9	5.0	✓	ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	1	8	12.5	5.0	✓	ALS QCS3 requirement



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Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
pH (1:5)	EA002	SOIL	(APHA 21st ed., 4500H+) pH is determined on soil samples after a 1:5 soil/water leach. This method is compliant with NEPM (1999) Schedule B(3) (Method 103)
Moisture Content	EA055-103	SOIL	A gravimetric procedure based on weight loss over a 12 hour drying period at 103-105 degrees C. This method is compliant with NEPM (2010 Draft) Schedule B(3) Section 7.1 and Table 1 (14 day holding time).
Total Metals by ICP-AES	EG005T	SOIL	(APHA 21st ed., 3120; USEPA SW 846 - 6010) (ICPAES) Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (1999) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	AS 3550, APHA 21st ed., 3112 Hg - B (Flow-injection (SnCl ₂)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl ₂ which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3)
Organic Matter	EP004	SOIL	AS1289.4.1.1 - 1997., Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM (1999) Schedule B(3) (Method 105)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 504)
Pesticides by GCMS	EP068	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (1999) Schedule B(3) (Method 504.505)
TPH - Semivolatle Fraction	EP071	SOIL	(USEPA SW 846 - 8015A) Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C36. This method is compliant with NEPM (1999) Schedule B(3) (Method 506.1)
Volatle Scan for Unknowns	EP072	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS and unknowns are identified by comparison of peaks with the NIST library. Semiquantification is by comparison with the closest eluting internal standard.
Semivolatle Scan for Unknowns	EP073	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Capillary GC/MS and unknowns are identified by comparison of peaks with the NIST library. Semiquantification is by comparison with the closest eluting internal standard.
Volatle Organic Compounds	EP074	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 501)
Semivolatle Organic Compounds	EP075	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (1999) Schedule B(3) (Method 502)
TPH Volatiles/BTEX	EP080	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 501)
Perchlorate in Soils and Sediments by LC/MS	EP216	SOIL	US EPA Method 6850: 5 g of sample is extracted with 25 mL of water acidified with acetic acid, filtered with a 0.2 µm filter (to extend extract holding time) and analysed by LC/MS in ESI (negative) mode.



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Analytical Methods	Method	Matrix	Method Descriptions
Perfluorooctyl Acids and Sulfonates by LC/MS/MS	* EP231	SOIL	In-House. A portion of soil is soaked in sodium hydroxide followed by extraction with methanol. The extract is neutralised with HCl and an aliquot taken to dryness, made up in mobile phase. Analysis is by LC/MSMS, ESI Negative Mode using MRM.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	(APHA 21st ed., 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020): The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Mercury by FIMS	EG035T	WATER	AS 3550, APHA 21st ed. 3112 Hg - B (Flow-injection (SnCl ₂)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl ₂ which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Volatile Scan for Unknowns	EP072	WATER	USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Volatile Organic Compounds	EP074	WATER	USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Preparation Methods	Method	Matrix	Method Descriptions
1:5 solid / water leach for soluble analytes	EN34	SOIL	10 g of soil is mixed with 50 mL of distilled water and tumbled end over end for 1 hour. Water soluble salts are leached from the soil by the continuous suspension. Samples are settled and the water filtered off for analysis.
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	USEPA 200.2 Mod. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM (1999) Schedule B(3) (Method 202)
Organic Matter	EP004-PR	SOIL	AS1289.4.1.1 - 1997., Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM (1999) Schedule B(3) (Method 105)
Sample Extraction for Perchlorate	EP216-PR	SOIL	US EPA 6850.
Sample Extraction for Perfluoroalkyl Compounds	EP231-PR	SOIL	In-House
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	(USEPA SW 846 - 5030A) 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids (Option A - Concentrating)	ORG17A	SOIL	In-house, Mechanical agitation (tumbler). 20g of sample, Na ₂ SO ₄ and surrogate are extracted with 150mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Tumbler Extraction of Solids (Option B - Non-concentrating)	ORG17B	SOIL	In-house, Mechanical agitation (tumbler). 10g of sample, Na ₂ SO ₄ and surrogate are extracted with 20mL 1:1 DCM/Acetone by end over end tumble. The solvent is transferred directly to a GC vial for analysis.
Digestion for Total Recoverable Metals	EN25	WATER	USEPA SW846-3005 Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.



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Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report. Surrogate recovery limits are static and based on USEPA SW846 or ALS-QW/EN/38 (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: SOIL

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP075D: Nitrosamines	2578288-008	----	Methapyriene	91-80-5	16.3 %	24.4-143%	Recovery less than lower control limit
EP075E: Nitroaromatics and Ketones	2578288-008	----	1-Naphthylamine	134-32-7	4.5 %	10-84%	Recovery less than lower control limit
Matrix Spike (MS) Recoveries							
EP231: Perfluorooctyl Acids and Sulfonates.	EM1201711-001	A8HA2\2001	PFOS	1763-23-1	Not Determined	----	MS recovery not determined, background level greater than or equal to 4x spike level.
EP231: Perfluorooctyl Acids and Sulfonates.	EM1201711-001	A8HA2\2001	PFOA	335-67-1	Not Determined	----	MS recovery not determined, background level greater than or equal to 4x spike level.

Matrix: WATER

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP074E: Halogenated Aliphatic Compounds	2580422-001	----	cis-1,4-Dichloro-2-butene	1476-11-5	52.3 %	54-132%	Recovery less than lower control limit

- For all matrices, no Method Blank value outliers occur.
 - For all matrices, no Duplicate outliers occur.
- Regular Sample Surrogates**
- For all regular sample matrices, no surrogate recovery outliers occur.

Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

- No Quality Control Sample Frequency Outliers exist.

Environmental Division

CERTIFICATE OF ANALYSIS

Work Order : **EM1202311**
Client : **GOLDER ASSOCIATES**
Contact : **Niamh McCormack**
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Project : **117613201**
Order number : **GA MELB 332509**
C-O-C number : **8163**
Sampler : **NMC**
Site : **F-VIC**
Quote number : **EN/002/11**

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Laboratory : **Environmental Division Melbourne**
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Telephone : **+61-3-8549 9644**
Facsimile : **+61-3-8549 9601**
QC Level : **NEPM 1999 Schedule B(3) and ALS QCS3 requirement**
Date Samples Received : **02-MAR-2012**
Issue Date : **13-MAR-2012**
No. of samples received : **11**
No. of samples analysed : **7**

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



NATA Accredited Laboratory 825

Accredited for compliance with
ISO/IEC 17025.

Signatories

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

Signatories	Position	Accreditation Category
Nancy Wang	Senior Semivolatile Instrument Chemist	Melbourne Organics
Xingbin Lin	Senior Organic Chemist	Melbourne Organics



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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 house developed procedures are employed in the absence of documented standards or by client request.

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

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

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

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

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

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

- **EP074: Insufficient sample has been provided for standard analysis. Where applicable LOR values have been adjusted accordingly.**



Analytical Results

Sub-Matrix: VEGETATION

Compound	CAS Number	LOR	Unit	Client sampling date / time				
				TC1/8001 01-MAR-2012 15:00 EM1202311-001	TC1/8801 01-MAR-2012 15:00 EM1202311-002	TC2/8002 01-MAR-2012 15:00 EM1202311-003	TC3/8003 01-MAR-2012 15:00 EM1202311-004	TC7/8007 01-MAR-2012 15:00 EM1202311-008
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.8	<0.8	<0.6	<0.5	<0.8
Toluene	108-88-3	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
Ethylbenzene	100-41-4	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
meta- & para-Xylene	108-38-3	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
Styrene	100-42-5	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
ortho-Xylene	95-47-6	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
Isopropylbenzene	98-82-8	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
n-Propylbenzene	103-65-1	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
sec-Butylbenzene	135-98-8	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
tert-Butylbenzene	98-06-6	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
p-Isopropyltoluene	99-87-6	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
n-Butylbenzene	104-51-8	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	5	mg/kg	<20	<20	<15	<12	<20
2-Butanone (MEK)	78-93-3	5	mg/kg	<20	<20	<15	<12	<20
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<20	<20	<15	<12	<20
2-Hexanone (MBK)	591-78-6	5	mg/kg	<20	<20	<15	<12	<20
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
EP074D: Fumigants								
2,2-Dichloropropane	594-20-7	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
1,2-Dichloropropane	78-87-5	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	5	mg/kg	<20	<20	<15	<12	<20
Chloromethane	74-87-3	5	mg/kg	<20	<20	<15	<12	<20
Vinyl chloride	75-01-4	5	mg/kg	<20	<20	<15	<12	<20
Bromomethane	74-83-9	5	mg/kg	<20	<20	<15	<12	<20
Chloroethane	75-00-3	5	mg/kg	<20	<20	<15	<12	<20
Trichlorofluoromethane	75-69-4	5	mg/kg	<20	<20	<15	<12	<20
1,1-Dichloroethene	75-35-4	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
Iodomethane	74-88-4	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0
1,1-Dichloroethane	75-34-3	0.5	mg/kg	<2.0	<2.0	<1.5	<1.2	<2.0



Analytical Results

Sub-Matrix: VEGETATION

Compound	CAS Number	LOR	Client sampling date / time		Client sample ID				
			Unit	EM1202311-001	EM1202311-002	EM1202311-003	EM1202311-004	EM1202311-008	
EP074E: Halogenated Aliphatic Compounds - Continued									
cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,1-Trichloroethane	71-55-6	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloropropylene	563-58-6	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Tetrachloride	56-23-5	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane	107-06-2	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichloroethene	79-01-6	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromomethane	74-95-3	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	79-00-5	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,3-Dichloropropane	142-28-9	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Tetrachloroethene	127-18-4	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,1,2-Tetrachloroethane	630-20-6	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
cis-1,4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2,2-Tetrachloroethane	79-34-5	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichloropropane	96-18-4	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Pentachloroethane	76-01-7	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Hexachlorobutadiene	87-68-3	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
EP074F: Halogenated Aromatic Compounds									
Chlorobenzene	108-90-7	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromobenzene	108-86-1	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-Chlorotoluene	95-49-8	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
4-Chlorotoluene	106-43-4	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,3-Dichlorobenzene	541-73-1	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,4-Dichlorobenzene	106-46-7	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichlorobenzene	95-50-1	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichlorobenzene	87-61-6	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
EP074G: Trihalomethanes									
Chloroform	67-66-3	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromodichloromethane	75-27-4	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromochloromethane	124-48-1	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromoform	75-25-2	0.5	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
EP074H: Naphthalene									
Naphthalene	91-20-3	5	mg/kg	<20	<20	<20	<20	<20	<20
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.1	%	72.6	80.9	81.7	82.5	81.2	81.2
Toluene-D8	2037-26-5	0.1	%	81.3	83.8	89.7	78.4	83.0	83.0



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 Work Order : EM1202311
 Client : GOLDR ASSOCIATES
 Project : 117613201

Analytical Results

Sub-Matrix: VEGETATION

Compound	CAS Number	LOR	Unit	Client sample ID					
				Client sampling date / time	TC1/8001	TC2/8002	TC3/8003	TC7/8007	
4-Bromofluorobenzene	460-00-4	0.1	%	01-MAR-2012 15:00	EM1202311-001	EM1202311-002	EM1202311-003	EM1202311-004	EM1202311-008
					72.5	74.5	78.0	67.0	72.1



Analytical Results

Compound	CAS Number	LOR	Unit	Client sample ID	
				Client sampling date / time	Client sample ID
Sub-Matrix: WATER					
EP074A: Monocyclic Aromatic Hydrocarbons					
Benzene	71-43-2	1	µg/L	<1	TC10/8710 01-MAR-2012 15:00
Toluene	108-88-3	2	µg/L	<2	EM1202311-010
Ethylbenzene	100-41-4	2	µg/L	<2	
meta- & para-Xylene	108-38-3	2	µg/L	<2	
Styrene	100-42-5	5	µg/L	<5	
ortho-Xylene	95-47-6	2	µg/L	<2	
Isopropylbenzene	98-82-8	5	µg/L	<5	
n-Propylbenzene	103-65-1	5	µg/L	<5	
1,3-Trimethylbenzene	108-67-8	5	µg/L	<5	
sec-Butylbenzene	135-98-8	5	µg/L	<5	
1,2,4-Trimethylbenzene	95-63-6	5	µg/L	<5	
tert-Butylbenzene	98-06-6	5	µg/L	<5	
p-Isopropyltoluene	99-87-6	5	µg/L	<5	
n-Butylbenzene	104-51-8	5	µg/L	<5	
EP074B: Oxygenated Compounds					
Vinyl Acetate	108-05-4	50	µg/L	<50	
2-Butanone (MEK)	78-93-3	50	µg/L	<50	
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	
EP074C: Sulfonated Compounds					
Carbon disulfide	75-15-0	5	µg/L	<5	
EP074D: Fumigants					
2,2-Dichloropropane	594-20-7	5	µg/L	<5	
1,2-Dichloropropane	78-87-5	5	µg/L	<5	
cis-1,3-Dichloropropylene	10061-01-5	5	µg/L	<5	
trans-1,3-Dichloropropylene	10061-02-6	5	µg/L	<5	
1,2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	
EP074E: Halogenated Aliphatic Compounds					
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	
Chloromethane	74-87-3	50	µg/L	<50	
Vinyl chloride	75-01-4	50	µg/L	<50	
Bromomethane	74-83-9	50	µg/L	<50	
Chloroethane	75-00-3	50	µg/L	<50	
Trichlorofluoromethane	75-69-4	50	µg/L	<50	
1,1-Dichloroethene	75-35-4	5	µg/L	<5	
Iodomethane	74-88-4	5	µg/L	<5	
trans-1,2-Dichloroethene	156-60-5	5	µg/L	<5	
1,1-Dichloroethane	75-34-3	5	µg/L	<5	



Analytical Results

Sub-Matrix: WATER

Compound	CAS Number	LOR	Unit	Client sampling date / time		Client sample ID
				TC9/8509 01-MAR-2012 15:00 EM1202311-010	TC10/8710 01-MAR-2012 15:00 EM1202311-011	
EP074E: Halogenated Aliphatic Compounds - Continued						
cis-1,2-Dichloroethene	156-59-2	5	µg/L	<5	<5	
1,1,1-Trichloroethane	71-55-6	5	µg/L	<5	<5	
1,1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	
1,2-Dichloroethane	107-06-2	5	µg/L	<5	<5	
Trichloroethene	79-01-6	5	µg/L	<5	<5	
Dibromomethane	74-95-3	5	µg/L	<5	<5	
1,1,2-Trichloroethane	79-00-5	5	µg/L	<5	<5	
1,3-Dichloropropane	142-28-9	5	µg/L	<5	<5	
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	
1,1,1,2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	
trans-1,4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	
cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	
1,1,2,2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	
1,2,3-Trichloropropane	96-18-4	5	µg/L	<5	<5	
Pentachloroethane	76-01-7	5	µg/L	<5	<5	
1,2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	
Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	
EP074F: Halogenated Aromatic Compounds						
Chlorobenzene	108-90-7	5	µg/L	<5	<5	
Bromobenzene	108-86-1	5	µg/L	<5	<5	
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	
1,3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	
1,4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	
1,2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	
1,2,4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	
1,2,3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	
EP074G: Trihalomethanes						
Chloroform	67-66-3	5	µg/L	<5	<5	
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	
Bromoform	75-25-2	5	µg/L	<5	<5	
EP074H: Naphthalene						
Naphthalene	91-20-3	7	µg/L	<7	<7	
EP074S: VOC Surrogates						
1,2-Dichloroethane-D4	17060-07-0	0.1	%	110	115	
Toluene-D8	2037-26-5	0.1	%	109	110	



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 Work Order : EM1202311
 Client : GOLDR ASSOCIATES
 Project : 117613201

Analytical Results

Sub-Matrix: WATER

Compound	CAS Number	LOR	Unit	Client sample ID		Client sampling date / time	LOR	Unit	Client sampling date / time
				TC9/8509	TC10/8710				
4-Bromofluorobenzene	460-00-4	0.1	%	87.5	88.8	01-MAR-2012 15:00	EM1202311-010	EM1202311-011	01-MAR-2012 15:00

EP074S: VOC Surrogates - Continued



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Surrogate Control Limits

Sub-Matrix: VEGETATION

Compound	CAS Number	Recovery Limits (%)	
		Low	High
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	62	122
Toluene-D8	2037-26-5	64	120
4-Bromofluorobenzene	460-00-4	66	124

Sub-Matrix: WATER

Compound	CAS Number	Recovery Limits (%)	
		Low	High
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	72	132
Toluene-D8	2037-26-5	74	128
4-Bromofluorobenzene	460-00-4	70	132

Environmental Division

QUALITY CONTROL REPORT

Work Order : **EM1202311** Page : 1 of 12

Client : **GOLDER ASSOCIATES** Laboratory : Environmental Division Melbourne
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Project : 117613201 QC Level : NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site : F-VIC
C-O-C number : 8163 Date Samples Received : 02-MAR-2012
Sampler : NMC Issue Date : 13-MAR-2012
Order number : GA MELB 332509 No. of samples received : 11
Quote number : EN/002/11 No. of samples analysed : 7

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 Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD), and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits



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ISO/IEC 17025.

WORLD RECOGNISED
ACCREDITATION

Signatories

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

Signatories	Position	Accreditation Category
Nancy Wang	Senior Semivolatile Instrument Chemist	Melbourne Organics
Xingbin Lin	Senior Organic Chemist	Melbourne Organics



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Work Order : EM1202311
Client : GOLDR ASSOCIATES
Project : 117613201

General Comments

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

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

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

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

Key :
Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
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
RPD = Relative Percentage Difference
= Indicates failed QC



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 Work Order : EM1202311
 Client : GOLDR ASSOCIATES
 Project : 117613201

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR:- No Limit; Result between 10 and 20 times LOR:- 0% - 50%; Result > 20 times LOR:- 0% - 20%.

Sub-Matrix: WATER		Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)		
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 2199891)											
EM1201486-001	Anonymous	EP074: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit		
		EP074: Toluene	108-88-3	2	µg/L	<2	<2	0.0	No Limit		
		EP074: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit		
		EP074: meta- & para-Xylene	108-38-3	2	µg/L	<2	<2	0.0	No Limit		
			106-42-3								
		EP074: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit		
		EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit		
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,3,5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit		
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2,4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit		
EM1202311-011	TC10/8710	EP074: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit		
		EP074: Toluene	108-88-3	2	µg/L	<2	<2	0.0	No Limit		
		EP074: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit		
		EP074: meta- & para-Xylene	108-38-3	2	µg/L	<2	<2	0.0	No Limit		
			106-42-3								
		EP074: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit		
		EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit		
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,3,5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit		
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2,4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit		
EP074B: Oxygenated Compounds (QC Lot: 2199891)											
EM1201486-001	Anonymous	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit		
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit		
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit		
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit		



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 Work Order : EM1202311
 Client : GOLDR ASSOCIATES
 Project : 117613201

Sub-Matrix: WATER		Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Client sample ID	Method/Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)		
EP074B: Oxygenated Compounds (QC Lot: 2198891) - continued											
EM1202311-011	TC10/8710	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit		
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit		
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit		
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit		
EP074C: Sulfonated Compounds (QC Lot: 2198891)											
EM1201486-001	Anonymous	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit		
EM1202311-011	TC10/8710	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit		
EP074D: Fumigants (QC Lot: 2198891)											
EM1201486-001	Anonymous	EP074: 2,2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: cis-1,3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: trans-1,3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 2,2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: cis-1,3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: trans-1,3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit		
EM1202311-011	TC10/8710	EP074: 1,2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: cis-1,3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: trans-1,3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit		
EP074E: Halogenated Aliphatic Compounds (QC Lot: 2198891)											
EM1201486-001	Anonymous	EP074: 1,1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: trans-1,2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit		
		EP074: cis-1,2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1,1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1,2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1,1,2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: trans-1,4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1,2,2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2,3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit		



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 Client : GOLDR ASSOCIATES
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Sub-Matrix: WATER		Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Client sample ID	Method/Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)		
EP074E: Halogenated Aliphatic Compounds (QC Lot: 2199891) - continued											
EM1201486-001		Anonymous									
		EP074: 1,2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit		
		EP074: 1,1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: trans-1,2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit		
		EP074: cis-1,2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1,1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1,2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1,1,2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: trans-1,4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit		
		EP074: cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,1,2,2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2,3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit		
		EP074: 1,2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit		
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit		
EP074F: Halogenated Aromatic Compounds (QC Lot: 2199891)											
EM1201486-001		Anonymous									
		EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit		
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit		



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Sub-Matrix: WATER		Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report			Recovery Limits (%)	
Laboratory sample ID	Original Result							Duplicate Result	RPD (%)			
EP074F: Halogenated Aromatic Compounds (QC Lot: 2199891) - continued												
EM1201486-001		Anonymous		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit	
				EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit	
				EP074: 1,3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	0.0	No Limit	
				EP074: 1,4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	0.0	No Limit	
				EP074: 1,2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	0.0	No Limit	
				EP074: 1,2,4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	0.0	No Limit	
				EP074: 1,2,3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit	
EM1202311-011		TC10/8710		EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit	
				EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit	
				EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit	
				EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit	
				EP074: 1,3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	0.0	No Limit	
				EP074: 1,4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	0.0	No Limit	
				EP074: 1,2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	0.0	No Limit	
				EP074: 1,2,4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	0.0	No Limit	
				EP074: 1,2,3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit	
EP074G: Trihalomethanes (QC Lot: 2199891)												
EM1201486-001		Anonymous		EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit	
				EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit	
				EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit	
				EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit	
EM1202311-011		TC10/8710		EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit	
				EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit	
				EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit	
				EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit	
EP074H: Naphthalene (QC Lot: 2199891)												
EM1201486-001		Anonymous		EP074: Naphthalene	91-20-3	7	µg/L	<7	<7	0.0	No Limit	
EM1202311-011		TC10/8710		EP074: Naphthalene	91-20-3	7	µg/L	<7	<7	0.0	No Limit	



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Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
				Result	Concentration	Spike Recovery (%)	LCS	Low	High
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 2202955)									
EP074: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	84.3	75	121	
EP074: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	84.5	76	124	
EP074: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	82.4	74	118	
EP074: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	87.6	75	121	
EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	1 mg/kg	76.6	64	120	
EP074: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	84.8	77	121	
EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	1 mg/kg	79.4	74	120	
EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	1 mg/kg	92.0	65	117	
EP074: 1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	1 mg/kg	91.2	65	117	
EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	1 mg/kg	94.2	67	117	
EP074: 1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	1 mg/kg	87.1	66	117	
EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	1 mg/kg	87.6	68	116	
EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	1 mg/kg	95.0	64	117	
EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	1 mg/kg	91.2	59	115	
EP074B: Oxygenated Compounds (QCLot: 2202955)									
EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	10 mg/kg	77.7	40	138	
EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	10 mg/kg	78.6	61	143	
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	10 mg/kg	71.6	63	137	
EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	10 mg/kg	73.8	63	133	
EP074C: Sulfonated Compounds (QCLot: 2202955)									
EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	1 mg/kg	85.7	57	121	
EP074D: Fumigants (QCLot: 2202955)									
EP074: 2,2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	1 mg/kg	74.5	51	130	
EP074: 1,2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	1 mg/kg	87.0	73	121	
EP074: cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	1 mg/kg	68.4	59	109	
EP074: trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	1 mg/kg	62.2	52	110	
EP074: 1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	1 mg/kg	94.0	68	120	
EP074E: Halogenated Aliphatic Compounds (QCLot: 2202955)									
EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	10 mg/kg	80.3	34	122	
EP074: Chloromethane	74-87-3	5	mg/kg	<5	10 mg/kg	96.1	52	133	
EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	10 mg/kg	91.2	47	133	
EP074: Bromomethane	74-83-9	5	mg/kg	<5	10 mg/kg	85.5	39	116	
EP074: Chloroethane	75-00-3	5	mg/kg	<5	10 mg/kg	90.4	43	137	



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 Work Order : EM1202311
 Client : GOLDR ASSOCIATES
 Project : 117613201

Method: Compound		CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report		
					Result	Concentration	Spike	Spike Recovery (%)	Recovery Limits (%)
Sub-Matrix: SOIL									
EP074E: Halogenated Aliphatic Compounds (QCLot: 2202955) - continued									
EP074: Trichlorofluoromethane		75-69-4	5	mg/kg	<5	10 mg/kg	88.6	61	126
EP074: 1,1-Dichloroethene		75-35-4	0.5	mg/kg	<0.5	1 mg/kg	84.6	62	124
EP074: Iodomethane		74-88-4	0.5	mg/kg	<0.5	1 mg/kg	54.4	47	116
EP074: trans-1,2-Dichloroethene		156-60-5	0.5	mg/kg	<0.5	1 mg/kg	86.1	69	119
EP074: 1,1-Dichloroethane		75-34-3	0.5	mg/kg	<0.5	1 mg/kg	81.3	70	120
EP074: cis-1,2-Dichloroethene		156-59-2	0.5	mg/kg	<0.5	1 mg/kg	80.6	72	120
EP074: 1,1,1-Trichloroethane		71-55-6	0.5	mg/kg	<0.5	1 mg/kg	79.8	64	112
EP074: 1,1-Dichloropropylene		563-58-6	0.5	mg/kg	<0.5	1 mg/kg	82.7	71	117
EP074: Carbon Tetrachloride		56-23-5	0.5	mg/kg	<0.5	1 mg/kg	75.9	51	106
EP074: 1,2-Dichloroethane		107-06-2	0.5	mg/kg	<0.5	1 mg/kg	82.4	70	126
EP074: Trichloroethene		79-01-6	0.5	mg/kg	<0.5	1 mg/kg	85.1	71	120
EP074: Dibromomethane		74-95-3	0.5	mg/kg	<0.5	1 mg/kg	85.9	70	122
EP074: 1,1,2-Trichloroethane		79-00-5	0.5	mg/kg	<0.5	1 mg/kg	85.9	73	125
EP074: 1,3-Dichloropropane		142-28-9	0.5	mg/kg	<0.5	1 mg/kg	82.3	75	125
EP074: Tetrachloroethene		127-18-4	0.5	mg/kg	<0.5	1 mg/kg	81.4	71	120
EP074: 1,1,1,2-Tetrachloroethane		630-20-6	0.5	mg/kg	<0.5	1 mg/kg	76.2	54	106
EP074: trans-1,4-Dichloro-2-butene		110-57-6	0.5	mg/kg	<0.5	1 mg/kg	69.1	46	112
EP074: cis-1,4-Dichloro-2-butene		1476-11-5	0.5	mg/kg	<0.5	1 mg/kg	64.2	21.8	117
EP074: 1,1,2,2-Tetrachloroethane		79-34-5	0.5	mg/kg	<0.5	1 mg/kg	88.5	71	131
EP074: 1,2,3-Trichloropropane		96-18-4	0.5	mg/kg	<0.5	1 mg/kg	# 61.0	70	134
EP074: Pentachloroethane		76-01-7	0.5	mg/kg	<0.5	1 mg/kg	79.1	40	94
EP074: 1,2-Dibromo-3-chloropropane		96-12-8	0.5	mg/kg	<0.5	1 mg/kg	87.7	41	113
EP074: Hexachlorobutadiene		87-68-3	0.5	mg/kg	<0.5	1 mg/kg	# 128	40	127
EP074F: Halogenated Aromatic Compounds (QCLot: 2202955)									
EP074: Chlorobenzene		108-90-7	0.5	mg/kg	<0.5	1 mg/kg	91.7	78	120
EP074: Bromobenzene		108-86-1	0.5	mg/kg	<0.5	1 mg/kg	103	68	116
EP074: 2-Chlorotoluene		95-49-8	0.5	mg/kg	<0.5	1 mg/kg	100	67	117
EP074: 4-Chlorotoluene		106-43-4	0.5	mg/kg	<0.5	1 mg/kg	94.6	67	115
EP074: 1,3-Dichlorobenzene		541-73-1	0.5	mg/kg	<0.5	1 mg/kg	102	69	115
EP074: 1,4-Dichlorobenzene		106-46-7	0.5	mg/kg	<0.5	1 mg/kg	93.4	70	116
EP074: 1,2-Dichlorobenzene		95-50-1	0.5	mg/kg	<0.5	1 mg/kg	94.9	72	116
EP074: 1,2,4-Trichlorobenzene		120-82-1	0.5	mg/kg	<0.5	1 mg/kg	# 134	49	118
EP074: 1,2,3-Trichlorobenzene		87-61-6	0.5	mg/kg	<0.5	1 mg/kg	# 149	60	120
EP074G: Trihalomethanes (QCLot: 2202955)									
EP074: Chloroform		67-66-3	0.5	mg/kg	<0.5	1 mg/kg	82.8	71	121
EP074: Bromodichloromethane		75-27-4	0.5	mg/kg	<0.5	1 mg/kg	81.2	60	108
EP074: Dibromochloromethane		124-48-1	0.5	mg/kg	<0.5	1 mg/kg	73.7	48	104
EP074: Bromoform		75-25-2	0.5	mg/kg	<0.5	1 mg/kg	76.7	40	106
EP074H: Naphthalene (QCLot: 2202955)									



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Sub-Matrix: SOIL		Method Blank (MB) Report			Laboratory Control Spike (LCS) Report		
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	Recovery Limits (%)
						LCS	Low High
EP074H: Naphthalene (QCLot: 2202955) - continued							
EP074: Naphthalene	91-20-3	5	mg/kg	<5	1 mg/kg	118	61 132
Sub-Matrix: WATER							
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	Recovery Limits (%)
						LCS	Low High
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 2199891)							
EP074: Benzene	71-43-2	1	µg/L	<1	20 µg/L	99.6	79 121
EP074: Toluene	108-88-3	2	µg/L	<2	20 µg/L	92.4	80 124
EP074: Ethylbenzene	100-41-4	2	µg/L	<2	20 µg/L	102	79 121
EP074: meta- & para-Xylene	108-38-3	2	µg/L	<2	40 µg/L	100	80 122
	106-42-3						
EP074: Styrene	100-42-5	5	µg/L	<5	20 µg/L	83.7	74 122
EP074: ortho-Xylene	95-47-6	2	µg/L	<2	20 µg/L	109	81 123
EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	20 µg/L	93.9	80 120
EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	20 µg/L	76.6	70 120
EP074: 1,3,5-Trimethylbenzene	108-67-8	5	µg/L	<5	20 µg/L	77.9	71 119
EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	20 µg/L	82.0	72 120
EP074: 1,2,4-Trimethylbenzene	95-63-6	5	µg/L	<5	20 µg/L	78.4	73 119
EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	20 µg/L	76.1	73 119
EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	20 µg/L	74.1	71 121
EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	20 µg/L	72.4	65 121
EP074B: Oxygenated Compounds (QCLot: 2199891)							
EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	200 µg/L	90.9	57 131
EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	200 µg/L	113	69 135
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	200 µg/L	101	68 136
EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	200 µg/L	98.6	68 138
EP074C: Sulfonated Compounds (QCLot: 2199891)							
EP074: Carbon disulfide	75-15-0	5	µg/L	<5	20 µg/L	# 57.7	67 127
EP074D: Fumigants (QCLot: 2199891)							
EP074: 2,2-Dichloropropane	594-20-7	5	µg/L	<5	20 µg/L	69.3	59 128
EP074: 1,2-Dichloropropane	78-87-5	5	µg/L	<5	20 µg/L	93.1	77 121
EP074: cis-1,3-Dichloropropylene	10061-01-5	5	µg/L	<5	20 µg/L	# 58.4	70 118
EP074: trans-1,3-Dichloropropylene	10061-02-6	5	µg/L	<5	20 µg/L	# 52.4	66 120
EP074: 1,2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	20 µg/L	94.0	78 124
EP074E: Halogenated Aliphatic Compounds (QCLot: 2199891)							
EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	200 µg/L	78.2	58 148
EP074: Chloromethane	74-87-3	50	µg/L	<50	200 µg/L	95.8	62 142
EP074: Vinyl chloride	75-01-4	50	µg/L	<50	200 µg/L	100	61 141
EP074: Bromomethane	74-83-9	50	µg/L	<50	200 µg/L	84.6	57 131



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Sub-Matrix: WATER		Method: Compound			Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	LCS	Low	High	Recovery Limits (%)
EP074E: Halogenated Aliphatic Compounds (QCLot: 2199891) - continued										
EP074: Chloroethane	75-00-3	50	µg/L	<50	200 µg/L	98.4	64	138		
EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	200 µg/L	96.6	67	131		
EP074: 1,1-Dichloroethene	75-35-4	5	µg/L	<5	20 µg/L	98.4	71	125		
EP074: Iodomethane	74-88-4	5	µg/L	<5	20 µg/L	77.4	61	135		
EP074: trans-1,2-Dichloroethene	156-60-5	5	µg/L	<5	20 µg/L	102	75	121		
EP074: 1,1-Dichloroethane	75-34-3	5	µg/L	<5	20 µg/L	101	77	121		
EP074: cis-1,2-Dichloroethene	156-59-2	5	µg/L	<5	20 µg/L	106	78	122		
EP074: 1,1,1-Trichloroethane	71-55-6	5	µg/L	<5	20 µg/L	79.6	70	120		
EP074: 1,1-Dichloropropylene	563-58-6	5	µg/L	<5	20 µg/L	100	74	122		
EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	20 µg/L	67.8	57	123		
EP074: 1,2-Dichloroethane	107-06-2	5	µg/L	<5	20 µg/L	107	75	125		
EP074: Trichloroethene	79-01-6	5	µg/L	<5	20 µg/L	99.4	77	121		
EP074: Dibromomethane	74-95-3	5	µg/L	<5	20 µg/L	102	76	122		
EP074: 1,1,2-Trichloroethane	79-00-5	5	µg/L	<5	20 µg/L	113	78	126		
EP074: 1,3-Dichloropropane	142-28-9	5	µg/L	<5	20 µg/L	100	79	125		
EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	20 µg/L	97.0	76	122		
EP074: 1,1,1,2-Tetrachloroethane	630-20-6	5	µg/L	<5	20 µg/L	78.1	65	119		
EP074: trans-1,4-Dichloro-2-butene	110-57-6	5	µg/L	<5	20 µg/L	63.5	46	126		
EP074: cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	20 µg/L	68.8	54	132		
EP074: 1,1,2,2-Tetrachloroethane	79-34-5	5	µg/L	<5	20 µg/L	110	75	131		
EP074: 1,2,3-Trichloropropane	96-18-4	5	µg/L	<5	20 µg/L	107	75	133		
EP074: Pentachloroethane	76-01-7	5	µg/L	<5	20 µg/L	81.3	46	118		
EP074: 1,2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	20 µg/L	89.8	54	124		
EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	20 µg/L	79.6	50	134		
EP074F: Halogenated Aromatic Compounds (QCLot: 2199891)										
EP074: Chlorobenzene	108-90-7	5	µg/L	<5	20 µg/L	98.1	81	121		
EP074: Bromobenzene	108-86-1	5	µg/L	<5	20 µg/L	99.7	75	119		
EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	20 µg/L	81.9	73	121		
EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	20 µg/L	85.3	72	120		
EP074: 1,3-Dichlorobenzene	541-73-1	5	µg/L	<5	20 µg/L	78.4	73	119		
EP074: 1,4-Dichlorobenzene	106-46-7	5	µg/L	<5	20 µg/L	85.6	74	120		
EP074: 1,2-Dichlorobenzene	95-50-1	5	µg/L	<5	20 µg/L	94.2	78	118		
EP074: 1,2,4-Trichlorobenzene	120-82-1	5	µg/L	<5	20 µg/L	81.5	56	128		
EP074: 1,2,3-Trichlorobenzene	87-61-6	5	µg/L	<5	20 µg/L	88.3	69	123		
EP074G: Trihalomethanes (QCLot: 2199891)										
EP074: Chloroform	67-66-3	5	µg/L	<5	20 µg/L	103	77	121		
EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	20 µg/L	85.9	69	117		
EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	20 µg/L	59.4	59	119		
EP074: Bromoform	75-25-2	5	µg/L	<5	20 µg/L	53.5	49	121		



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Sub-Matrix: WATER		Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
Method: Compound	CAS Number	LOR	Unit	Spike Concentration	Spike Recovery (%)	Recovery Limits (%)	
					LCS	Low	High
EP074H: Naphthalene (QCLot: 2199891)	91-20-3	7	µg/L	20 µg/L	89.0	76	124
EP074: Naphthalene							



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Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Matrix Spike (MS) Report		
					Spike Recovery (%) MS	Low	High
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 2199891)							
EM1201486-002	Anonymous	EP074: Benzene	71-43-2	20 µg/L	108	64	121
		EP074: Toluene	108-88-3	20 µg/L	96.6	63	125
EP074E: Halogenated Aliphatic Compounds (QCLot: 2199891)							
EM1201486-002	Anonymous	EP074: 1,1-Dichloroethene	75-35-4	20 µg/L	88.9	52	104
		EP074: Trichloroethene	79-01-6	20 µg/L	95.3	59	120
EP074F: Halogenated Aromatic Compounds (QCLot: 2199891)							
EM1201486-002	Anonymous	EP074: Chlorobenzene	108-90-7	20 µg/L	107	63	132



Environmental Division

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: EM1202311	Page	: 1 of 5
Client	: GOLDER ASSOCIATES	Laboratory	: Environmental Division Melbourne
Contact	: Niamh McCormack	Contact	: Samantha Smith
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E-mail	: nmccormack@golder.com.au	E-mail	: samantha.smith@alsglobal.com
Telephone	: +51 63 8852 3, 66	Telephone	: +51-3-8, 47 7544
Facsimile	: +51 63 8852 3, 61	Facsimile	: +51-3-8, 47 7561
Project	: 110513261	QC Level	: NEPM 1777 Schedule B(3) and ALS QCS3 requirement
Site	: F-VIC	Date Samples Received	: 62-MAR-2612
C-O-C number	: 8153	Issue Date	: 13-MAR-2612
Sampler	: NMC	No. of samples received	: 11
Order number	: GA MELB 332, 67	No. of samples analysed	: 0
Quote number	: EN/662/11		

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 Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers



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 Client : GOLDR ASSOCIATES
 Project : 110513261

Analysis Holding Time Compliance

The following report summarises extraction / preparation and analysis times and compares with recommended holding times. Dates reported represent first date of extraction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the analysis aliquot was taken. Elapsed period to analysis represents number of days from sampling where no extraction / digestion is involved or period from extraction / digestion where this is present. For composite samples9 sampling date is assumed to be that of the oldest sample contributing to the composite. Sample date for laboratory produced leachates is assumed as the completion date of the leaching process. Outliers for holding time are based on USEPA SW 8459 APHA9 AS and NEPM (1777). A listing of breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according to the analytes being determined on the resulting solution. For non-volatile analytes9 the holding time compliance assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days), Mercury (28 days) & other metals (186 days). A recorded breach therefore does not guarantee a breach for all non-volatile parameters.

Matrix: SOIL

Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method	Container / Client Sample ID(s)	Sample Date	Extraction / Preparation		Analysis		
			Date extracted	Due for extraction	Evaluation	Due for analysis	
EA055: Moisture Content							
Amber VOC Vial- NaHSO4 or H2SO4	TC1/86619 TC2/86629 TC0/86660	01-MAR-2012	----	----	----	08-MAR-2012	1, -MAR-2612
EP074A: Monocyclic Aromatic Hydrocarbons							
Amber VOC Vial- NaHSO4 or H2SO4	TC1/86619 TC2/86629 TC0/86660	01-MAR-2012	08-MAR-2012	1, -MAR-2612	✓	09-MAR-2012	1, -MAR-2612
EP074B: Oxygenated Compounds							
Amber VOC Vial- NaHSO4 or H2SO4	TC1/86619 TC2/86629 TC0/86660	01-MAR-2012	08-MAR-2012	1, -MAR-2612	✓	09-MAR-2012	1, -MAR-2612
EP074C: Sulfonated Compounds							
Amber VOC Vial- NaHSO4 or H2SO4	TC1/86619 TC2/86629 TC0/86660	01-MAR-2012	08-MAR-2012	1, -MAR-2612	✓	09-MAR-2012	1, -MAR-2612
EP074D: Fumigants							
Amber VOC Vial- NaHSO4 or H2SO4	TC1/86619 TC2/86629 TC0/86660	01-MAR-2012	08-MAR-2012	1, -MAR-2612	✓	09-MAR-2012	1, -MAR-2612
EP074E: Halogenated Aliphatic Compounds							
Amber VOC Vial- NaHSO4 or H2SO4	TC1/86619 TC2/86629 TC0/86660	01-MAR-2012	08-MAR-2012	1, -MAR-2612	✓	09-MAR-2012	1, -MAR-2612



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Matrix: SOIL Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method		Sample Date		Extraction / Preparation		Analysis	
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074F: Halogenated Aromatic Compounds							
Amber VOC Vial- NaHSO4 or H2SO4							
TC1/86619	TC1/86619	08-MAR-2012	1, -MAR-2612	✓	09-MAR-2012	1, -MAR-2612	✓
TC2/86629	TC2/86629						
TC0/86660	TC3/86639						
EP074G: Trihalomethanes							
Amber VOC Vial- NaHSO4 or H2SO4							
TC1/86619	TC1/86619	08-MAR-2012	1, -MAR-2612	✓	09-MAR-2012	1, -MAR-2612	✓
TC2/86629	TC2/86629						
TC0/86660	TC3/86639						
EP074H: Naphthalene							
Amber VOC Vial- NaHSO4 or H2SO4							
TC1/86619	TC1/86619	08-MAR-2012	1, -MAR-2612	✓	09-MAR-2012	1, -MAR-2612	✓
TC2/86629	TC2/86629						
TC0/86660	TC3/86639						

Matrix: WATER Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method		Sample Date		Extraction / Preparation		Analysis	
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074A: Monocyclic Aromatic Hydrocarbons							
Amber VOC Vial- NaHSO4 or H2SO4							
TC7/8, 679	TC16/8016	08-MAR-2012	1, -MAR-2612	✓	08-MAR-2012	1, -MAR-2612	✓
EP074B: Oxygenated Compounds							
Amber VOC Vial- NaHSO4 or H2SO4							
TC7/8, 679	TC16/8016	08-MAR-2012	1, -MAR-2612	✓	08-MAR-2012	1, -MAR-2612	✓
EP074C: Sulfonated Compounds							
Amber VOC Vial- NaHSO4 or H2SO4							
TC7/8, 679	TC16/8016	08-MAR-2012	1, -MAR-2612	✓	08-MAR-2012	1, -MAR-2612	✓
EP074D: Fumigants							
Amber VOC Vial- NaHSO4 or H2SO4							
TC7/8, 679	TC16/8016	08-MAR-2012	1, -MAR-2612	✓	08-MAR-2012	1, -MAR-2612	✓
EP074E: Halogenated Aliphatic Compounds							
Amber VOC Vial- NaHSO4 or H2SO4							
TC7/8, 679	TC16/8016	08-MAR-2012	1, -MAR-2612	✓	08-MAR-2012	1, -MAR-2612	✓
EP074F: Halogenated Aromatic Compounds							
Amber VOC Vial- NaHSO4 or H2SO4							
TC7/8, 679	TC16/8016	08-MAR-2012	1, -MAR-2612	✓	08-MAR-2012	1, -MAR-2612	✓
EP074G: Trihalomethanes							
Amber VOC Vial- NaHSO4 or H2SO4							
TC7/8, 679	TC16/8016	08-MAR-2012	1, -MAR-2612	✓	08-MAR-2012	1, -MAR-2612	✓
EP074H: Naphthalene							
Amber VOC Vial- NaHSO4 or H2SO4							
TC7/8, 679	TC16/8016	08-MAR-2012	1, -MAR-2612	✓	08-MAR-2012	1, -MAR-2612	✓



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Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type Analytical Methods	Method	Count		Rate (%)		Quality Control Specification	
		QC	Regular	Actual	Expected	Actual	Evaluation
Laboratory Duplicates (DUP)							
Moisture Content	EA6, , -163	2	1,	13.3	10.0	✓	NEPM 1777 Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
Volatile Organic Compounds	EP604	1	,	20.0	5.0	✓	NEPM 1777 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
Volatile Organic Compounds	EP604	1	,	20.0	5.0	✓	NEPM 1777 Schedule B(3) and ALS QCS3 requirement
Matrix: WATER							
Quality Control Sample Type Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	Quality Control Specification
Laboratory Duplicates (DUP)							
Volatile Organic Compounds	EP604	2	5	33.3	10.0	✓	NEPM 1777 Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
Volatile Organic Compounds	EP604	1	5	16.7	5.0	✓	NEPM 1777 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
Volatile Organic Compounds	EP604	1	5	16.7	5.0	✓	NEPM 1777 Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)							
Volatile Organic Compounds	EP604	1	5	16.7	5.0	✓	ALS QCS3 requirement



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 Client : GOLDR ASSOCIATES
 Project : 110513261

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA9APHA9AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA6, , -163	SOIL	A gravimetric procedure based on weight loss over a 12 hour drying period at 163-16, degrees C. This method is compliant with NEPM (2616 Draft) Schedule B(3) Section 0.1 and Table 1 (14 day holding time).
Volatile Organic Compounds	EP604	SOIL	(USEPA SW 845 - 8256B) Extracts are analysed by Purge and Trap9Capillary GC/MS. Quantification is by comparison against an established , point calibration curve. This method is compliant with NEPM (1777) Schedule B(3) (Method , 61)
Volatile Organic Compounds	EP604	WATER	USEPA SW 845 - 8256B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established , point calibration curve. This method is compliant with NEPM (1777) Schedule B(3) (Appdx. 2)
Preparation Methods	Method	Matrix	Method Descriptions
Methanolic Extraction of Soils for Purge and Trap	ORG15	SOIL	(USEPA SW 845 - , 636A) , g of solid is shaken with surrogate and 16mL methanol prior to analysis by Purge and Trap - GC/MS.
Volatiles Water Preparation	ORG15-W	SOIL	A , mL aliquot or , mL of a diluted sample is added to a 46 mL VOC vial for sparging.
Volatiles Water Preparation	ORG15-W	WATER	A , mL aliquot or , mL of a diluted sample is added to a 46 mL VOC vial for sparging.



Page : 5 of 5
 Work Order : EM1262311
 Client : GOLDER ASSOCIATES
 Project : 110513261

Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report. Surrogate recovery limits are static and based on USEPA SW845 or ALS-QW/EN/38 (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: SOIL

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP604E: Halogenated Aliphatic Compounds	2568842-661	----	1.2.3-Trichloropropane	75-18-4	51.6 %	06-134%	Recovery less than lower control limit
EP604E: Halogenated Aliphatic Compounds	2568842-661	----	Hexachlorobutadiene	80-58-3	128 %	46-120%	Recovery greater than upper control limit
EP604F: Halogenated Aromatic Compounds	2568842-661	----	1.2.4-Trichlorobenzene	126-82-1	134 %	47-118%	Recovery greater than upper control limit
EP604F: Halogenated Aromatic Compounds	2568842-661	----	1.2.3-Trichlorobenzene	80-51-5	147 %	56-126%	Recovery greater than upper control limit

Matrix: WATER

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP604C: Sulfonated Compounds	256, 170-661	----	Carbon disulfide	0, -1, -6	, 0.0 %	50-120%	Recovery less than lower control limit
EP604D: Fumigants	256, 170-661	----	cis-1,3-Dichloropropylene	16651-61-	, 8.4 %	06-118%	Recovery less than lower control limit
EP604D: Fumigants	256, 170-661	----	trans-1,3-Dichloropropylene	16651-62-5	, 2.4 %	55-126%	Recovery less than lower control limit

- For all matrices, no Method Blank value outliers occur.
 - For all matrices, no Duplicate outliers occur.
 - For all matrices, no Matrix Spike outliers occur.
- Regular Sample Surrogates**
- For all regular sample matrices, no surrogate recovery outliers occur.

Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

- No Quality Control Sample Frequency Outliers exist.



Golder Associates

CHAIN OF CUSTODY
No 8163

GOLDER ASSOCIATES PTY LTD
BUILDING 7, BOTANICCA CORPORATE PARK, 570 - 588 SWAN STREET
RICHMOND VIC 3121
Tel: (03) 8862 3500
Fax: (03) 8862 3501

Golder Job Number: 117613201
 Job Location: F-VIC
 Laboratory Issued To: ALS
 Purchase Order No.: GAMELB 332509 (EM1201801)
 Sampled By (Golder): NMCCORRY HACK
 Golder Job Contact: NIAPPEL McCORMACK
 Golder Contact Email: nmccormack@golder.com.au

* OBSERVATIONS	SAMPLE DATE	SAMPLE ID TAAXXX/MQNN	SAMPLE TYPE	SAMPLE DEPTH (m)	No. OF CONTAINERS	pH
1	1/3	TC1/18001	tree	N/A	1	
2		TC1/18802	care		1 vial	
3		TC2/18003			1 vial	
4		TC3/18003				
5		TC4/18004				
6		TC5/18005				
7		TC6/18006				
8		TC7/18007				
9		TC8/18608	water			
10		TC9/18509	water			
11		TC10/18710				

Special Instructions: VIAL NUMBERS ON VIALS - TC 1/2 = #2, 17, TC 2 = #26, 17, TC 3 = #30, 10, TC 4 = #18, 28, TC 5 = #1, TC 6 = #29, 17, TC 7 = #4, 17, TC 8 = #30, 10, TC 9 = #28, 28.

1 Working Day 2 Working Days 3 Working Days 4 Working Days 5 Working Days (standard) Other

TURN AROUND TIME REQUIRED

SAMPLE RECEIPT
 Relinquished by: Ric Ann Received by: Ric Ann
 Organisation: Golder Associates Organisation: Golder Associates
 Date: 2/03/12 Date: 2/03/12
 Time: 3:40pm Time: 3:40pm

ANALYTICAL SCHEDULE
 Relinquished by: _____ Received by: _____
 Organisation: Golder Associates Organisation: _____
 Date: _____ Date: _____
 Time: _____ Time: _____

DELIVERED BY: COURIER/LAB GOLDER Other

RECEIVED BY: FAX HAND

SAMPLE STATUS
 Security Sealed Chilled Frozen Ambient

Environmental Division
Melbourne
Work Order
EM1202311

Telephone: + 61-3-8549 9600

VOC
HOLD

At Golder Associates we strive to be the most respected global company providing consulting, design, and construction services in earth, environment, and related areas of energy. Employee owned since our formation in 1960, our focus, unique culture and operating environment offer opportunities and the freedom to excel, which attracts the leading specialists in our fields. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees who operate from offices located throughout Africa, Asia, Australasia, Europe, North America, and South America.

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