



Client : SINCLAIR KNIGHT MERZ
Project : EN01669

Work Order : ES0501668
ALS Quote Reference : ----

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Matrix Type: WATER

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

Analyte name	LOR	Method blank result	Actual Results		Recovery Limits	
			Spike concentration	Spike Recovery LCS	Low	High
EP075E: Nitroaromatics and Ketones						
EP075E: Nitroaromatics and Ketones - (QC Lot: 49392)						
2-Picoline	2 µg/L	<2	µg/L	%	%	%
Acetophenone	2 µg/L	---	5	50.9	16	128
	2 µg/L	<2	---	---	---	---
Nitrobenzene	2 µg/L	---	5	94.9	74	112
	2 µg/L	<2	---	---	---	---
Isophorone	2 µg/L	---	5	96.1	79	110
	2 µg/L	<2	---	---	---	---
2,6-Dinitrotoluene	2 µg/L	---	5	86.0	78	108
	4 µg/L	<4	---	---	---	---
2,4-Dinitrotoluene	4 µg/L	---	5	87.5	58	121
	4 µg/L	<4	---	---	---	---
1-Naphthylamine	4 µg/L	---	5	101	59	125
	4 µg/L	<2	---	---	---	---
4-Nitroquinoline-N-oxide	2 µg/L	---	5	75.5	49	109
	2 µg/L	<2	---	---	---	---
5-Nitro-o-toluidine	2 µg/L	---	5	64.0	9	124
	2 µg/L	<2	---	---	---	---
Azobenzene	2 µg/L	---	5	87.6	56	122
	2 µg/L	<2	---	---	---	---
1,3,5-Trinitrobenzene	2 µg/L	---	5	93.7	73	110
	2 µg/L	<2	---	---	---	---
Phenacetin	2 µg/L	---	5	95.3	46	125
	2 µg/L	<2	---	---	---	---
4-Aminobiphenyl	2 µg/L	---	5	93.0	62	104
	2 µg/L	<2	---	---	---	---
Pentachloronitrobenzene	2 µg/L	---	5	78.5	23	123
	2 µg/L	<2	---	---	---	---
Pronamide	2 µg/L	---	5	99.2	63	112
	2 µg/L	<2	---	---	---	---
Dimethylaminoazobenzene	2 µg/L	---	5	83.6	57	114
	2 µg/L	<2	---	---	---	---
Chlorobenzilate	2 µg/L	---	5	75.5	62	109
	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	82.6	62	114



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Analyte name	LOR	Method blank result	Actual Results		Recovery Limits	
			Spike concentration	Spike Recovery LCS	Dynamic Recovery Limits	
					Low	High
EP075F: Haloethers						
EP075F: Haloethers - (QC Lot: 49392)						
Bis(2-chloroethyl) ether	2 µg/L	<2	µg/L	%	%	%
	2 µg/L	----	5	100	81	111
	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	100	74	111
4-Chlorophenyl phenyl ether	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	77.5	67	113
4-Bromophenyl phenyl ether	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	74.8	63	117
EP075G: Chlorinated Hydrocarbons						
EP075G: Chlorinated Hydrocarbons - (QC Lot: 49392)						
1,4-Dichlorobenzene	2 µg/L	<2	µg/L	%	%	%
	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	79.8	45	121
	2 µg/L	----	5	78.0	45	122
	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	77.4	48	117
Hexachloroethane	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	76.6	34	117
1,2,4-Trichlorobenzene	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	75.2	43	119
Hexachloropropylene	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	73.3	32	114
Hexachlorobutadiene	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	75.2	39	117
Hexachlorocyclopentadiene	10 µg/L	<10	----	----	----	----
	10 µg/L	----	5	41.0	0	119
Pentachlorobenzene	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	79.2	64	118
Hexachlorobenzene (HCB)	4 µg/L	<4	----	----	----	----
	4 µg/L	----	5	80.7	66	119



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

Analyte name	LOR	Method blank result	Actual Results		Recovery Limits	
			Spike concentration	Spike Recovery LCS	Dynamic Recovery Limits	High
			µg/L	%	%	%
EP075H: Anilines and Benzidines - (QC Lot: 49392)						
Aniline	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	49.4	6	121
4-Chloroaniline	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	92.3	40	118
2-Nitroaniline	4 µg/L	<4	---	---	---	---
	4 µg/L	---	5	83.0	60	113
3-Nitroaniline	4 µg/L	<4	---	---	---	---
	4 µg/L	---	5	78.3	55	110
Dibenzofuran	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	82.3	70	116
4-Nitroaniline	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	77.8	46	117
Carbazole	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	81.5	69	109
3,3'-Dichlorobenzidine	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	82.1	48	138

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

Analyte name	LOR	Method blank result	Actual Results		Recovery Limits	
			Spike concentration	Spike Recovery	Dynamic Recovery Limits	
					LCS	Low
EP0751: Organochlorine Pesticides						
EP0751: Organochlorine Pesticides - (QC Lot: 49392)						
alpha-BHC	2 µg/L	<2	µg/L	%	%	%
	2 µg/L	---	5	88.7	71	114
beta-BHC	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	94.6	67	118
gamma-BHC	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	88.3	67	118
delta-BHC	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	90.7	70	105
Heptachlor	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	82.3	71	101
Aldrin	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	86.6	70	102
Heptachlor epoxide	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	84.0	68	108
alpha-Endosulfan	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	90.5	68	108
4,4'-DDE	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	81.2	65	109
Dieldrin	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	91.6	76	107
Endrin	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	81.8	66	108
beta-Endosulfan	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	88.0	67	113
4,4'-DDD	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	80.3	61	117
Endosulfan sulfate	2 µg/L	<2	---	---	---	---
	2 µg/L	---	5	92.7	61	117
4,4'-DDT	4 µg/L	<4	---	---	---	---
	4 µg/L	---	5	74.3	54	113



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

Analyte name		LOR	Method blank result	Actual Results		Recovery Limits	
				Spike concentration	Spike Recovery LCS	Low	High
EP075J: Organophosphorus Pesticides							
EP075J: Organophosphorus Pesticides - (QC Lot: 49392)							
Dichlorvos	2 µg/L		<2	µg/L	%	%	%
	2 µg/L		---	5	100	72	107
Dimethoate	2 µg/L		<2	---	---	---	---
	2 µg/L		---	5	101	63	107
Diazinon	2 µg/L		<2	---	---	---	---
	2 µg/L		---	5	90.4	62	113
Chlorpyrifos-methyl	2 µg/L		<2	---	---	---	---
	2 µg/L		---	5	80.6	72	103
Malathion	2 µg/L		<2	---	---	---	---
	2 µg/L		---	5	91.4	77	110
Fenthion	2 µg/L		<2	---	---	---	---
	2 µg/L		---	5	79.5	63	111
Chlorpyrifos	2 µg/L		<2	---	---	---	---
	2 µg/L		---	5	81.0	68	110
Pirimphos-ethyl	2 µg/L		<2	---	---	---	---
	2 µg/L		---	5	84.8	59	112
Chlorfenvinphos	2 µg/L		<2	---	---	---	---
	2 µg/L		---	6	90.2	48	125
Prothiofos	2 µg/L		<2	---	---	---	---
	2 µg/L		---	5	84.3	67	108
Ethion	2 µg/L		<2	---	---	---	---
	2 µg/L		---	5	79.0	59	113



Matrix Type: WATER

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

Analyte name	LOR	Method blank result	Actual Results		Recovery Limits	
			Spike concentration	Spike Recovery LCS	Low	High
EP075K: Miscellaneous Compounds						
EP075K: Miscellaneous Compounds - (QC Lot: 49392)						
1,3,5-Trichlorobenzene	2 µg/L	<2	µg/L	%	%	%
	2 µg/L	----	5	85.3	18	138
1,2,4,5-Tetrachlorobenzene	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	80.9	26	137
Methanesulfonate methyl	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	63.7	19	124
Methanesulfonate ethyl	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	92.4	70	109
cis-Isosafrole	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	74.8	65	113
trans-Isosafrole	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	85.7	65	115
Safrole	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	92.5	68	105
Diallyl	2 µg/L	<2	----	----	----	----
	2 µg/L	----	5	102	77	113
2,3,4,6-Tetrachlorophenol	2 µg/L	<2	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons						
EP080/071: Total Petroleum Hydrocarbons - (QC Lot: 48804)						
C6 - C9 Fraction	20 µg/L	<20	µg/L	%	%	%
	20 µg/L	----	260	98.7	80	120
EP080/071: Total Petroleum Hydrocarbons - (QC Lot: 49391)						
C10 - C14 Fraction	50 µg/L	<50	µg/L	%	%	%
	50 µg/L	----	200	110	75	134
C15 - C28 Fraction	100 µg/L	<100	----	----	----	----
	100 µg/L	----	200	121	87	132
C29 - C36 Fraction	50 µg/L	<50	----	----	----	----
	50 µg/L	----	200	101	80	126
EP080/071: Total Petroleum Hydrocarbons - (QC Lot: 50189)						
C6 - C9 Fraction	20 µg/L	µg/L	µg/L	%	%	%
	20 µg/L	----	260	96.3	80	120
EP080/071: Total Petroleum Hydrocarbons - (QC Lot: 50459)						
C6 - C9 Fraction	20 µg/L	<20	µg/L	%	%	%
	20 µg/L	<20	----	----	----	----
	20 µg/L	----	260	98.5	80	120



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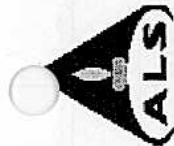
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Method Blank (MB) and Laboratory Control Samples (LCS) Report

Analyte name		LOR	Method blank result	Actual Results		Recovery Limits	
				Spike concentration	Spike Recovery LCS	Dynamic Recovery Limits	Low
EP080: BTEX							
EP080: BTEX - (QC Lot: 48804)							
Benzene	1 µg/L		µg/L		%	%	%
	1 µg/L		10		99.4	78	125
Toluene	1 µg/L		----		----	----	----
	2 µg/L		----		----	----	----
	2 µg/L		10		102	74	126
Ethylbenzene	2 µg/L		----		----	----	----
	2 µg/L		10		105	73	118
meta- & para-Xylene	2 µg/L		----		----	----	----
	2 µg/L		10		104	78	117
ortho-Xylene	2 µg/L		----		----	----	----
	2 µg/L		10		98.9	75	119
EP080: BTEX - (QC Lot: 50189)							
Benzene	1 µg/L		µg/L		%	%	%
	1 µg/L		10		96.1	78	125
Toluene	1 µg/L		----		----	----	----
	2 µg/L		10		92.3	74	126
Ethylbenzene	2 µg/L		----		----	----	----
	2 µg/L		10		94.2	73	118
meta- & para-Xylene	2 µg/L		----		----	----	----
	2 µg/L		10		91.6	78	117
ortho-Xylene	2 µg/L		----		----	----	----
	2 µg/L		10		96.0	75	119
	2 µg/L		----		----	----	----
EP080: BTEX - (QC Lot: 50459)							
Benzene	1 µg/L		µg/L		%	%	%
	1 µg/L		<1		----	----	----
Toluene	1 µg/L		10		99.7	78	125
	2 µg/L		<2		----	----	----
Ethylbenzene	2 µg/L		10		106	74	126
	2 µg/L		----		----	----	----
	2 µg/L		<2		----	----	----
meta- & para-Xylene	2 µg/L		10		90.7	73	118
	2 µg/L		----		----	----	----
ortho-Xylene	2 µg/L		<2		106	78	117
	2 µg/L		----		----	----	----
	2 µg/L		<2		97.3	75	119
	2 µg/L		----		----	----	----



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Quality Control Report - Matrix Spikes (MS)

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 type 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 interferences. - Anonymous - Client Sample IDs refer to samples which are not specifically part of this work order but formed part of the QC process lot. Abbreviations: **LOR** = Limit of Reporting, **RPD** = Relative Percent Difference.

- * Indicates failed QC

Matrix Type: WATER

Matrix Type: WATER					Actual Results		Recovery Limits	
Analyte name	Laboratory Sample ID	Client Sample ID	LOR	Spike Concentration	Sample Result	Spike Recovery MS	Low	High
EG020T: Total Metals by ICP-MS								
EG020T: Total Metals by ICP-MS - (QC Lot: 48904)								
Arsenic	ES0501651-015	Anonymous	0.001 mg/L	1	<0.001	102	70	130
Cadmium			0.0001 mg/L	0.25	<0.0001	103	70	130
Copper			0.001 mg/L	1	<0.001	99.2	70	130
Lead			0.001 mg/L	1	<0.001	97.3	70	130
Nickel			0.001 mg/L	1	0.001	102	70	130
Zinc			0.005 mg/L	1	<0.005	106	70	130
EG020T: Total Metals by ICP-MS - (QC Lot: 48906)								
Arsenic	ES0501668-008	DUP4	0.001 mg/L	1	0.019	112	70	130
Cadmium			0.0001 mg/L	0.25	0.0004	112	70	130
Copper			0.001 mg/L	1	0.210	112	70	130
Lead			0.001 mg/L	1	0.122	105	70	130
Nickel			0.001 mg/L	1	0.072	115	70	130
Zinc			0.005 mg/L	1	0.289	122	70	130
EG035T: Total Mercury by FIMS								
EG035T: Total Mercury by FIMS - (QC Lot: 50078)								
Mercury	ES0501640-004	Anonymous	0.0001 mg/L	0.010	0.0004	76.8	70	130
EG035T: Total Mercury by FIMS - (QC Lot: 50079)								
Mercury	ES0501668-011	RINSATE 2	0.0001 mg/L	0.010	<0.0001	83.1	70	130
EG050T: Hexavalent Chromium - Total								
EG050T: Hexavalent Chromium - Total - (QC Lot: 48684)								
Hexavalent Chromium	ES0501668-001	MW42D	0.01 mg/L	5.0	<0.100	115	70	130
EK055G: Ammonia as N by Discrete Analyser								
EK055G: Ammonia as N by Discrete Analyser - (QC Lot: 50140)								
Ammonia as N	ES0501668-001	MW42D	0.01 mg/L	10.00	0.114	115	70	130
EK059G: NOX as N by Discrete Analyser								
EK059G: NOX as N by Discrete Analyser - (QC Lot: 48818)								
Nitrite + Nitrate as N	ES0501581-001	Anonymous	0.01 mg/L	0.60	5.95	* Not Determined	70	130