



A Waters Company

Carrie McCrillis
Oilfield Environmental & Compliance
307 Roemer Way
Suite 300
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SOIL-73



Final Report

Soil/Hazardous Waste Proficiency Testing

Soil Study

Open Date: 01/24/11

Close Date: 03/10/11

Report Issued Date: 03/29/11



May 6, 2011

Carrie McCrillis
Oilfield Environmental & Compliance
307 Roemer Way
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The enclosed report for ERA's SOIL-73 study contains data that was either revised by ERA at the request of Oilfield Environmental & Compliance or was submitted after the close of the study.

The late or revised data are flagged as follows:

Late data is indicated by a single asterisk (*)
Revised data is indicated by two asterisks (**)

If you have any questions, please do not hesitate to contact the Proficiency Testing Group at 1-800-372-0122.

Sincerely,

Jay R. McBurney
Quality Program Manager

attachments
jrm



A Waters Company

Report Recipient	Contact/Phone Number	Reporting Type
California	Fred Choske / 510-620-3175	All Analytes
EPA Region 9	Andrew Lincoff / 510-412-2330	All Analytes

SOIL-73 Definitions & Study Discussion

Study Dates: 01/24/11 - 03/10/11

Report Issued: 03/29/11

SOIL Study Definitions

The Reported Value is the value that the laboratory reported to ERA.

The ERA assigned value for the Organic Proficiency Testing Standards is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation as applicable. The ERA assigned value for the Inorganic Proficiency Testing Standards, with the exception of the TCLP Metals in Soil, is equal to the maximum amount of the parameter available in the standard by applicable EPA methodologies. The ERA assigned value for the TCLP metals is equal to the mean of ERA's internal analytical analyses. The assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT standards. All NELAC parameters not added to a standard are given an assigned Value of "0", per the guidance issued by the NELAC Board of Directors, on December 14, 2000. Non-NELAC parameters not added to a standard may be given an assigned value of less than a minimum verified concentration as determined in the background soil for applicable EPA methodologies.

The Acceptance Limits are established per the NELAC PT program criteria or ERA's SOP for the Generation of Performance Acceptance Limits™ as applicable.

The Performance Evaluation:

Acceptable = Reported Value falls within the Acceptance Limits.

Not Acceptable = Reported Value falls outside the Acceptance Limits.

No Evaluation = Reported Value cannot be evaluated.

Not Reported = No Value reported.

The Method Description is the method the laboratory reported to ERA.

SOIL Study Discussion

ERA's SOIL-73 Proficiency Testing (PT) study has been reviewed by ERA senior management and certified compliant with the requirements of the National Environmental Laboratory Accreditation Conference (NELAC), Proficiency Testing Program Standards, Chapter 2, July 2003.

Per the requirements of the NELAC Proficiency Testing Program, a full review of all homogeneity, stability and accuracy verification data was completed. All analytical verification data for all analytes in the Soil study standards met the acceptance criteria contained in the NELAC Proficiency Testing Program Standards, Chapter 2, July 2003. If the analyte is included in the NELAC Fields of Testing list, the acceptance limits were calculated based on the NELAC Proficiency Testing Program Standards, Chapter 2, July 2003. If the analyte is not included in the NELAC Fields of Testing list, the acceptance limits were calculated using the procedures outlined in ERA's Standard Operating Procedure for the Generation of Performance Acceptance Limits (SOP 0260, Rev. 2.0).

The data submitted by participating laboratories was also examined for study anomalies. There were no anomalies observed during the statistical review of the data.

ERA's SOIL-73 Proficiency Testing study reports shall not be reproduced except in its entirety and not without the permission of the participating laboratory. The report must not be used by the participating laboratories to claim product endorsement any agency of the U. S. government.

The data contained herein are confidential and intended for your use only.

If you have any questions or concerns regarding your assessment in ERA's SOIL Proficiency Testing program, please contact Jay McBurney, Quality Program Manager, or the proficiency testing department at 1-800-372-0122.



Study: **SOIL-73**

ERA Customer Number: **O460853**

Laboratory Name: **Oilfield Environmental &
Compliance**

Inorganic Results





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SOIL-73 Final Complete Report

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01/24/11 - 03/10/11

Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
SOIL Metals in Soil (cat# 620)							
1000	Aluminum	mg/kg	8760	14000	4920 - 16300	Acceptable	EPA 6020
1005	Antimony	mg/kg	224	260	26.0 - 303	Acceptable	EPA 6020
1010	Arsenic	mg/kg	120	144	86.5 - 161	Acceptable	EPA 6020
1015	Barium	mg/kg	313	332	234 - 398	Acceptable	EPA 6020
1020	Beryllium	mg/kg	93.4	99.1	70.8 - 119	Acceptable	EPA 6020
1025	Boron	mg/kg	145	173	95.6 - 201	Acceptable	EPA 6020
1030	Cadmium	mg/kg	129	123	84.9 - 147	Acceptable	EPA 6020
1035	Calcium	mg/kg	10400	12200	8250 - 13500	Acceptable	EPA 6020
1040	Chromium	mg/kg	93.8	103	66.5 - 125	Acceptable	EPA 6020
1050	Cobalt	mg/kg	133	147	102 - 173	Acceptable	EPA 6020
1055	Copper	mg/kg	78.3	87.2	61.1 - 104	Acceptable	EPA 6020
1070	Iron	mg/kg	15600	22900	7700 - 28800	Acceptable	EPA 6020
1075	Lead	mg/kg	130	144	100 - 174	Acceptable	EPA 6020
1085	Magnesium	mg/kg	2670	3530	2020 - 4070	Acceptable	EPA 6020
1090	Manganese	mg/kg	552	598	448 - 708	Acceptable	EPA 6020
1095	Mercury	mg/kg		15.2	7.82 - 22.6	Not Reported	
1100	Molybdenum	mg/kg	92.5	101	61.5 - 116	Acceptable	EPA 6020
1105	Nickel	mg/kg	116	130	87.9 - 153	Acceptable	EPA 6020
1125	Potassium	mg/kg	1720	1980	1060 - 2670	Acceptable	EPA 6020
1140	Selenium	mg/kg	208	221	138 - 265	Acceptable	EPA 6020
1150	Silver	mg/kg	38.8	56.0	35.7 - 71.4	Acceptable	EPA 6020
1155	Sodium	mg/kg	675	823	410 - 1040	Acceptable	EPA 6020
1160	Strontium	mg/kg	71.9	77.1	51.2 - 95.1	Acceptable	EPA 6020
1165	Thallium	mg/kg	224	246	160 - 301	Acceptable	EPA 6020
1175	Tin	mg/kg	137	143	78.0 - 186	Acceptable	EPA 6020
1180	Titanium	mg/kg	247	488	0.00 - 820	Acceptable	EPA 6020
1185	Vanadium	mg/kg	93.8	108	68.8 - 139	Acceptable	EPA 6020
1190	Zinc	mg/kg	270	296	196 - 354	Acceptable	EPA 6020

** Result(s) have been revised by ERA.





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1005	Antimony	mg/kg	92.8	260	26.0 - 303	Acceptable	EPA 6020
1010	Arsenic	mg/kg	117	144	86.5 - 161	Acceptable	EPA 6020
1015	Barium	mg/kg	287	332	234 - 398	Acceptable	EPA 6020
1020	Beryllium	mg/kg	93.9	99.1	70.8 - 119	Acceptable	EPA 6020
1025	Boron	mg/kg	131	173	95.6 - 201	Acceptable	EPA 6020
1030	Cadmium	mg/kg	126	123	84.9 - 147	Acceptable	EPA 6020
1035	Calcium	mg/kg	10100	12200	8250 - 13500	Acceptable	EPA 6020
1040	Chromium	mg/kg	89.3	103	66.5 - 125	Acceptable	EPA 6020
1050	Cobalt	mg/kg	127	147	102 - 173	Acceptable	EPA 6020
1055	Copper	mg/kg	77.4	87.2	61.1 - 104	Acceptable	EPA 6020
1070	Iron	mg/kg	15400	22900	7700 - 28800	Acceptable	EPA 6020
1075	Lead	mg/kg	136	144	100 - 174	Acceptable	EPA 6020
1085	Magnesium	mg/kg	2690	3530	2020 - 4070	Acceptable	EPA 6020
1090	Manganese	mg/kg	549	598	448 - 708	Acceptable	EPA 6020
1095	Mercury	mg/kg		15.2	7.82 - 22.6	Not Reported	
1100	Molybdenum	mg/kg	87.2	101	61.5 - 116	Acceptable	EPA 6020
1105	Nickel	mg/kg	123	130	87.9 - 153	Acceptable	EPA 6020
1125	Potassium	mg/kg	1650	1980	1060 - 2670	Acceptable	EPA 6020
1140	Selenium	mg/kg	204	221	138 - 265	Acceptable	EPA 6020
1150	Silver	mg/kg	44.4	56.0	35.7 - 71.4	Acceptable	EPA 6020
1155	Sodium	mg/kg	650	823	410 - 1040	Acceptable	EPA 6020
1160	Strontium	mg/kg	67.8	77.1	51.2 - 95.1	Acceptable	EPA 6020
1165	Thallium	mg/kg	228	246	160 - 301	Acceptable	EPA 6020
1175	Tin	mg/kg	127	143	78.0 - 186	Acceptable	EPA 6020
1180	Titanium	mg/kg	242	488	0.00 - 820	Acceptable	EPA 6020
1185	Vanadium	mg/kg	99.1	108	68.8 - 139	Acceptable	EPA 6020
1190	Zinc	mg/kg	261	296	196 - 354	Acceptable	EPA 6020

** Result(s) have been revised by ERA.





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1010	Arsenic	mg/kg		144	86.5 - 161	Not Reported	
1015	Barium	mg/kg		332	234 - 398	Not Reported	
1020	Beryllium	mg/kg		99.1	70.8 - 119	Not Reported	
1025	Boron	mg/kg		173	95.6 - 201	Not Reported	
1030	Cadmium	mg/kg		123	84.9 - 147	Not Reported	
1035	Calcium	mg/kg		12200	8250 - 13500	Not Reported	
1040	Chromium	mg/kg		103	66.5 - 125	Not Reported	
1050	Cobalt	mg/kg		147	102 - 173	Not Reported	
1055	Copper	mg/kg		87.2	61.1 - 104	Not Reported	
1070	Iron	mg/kg		22900	7700 - 28800	Not Reported	
1075	Lead	mg/kg		144	100 - 174	Not Reported	
1085	Magnesium	mg/kg		3530	2020 - 4070	Not Reported	
1090	Manganese	mg/kg		598	448 - 708	Not Reported	
1095	Mercury	mg/kg	13.3	15.2	7.82 - 22.6	Acceptable	EPA 7471A
1100	Molybdenum	mg/kg		101	61.5 - 116	Not Reported	
1105	Nickel	mg/kg		130	87.9 - 153	Not Reported	
1125	Potassium	mg/kg		1980	1060 - 2670	Not Reported	
1140	Selenium	mg/kg		221	138 - 265	Not Reported	
1150	Silver	mg/kg		56.0	35.7 - 71.4	Not Reported	
1155	Sodium	mg/kg		823	410 - 1040	Not Reported	
1160	Strontium	mg/kg		77.1	51.2 - 95.1	Not Reported	
1165	Thallium	mg/kg		246	160 - 301	Not Reported	
1175	Tin	mg/kg		143	78.0 - 186	Not Reported	
1180	Titanium	mg/kg		488	0.00 - 820	Not Reported	
1185	Vanadium	mg/kg		108	68.8 - 139	Not Reported	
1190	Zinc	mg/kg		296	196 - 354	Not Reported	

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SOIL Metals in Soil (cat# 620)							
1000	Aluminum	mg/kg	8760**	14000	4920 - 16300	Acceptable	EPA 6010B
1005	Antimony	mg/kg	224**	260	26.0 - 303	Acceptable	EPA 6010B
1010	Arsenic	mg/kg	120**	144	86.5 - 161	Acceptable	EPA 6010B
1015	Barium	mg/kg	313**	332	234 - 398	Acceptable	EPA 6010B
1020	Beryllium	mg/kg	93.4**	99.1	70.8 - 119	Acceptable	EPA 6010B
1025	Boron	mg/kg	145**	173	95.6 - 201	Acceptable	EPA 6010B
1030	Cadmium	mg/kg	129**	123	84.9 - 147	Acceptable	EPA 6010B
1035	Calcium	mg/kg	10400**	12200	8250 - 13500	Acceptable	EPA 6010B
1040	Chromium	mg/kg	93.8**	103	66.5 - 125	Acceptable	EPA 6010B
1050	Cobalt	mg/kg	133**	147	102 - 173	Acceptable	EPA 6010B
1055	Copper	mg/kg	78.3**	87.2	61.1 - 104	Acceptable	EPA 6010B
1070	Iron	mg/kg	15600**	22900	7700 - 28800	Acceptable	EPA 6010B
1075	Lead	mg/kg	130**	144	100 - 174	Acceptable	EPA 6010B
1085	Magnesium	mg/kg	2670**	3530	2020 - 4070	Acceptable	EPA 6010B
1090	Manganese	mg/kg	552**	598	448 - 708	Acceptable	EPA 6010B
1095	Mercury	mg/kg		15.2	7.82 - 22.6	Not Reported	
1100	Molybdenum	mg/kg	92.5**	101	61.5 - 116	Acceptable	EPA 6010B
1105	Nickel	mg/kg	116**	130	87.9 - 153	Acceptable	EPA 6010B
1125	Potassium	mg/kg	1720**	1980	1060 - 2670	Acceptable	EPA 6010B
1140	Selenium	mg/kg	208**	221	138 - 265	Acceptable	EPA 6010B
1150	Silver	mg/kg	38.8**	56.0	35.7 - 71.4	Acceptable	EPA 6010B
1155	Sodium	mg/kg	675**	823	410 - 1040	Acceptable	EPA 6010B
1160	Strontium	mg/kg	71.9**	77.1	51.2 - 95.1	Acceptable	EPA 6010B
1165	Thallium	mg/kg	224**	246	160 - 301	Acceptable	EPA 6010B
1175	Tin	mg/kg	137**	143	78.0 - 186	Acceptable	EPA 6010B
1180	Titanium	mg/kg	247**	488	0.00 - 820	Acceptable	EPA 6010B
1185	Vanadium	mg/kg	93.8**	108	68.8 - 139	Acceptable	EPA 6010B
1190	Zinc	mg/kg	270**	296	196 - 354	Acceptable	EPA 6010B

SOIL Hexavalent Chromium in Soil (cat# 876)

1045	Chromium VI	mg/kg	151	221	68.0 - 282	Acceptable	EPA 7196A
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SOIL Anions in Soil (cat# 873)

1540	Bromide	mg/kg	91.7	99.2	67.2 - 110	Acceptable	EPA 300.0
1575	Chloride	mg/kg	325	372	262 - 444	Acceptable	EPA 300.0
1730	Fluoride	mg/kg	58.8	417	41.7 - 459	Acceptable	EPA 300.0
1810	Nitrate as N	mg/kg	257	362	215 - 398	Acceptable	EPA 300.0
1870	Phosphate as P	mg/kg	78.2	365	36.5 - 402	Acceptable	EPA 300.0
2000	Sulfate	mg/kg	242	332	130 - 437	Acceptable	EPA 300.0

** Result(s) have been revised by ERA.





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EPA ID: CA01480
ERA Customer Number: O460853
Report Issued: 03/29/11
Study Dates: 01/24/11 - 03/10/11

Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
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SOIL Cyanide in Soil (cat# 621)

1635	Cyanide, total	mg/kg	81.9	87.2	26.8 - 121	Acceptable	EPA 9014
1923	Reactive Cyanide	mg/kg		< 25.0		Not Reported	

SOIL Nutrients in Soil (cat# 869)

1515	Ammonia as N	mg/kg	1082	1180	617 - 1360	Acceptable	SM4500NH3 D
1795	Total Kjeldahl Nitrogen	mg/kg	1080	1550	831 - 2240	Acceptable	SM4500NH3 D
2040	Total Organic Carbon (TOC)	mg/kg		2690	269 - 5920	Not Reported	
1910	Total Phosphorus	mg/kg	580	576	138 - 908	Acceptable	6010b

SOIL Nutrients in Soil (cat# 869)

1515	Ammonia as N	mg/kg		1180	617 - 1360	Not Reported	
1795	Total Kjeldahl Nitrogen	mg/kg		1550	831 - 2240	Not Reported	
2040	Total Organic Carbon (TOC)	mg/kg		2690	269 - 5920	Not Reported	
1910	Total Phosphorus	mg/kg	692	576	138 - 908	Acceptable	6020

SOIL Corrosivity/pH in Soil (cat# 875)

1625	Corrosivity (pH)	S.U.	6.90	6.97	6.37 - 7.57	Acceptable	EPA 9045C
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SOIL Ignitability/Flashpoint (cat# 874)

1780	Ignitability/Flashpoint	°F	107	106	89.0 - 123	Acceptable	EPA 1010
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** Result(s) have been revised by ERA.



Study: **SOIL-73**

ERA Customer Number: **O460853**

Laboratory Name: **Oilfield Environmental &
Compliance**

Organic Results





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SOIL Ready-to-Use VOAs in Soil (cat# 870)

4315	Acetone	µg/kg	12000	15200	4330 - 23200	Acceptable	EPA 8260B
4320	Acetonitrile	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4325	Acrolein	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4375	Benzene	µg/kg	3760	3610	2590 - 4690	Acceptable	EPA 8260B
4385	Bromobenzene	µg/kg	4550	4450	2680 - 6320	Acceptable	EPA 8260B
4395	Bromodichloromethane	µg/kg	8050	7880	5540 - 11000	Acceptable	EPA 8260B
4400	Bromoform	µg/kg	9550	8060	5450 - 10700	Acceptable	EPA 8260B
4950	Bromomethane	µg/kg	7220	8000	800 - 14300	Acceptable	EPA 8260B
4410	2-Butanone (MEK)	µg/kg	12100	16800	4720 - 25400	Acceptable	EPA 8260B
5000	tert-Butyl methyl ether (MTBE)	µg/kg	7940	7530	4930 - 10200	Acceptable	EPA 8260B
4450	Carbon disulfide	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4455	Carbon tetrachloride	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4475	Chlorobenzene	µg/kg	9320	8640	6520 - 10900	Acceptable	EPA 8260B
4575	Chlorodibromomethane	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4485	Chloroethane	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4500	2-Chloroethylvinylether	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4505	Chloroform	µg/kg	9450	8860	6140 - 11600	Acceptable	EPA 8260B
4960	Chloromethane	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4570	1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4585	1,2-Dibromoethane (EDB)	µg/kg	6070	6230	4120 - 8170	Acceptable	EPA 8260B
4595	Dibromomethane	µg/kg	8050	8040	5400 - 10600	Acceptable	EPA 8260B
4610	1,2-Dichlorobenzene	µg/kg	4440	4340	3140 - 5660	Acceptable	EPA 8260B
4615	1,3-Dichlorobenzene	µg/kg	6950	6400	4590 - 8340	Acceptable	EPA 8260B
4620	1,4-Dichlorobenzene	µg/kg	5700	5100	3700 - 6460	Acceptable	EPA 8260B
4625	Dichlorodifluoromethane (Freon 12)	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4630	1,1-Dichloroethane	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4635	1,2-Dichloroethane	µg/kg	6770	6900	5020 - 8950	Acceptable	EPA 8260B
4640	1,1-Dichloroethylene	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4645	cis-1,2-Dichloroethylene	µg/kg	4280	4190	2430 - 5890	Acceptable	EPA 8260B
4700	trans-1,2-Dichloroethylene	µg/kg	10070	8630	4670 - 12700	Acceptable	EPA 8260B
4655	1,2-Dichloropropane	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4680	cis-1,3-Dichloropropylene	µg/kg	6360	6750	4130 - 8540	Acceptable	EPA 8260B

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SOIL Ready-to-Use VOAs in Soil (cat# 870) (Continued)

4685	trans-1,3-Dichloropropylene	µg/kg	9050	9720	5810 - 12700	Acceptable	EPA 8260B
4765	Ethylbenzene	µg/kg	10900	9230	6340 - 12400	Acceptable	EPA 8260B
4835	Hexachlorobutadiene	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4840	Hexachloroethane	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4860	2-Hexanone	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4900	Isopropylbenzene	µg/kg	4230	3960	2650 - 5720	Acceptable	EPA 8260B
4975	Methylene chloride	µg/kg	< 500	0.00		Acceptable	EPA 8260B
4995	4-Methyl-2-pentanone (MIBK)	µg/kg	5400	5640	2700 - 7980	Acceptable	EPA 8260B
5005	Naphthalene	µg/kg	7670	9800	4250 - 13800	Acceptable	EPA 8260B
5015	Nitrobenzene	µg/kg		10500	4950 - 27800	Not Reported	
5100	Styrene	µg/kg	< 500	0.00		Acceptable	EPA 8260B
5105	1,1,1,2-Tetrachloroethane	µg/kg	6540	6180	4540 - 7870	Acceptable	EPA 8260B
5110	1,1,2,2-Tetrachloroethane	µg/kg	< 500	0.00		Acceptable	EPA 8260B
5115	Tetrachloroethylene	µg/kg	11400	9640	6380 - 13100	Acceptable	EPA 8260B
5140	Toluene	µg/kg	8620	8100	5740 - 10600	Acceptable	EPA 8260B
5155	1,2,4-Trichlorobenzene	µg/kg	3550	4280	2550 - 5590	Acceptable	EPA 8260B
5160	1,1,1-Trichloroethane	µg/kg	< 500	0.00		Acceptable	EPA 8260B
5165	1,1,2-Trichloroethane	µg/kg	3660	3620	2550 - 4780	Acceptable	EPA 8260B
5170	Trichloroethylene	µg/kg	4930	4390	3040 - 5970	Acceptable	EPA 8260B
5175	Trichlorofluoromethane	µg/kg	< 500	0.00		Acceptable	EPA 8260B
5180	1,2,3-Trichloropropane (TCP)	µg/kg	11600	9580	4920 - 13200	Acceptable	EPA 8260B
5225	Vinyl acetate	µg/kg	< 500	0.00		Acceptable	EPA 8260B
5235	Vinyl chloride	µg/kg	10700	9000	2770 - 15300	Acceptable	EPA 8260B
5260	Xylenes, total	µg/kg	11400	10400	7360 - 13900	Acceptable	EPA 8260B

** Result(s) have been revised by ERA.





A Waters Company

SOIL-73 Final Complete Report

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EPA ID:
ERA Customer Number:
Report Issued:
Study Dates:

CA01480
O460853
03/29/11
01/24/11 - 03/10/11

Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
SOIL Ready-to-Use VOAs in Soil (cat# 870)							
4315	Acetone	µg/kg		15200	4330 - 23200	Not Reported	
4320	Acetonitrile	µg/kg		0.00		Not Reported	
4325	Acrolein	µg/kg		0.00		Not Reported	
4375	Benzene	µg/kg	3720	3610	2590 - 4690	Acceptable	EPA 8021B
4385	Bromobenzene	µg/kg		4450	2680 - 6320	Not Reported	
4395	Bromodichloromethane	µg/kg		7880	5540 - 11000	Not Reported	
4400	Bromoform	µg/kg		8060	5450 - 10700	Not Reported	
4950	Bromomethane	µg/kg		8000	800 - 14300	Not Reported	
4410	2-Butanone (MEK)	µg/kg		16800	4720 - 25400	Not Reported	
5000	tert-Butyl methyl ether (MTBE)	µg/kg	9600	7530	4930 - 10200	Acceptable	EPA 8021B
4450	Carbon disulfide	µg/kg		0.00		Not Reported	
4455	Carbon tetrachloride	µg/kg		0.00		Not Reported	
4475	Chlorobenzene	µg/kg		8640	6520 - 10900	Not Reported	
4575	Chlorodibromomethane	µg/kg		0.00		Not Reported	
4485	Chloroethane	µg/kg		0.00		Not Reported	
4500	2-Chloroethylvinylether	µg/kg		0.00		Not Reported	
4505	Chloroform	µg/kg		8860	6140 - 11600	Not Reported	
4960	Chloromethane	µg/kg		0.00		Not Reported	
4570	1,2-Dibromo-3-chloropropane (DBCP)	µg/kg		0.00		Not Reported	
4585	1,2-Dibromoethane (EDB)	µg/kg		6230	4120 - 8170	Not Reported	
4595	Dibromomethane	µg/kg		8040	5400 - 10600	Not Reported	
4610	1,2-Dichlorobenzene	µg/kg		4340	3140 - 5660	Not Reported	
4615	1,3-Dichlorobenzene	µg/kg		6400	4590 - 8340	Not Reported	
4620	1,4-Dichlorobenzene	µg/kg		5100	3700 - 6460	Not Reported	
4625	Dichlorodifluoromethane (Freon 12)	µg/kg		0.00		Not Reported	
4630	1,1-Dichloroethane	µg/kg		0.00		Not Reported	
4635	1,2-Dichloroethane	µg/kg		6900	5020 - 8950	Not Reported	
4640	1,1-Dichloroethylene	µg/kg		0.00		Not Reported	
4645	cis-1,2-Dichloroethylene	µg/kg		4190	2430 - 5890	Not Reported	
4700	trans-1,2-Dichloroethylene	µg/kg		8630	4670 - 12700	Not Reported	
4655	1,2-Dichloropropane	µg/kg		0.00		Not Reported	
4680	cis-1,3-Dichloropropylene	µg/kg		6750	4130 - 8540	Not Reported	

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EPA ID: CA01480
ERA Customer Number: O460853
Report Issued: 03/29/11
Study Dates: 01/24/11 - 03/10/11

Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
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SOIL Ready-to-Use VOAs in Soil (cat# 870) (Continued)

4685	trans-1,3-Dichloropropylene	µg/kg		9720	5810 - 12700	Not Reported	
4765	Ethylbenzene	µg/kg	11500	9230	6340 - 12400	Acceptable	EPA 8021B
4835	Hexachlorobutadiene	µg/kg		0.00		Not Reported	
4840	Hexachloroethane	µg/kg		0.00		Not Reported	
4860	2-Hexanone	µg/kg		0.00		Not Reported	
4900	Isopropylbenzene	µg/kg		3960	2650 - 5720	Not Reported	
4975	Methylene chloride	µg/kg		0.00		Not Reported	
4995	4-Methyl-2-pentanone (MIBK)	µg/kg		5640	2700 - 7980	Not Reported	
5005	Naphthalene	µg/kg		9800	4250 - 13800	Not Reported	
5015	Nitrobenzene	µg/kg		10500	4950 - 27800	Not Reported	
5100	Styrene	µg/kg		0.00		Not Reported	
5105	1,1,1,2-Tetrachloroethane	µg/kg		6180	4540 - 7870	Not Reported	
5110	1,1,2,2-Tetrachloroethane	µg/kg		0.00		Not Reported	
5115	Tetrachloroethylene	µg/kg		9640	6380 - 13100	Not Reported	
5140	Toluene	µg/kg	8840	8100	5740 - 10600	Acceptable	EPA 8021B
5155	1,2,4-Trichlorobenzene	µg/kg		4280	2550 - 5590	Not Reported	
5160	1,1,1-Trichloroethane	µg/kg		0.00		Not Reported	
5165	1,1,2-Trichloroethane	µg/kg		3620	2550 - 4780	Not Reported	
5170	Trichloroethylene	µg/kg		4390	3040 - 5970	Not Reported	
5175	Trichlorofluoromethane	µg/kg		0.00		Not Reported	
5180	1,2,3-Trichloropropane (TCP)	µg/kg		9580	4920 - 13200	Not Reported	
5225	Vinyl acetate	µg/kg		0.00		Not Reported	
5235	Vinyl chloride	µg/kg		9000	2770 - 15300	Not Reported	
5260	Xylenes, total	µg/kg	11600	10400	7360 - 13900	Acceptable	EPA 8021B

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Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
SOIL Ready-to-Use VOAs in Soil (cat# 870)							
4315	Acetone	µg/kg		15200	4330 - 23200	Not Reported	
4320	Acetonitrile	µg/kg		0.00		Not Reported	
4325	Acrolein	µg/kg		0.00		Not Reported	
4375	Benzene	µg/kg	3720	3610	2590 - 4690	Acceptable	LUFT GCMS
4385	Bromobenzene	µg/kg		4450	2680 - 6320	Not Reported	
4395	Bromodichloromethane	µg/kg		7880	5540 - 11000	Not Reported	
4400	Bromoform	µg/kg		8060	5450 - 10700	Not Reported	
4950	Bromomethane	µg/kg		8000	800 - 14300	Not Reported	
4410	2-Butanone (MEK)	µg/kg		16800	4720 - 25400	Not Reported	
5000	tert-Butyl methyl ether (MTBE)	µg/kg	9600	7530	4930 - 10200	Acceptable	LUFT GCMS
4450	Carbon disulfide	µg/kg		0.00		Not Reported	
4455	Carbon tetrachloride	µg/kg		0.00		Not Reported	
4475	Chlorobenzene	µg/kg		8640	6520 - 10900	Not Reported	
4575	Chlorodibromomethane	µg/kg		0.00		Not Reported	
4485	Chloroethane	µg/kg		0.00		Not Reported	
4500	2-Chloroethylvinylether	µg/kg		0.00		Not Reported	
4505	Chloroform	µg/kg		8860	6140 - 11600	Not Reported	
4960	Chloromethane	µg/kg		0.00		Not Reported	
4570	1,2-Dibromo-3-chloropropane (DBCP)	µg/kg		0.00		Not Reported	
4585	1,2-Dibromoethane (EDB)	µg/kg		6230	4120 - 8170	Not Reported	
4595	Dibromomethane	µg/kg		8040	5400 - 10600	Not Reported	
4610	1,2-Dichlorobenzene	µg/kg		4340	3140 - 5660	Not Reported	
4615	1,3-Dichlorobenzene	µg/kg		6400	4590 - 8340	Not Reported	
4620	1,4-Dichlorobenzene	µg/kg		5100	3700 - 6460	Not Reported	
4625	Dichlorodifluoromethane (Freon 12)	µg/kg		0.00		Not Reported	
4630	1,1-Dichloroethane	µg/kg		0.00		Not Reported	
4635	1,2-Dichloroethane	µg/kg		6900	5020 - 8950	Not Reported	
4640	1,1-Dichloroethylene	µg/kg		0.00		Not Reported	
4645	cis-1,2-Dichloroethylene	µg/kg		4190	2430 - 5890	Not Reported	
4700	trans-1,2-Dichloroethylene	µg/kg		8630	4670 - 12700	Not Reported	
4655	1,2-Dichloropropane	µg/kg		0.00		Not Reported	
4680	cis-1,3-Dichloropropylene	µg/kg		6750	4130 - 8540	Not Reported	

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O460853
03/29/11
01/24/11 - 03/10/11

Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
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SOIL Ready-to-Use VOAs in Soil (cat# 870) (Continued)

4685	trans-1,3-Dichloropropylene	µg/kg		9720	5810 - 12700	Not Reported	
4765	Ethylbenzene	µg/kg	11500	9230	6340 - 12400	Acceptable	LUFT GCMS
4835	Hexachlorobutadiene	µg/kg		0.00		Not Reported	
4840	Hexachloroethane	µg/kg		0.00		Not Reported	
4860	2-Hexanone	µg/kg		0.00		Not Reported	
4900	Isopropylbenzene	µg/kg		3960	2650 - 5720	Not Reported	
4975	Methylene chloride	µg/kg		0.00		Not Reported	
4995	4-Methyl-2-pentanone (MIBK)	µg/kg		5640	2700 - 7980	Not Reported	
5005	Naphthalene	µg/kg		9800	4250 - 13800	Not Reported	
5015	Nitrobenzene	µg/kg		10500	4950 - 27800	Not Reported	
5100	Styrene	µg/kg		0.00		Not Reported	
5105	1,1,1,2-Tetrachloroethane	µg/kg		6180	4540 - 7870	Not Reported	
5110	1,1,2,2-Tetrachloroethane	µg/kg		0.00		Not Reported	
5115	Tetrachloroethylene	µg/kg		9640	6380 - 13100	Not Reported	
5140	Toluene	µg/kg	8840	8100	5740 - 10600	Acceptable	LUFT GCMS
5155	1,2,4-Trichlorobenzene	µg/kg		4280	2550 - 5590	Not Reported	
5160	1,1,1-Trichloroethane	µg/kg		0.00		Not Reported	
5165	1,1,2-Trichloroethane	µg/kg		3620	2550 - 4780	Not Reported	
5170	Trichloroethylene	µg/kg		4390	3040 - 5970	Not Reported	
5175	Trichlorofluoromethane	µg/kg		0.00		Not Reported	
5180	1,2,3-Trichloropropane (TCP)	µg/kg		9580	4920 - 13200	Not Reported	
5225	Vinyl acetate	µg/kg		0.00		Not Reported	
5235	Vinyl chloride	µg/kg		9000	2770 - 15300	Not Reported	
5260	Xylenes, total	µg/kg	11600	10400	7360 - 13900	Acceptable	LUFT GCMS

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EPA ID: CA01480
ERA Customer Number: O460853
Report Issued: 03/29/11
Study Dates: 01/24/11 - 03/10/11

Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
SOIL Low-Level PAHs in Soil (cat# 625)							
5500	Acenaphthene	µg/kg	345	718	109 - 864	Acceptable	EPA 8270 SIM
5505	Acenaphthylene	µg/kg	311	648	64.8 - 926	Acceptable	EPA 8270 SIM
5555	Anthracene	µg/kg	478	798	116 - 1020	Acceptable	EPA 8270 SIM
5575	Benzo(a)anthracene	µg/kg	218	329	103 - 416	Acceptable	EPA 8270 SIM
5585	Benzo(b)fluoranthene	µg/kg	220	360	129 - 430	Acceptable	EPA 8270 SIM
5600	Benzo(k)fluoranthene	µg/kg	275	457	136 - 558	Acceptable	EPA 8270 SIM
5590	Benzo(g,h,i)perylene	µg/kg	261	514	51.4 - 750	Acceptable	EPA 8270 SIM
5580	Benzo(a)pyrene	µg/kg	54.9	75.1	11.0 - 105	Acceptable	EPA 8270 SIM
5855	Chrysene	µg/kg	153	210	47.0 - 296	Acceptable	EPA 8270 SIM
5895	Dibenz(a,h)anthracene	µg/kg	200	330	72.4 - 424	Acceptable	EPA 8270 SIM
6265	Fluoranthene	µg/kg	391	696	200 - 882	Acceptable	EPA 8270 SIM
6270	Fluorene	µg/kg	122	253	44.2 - 334	Acceptable	EPA 8270 SIM
6315	Indeno(1,2,3-cd)pyrene	µg/kg	110	144	29.3 - 244	Acceptable	EPA 8270 SIM
5005	Naphthalene	µg/kg	70.2	152	30.0 - 213	Acceptable	EPA 8270 SIM
6615	Phenanthrene	µg/kg	418	848	225 - 1040	Acceptable	EPA 8270 SIM
6665	Pyrene	µg/kg	146	256	70.1 - 338	Acceptable	EPA 8270 SIM

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EPA ID: CA01480
ERA Customer Number: O460853
Report Issued: 03/29/11
Study Dates: 01/24/11 - 03/10/11

Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
SOIL Base/Neutrals and Acids in Soil (cat# 467)							
5500	Acenaphthene	µg/kg	6220	7170	2040 - 8910	Acceptable	EPA 8270C
5505	Acenaphthylene	µg/kg	6250	6750	1750 - 8970	Acceptable	EPA 8270C
5145	2-Amino-1-methylbenzene (o-toluidine)	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5545	Aniline	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5555	Anthracene	µg/kg	4670	5260	1370 - 7100	Acceptable	EPA 8270C
5595	Benzidine	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5610	Benzoic acid	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5575	Benzo(a)anthracene	µg/kg	2840	3630	1170 - 4720	Acceptable	EPA 8270C
5585	Benzo(b)fluoranthene	µg/kg	3230	3690	988 - 5050	Acceptable	EPA 8270C
5600	Benzo(k)fluoranthene	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5590	Benzo(g,h,i)perylene	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5580	Benzo(a)pyrene	µg/kg	6180	7920	1950 - 10800	Acceptable	EPA 8270C
5630	Benzyl alcohol	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5760	bis(2-Chloroethoxy)methane	µg/kg	7060	9500	2020 - 11900	Acceptable	EPA 8270C
5765	bis(2-Chloroethyl)ether	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5780	bis(2-Chloroisopropyl)ether	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5660	4-Bromophenyl-phenylether	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5670	Butylbenzylphthalate	µg/kg	6660	9630	2320 - 14200	Acceptable	EPA 8270C
5680	Carbazole	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5745	4-Chloroaniline	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5700	4-Chloro-3-methylphenol	µg/kg	7410	10500	3130 - 12500	Acceptable	EPA 8270C
5790	1-Chloronaphthalene	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5795	2-Chloronaphthalene	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5800	2-Chlorophenol	µg/kg	1970	2890	300 - 3680	Acceptable	EPA 8270C
5825	4-Chlorophenyl-phenylether	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5855	Chrysene	µg/kg	5010	5810	1630 - 7290	Acceptable	EPA 8270C
5895	Dibenz(a,h)anthracene	µg/kg	9400	9170	2680 - 11100	Acceptable	EPA 8270C
5905	Dibenzofuran	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5925	Di-n-butylphthalate	µg/kg	< 100	0.00		Acceptable	EPA 8270C
4610	1,2-Dichlorobenzene	µg/kg	4270	6930	693 - 8150	Acceptable	EPA 8270C
4615	1,3-Dichlorobenzene	µg/kg	< 100	0.00		Acceptable	EPA 8270C
4620	1,4-Dichlorobenzene	µg/kg	< 100	0.00		Acceptable	EPA 8270C

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Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
SOIL Base/Neutrals and Acids in Soil (cat# 467) (Continued)							
5945	3,3'-Dichlorobenzidine	µg/kg	< 100	0.00		Acceptable	EPA 8270C
6000	2,4-Dichlorophenol	µg/kg	4870	7690	1420 - 9680	Acceptable	EPA 8270C
6005	2,6-Dichlorophenol	µg/kg	6050	9140	1280 - 11200	Acceptable	EPA 8270C
6070	Diethylphthalate	µg/kg	7660	10900	2510 - 14700	Acceptable	EPA 8270C
6130	2,4-Dimethylphenol	µg/kg	< 100	0.00		Acceptable	EPA 8270C
6135	Dimethylphthalate	µg/kg	6760	8500	2530 - 10800	Acceptable	EPA 8270C
6175	2,4-Dinitrophenol	µg/kg	< 100	0.00		Acceptable	EPA 8270C
6185	2,4-Dinitrotoluene	µg/kg	6370	7910	1600 - 10700	Acceptable	EPA 8270C
6190	2,6-Dinitrotoluene	µg/kg	4660	6040	1820 - 7390	Acceptable	EPA 8270C
6200	Di-n-octylphthalate	µg/kg	< 100	0.00		Acceptable	EPA 8270C
6065	bis(2-Ethylhexyl)phthalate	µg/kg	6420	8860	2430 - 12500	Acceptable	EPA 8270C
6265	Fluoranthene	µg/kg	7680	8590	2960 - 11300	Acceptable	EPA 8270C
6270	Fluorene	µg/kg	2720	3440	970 - 4360	Acceptable	EPA 8270C
6275	Hexachlorobenzene	µg/kg	3650	4110	1290 - 5310	Acceptable	EPA 8270C
4835	Hexachlorobutadiene	µg/kg	< 100	0.00		Acceptable	EPA 8270C
6285	Hexachlorocyclopentadiene	µg/kg	< 100	0.00		Acceptable	EPA 8270C
4840	Hexachloroethane	µg/kg	7640	12800	794 - 14500	Acceptable	EPA 8270C
6315	Indeno(1,2,3-cd)pyrene	µg/kg	1940	0.00		Not Acceptable	EPA 8270C
6320	Isophorone	µg/kg	6960	11100	2830 - 13900	Acceptable	EPA 8270C
6360	4,6-Dinitro-2-methylphenol	µg/kg	3070	7740	0.00 - 8510	Acceptable	EPA 8270C
6385	2-Methylnaphthalene	µg/kg	4410	5510	1010 - 7130	Acceptable	EPA 8270C
6400	2-Methylphenol	µg/kg	4890	8260	826 - 9090	Acceptable	EPA 8270C
6410	3&4-Methylphenol	µg/kg	5790	8620	262 - 10100	Acceptable	EPA 8270C
5005	Naphthalene	µg/kg	2070	2690	444 - 3270	Acceptable	EPA 8270C
6460	2-Nitroaniline	µg/kg	< 100	0.00		Acceptable	EPA 8270C
6465	3-Nitroaniline	µg/kg	< 100	0.00		Acceptable	EPA 8270C
6470	4-Nitroaniline	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5015	Nitrobenzene	µg/kg	6540	10100	2000 - 12700	Acceptable	EPA 8270C
6490	2-Nitrophenol	µg/kg	7480	11000	1400 - 13400	Acceptable	EPA 8270C
6500	4-Nitrophenol	µg/kg	< 100	0.00		Acceptable	EPA 8270C
6525	N-Nitrosodiethylamine	µg/kg	< 100	0.00		Acceptable	EPA 8270C
6530	N-Nitrosodimethylamine	µg/kg	3280	4940	207 - 5760	Acceptable	EPA 8270C

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Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
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SOIL Base/Neutrals and Acids in Soil (cat# 467) (Continued)

6535	N-Nitrosodiphenylamine	µg/kg	< 100	0.00		Acceptable	EPA 8270C
6545	N-Nitroso-di-n-propylamine	µg/kg	5830	8680	1140 - 11800	Acceptable	EPA 8270C
6590	Pentachlorobenzene	µg/kg	< 100	0.00		Acceptable	EPA 8270C
6605	Pentachlorophenol	µg/kg	2220	4520	600 - 4980	Acceptable	EPA 8270C
6615	Phenanthrene	µg/kg	8650	11200	3890 - 14000	Acceptable	EPA 8270C
6625	Phenol	µg/kg	5990	8510	851 - 11000	Acceptable	EPA 8270C
6665	Pyrene	µg/kg	2470	2760	825 - 3610	Acceptable	EPA 8270C
5095	Pyridine	µg/kg	< 100	0.00		Acceptable	EPA 8270C
6715	1,2,4,5-Tetrachlorobenzene	µg/kg	< 100	0.00		Acceptable	EPA 8270C
6735	2,3,4,6-Tetrachlorophenol	µg/kg	< 100	0.00		Acceptable	EPA 8270C
5155	1,2,4-Trichlorobenzene	µg/kg	< 100	0.00		Acceptable	EPA 8270C
6835	2,4,5-Trichlorophenol	µg/kg	5840	8980	1410 - 11200	Acceptable	EPA 8270C
6840	2,4,6-Trichlorophenol	µg/kg	1870	2670	323 - 3680	Acceptable	EPA 8270C

SOIL Organochlorine Pesticides in Soil (cat# 468)

7025	Aldrin	µg/kg	218	375	107 - 466	Acceptable	EPA 8081A
7110	alpha-BHC	µg/kg	136	292	81.0 - 373	Acceptable	EPA 8081A
7115	beta-BHC	µg/kg	196	309	60.2 - 436	Acceptable	EPA 8081A
7105	delta-BHC	µg/kg	135	180	37.6 - 250	Acceptable	EPA 8081A
7120	gamma-BHC(Lindane)	µg/kg	199	186	43.4 - 253	Acceptable	EPA 8081A
7240	alpha-Chlordane	µg/kg	260	393	127 - 494	Acceptable	EPA 8081A
7245	gamma-Chlordane	µg/kg	219	289	113 - 356	Acceptable	EPA 8081A
7355	4,4'-DDD	µg/kg	305	411	143 - 539	Acceptable	EPA 8081A
7360	4,4'-DDE	µg/kg	267	370	124 - 480	Acceptable	EPA 8081A
7365	4,4'-DDT	µg/kg	202	237	53.3 - 321	Acceptable	EPA 8081A
7470	Dieldrin	µg/kg	333	434	155 - 548	Acceptable	EPA 8081A
7540	Endrin	µg/kg	200	215	87.5 - 295	Acceptable	EPA 8081A
7530	Endrin aldehyde	µg/kg	204	286	29.6 - 360	Acceptable	EPA 8081A
7535	Endrin ketone	µg/kg	335	398	91.0 - 487	Acceptable	EPA 8081A
7510	Endosulfan I	µg/kg	222	394	79.1 - 433	Acceptable	EPA 8081A
7515	Endosulfan II	µg/kg	293	485	95.3 - 534	Acceptable	EPA 8081A
7520	Endosulfan sulfate	µg/kg	355	390	86.5 - 558	Acceptable	EPA 8081A
7685	Heptachlor	µg/kg	165	312	88.6 - 401	Acceptable	EPA 8081A
7690	Heptachlor epoxide	µg/kg	190	265	90.4 - 347	Acceptable	EPA 8081A
7810	Methoxychlor	µg/kg	253	185	18.5 - 309	Acceptable	EPA 8081A

SOIL Chlordane in Soil (cat# 628)

7250	Chlordane, technical	µg/kg	286	522	101 - 684	Acceptable	EPA 8081A
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** Result(s) have been revised by ERA.





A Waters Company

SOIL-73 Final Complete Report

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EPA ID: CA01480
 ERA Customer Number: O460853
 Report Issued: 03/29/11
 Study Dates: 01/24/11 - 03/10/11

Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
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SOIL Toxaphene in Soil (cat# 627)

8250	Toxaphene	µg/kg	1480	1710	171 - 2490	Acceptable	EPA 8081A
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SOIL PCBs in Soil (cat# 624)

8880	Aroclor 1016	mg/kg	< 0.2	0.00		Acceptable	EPA 8082
8885	Aroclor 1221	mg/kg	< 0.2	0.00		Acceptable	EPA 8082
8890	Aroclor 1232	mg/kg	< 0.2	0.00		Acceptable	EPA 8082
8895	Aroclor 1242	mg/kg	< 0.2	0.00		Acceptable	EPA 8082
8900	Aroclor 1248	mg/kg	< 0.2	0.00		Acceptable	EPA 8082
8905	Aroclor 1254	mg/kg	13.2	15.3	3.85 - 21.8	Acceptable	EPA 8082
8910	Aroclor 1260	mg/kg	< 0.2	0.00		Acceptable	EPA 8082

SOIL Oil and Grease (O&G) in Soil (cat# 867)

1860	n-Hexane Extractable Material(O&G)(Gravimet	mg/kg	1050	1610	566 - 2560	Acceptable	EPA 1664A
1860	n-Hexane Extractable Material(O&G)(IR)	mg/kg		1980	198 - 2180	Not Reported	

SOIL Gasoline Range Organics (GRO) in Soil (cat# 630)

9408	Gasoline Range Organics (GRO)	mg/kg	576	1120	225 - 1870	Acceptable	EPA 8015B
4375	Benzene in GRO	mg/kg		12.0	0.441 - 17.8	Not Reported	
4765	Ethylbenzene in GRO	mg/kg		36.0	27.9 - 52.0	Not Reported	
5140	Toluene in GRO	mg/kg		104	61.3 - 114	Not Reported	
5260	Xylenes, total in GRO	mg/kg		106	93.4 - 146	Not Reported	

SOIL Gasoline Range Organics (GRO) in Soil (cat# 630)

9408	Gasoline Range Organics (GRO)	mg/kg		1120	225 - 1870	Not Reported	
4375	Benzene in GRO	mg/kg	4.14	12.0	0.441 - 17.8	Acceptable	EPA 8021B
4765	Ethylbenzene in GRO	mg/kg	33.8	36.0	27.9 - 52.0	Acceptable	EPA 8021B
5140	Toluene in GRO	mg/kg	64.1	104	61.3 - 114	Acceptable	EPA 8021B
5260	Xylenes, total in GRO	mg/kg	97.0	106	93.4 - 146	Acceptable	EPA 8021B

SOIL Gasoline Range Organics (GRO) in Soil (cat# 630)

9408	Gasoline Range Organics (GRO)	mg/kg	576	1120	225 - 1870	Acceptable	CA LUFT GC
4375	Benzene in GRO	mg/kg		12.0	0.441 - 17.8	Not Reported	
4765	Ethylbenzene in GRO	mg/kg		36.0	27.9 - 52.0	Not Reported	
5140	Toluene in GRO	mg/kg		104	61.3 - 114	Not Reported	
5260	Xylenes, total in GRO	mg/kg		106	93.4 - 146	Not Reported	

SOIL Gasoline Range Organics (GRO) in Soil (cat# 630)

9408	Gasoline Range Organics (GRO)	mg/kg	1280	1120	225 - 1870	Acceptable	EPA 8260B
4375	Benzene in GRO	mg/kg	5.10	12.0	0.441 - 17.8	Acceptable	EPA 8260B
4765	Ethylbenzene in GRO	mg/kg	31.1	36.0	27.9 - 52.0	Acceptable	EPA 8260B
5140	Toluene in GRO	mg/kg	65.0	104	61.3 - 114	Acceptable	EPA 8260B
5260	Xylenes, total in GRO	mg/kg	95.4	106	93.4 - 146	Acceptable	EPA 8260B

** Result(s) have been revised by ERA.





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SOIL-73 Final Complete Report

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EPA ID: CA01480
ERA Customer Number: O460853
Report Issued: 03/29/11
Study Dates: 01/24/11 - 03/10/11

Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
SOIL Gasoline Range Organics (GRO) in Soil (cat# 630)							
9408	Gasoline Range Organics (GRO)	mg/kg	1280**	1120	225 - 1870	Acceptable	CA LUFT GCMS
4375	Benzene in GRO	mg/kg		12.0	0.441 - 17.8	Not Reported	
4765	Ethylbenzene in GRO	mg/kg		36.0	27.9 - 52.0	Not Reported	
5140	Toluene in GRO	mg/kg		104	61.3 - 114	Not Reported	
5260	Xylenes, total in GRO	mg/kg		106	93.4 - 146	Not Reported	

SOIL Diesel Range Organics (DRO) in Soil (cat# 631)

9369	Diesel Range Organics (DRO)	mg/kg	1810	2050	669 - 2590	Acceptable	CA LUFT GC
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SOIL Diesel Range Organics (DRO) in Soil (cat# 631)

9369	Diesel Range Organics (DRO)	mg/kg	1810	2050	669 - 2590	Acceptable	EPA 8015B
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SOIL Diesel Range Organics (DRO) in Soil (cat# 631)

9369	Diesel Range Organics (DRO)	mg/kg	1810	2050	669 - 2590	Acceptable	CA LUFT GCMS
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SOIL Total Petroleum Hydrocarbons (TPH) in Soil (cat# 632)

1935	non-Polar Extractable Material(TPH)(Gravimetr	mg/kg	1240	1540	394 - 2090	Acceptable	EPA 1664A
1935	non-Polar Extractable Material(TPH)(IR)	mg/kg		1890	582 - 2610	Not Reported	

** Result(s) have been revised by ERA.

