

US EPA ARCHIVE DOCUMENT



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Weston Solutions, Inc.
2501 Jolly Road
Okemos, MI 48864

KAR Project No. : 103014
Date Reported : 07/30/10
Date Activated : 07/29/10
Date Due : 07/30/10
Date Validated : 07/30/10

Attn : Mr. Dan Capone

Project

Description : Analysis of four samples from Enbridge Oil Spill.

Dear Client,

Your laboratory data is presented to you in this report. Unless otherwise stated under the "Comments" heading, all tests were performed within the maximum allowable holding times, have met or exceeded QC requirements and the result represents the sample as it was received. If a sample was identified as drinking water under the Safe Drinking Water Act, the "Comments" column may also contain federal drinking water information including MCL which is the Maximum Contaminant Level set by USEPA. Values enclosed in brackets ([]) are Secondary MCL's and are non-enforceable guidelines for aesthetic quality.

If you wish to contact us about this work please mention KAR Project No. 103014. To arrange additional sampling or testing please contact our Client Services Department. If you have any questions regarding quality assurance please contact us.

Thank you for the opportunity to serve you. Please do not hesitate to call if we can provide additional assistance.

Respectfully submitted,


David R. Alkema
Laboratory Manager

KAR Laboratories, Inc. maintains Full Certification status for Bacteriology, Inorganics, Regulated Organics and Synthetic Organics through USEPA, Michigan Department of Public Health and Indiana State Department of Health. This report may only be reproduced in full and not without the written consent of **Weston Solutions, Inc.**

LABORATORY DETAIL REPORT

Client: **Weston Solutions, Inc.**

Attest: 
David R. Alkema, Lab Manager

KAR Project No. : **103014**

Date Reported: **07/30/10**

Project

Description: Analysis of four samples from Enbridge Oil Spill.

Sample ID : "Source Oil"	Date Received : 07/29/10
Sampled By : DC of Weston Solutions, Inc.	Sample Type : liquid
Sample Date : 07/27/10	KAR Sample No. : 103014-01
Sample Time : 0520	

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Sulfur, total, by ICP	0.2	% by weight	Parr 207M, 200.7	07/29/10	DBL	Matrix difficulty encountered; result is approximate. Analysis performed on oil layer comprising approximately 5% of sample.
Purg. organic solvent scan	See below		EPA 8260	07/29/10	JAR	
Prep. VOA	Completed		EPA 5030	07/29/10	JAR	
1,1,1,2-Tetrachloroethane	400U	ug/kg	EPA 8260	07/29/10	JAR	
1,1,1-Trichloroethane	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,1,2,2-Tetrachloroethane	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,1,2-Trichloroethane	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,1-Dichloroethane	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,1-Dichloroethene	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,1-Dichloropropene	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,2,3-Trichlorobenzene	1000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2,3-Trichloropropane	400U	ug/kg	EPA 8260	07/29/10	JAR	
1,2,4-Trichlorobenzene	1000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2,4-Trimethylbenzene	2400	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dibromo-3-chloropropane	1000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dibromoethane	1000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dichlorobenzene	400U	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dichloroethane	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dichloropropane	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,3,5-Trimethylbenzene	1000	ug/kg	EPA 8260	07/29/10	JAR	
1,3-Dichlorobenzene	400U	ug/kg	EPA 8260	07/29/10	JAR	
1,3-Dichloropropane	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,4-Dichlorobenzene	400U	ug/kg	EPA 8260	07/29/10	JAR	
2,2-Dichloropropane	200U	ug/kg	EPA 8260	07/29/10	JAR	
2-Chlorotoluene	1000U	ug/kg	EPA 8260	07/29/10	JAR	
4-Chlorotoluene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Benzene	3500	ug/kg	EPA 8260	07/29/10	JAR	
Bromobenzene	400U	ug/kg	EPA 8260	07/29/10	JAR	
Bromochloromethane	400U	ug/kg	EPA 8260	07/29/10	JAR	
Bromodichloromethane	400U	ug/kg	EPA 8260	07/29/10	JAR	
Bromoform	400U	ug/kg	EPA 8260	07/29/10	JAR	
Bromomethane	800U	ug/kg	EPA 8260	07/29/10	JAR	
Carbon tetrachloride	200U	ug/kg	EPA 8260	07/29/10	JAR	
Chlorobenzene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Chloroethane	1000U	ug/kg	EPA 8260	07/29/10	JAR	
Chloroform	200U	ug/kg	EPA 8260	07/29/10	JAR	
Chloromethane	1000U	ug/kg	EPA 8260	07/29/10	JAR	

LABORATORY DETAIL REPORT

Client: **Weston Solutions, Inc.**

KAR Project No. : **103014**

Attest: 
David R. Alkema, Lab Manager

Date Reported: **07/30/10**

Project


Description: Analysis of four samples from Enbridge Oil Spill.

Sample ID : "Source Oil"	Date Received : 07/29/10
Sampled By : DC of Weston Solutions, Inc.	Sample Type : liquid
Sample Date : 07/27/10	KAR Sample No. : 103014-01
Sample Time : 0520	

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Cis-1,2-Dichloroethene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Cis-1,3-Dichloropropene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Dibromochloromethane	400U	ug/kg	EPA 8260	07/29/10	JAR	
Dibromomethane	1000U	ug/kg	EPA 8260	07/29/10	JAR	
Dichlorodifluoromethane	1000U	ug/kg	EPA 8260	07/29/10	JAR	
Ethylbenzene	1200	ug/kg	EPA 8260	07/29/10	JAR	
Hexachlorobutadiene by 8260	800U	ug/kg	EPA 8260	07/29/10	JAR	
Isopropylbenzene	1000U	ug/kg	EPA 8260	07/29/10	JAR	
M-and/or p-xylene	7100	ug/kg	EPA 8260	07/29/10	JAR	
Methylene chloride	400U	ug/kg	EPA 8260	07/29/10	JAR	
N-Butylbenzene	340	ug/kg	EPA 8260	07/29/10	JAR	
N-Propylbenzene	470	ug/kg	EPA 8260	07/29/10	JAR	
Naphthalene	1000U	ug/kg	EPA 8260	07/29/10	JAR	
O-Xylene	2200	ug/kg	EPA 8260	07/29/10	JAR	
P-Isopropyltoluene	220	ug/kg	EPA 8260	07/29/10	JAR	
Sec-Butylbenzene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Styrene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Tert-Butylbenzene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Tetrachloroethene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Toluene	8700	ug/kg	EPA 8260	07/29/10	JAR	
Trans-1,2-Dichloroethene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Trans-1,3-Dichloropropene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Trichloroethene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Trichlorofluoromethane	400U	ug/kg	EPA 8260	07/29/10	JAR	
Vinyl chloride	160U	ug/kg	EPA 8260	07/29/10	JAR	
TPH by GC-gasoline range	220	mg/kg	EPA 8260	07/29/10	JAR	
MDNR Scan 7	See below		EPA 8270	07/29/10	KTL	
SVOA surr. - Base/Neutrals	See below		EPA 8270	07/29/10	KTL	
Prep. SV BN	Completed		EPA 3580	07/29/10	KTL	
Acenaphthene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Acenaphthylene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Anthracene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Benzo(a)anthracene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Benzo(a)pyrene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Benzo(b)fluoranthene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Benzo(ghi)perylene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.

LABORATORY DETAIL REPORT

Client: **Weston Solutions, Inc.**

Attest: 
David R. Alkema, Lab Manager

KAR Project No. : **103014**

Date Reported: **07/30/10**

Project

Description: **Analysis of four samples from Enbridge Oil Spill.**

Sample ID : "Source Oil"	Date Received : 07/29/10
Sampled By : DC of Weston Solutions, Inc.	Sample Type : liquid
Sample Date : 07/27/10	KAR Sample No. : 103014-01
Sample Time : 0520	

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Benzo(k)fluoranthene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Chrysene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Dibenzo(ah)anthracene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Fluoranthene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Fluorene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Indeno(123cd)pyrene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Naphthalene by Method 8270	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Phenanthrene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Pyrene	39,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
TPH by GC-diesel range	7900	mg/kg	EPA 8270	07/29/10	KTL	
TPH by GC-extended range	4600	mg/kg	EPA 8270	07/29/10	KTL	
12DCA-D4 (surr spk)	84	% spike recovery	EPA 8260	07/29/10	JAR	
BFB (surr spk)	90	% spike recovery	EPA 8260	07/29/10	JAR	
Toluene-D8 (surr spk)	107	% spike recovery	EPA 8260	07/29/10	JAR	
2FB (surr spk)	77	% spike recovery	EPA 8270	07/29/10	KTL	
D5-Nitrobenzene (surr spk)	88	% spike recovery	EPA 8270	07/29/10	KTL	
Terphenyl D14 (surr spk)	66	% spike recovery	EPA 8270	07/29/10	KTL	

KAR Laboratories, Inc.

(269) 381-9666

LABORATORY DETAIL REPORT

Client: Weston Solutions, Inc.

Attest: 
David R. Alkema, Lab Manager

KAR Project No. : 103014

Date Reported: 07/30/10

Project

Description: Analysis of four samples from Enbridge Oil Spill.

Sample ID : <u>"DS01"</u>	Date Received : 07/29/10
Sampled By : DC of Weston Solutions, Inc.	Sample Type : liquid
Sample Date : 07/27/10	KAR Sample No. : 103014-02
Sample Time : 0602	

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Sulfur, total, by ICP	2.7	% by weight	Parr 207M, 200.7	07/29/10	DBL	Matrix difficulty encountered; result is approximate. Analysis performed on oil layer comprising approximately 75% of sample.
Purg. organic solvent scan	See below		EPA 8260	07/29/10	JAR	
Prep. VOA	Completed		EPA 5030	07/29/10	JAR	
1,1,1,2-Tetrachloroethane	400U	ug/kg	EPA 8260	07/29/10	JAR	
1,1,1-Trichloroethane	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,1,2,2-Tetrachloroethane	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,1,2-Trichloroethane	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,1-Dichloroethane	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,1-Dichloroethene	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,1-Dichloropropene	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,2,3-Trichlorobenzene	1000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2,3-Trichloropropane	400U	ug/kg	EPA 8260	07/29/10	JAR	
1,2,4-Trichlorobenzene	1000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2,4-Trimethylbenzene	9800	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dibromo-3-chloropropane	1000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dibromoethane	1000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dichlorobenzene	400U	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dichloroethane	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dichloropropane	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,3,5-Trimethylbenzene	4000	ug/kg	EPA 8260	07/29/10	JAR	
1,3-Dichlorobenzene	400U	ug/kg	EPA 8260	07/29/10	JAR	
1,3-Dichloropropane	200U	ug/kg	EPA 8260	07/29/10	JAR	
1,4-Dichlorobenzene	400U	ug/kg	EPA 8260	07/29/10	JAR	
2,2-Dichloropropane	200U	ug/kg	EPA 8260	07/29/10	JAR	
2-Chlorotoluene	1000U	ug/kg	EPA 8260	07/29/10	JAR	
4-Chlorotoluene	1000U	ug/kg	EPA 8260	07/29/10	JAR	
Benzene	1000	ug/kg	EPA 8260	07/29/10	JAR	
Bromobenzene	400U	ug/kg	EPA 8260	07/29/10	JAR	
Bromochloromethane	400U	ug/kg	EPA 8260	07/29/10	JAR	
Bromodichloromethane	400U	ug/kg	EPA 8260	07/29/10	JAR	
Bromoform	400U	ug/kg	EPA 8260	07/29/10	JAR	
Bromomethane	800U	ug/kg	EPA 8260	07/29/10	JAR	
Carbon tetrachloride	200U	ug/kg	EPA 8260	07/29/10	JAR	
Chlorobenzene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Chloroethane	1000U	ug/kg	EPA 8260	07/29/10	JAR	
Chloroform	200U	ug/kg	EPA 8260	07/29/10	JAR	
Chloromethane	1000U	ug/kg	EPA 8260	07/29/10	JAR	

LABORATORY DETAIL REPORT

Client: Weston Solutions, Inc.

Attest: 
David R. Alkema, Lab Manager

KAR Project No. : 103014

Date Reported: 07/30/10

Project

Description: Analysis of four samples from Enbridge Oil Spill.

Sample ID : "DS01"	Date Received : 07/29/10
Sampled By : DC of Weston Solutions, Inc.	Sample Type : liquid
Sample Date : 07/27/10	KAR Sample No. : 103014-02
Sample Time : 0602	

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Cis-1,2-Dichloroethene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Cis-1,3-Dichloropropene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Dibromochloromethane	400U	ug/kg	EPA 8260	07/29/10	JAR	
Dibromomethane	1000U	ug/kg	EPA 8260	07/29/10	JAR	
Dichlorodifluoromethane	1000U	ug/kg	EPA 8260	07/29/10	JAR	
Ethylbenzene	4300	ug/kg	EPA 8260	07/29/10	JAR	
Hexachlorobutadiene by 8260	800U	ug/kg	EPA 8260	07/29/10	JAR	
Isopropylbenzene	1200	ug/kg	EPA 8260	07/29/10	JAR	
M-and/or p-xylene	25,000	ug/kg	EPA 8260	07/29/10	JAR	
Methylene chloride	400U	ug/kg	EPA 8260	07/29/10	JAR	
N-Butylbenzene	1400	ug/kg	EPA 8260	07/29/10	JAR	
N-Propylbenzene	1900	ug/kg	EPA 8260	07/29/10	JAR	
Naphthalene	1500	ug/kg	EPA 8260	07/29/10	JAR	
O-Xylene	7600	ug/kg	EPA 8260	07/29/10	JAR	
P-Isopropyltoluene	860	ug/kg	EPA 8260	07/29/10	JAR	
Sec-Butylbenzene	730	ug/kg	EPA 8260	07/29/10	JAR	
Styrene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Tert-Butylbenzene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Tetrachloroethene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Toluene	26,000	ug/kg	EPA 8260	07/29/10	JAR	
Trans-1,2-Dichloroethene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Trans-1,3-Dichloropropene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Trichloroethene	200U	ug/kg	EPA 8260	07/29/10	JAR	
Trichlorofluoromethane	400U	ug/kg	EPA 8260	07/29/10	JAR	
Vinyl chloride	160U	ug/kg	EPA 8260	07/29/10	JAR	
TPH by GC-gasoline range	1000	mg/kg	EPA 8260	07/29/10	JAR	
MDNR Scan 7	See below		EPA 8270	07/29/10	KTL	
SVOA surr. - Base/Neutrals	See below		EPA 8270	07/29/10	KTL	
Prep, SV BN	Completed		EPA 3580	07/29/10	KTL	
Acenaphthene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Acenaphthylene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Anthracene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Benzo(a)anthracene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Benzo(a)pyrene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Benzo(b)fluoranthene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Benzo(ghi)perylene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.

LABORATORY DETAIL REPORT

Client: **Weston Solutions, Inc.**

Attest: 
David R. Alkema, Lab Manager

KAR Project No. : **103014**

Date Reported: **07/30/10**

Project

Description: **Analysis of four samples from Enbridge Oil Spill.**

Sample ID : <u>"DS01"</u>	
Sampled By : <i>DC of Weston Solutions, Inc.</i>	Date Received : 07/29/10
Sample Date : 07/27/10	Sample Type : liquid
Sample Time : 0602	KAR Sample No. : 103014-02

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Benzo(k)fluoranthene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Chrysene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Dibenzo(ah)anthracene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Fluoranthene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Fluorene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Indeno(123cd)pyrene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Naphthalene by Method 8270	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Phenanthrene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Pyrene	54,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
TPH by GC-diesel range	16,000	mg/kg	EPA 8270	07/29/10	KTL	
TPH by GC-extended range	11,000	mg/kg	EPA 8270	07/29/10	KTL	
12DCA-D4 (surr spk)	85	% spike recovery	EPA 8260	07/29/10	JAR	
BFB (surr spk)	70	% spike recovery	EPA 8260	07/29/10	JAR	
Toluene-D8 (surr spk)	107	% spike recovery		07/29/10	JAR	
2FB (surr spk)	81	% spike recovery	EPA 8270	07/29/10	KTL	
D5-Nitrobenzene (surr spk)	97	% spike recovery	EPA 8270	07/29/10	KTL	
Terphenyl D14 (surr spk)	62	% spike recovery	EPA 8270	07/29/10	KTL	

LABORATORY DETAIL REPORT

Client: **Weston Solutions, Inc.**

Attest: 
David R. Alkema, Lab Manager

KAR Project No. : **103014**

Date Reported: **07/30/10**

Project

Description: **Analysis of four samples from Enbridge Oil Spill.**

Sample ID : "DS02"			
Sampled By : DC of Weston Solutions, Inc.	Date Received : 07/29/10	Sample Type : liquid	
Sample Date : 07/27/10	KAR Sample No. : 103014-03		
Sample Time : 0636			

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Sulfur, total, by ICP	3.7	% by weight	Parr 207M, 200.7	07/29/10	DBL	Analysis performed on oil layer comprising approximately 100% of sample.
Purg. organic solvent scan	See below		EPA 8260	07/29/10	JAR	
Prep. VOA	Completed		EPA 5030	07/29/10	JAR	
1,1,1,2-Tetrachloroethane	40,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,1,1-Trichloroethane	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,1,2,2-Tetrachloroethane	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,1,2-Trichloroethane	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,1-Dichloroethane	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,1-Dichloroethene	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,1-Dichloropropene	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2,3-Trichlorobenzene	100,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2,3-Trichloropropane	400,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2,4-Trichlorobenzene	100,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2,4-Trimethylbenzene	470,000	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dibromo-3-chloropropane	100,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dibromoethane	100,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dichlorobenzene	40,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dichloroethane	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,2-Dichloropropane	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,3,5-Trimethylbenzene	200,000	ug/kg	EPA 8260	07/29/10	JAR	
1,3-Dichlorobenzene	40,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,3-Dichloropropane	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
1,4-Dichlorobenzene	40,000U	ug/kg	EPA 8260	07/29/10	JAR	
2,2-Dichloropropane	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
2-Chlorotoluene	100,000U	ug/kg	EPA 8260	07/29/10	JAR	
4-Chlorotoluene	100,000U	ug/kg	EPA 8260	07/29/10	JAR	
Benzene	870,000	ug/kg	EPA 8260	07/29/10	JAR	
Bromobenzene	40,000U	ug/kg	EPA 8260	07/29/10	JAR	
Bromochloromethane	40,000U	ug/kg	EPA 8260	07/29/10	JAR	
Bromodichloromethane	40,000U	ug/kg	EPA 8260	07/29/10	JAR	
Bromoform	40,000U	ug/kg	EPA 8260	07/29/10	JAR	
Bromomethane	80,000U	ug/kg	EPA 8260	07/29/10	JAR	
Carbon tetrachloride	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
Chlorobenzene	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
Chloroethane	100,000U	ug/kg	EPA 8260	07/29/10	JAR	
Chloroform	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
Chloromethane	100,000U	ug/kg	EPA 8260	07/29/10	JAR	
Cis-1,2-Dichloroethene	20,000U	ug/kg	EPA 8260	07/29/10	JAR	

KAR Laboratories, Inc.

(269) 381-9666

LABORATORY DETAIL REPORT

Client: Weston Solutions, Inc.

Attest: 
David R. Alkema, Lab Manager

KAR Project No. : 103014

Date Reported: 07/30/10

Project

Description: Analysis of four samples from Enbridge Oil Spill.

Sample ID : <u>"DS02"</u>	Date Received : 07/29/10
Sampled By : DC of Weston Solutions, Inc.	Sample Type : liquid
Sample Date : 07/27/10	KAR Sample No. : 103014-03
Sample Time : 0636	

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Cis-1,3-Dichloropropene	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
Dibromochloromethane	40,000U	ug/kg	EPA 8260	07/29/10	JAR	
Dibromomethane	100,000U	ug/kg	EPA 8260	07/29/10	JAR	
Dichlorodifluoromethane	100,000U	ug/kg	EPA 8260	07/29/10	JAR	
Ethylbenzene	280,000	ug/kg	EPA 8260	07/29/10	JAR	
Hexachlorobutadiene by 8260	80000U	ug/kg	EPA 8260	07/29/10	JAR	
Isopropylbenzene	66,000	ug/kg	EPA 8260	07/29/10	JAR	
M-and/or p-xylene	1,500,000	ug/kg	EPA 8260	07/29/10	JAR	
Methylene chloride	40,000U	ug/kg	EPA 8260	07/29/10	JAR	
N-Butylbenzene	77,000	ug/kg	EPA 8260	07/29/10	JAR	
N-Propylbenzene	100,000	ug/kg	EPA 8260	07/29/10	JAR	
Naphthalene	57,000	ug/kg	EPA 8260	07/29/10	JAR	
O-Xylene	420,000	ug/kg	EPA 8260	07/29/10	JAR	
P-Isopropyltoluene	46,000	ug/kg	EPA 8260	07/29/10	JAR	
Sec-Butylbenzene	41,000	ug/kg	EPA 8260	07/29/10	JAR	
Styrene	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
Tert-Butylbenzene	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
Tetrachloroethene	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
Toluene	2,500,000	ug/kg	EPA 8260	07/29/10	JAR	
Trans-1,2-Dichloroethene	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
Trans-1,3-Dichloropropene	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
Trichloroethene	20,000U	ug/kg	EPA 8260	07/29/10	JAR	
Trichlorofluoromethane	40,000U	ug/kg	EPA 8260	07/29/10	JAR	
Vinyl chloride	16,000U	ug/kg	EPA 8260	07/29/10	JAR	
TPH by GC-gasoline range	100,000	mg/kg	EPA 8260	07/29/10	JAR	
MDNR Scan 7	See below		EPA 8270	07/29/10	KTL	
SVOA surr. - Base/Neutrals	See below		EPA 8270	07/29/10	KTL	
Prep. SV BN	Completed		EPA 3580	07/29/10	KTL	
Acenaphthene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Acenaphthylene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Anthracene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Benzo(a)anthracene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Benzo(a)pyrene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Benzo(b)fluoranthene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Benzo(ghi)perylene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Benzo(k)fluoranthene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.

LABORATORY DETAIL REPORT

Client: **Weston Solutions, Inc.**

Attest: 
David R. Alkema, Lab Manager

KAR Project No. : **103014**

Date Reported: **07/30/10**

Project


Description: **Analysis of four samples from Enbridge Oil Spill.**

Sample ID : <u>"DS02"</u>	
Sampled By : <i>DC of Weston Solutions, Inc.</i>	Date Received : 07/29/10
Sample Date : 07/27/10	Sample Type : liquid
Sample Time : 0636	KAR Sample No. : 103014-03

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Chrysene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Dibenzo(ah)anthracene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Fluoranthene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Fluorene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Indeno(123cd)pyrene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Naphthalene by Method 8270	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Phenanthrene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
Pyrene	170,000U	ug/kg	EPA 8270	07/29/10	KTL	Elevated detection limit due to unusual sample type.
TPH by GC-diesel range	72,000	mg/kg	EPA 8270	07/29/10	KTL	
TPH by GC-extended range	40,000	mg/kg	EPA 8270	07/29/10	KTL	
12DCA-D4 (surr spk)	80	% spike recovery	EPA 8260	07/29/10	JAR	
BFB (surr spk)	91	% spike recovery	EPA 8260	07/29/10	JAR	
Toluene-D8 (surr spk)	111	% spike recovery	EPA 8260	07/29/10	JAR	
2FB (surr spk)	74	% spike recovery	EPA 8270	07/29/10	KTL	
D5-Nitrobenzene (surr spk)	91	% spike recovery	EPA 8270	07/29/10	KTL	
Terphenyl D14 (surr spk)	56	% spike recovery	EPA 8270	07/29/10	KTL	

LABORATORY DETAIL REPORT

Client: **Weston Solutions, Inc.**

Attest: 
David R. Alkema, Lab Manager

KAR Project No. : **103014**

Date Reported: **07/30/10**

Project

Description: **Analysis of four samples from Enbridge Oil Spill.**

Sample ID : **"DS03"**

Sampled By : **DC of Weston Solutions, Inc.**

Sample Date : **07/27/10**

Sample Time : **0720**

Date Received : **07/29/10**

Sample Type : **aqueous**

KAR Sample No. : **103014-04**

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Sulfur, total, by ICP	11.5	mg/L	EPA 200.7	07/29/10	DBL	
Sulfate	17	mg/L	EPA 300.0A	07/29/10	DMC	
Sulfide	0.1U	mg/L	EPA 376.2	07/30/10	ALK	
Purg. organic solvent scan	See below		EPA 8260	07/29/10	JAR	
Prep. VOA	Completed		EPA 5030	07/29/10	JAR	
1,1,1,2-Tetrachloroethane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,1,1-Trichloroethane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,1,2,2-Tetrachloroethane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,1,2-Trichloroethane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,1-Dichloroethane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,1-Dichloroethene	1U	ug/L	EPA 8260	07/29/10	JAR	
1,1-Dichloropropene	1U	ug/L	EPA 8260	07/29/10	JAR	
1,2,3-Trichlorobenzene	5U	ug/L	EPA 8260	07/29/10	JAR	
1,2,3-Trichloropropane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,2,4-Trichlorobenzene	5U	ug/L	EPA 8260	07/29/10	JAR	
1,2,4-Trimethylbenzene	1.3	ug/L	EPA 8260	07/29/10	JAR	
1,2-Dibromo-3-chloropropane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,2-Dibromoethane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,2-Dichlorobenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
1,2-Dichloroethane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,2-Dichloropropane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,3,5-Trimethylbenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
1,3-Dichlorobenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
1,3-Dichloropropane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,4-Dichlorobenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
2,2-Dichloropropane	1U	ug/L	EPA 8260	07/29/10	JAR	
2-Chlorotoluene	5U	ug/L	EPA 8260	07/29/10	JAR	
4-Chlorotoluene	5U	ug/L	EPA 8260	07/29/10	JAR	
Benzene	18	ug/L	EPA 8260	07/29/10	JAR	
Bromobenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
Bromochloromethane	1U	ug/L	EPA 8260	07/29/10	JAR	
Bromodichloromethane	1U	ug/L	EPA 8260	07/29/10	JAR	
Bromoform	1U	ug/L	EPA 8260	07/29/10	JAR	
Bromomethane	5U	ug/L	EPA 8260	07/29/10	JAR	
Carbon tetrachloride	1U	ug/L	EPA 8260	07/29/10	JAR	
Chlorobenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
Chloroethane	5U	ug/L	EPA 8260	07/29/10	JAR	
Chloroform	1U	ug/L	EPA 8260	07/29/10	JAR	
Chloromethane	5U	ug/L	EPA 8260	07/29/10	JAR	

KAR Laboratories, Inc.

(269) 381-9666

LABORATORY DETAIL REPORT

Client: **Weston Solutions, Inc.**

KAR Project No. : **103014**

Attest: 
David R. Alkema, Lab Manager

Date Reported: **07/30/10**

Project

Description: Analysis of four samples from Enbridge Oil Spill.

Sample ID : "DS03"	Date Received : 07/29/10
Sampled By : DC of Weston Solutions, Inc.	Sample Type : aqueous
Sample Date : 07/27/10	KAR Sample No. : 103014-04
Sample Time : 0720	

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Cis-1,2-Dichloroethene	1U	ug/L	EPA 8260	07/29/10	JAR	
Cis-1,3-Dichloropropene	1U	ug/L	EPA 8260	07/29/10	JAR	
Dibromochloromethane	5U	ug/L	EPA 8260	07/29/10	JAR	
Dibromomethane	5U	ug/L	EPA 8260	07/29/10	JAR	
Dichlorodifluoromethane	5U	ug/L	EPA 8260	07/29/10	JAR	
Ethylbenzene	1.8	ug/L	EPA 8260	07/29/10	JAR	
Ethylene dibromide	1U	ug/L	EPA 8260	07/29/10	JAR	
Hexachlorobutadiene by 8260	1U	ug/L	EPA 8260	07/29/10	JAR	
Hexachloroethane by 8260	5U	ug/L	EPA 8260	07/29/10	JAR	
Isopropylbenzene	5U	ug/L	EPA 8260	07/29/10	JAR	
M-and/or p-xylene	9.7	ug/L	EPA 8260	07/29/10	JAR	
Methyl iodide	1U	ug/L	EPA 8260	07/29/10	JAR	
Methylene chloride	5U	ug/L	EPA 8260	07/29/10	JAR	
N-Butylbenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
N-Propylbenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
Naphthalene	5U	ug/L	EPA 8260	07/29/10	JAR	
O-Xylene	3.8	ug/L	EPA 8260	07/29/10	JAR	
P-Isopropyltoluene	1U	ug/L	EPA 8260	07/29/10	JAR	
Sec-Butylbenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
Styrene	1U	ug/L	EPA 8260	07/29/10	JAR	
Tert-Butylbenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
Tetrachloroethene	1U	ug/L	EPA 8260	07/29/10	JAR	
Toluene	7.7	ug/L	EPA 8260	07/29/10	JAR	
Trans-1,2-Dichloroethene	1U	ug/L	EPA 8260	07/29/10	JAR	
Trans-1,3-Dichloropropene	1U	ug/L	EPA 8260	07/29/10	JAR	
Trans-1,4-Dichloro-2-butene	1U	ug/L	EPA 8260	07/29/10	JAR	
Trichloroethene	1U	ug/L	EPA 8260	07/29/10	JAR	
Trichlorofluoromethane	1U	ug/L	EPA 8260	07/29/10	JAR	
Vinyl chloride	1U	ug/L	EPA 8260	07/29/10	JAR	
TPH by GC-gasoline range	0.150	mg/L	EPA 8260	07/29/10	JAR	
MDNR Scan 7	See below		EPA 8270	07/29/10	KTL	
SVOA surr. - Base/Neutrals	See below		EPA 8270	07/29/10	KTL	
Prep, SV BN	Completed		EPA 3510	07/29/10	KTL	
Acenaphthene	5U	ug/L	EPA 8270	07/29/10	KTL	
Acenaphthylene	5U	ug/L	EPA 8270	07/29/10	KTL	
Anthracene	25U	ug/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
Benzo(a)anthracene	25U	ug/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
Benzo(a)pyrene	25U	ug/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.

LABORATORY DETAIL REPORT

Client: **Weston Solutions, Inc.**

Attest: 
David R. Alkema, Lab Manager

KAR Project No. : **103014**

Date Reported: **07/30/10**

Project

Description: **Analysis of four samples from Enbridge Oil Spill.**

Sample ID : "DS03"	Date Received : 07/29/10
Sampled By : DC of Weston Solutions, Inc.	Sample Type : aqueous
Sample Date : 07/27/10	KAR Sample No. : 103014-04
Sample Time : 0720	


Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Benzo(b)fluoranthene	25U	ug/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
Benzo(ghi)perylene	25U	ug/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
Benzo(k)fluoranthene	25U	ug/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
Chrysene	25U	ug/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
Dibenzo(ah)anthracene	25U	ug/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
Fluoranthene	25U	ug/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
Fluorene	25U	ug/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
Indeno(123cd)pyrene	25U	ug/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
Naphthalene by Method 8270	25U	ug/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
Phenanthrene	25U	ug/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
Pyrene	25U	ug/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
TPH by GC-diesel range	0.5U	mg/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
TPH by GC-extended range	0.5U	mg/L	EPA 8270	07/29/10	KTL	Elevated detection limit; reduced volume of sample analyzed.
12DCA-D4 (surr spk)	92	% spike recovery	EPA 8260	07/29/10	JAR	
BFB (surr spk)	88	% spike recovery	EPA 8260	07/29/10	JAR	
Toluene-D8 (surr spk)	96	% spike recovery	EPA 8260	07/29/10	JAR	
2FB (surr spk)	45	% spike recovery	EPA 8270	07/29/10	KTL	
D5-Nitrobenzene (surr spk)	51	% spike recovery	EPA 8270	07/29/10	KTL	
Terphenyl D14 (surr spk)	73	% spike recovery	EPA 8270	07/29/10	KTL	

KAR Laboratories, Inc.

(269) 381-9666

LABORATORY DETAIL REPORT

Client: **Weston Solutions, Inc.**

Attest: 
David R. Alkema, Lab Manager

KAR Project No. : **103014**

Date Reported: **07/30/10**

Project

Description: **Analysis of four samples from Enbridge Oil Spill.**

Sample ID : **Laboratory Method Blank #1**

Sampled By :

Date Received : **07/29/10**

Sample Date :

Sample Type : **LMB**

Sample Time :

KAR Sample No. : **103014-05**

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Sulfur, total, by ICP	0.05U	% by weight	Parr 207M, 200.7	07/29/10	DBL	
Sulfate	1U	mg/L	EPA 300.0A	07/29/10	DMC	
Sulfide	0.1U	mg/L	EPA 376.2	07/30/10	ALK	
Purg. organic solvent scan	See below		EPA 8260	07/29/10	JAR	
Prep. VOA	Completed		EPA 5030	07/29/10	JAR	
1,1,1,2-Tetrachloroethane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,1,1-Trichloroethane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,1,2,2-Tetrachloroethane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,1,2-Trichloroethane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,1-Dichloroethane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,1-Dichloroethene	1U	ug/L	EPA 8260	07/29/10	JAR	
1,1-Dichloropropene	1U	ug/L	EPA 8260	07/29/10	JAR	
1,2,3-Trichlorobenzene	5U	ug/L	EPA 8260	07/29/10	JAR	
1,2,3-Trichloropropane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,2,4-Trichlorobenzene	5U	ug/L	EPA 8260	07/29/10	JAR	
1,2,4-Trimethylbenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
1,2-Dibromo-3-chloropropane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,2-Dibromoethane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,2-Dichlorobenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
1,2-Dichloroethane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,2-Dichloropropane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,3,5-Trimethylbenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
1,3-Dichlorobenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
1,3-Dichloropropane	1U	ug/L	EPA 8260	07/29/10	JAR	
1,4-Dichlorobenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
2,2-Dichloropropane	1U	ug/L	EPA 8260	07/29/10	JAR	
2-Chlorotoluene	5U	ug/L	EPA 8260	07/29/10	JAR	
4-Chlorotoluene	5U	ug/L	EPA 8260	07/29/10	JAR	
4-Methyl-2-pentanone	50U	ug/L	EPA 8260	07/29/10	JAR	
Acetone	50U	ug/L	EPA 8260	07/29/10	JAR	
Acrylonitrile	2U	ug/L	EPA 8260	07/29/10	JAR	
Benzene	1U	ug/L	EPA 8260	07/29/10	JAR	
Bromobenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
Bromochloromethane	1U	ug/L	EPA 8260	07/29/10	JAR	
Bromodichloromethane	1U	ug/L	EPA 8260	07/29/10	JAR	
Bromoform	1U	ug/L	EPA 8260	07/29/10	JAR	
Bromomethane	5U	ug/L	EPA 8260	07/29/10	JAR	
Carbon disulfide	5U	ug/L	EPA 8260	07/29/10	JAR	
Carbon tetrachloride	1U	ug/L	EPA 8260	07/29/10	JAR	

KAR Laboratories, Inc.

(269) 381-9666

LABORATORY DETAIL REPORT

Client: **Weston Solutions, Inc.**

Attest: 
David R. Alkema, Lab Manager

KAR Project No. : **103014**

Date Reported: **07/30/10**

Project

Description: **Analysis of four samples from Enbridge Oil Spill.**

Sample ID : **Laboratory Method Blank #1**

Sampled By :

Date Received : **07/29/10**

Sample Date :

Sample Type : **LMB**

Sample Time :

KAR Sample No. : **103014-05**

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Chlorobenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
Chloroethane	5U	ug/L	EPA 8260	07/29/10	JAR	
Chloroform	1U	ug/L	EPA 8260	07/29/10	JAR	
Chloromethane	5U	ug/L	EPA 8260	07/29/10	JAR	
Cis-1,2-Dichloroethene	1U	ug/L	EPA 8260	07/29/10	JAR	
Cis-1,3-Dichloropropene	1U	ug/L	EPA 8260	07/29/10	JAR	
Dibromochloromethane	5U	ug/L	EPA 8260	07/29/10	JAR	
Dibromomethane	5U	ug/L	EPA 8260	07/29/10	JAR	
Dichlorodifluoromethane	5U	ug/L	EPA 8260	07/29/10	JAR	
Ethylbenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
Ethylene dibromide	1U	ug/L	EPA 8260	07/29/10	JAR	
Hexachlorobutadiene by 8260	1U	ug/L	EPA 8260	07/29/10	JAR	
Isopropylbenzene	5U	ug/L	EPA 8260	07/29/10	JAR	
M-and/or p-xylene	2U	ug/L	EPA 8260	07/29/10	JAR	
Methyl iodide	1U	ug/L	EPA 8260	07/29/10	JAR	
Methylene chloride	5U	ug/L	EPA 8260	07/29/10	JAR	
N-Butylbenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
N-Propylbenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
Naphthalene	5U	ug/L	EPA 8260	07/29/10	JAR	
O-Xylene	1U	ug/L	EPA 8260	07/29/10	JAR	
P-Isopropyltoluene	1U	ug/L	EPA 8260	07/29/10	JAR	
Sec-Butylbenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
Styrene	1U	ug/L	EPA 8260	07/29/10	JAR	
Tert-Butylbenzene	1U	ug/L	EPA 8260	07/29/10	JAR	
Tetrachloroethene	1U	ug/L	EPA 8260	07/29/10	JAR	
Toluene	1U	ug/L	EPA 8260	07/29/10	JAR	
Trans-1,2-Dichloroethene	1U	ug/L	EPA 8260	07/29/10	JAR	
Trans-1,3-Dichloropropene	1U	ug/L	EPA 8260	07/29/10	JAR	
Trans-1,4-Dichloro-2-butene	1U	ug/L	EPA 8260	07/29/10	JAR	
Trichloroethene	1U	ug/L	EPA 8260	07/29/10	JAR	
Trichlorofluoromethane	1U	ug/L	EPA 8260	07/29/10	JAR	
Vinyl chloride	1U	ug/L	EPA 8260	07/29/10	JAR	
TPH by GC-gasoline range	0.1U	mg/L		07/29/10	JAR	
MDNR Scan 7	See below		EPA 8270	07/29/10	KTL	
SVOA surr. - Base/Neutrals	See below		EPA 8270	07/29/10	KTL	
Prep. SV BN	Completed		EPA 3580	07/29/10	KTL	
Acenaphthene	5U	ug/L	EPA 8270	07/29/10	KTL	
Acenaphthylene	5U	ug/L	EPA 8270	07/29/10	KTL	
Anthracene	5U	ug/L	EPA 8270	07/29/10	KTL	

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LABORATORY DETAIL REPORT

Client: **Weston Solutions, Inc.**

KAR Project No. : **103014**

Attest: 
David R. Alkema, Lab Manager

Date Reported: **07/30/10**

Project

Description: **Analysis of four samples from Enbridge Oil Spill.**

Sample ID : **Laboratory Method Blank #1**

Sampled By :

Date Received : **07/29/10**

Sample Date :

Sample Type : **LMB**

Sample Time :

KAR Sample No. : **103014-05**

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Benzo(a)anthracene	5U	ug/L	EPA 8270	07/29/10	KTL	
Benzo(a)pyrene	5U	ug/L	EPA 8270	07/29/10	KTL	
Benzo(b)fluoranthene	5U	ug/L	EPA 8270	07/29/10	KTL	
Benzo(ghi)perylene	5U	ug/L	EPA 8270	07/29/10	KTL	
Benzo(k)fluoranthene	5U	ug/L	EPA 8270	07/29/10	KTL	
Chrysene	5U	ug/L	EPA 8270	07/29/10	KTL	
Dibenzo(ah)anthracene	5U	ug/L	EPA 8270	07/29/10	KTL	
Fluoranthene	5U	ug/L	EPA 8270	07/29/10	KTL	
Fluorene	5U	ug/L	EPA 8270	07/29/10	KTL	
Indeno(123cd)pyrene	5U	ug/L	EPA 8270	07/29/10	KTL	
Naphthalene by Method 8270	5U	ug/L	EPA 8270	07/29/10	KTL	
Phenanthrene	5U	ug/L	EPA 8270	07/29/10	KTL	
Pyrene	5U	ug/L	EPA 8270	07/29/10	KTL	
TPH by GC-diesel range	0.1U	mg/L	EPA 8270	07/29/10	KTL	
TPH by GC-extended range	0.1U	mg/L	EPA 8270	07/29/10	KTL	
12DCA-D4 (surr spk)	94	% spike recovery	EPA 8260	07/29/10	JAR	
BFB (surr spk)	91	% spike recovery	EPA 8260	07/29/10	JAR	
Toluene-D8 (surr spk)	99	% spike recovery	EPA 8260	07/29/10	JAR	
2FB (surr spk)	44	% spike recovery	EPA 8270	07/29/10	KTL	
D5-Nitrobenzene (surr spk)	48	% spike recovery	EPA 8270	07/29/10	KTL	
Terphenyl D14 (surr spk)	67	% spike recovery	EPA 8270	07/29/10	KTL	

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LABORATORY DETAIL REPORT

Client: **Weston Solutions, Inc.**

KAR Project No. : **103014**

Attest: 
David R. Alkema, Lab Manager

Date Reported: **07/30/10**

Project

Description: **Analysis of four samples from Enbridge Oil Spill.**

Sample ID : **Laboratory Method Blank #2**

Sampled By :

Date Received : **07/29/10**

Sample Date :

Sample Type : **LMB**

Sample Time :

KAR Sample No. : **103014-06**

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Sulfur, total, by ICP	0.5U	mg/L	EPA 200.7	07/30/10	DBL	
MDNR Scan 7	See below		EPA 8270	07/29/10	KTL	
SVOA surr. - Base/Neutrals	See below		EPA 8270	07/29/10	KTL	
Prep. SV BN	Completed		EPA 3580	07/29/10	KTL	
Acenaphthene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Acenaphthylene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Anthracene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Benzo(a)anthracene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Benzo(a)pyrene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Benzo(b)fluoranthene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Benzo(ghi)perylene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Benzo(k)fluoranthene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Chrysene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Dibenzo(ah)anthracene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Fluoranthene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Fluorene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Indeno(123cd)pyrene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Naphthalene by Method 8270	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Phenanthrene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
Pyrene	50,000U	ug/kg	EPA 8270	07/29/10	KTL	
TPH by GC-diesel range	1000U	mg/L	EPA 8270	07/29/10	KTL	
TPH by GC-extended range	1000U	mg/L	EPA 8270	07/29/10	KTL	
2FB (surr spk)	63	% spike recovery	EPA 8270	07/29/10	KTL	
D5-Nitrobenzene (surr spk)	79	% spike recovery	EPA 8270	07/29/10	KTL	
Terphenyl D14 (surr spk)	81	% spike recovery	EPA 8270	07/29/10	KTL	

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