



LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-008  
**Client Sample ID:** T2/MB-10-(0-6")

**Report Date:** 12/17/08  
**Collection Date:** 10/21/08 17:00  
**Date Received:** 10/23/08  
**Matrix:** Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SATURATED PASTE</b>							
pH, sat. paste	7.7	s.u.		0.1		ASAM10-3.2	10/30/08 07:47 / sah
Conductivity, sat. paste	0.46	mmhos/cm		0.01		ASA10-3	10/30/08 12:27 / sah
Saturation	43.4	%		0.1		USDA27a	10/30/08 09:11 / sah
Calcium, sat. paste	1.57	meq/l		0.05		SW6010B	11/10/08 09:28 / sld
Magnesium, sat. paste	1.31	meq/l		0.08		SW6010B	11/10/08 09:28 / sld
Sodium, sat. paste	1.52	meq/l		0.04		SW6010B	11/10/08 09:28 / sld
Sodium Adsorption Ratio (SAR)	1.3	unitless		0.01		Calculation	11/21/08 13:59 / sah
Bicarbonate, sat. paste	2.78	meq/L		0.02		ASA10-3	11/05/08 12:32 / abb
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	28	%		1		ASA15-5	10/30/08 15:30 / sah
Silt	42	%		1		ASA15-5	10/30/08 15:30 / sah
Clay	30	%		1		ASA15-5	10/30/08 15:30 / sah
Texture	CL	unitless				ASA15-5	10/30/08 15:30 / sah
<b>CHEMICAL CHARACTERISTICS</b>							
Potassium, NH4OAc Extractable	343	mg/kg		1		ASA13-3	11/07/08 16:11 / sld
Cation Exchange Capacity	28.1	meq/100g		0.09		SW6010B	11/04/08 12:30 / sld
Organic Matter	1.93	%		0.02		ASA29-3	11/03/08 15:48 / sah
Lime as CaCO3	1.9	%		0.1		USDA23c	11/03/08 13:00 / sah
Phosphorus	9.2	mg/kg		0.1		ASA24-5	11/07/08 17:08 / stp
Nitrate as N, KCL Extract	5.3	mg/kg		1.0		ASA38-3	12/15/08 19:30 / stp
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	0.55	meq/100g		0.0044		SW6010B	11/07/08 16:11 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	0.5	meq/100g		0.1		Calculation	11/21/08 13:59 / sah
Exchangeable Sodium Percentage	1.7	%		0.1		USDA20a	11/21/08 13:59 / sah
<b>INORGANICS</b>							
Fluoride	1.1	mg/kg		0.10		E300.0	11/24/08 18:42 / abb
Sulfate, sat. paste	1.5	meq/L		0.021		E300.0	11/24/08 18:42 / abb
Chloride, sat. paste	0.39	meq/L		0.028		E300.0	11/24/08 18:42 / abb
<b>METALS, DTPA EXTRACTABLE</b>							
Zinc	0.16	mg/kg		0.02		SW6010B	11/07/08 11:35 / sld
<b>METALS, WATER SOLUBLE</b>							
Selenium	ND	mg/kg		0.05		E270.3	11/11/08 12:10 / eau

**Report Definitions:** RL - Analyte reporting limit.  
 QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



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**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-008  
**Client Sample ID:** T2/MB-10-(0-6")

**Report Date:** 12/17/08  
**Collection Date:** 10/21/08 17:00  
**Date Received:** 10/23/08  
**Matrix:** Soil

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Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>METALS, CACL2 EXTRACTABLE</b>							
Barium	0.78	mg/kg		0.20		SW6010B	11/07/08 12:24 / sld
Boron	0.28	mg/kg		0.20		SW6010B	11/07/08 12:24 / sld

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-009  
**Client Sample ID:** T2/MB-10-(6-12")

**Report Date:** 12/17/08  
**Collection Date:** 10/21/08 17:00  
**Date Received:** 10/23/08  
**Matrix:** Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SATURATED PASTE</b>							
pH, sat. paste	7.8	s.u.		0.1		ASAM10-3.2	10/30/08 07:48 / sah
Conductivity, sat. paste	0.63	mmhos/cm		0.01		ASA10-3	10/30/08 12:27 / sah
Saturation	46.7	%		0.1		USDA27a	10/30/08 09:11 / sah
Calcium, sat. paste	2.42	meq/l		0.05		SW6010B	11/10/08 09:31 / sld
Magnesium, sat. paste	2.19	meq/l		0.08		SW6010B	11/10/08 09:31 / sld
Sodium, sat. paste	1.58	meq/l		0.04		SW6010B	11/10/08 09:31 / sld
Sodium Adsorption Ratio (SAR)	1.0	unitless		0.01		Calculation	11/21/08 13:59 / sah
Bicarbonate, sat. paste	2.19	meq/L		0.02		ASA10-3	11/05/08 12:32 / abb
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	22	%		1		ASA15-5	10/30/08 15:30 / sah
Silt	46	%		1		ASA15-5	10/30/08 15:30 / sah
Clay	32	%		1		ASA15-5	10/30/08 15:30 / sah
Texture	CL	unitless				ASA15-5	10/30/08 15:30 / sah
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	27.5	meq/100g		0.09		SW6010B	11/04/08 12:32 / sld
Lime as CaCO3	5.0	%		0.1		USDA23c	11/03/08 13:00 / sah
Nitrate as N, KCL Extract	3.6	mg/kg		1.0		ASA38-3	12/15/08 19:32 / stp
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	0.60	meq/100g		0.0044		SW6010B	11/07/08 16:19 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	0.5	meq/100g		0.1		Calculation	11/21/08 13:59 / sah
Exchangeable Sodium Percentage	1.9	%		0.1		USDA20a	11/21/08 13:59 / sah
<b>INORGANICS</b>							
Sulfate, sat. paste	3.5	meq/L		0.021		E300.0	11/24/08 19:01 / abb
Chloride, sat. paste	0.30	meq/L		0.028		E300.0	11/24/08 19:01 / abb

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-010  
**Client Sample ID:** T2/MB-10-(12-24")

**Report Date:** 12/17/08  
**Collection Date:** 10/21/08 17:00  
**Date Received:** 10/23/08  
**Matrix:** Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SATURATED PASTE</b>							
pH, sat. paste	8.0	s.u.		0.1		ASAM10-3.2	10/30/08 07:48 / sah
Conductivity, sat. paste	0.60	mmhos/cm		0.01		ASA10-3	10/30/08 12:28 / sah
Saturation	49.1	%		0.1		USDA27a	10/30/08 09:11 / sah
Calcium, sat. paste	1.83	meq/l		0.05		SW6010B	11/10/08 09:33 / sld
Magnesium, sat. paste	2.35	meq/l		0.08		SW6010B	11/10/08 09:33 / sld
Sodium, sat. paste	1.76	meq/l		0.04		SW6010B	11/10/08 09:33 / sld
Sodium Adsorption Ratio (SAR)	1.2	unitless		0.01		Calculation	11/21/08 13:59 / sah
Bicarbonate, sat. paste	2.19	meq/L		0.02		ASA10-3	11/05/08 12:32 / abb
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	20	%		1		ASA15-5	10/30/08 15:30 / sah
Silt	44	%		1		ASA15-5	10/30/08 15:30 / sah
Clay	36	%		1		ASA15-5	10/30/08 15:30 / sah
Texture	SiCL	unitless				ASA15-5	10/30/08 15:30 / sah
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	27.6	meq/100g		0.09		SW6010B	11/04/08 12:35 / sld
Lime as CaCO3	8.9	%		0.1		USDA23c	11/03/08 13:00 / sah
Nitrate as N, KCL Extract	4.1	mg/kg		1.0		ASA38-3	12/15/08 19:38 / stp
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	0.72	meq/100g		0.0044		SW6010B	11/07/08 16:21 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	0.6	meq/100g		0.1		Calculation	11/21/08 13:59 / sah
Exchangeable Sodium Percentage	2.3	%		0.1		USDA20a	11/21/08 13:59 / sah
<b>INORGANICS</b>							
Sulfate, sat. paste	3.8	meq/L		0.021		E300.0	11/24/08 19:59 / abb
Chloride, sat. paste	0.28	meq/L		0.028		E300.0	11/24/08 19:59 / abb

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-011  
**Client Sample ID:** T2/MB-10-(24-36")

**Report Date:** 12/17/08  
**Collection Date:** 10/21/08 17:00  
**Date Received:** 10/23/08  
**Matrix:** Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SATURATED PASTE</b>							
pH, sat. paste	7.9	s.u.		0.1		ASAM10-3.2	10/30/08 07:51 / sah
Conductivity, sat. paste	0.74	mmhos/cm		0.01		ASA10-3	10/30/08 12:29 / sah
Saturation	46.3	%		0.1		USDA27a	10/30/08 09:12 / sah
Calcium, sat. paste	2.23	meq/l		0.05		SW6010B	11/10/08 09:38 / sld
Magnesium, sat. paste	2.81	meq/l		0.08		SW6010B	11/10/08 09:38 / sld
Sodium, sat. paste	2.21	meq/l		0.04		SW6010B	11/10/08 09:38 / sld
Sodium Adsorption Ratio (SAR)	1.4	unitless		0.01		Calculation	11/21/08 13:59 / sah
Bicarbonate, sat. paste	2.39	meq/L		0.02		ASA10-3	11/05/08 12:32 / abb
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	24	%		1		ASA15-5	10/30/08 15:30 / sah
Silt	44	%		1		ASA15-5	10/30/08 15:30 / sah
Clay	32	%		1		ASA15-5	10/30/08 15:30 / sah
Texture	CL	unitless				ASA15-5	10/30/08 15:30 / sah
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	24.5	meq/100g		0.09		SW6010B	11/04/08 12:40 / sld
Lime as CaCO3	10.6	%		0.1		USDA23c	11/03/08 13:00 / sah
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	0.75	meq/100g		0.0044		SW6010B	11/07/08 16:27 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	0.6	meq/100g		0.1		Calculation	11/21/08 13:59 / sah
Exchangeable Sodium Percentage	2.7	%		0.1		USDA20a	11/21/08 13:59 / sah
<b>INORGANICS</b>							
Chloride, sat. paste	0.20	meq/L		0.028		E300.0	11/24/08 20:38 / abb

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 QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-012  
**Client Sample ID:** T2/MB-10-(36-60")

**Report Date:** 12/17/08  
**Collection Date:** 10/21/08 17:00  
**Date Received:** 10/23/08  
**Matrix:** Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SATURATED PASTE</b>							
pH, sat. paste	7.8	s.u.		0.1		ASAM10-3.2	10/30/08 07:52 / sah
Conductivity, sat. paste	2.28	mmhos/cm		0.01		ASA10-3	10/30/08 12:29 / sah
Saturation	42.9	%		0.1		USDA27a	10/30/08 09:12 / sah
Calcium, sat. paste	9.94	meq/l		0.05		SW6010B	11/10/08 09:41 / sld
Magnesium, sat. paste	11.9	meq/l		0.08		SW6010B	11/10/08 09:41 / sld
Sodium, sat. paste	4.31	meq/l		0.04		SW6010B	11/10/08 09:41 / sld
Sodium Adsorption Ratio (SAR)	1.3	unitless		0.01		Calculation	11/21/08 13:59 / sah
Bicarbonate, sat. paste	1.39	meq/L		0.02		ASA10-3	11/05/08 12:32 / abb
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	36	%		1		ASA15-5	10/30/08 15:30 / sah
Silt	38	%		1		ASA15-5	10/30/08 15:30 / sah
Clay	26	%		1		ASA15-5	10/30/08 15:30 / sah
Texture	L	unitless				ASA15-5	10/30/08 15:30 / sah
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	21.2	meq/100g		0.09		SW6010B	11/04/08 12:43 / sld
Lime as CaCO3	7.6	%		0.1		USDA23c	11/03/08 13:00 / sah
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	0.86	meq/100g		0.0044		SW6010B	11/07/08 16:29 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	0.7	meq/100g		0.1		Calculation	11/21/08 13:59 / sah
Exchangeable Sodium Percentage	3.2	%		0.1		USDA20a	11/21/08 13:59 / sah
<b>INORGANICS</b>							
Fluoride	1.3	mg/kg		0.10		E300.0	11/24/08 20:58 / abb
Chloride, sat. paste	0.17	meq/L		0.028		E300.0	11/24/08 20:58 / abb
<b>METALS, WATER SOLUBLE</b>							
Selenium	ND	mg/kg		0.05		E270.3	11/11/08 12:12 / eau
<b>METALS, CaCl2 EXTRACTABLE</b>							
Barium	ND	mg/kg		0.20		SW6010B	11/07/08 12:27 / sld
Boron	0.41	mg/kg		0.20		SW6010B	11/07/08 12:27 / sld

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-013  
**Client Sample ID:** T2/MB-10-(60-96")

**Report Date:** 12/17/08  
**Collection Date:** 10/21/08 17:00  
**Date Received:** 10/23/08  
**Matrix:** Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SATURATED PASTE</b>							
pH, sat. paste	7.7	s.u.		0.1		ASAM10-3.2	10/30/08 07:53 / sah
Conductivity, sat. paste	3.78	mmhos/cm		0.01		ASA10-3	10/30/08 12:29 / sah
Saturation	43.5	%		0.1		USDA27a	10/30/08 09:12 / sah
Calcium, sat. paste	17.5	meq/l		0.05		SW6010B	11/10/08 09:44 / sld
Magnesium, sat. paste	20.1	meq/l		0.08		SW6010B	11/10/08 09:44 / sld
Sodium, sat. paste	8.41	meq/l		0.04		SW6010B	11/10/08 09:44 / sld
Sodium Adsorption Ratio (SAR)	1.9	unitless		0.01		Calculation	11/21/08 13:59 / sah
Bicarbonate, sat. paste	1.39	meq/L		0.02		ASA10-3	11/05/08 12:32 / abb
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	40	%		1		ASA15-5	10/30/08 15:30 / sah
Silt	34	%		1		ASA15-5	10/30/08 15:30 / sah
Clay	26	%		1		ASA15-5	10/30/08 15:30 / sah
Texture	L	unitless				ASA15-5	10/30/08 15:30 / sah
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	20.5	meq/100g		0.09		SW6010B	11/04/08 12:45 / sld
Lime as CaCO3	5.2	%		0.1		USDA23c	11/03/08 13:00 / sah
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	1.3	meq/100g		0.0044		SW6010B	11/07/08 16:32 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	0.9	meq/100g		0.1		Calculation	11/21/08 13:59 / sah
Exchangeable Sodium Percentage	4.4	%		0.1		USDA20a	11/21/08 13:59 / sah
<b>INORGANICS</b>							
Chloride, sat. paste	0.25	meq/L		0.028		E300.0	11/24/08 21:17 / abb

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-014  
**Client Sample ID:** T2/MB-10-(0-2")

**Report Date:** 12/17/08  
**Collection Date:** 10/21/08 17:00  
**Date Received:** 10/23/08  
**Matrix:** Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SATURATED PASTE</b>							
pH, sat. paste	7.7	s.u.		0.1		ASAM10-3.2	10/30/08 07:53 / sah
Conductivity, sat. paste	0.54	mmhos/cm		0.01		ASA10-3	10/30/08 12:30 / sah
Saturation	42.4	%		0.1		USDA27a	10/30/08 09:12 / sah
Calcium, sat. paste	1.78	meq/l		0.05		SW6010B	11/10/08 09:46 / sld
Magnesium, sat. paste	1.70	meq/l		0.08		SW6010B	11/10/08 09:46 / sld
Sodium, sat. paste	1.23	meq/l		0.04		SW6010B	11/10/08 09:46 / sld
Sodium Adsorption Ratio (SAR)	0.93	unitless		0.01		Calculation	11/21/08 13:59 / sah
Bicarbonate, sat. paste	3.18	meq/L		0.02		ASA10-3	11/05/08 12:32 / abb
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	20	%		1		ASA15-5	10/30/08 15:30 / sah
Silt	52	%		1		ASA15-5	10/30/08 15:30 / sah
Clay	28	%		1		ASA15-5	10/30/08 15:30 / sah
Texture	SiCL	unitless				ASA15-5	10/30/08 15:30 / sah
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	26.1	meq/100g		0.09		SW6010B	11/04/08 12:48 / sld
Lime as CaCO3	0.3	%		0.1		USDA23c	11/03/08 13:00 / sah
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	0.50	meq/100g		0.0044		SW6010B	11/07/08 16:34 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	0.4	meq/100g		0.1		Calculation	11/21/08 13:59 / sah
Exchangeable Sodium Percentage	1.7	%		0.1		USDA20a	11/21/08 13:59 / sah
<b>INORGANICS</b>							
Chloride, sat. paste	0.31	meq/L		0.028		E300.0	11/24/08 21:37 / abb

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