



LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-015  
**Client Sample ID:** T2/LA-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	7.3	s.u.		0.1		ASAM10-3.2	10/30/08 07:54 / sah
Conductivity, sat. paste	1.46	mmhos/cm		0.01		ASA10-3	10/30/08 12:30 / sah
Saturation	54.1	%		0.1		USDA27a	10/30/08 09:12 / sah
Calcium, sat. paste	8.93	meq/l		0.05		SW6010B	11/10/08 09:49 / sld
Magnesium, sat. paste	4.24	meq/l		0.08		SW6010B	11/10/08 09:49 / sld
Sodium, sat. paste	2.44	meq/l		0.04		SW6010B	11/10/08 09:49 / sld
Sodium Adsorption Ratio (SAR)	0.95	unitless		0.01		Calculation	11/21/08 13:59 / sah
Bicarbonate, sat. paste	4.27	meq/L		0.02		ASA10-3	11/05/08 12:32 / abb
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	30	%		1		ASA15-5	10/30/08 15:30 / sah
Silt	46	%		1		ASA15-5	10/30/08 15:30 / sah
Clay	24	%		1		ASA15-5	10/30/08 15:30 / sah
Texture	L	unitless				ASA15-5	10/30/08 15:30 / sah
<b>CHEMICAL CHARACTERISTICS</b>							
Potassium, NH4OAc Extractable	176	mg/kg		1		ASA13-3	11/07/08 16:37 / sld
Cation Exchange Capacity	30.0	meq/100g		0.09		SW6010B	11/04/08 12:56 / sld
Organic Matter	4.14	%		0.02		ASA29-3	11/03/08 15:48 / sah
Lime as CaCO3	9.5	%		0.1		USDA23c	11/03/08 13:00 / sah
Phosphorus	14	mg/kg		0.1		ASA24-5	11/07/08 17:09 / stp
Nitrate as N, KCL Extract	5.2	mg/kg		1.0		ASA38-3	12/15/08 19:42 / stp
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	0.65	meq/100g		0.0044		SW6010B	11/07/08 16:37 / 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	0.58	mg/kg		0.10		E300.0	11/24/08 21:56 / abb
Sulfate, sat. paste	10	meq/L		0.021		E300.0	11/24/08 21:56 / abb
Chloride, sat. paste	0.32	meq/L		0.028		E300.0	11/24/08 21:56 / abb
<b>METALS, DTPA EXTRACTABLE</b>							
Zinc	0.87	mg/kg		0.02		SW6010B	11/07/08 11:38 / sld
<b>METALS, WATER SOLUBLE</b>							
Selenium	ND	mg/kg		0.05		E270.3	11/11/08 12:13 / 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:** H08100303-015  
**Client Sample ID:** T2/LA-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	0.85	mg/kg		0.20		SW6010B	11/07/08 12:35 / sld
Boron	0.30	mg/kg		0.20		SW6010B	11/07/08 12:35 / sld

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-016  
**Client Sample ID:** T2/LA-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	7.5	s.u.		0.1		ASAM10-3.2	10/30/08 07:55 / sah
Conductivity, sat. paste	2.39	mmhos/cm		0.01		ASA10-3	10/30/08 12:30 / sah
Saturation	48.5	%		0.1		USDA27a	10/30/08 09:12 / sah
Calcium, sat. paste	13.4	meq/l		0.05		SW6010B	11/10/08 09:51 / sld
Magnesium, sat. paste	8.67	meq/l		0.08		SW6010B	11/10/08 09:51 / sld
Sodium, sat. paste	8.55	meq/l		0.04		SW6010B	11/10/08 09:51 / sld
Sodium Adsorption Ratio (SAR)	2.6	unitless		0.01		Calculation	11/21/08 13:59 / sah
Bicarbonate, sat. paste	3.78	meq/L		0.02		ASA10-3	11/05/08 12:32 / abb
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	34	%		1		ASA15-5	10/30/08 15:30 / sah
Silt	40	%		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	29.6	meq/100g		0.09		SW6010B	11/04/08 13:03 / sld
Lime as CaCO3	7.5	%		0.1		USDA23c	11/03/08 13:00 / sah
Nitrate as N, KCL Extract	4.2	mg/kg		1.0		ASA38-3	12/15/08 19:44 / stp
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	1.5	meq/100g		0.0044		SW6010B	11/07/08 16:50 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	1.0	meq/100g		0.1		Calculation	11/21/08 13:59 / sah
Exchangeable Sodium Percentage	3.5	%		0.1		USDA20a	11/21/08 13:59 / sah
<b>INORGANICS</b>							
Sulfate, sat. paste	27	meq/L		0.021		E300.0	11/24/08 22:54 / abb
Chloride, sat. paste	0.57	meq/L		0.028		E300.0	11/24/08 22:54 / abb

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-017  
**Client Sample ID:** T2/LA-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	7.8	s.u.		0.1		ASAM10-3.2	10/30/08 07:56 / sah
Conductivity, sat. paste	4.64	mmhos/cm		0.01		ASA10-3	10/30/08 12:31 / sah
Saturation	38.2	%		0.1		USDA27a	10/30/08 09:12 / sah
Calcium, sat. paste	17.3	meq/l		0.05		SW6010B	11/10/08 09:59 / sld
Magnesium, sat. paste	18.9	meq/l		0.08		SW6010B	11/10/08 09:59 / sld
Sodium, sat. paste	18.4	meq/l		0.04		SW6010B	11/10/08 09:59 / sld
Sodium Adsorption Ratio (SAR)	4.3	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	24	%		1		ASA15-5	10/30/08 15:30 / sah
Silt	56	%		1		ASA15-5	10/30/08 15:30 / sah
Clay	20	%		1		ASA15-5	10/30/08 15:30 / sah
Texture	SiL	unitless				ASA15-5	10/30/08 15:30 / sah
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	20.4	meq/100g		0.09		SW6010B	11/04/08 13:06 / sld
Lime as CaCO3	3.2	%		0.1		USDA23c	11/03/08 13:00 / sah
Nitrate as N, KCL Extract	7.8	mg/kg		1.0		ASA38-3	12/15/08 19:46 / stp
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	1.8	meq/100g		0.0044		SW6010B	11/07/08 16:52 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	1.2	meq/100g		0.1		Calculation	11/21/08 13:59 / sah
Exchangeable Sodium Percentage	5.6	%		0.1		USDA20a	11/21/08 13:59 / sah
<b>INORGANICS</b>							
Sulfate, sat. paste	51	meq/L		0.021		E300.0	11/24/08 23:14 / abb
Chloride, sat. paste	0.98	meq/L		0.028		E300.0	11/24/08 23:14 / abb

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-018  
**Client Sample ID:** T2/LA-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	7.8	s.u.		0.1		ASAM10-3.2	10/30/08 07:56 / sah
Conductivity, sat. paste	2.74	mmhos/cm		0.01		ASA10-3	10/30/08 12:31 / sah
Saturation	44.5	%		0.1		USDA27a	10/30/08 09:12 / sah
Calcium, sat. paste	11.0	meq/l		0.05		SW6010B	11/10/08 10:02 / sld
Magnesium, sat. paste	8.69	meq/l		0.08		SW6010B	11/10/08 10:02 / sld
Sodium, sat. paste	9.69	meq/l		0.04		SW6010B	11/10/08 10:02 / sld
Sodium Adsorption Ratio (SAR)	3.1	unitless		0.01		Calculation	11/21/08 13:59 / sah
Bicarbonate, sat. paste	2.12	meq/L		0.02		ASA10-3	11/05/08 12:32 / abb
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	32	%		1		ASA15-5	10/30/08 15:30 / sah
Silt	44	%		1		ASA15-5	10/30/08 15:30 / sah
Clay	24	%		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	25.2	meq/100g		0.09		SW6010B	11/04/08 13:09 / sld
Lime as CaCO3	6.4	%		0.1		USDA23c	11/03/08 13:00 / sah
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	1.5	meq/100g		0.0044		SW6010B	11/07/08 16:55 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	1.1	meq/100g		0.1		Calculation	11/21/08 13:59 / sah
Exchangeable Sodium Percentage	4.3	%		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 23:33 / abb

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 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-019  
**Client Sample ID:** T2/LA-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 07:58 / sah
Conductivity, sat. paste	4.19	mmhos/cm		0.01		ASA10-3	10/30/08 12:32 / sah
Saturation	37.3	%		0.1		USDA27a	10/30/08 09:12 / sah
Calcium, sat. paste	14.6	meq/l		0.05		SW6010B	11/10/08 10:04 / sld
Magnesium, sat. paste	18.2	meq/l		0.08		SW6010B	11/10/08 10:04 / sld
Sodium, sat. paste	14.9	meq/l		0.04		SW6010B	11/10/08 10:04 / sld
Sodium Adsorption Ratio (SAR)	3.7	unitless		0.01		Calculation	11/21/08 13:59 / sah
Bicarbonate, sat. paste	1.59	meq/L		0.02		ASA10-3	11/05/08 12:32 / abb
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	52	%		1		ASA15-5	10/30/08 15:30 / sah
Silt	30	%		1		ASA15-5	10/30/08 15:30 / sah
Clay	18	%		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	18.5	meq/100g		0.09		SW6010B	11/04/08 13:11 / sld
Lime as CaCO3	6.7	%		0.1		USDA23c	11/03/08 13:00 / sah
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	1.7	meq/100g		0.0044		SW6010B	11/07/08 16:58 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	1.1	meq/100g		0.1		Calculation	11/21/08 13:59 / sah
Exchangeable Sodium Percentage	6.0	%		0.1		USDA20a	11/21/08 13:59 / sah
<b>INORGANICS</b>							
Fluoride	2.3	mg/kg		0.10		E300.0	11/25/08 00:31 / abb
Chloride, sat. paste	0.30	meq/L		0.028		E300.0	11/25/08 00:31 / abb
<b>METALS, WATER SOLUBLE</b>							
Selenium	ND	mg/kg		0.05		E270.3	11/11/08 12:15 / eau
<b>METALS, CaCl2 EXTRACTABLE</b>							
Barium	ND	mg/kg		0.20		SW6010B	11/07/08 12:37 / sld
Boron	0.40	mg/kg		0.20		SW6010B	11/07/08 12:37 / sld

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-020  
**Client Sample ID:** T2/LA-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	7.9	s.u.		0.1		ASAM10-3.2	10/30/08 07:59 / sah
Conductivity, sat. paste	3.00	mmhos/cm		0.01		ASA10-3	10/30/08 12:32 / sah
Saturation	29.9	%		0.1		USDA27a	10/30/08 09:12 / sah
Calcium, sat. paste	5.23	meq/l		0.05		SW6010B	11/10/08 10:07 / sld
Magnesium, sat. paste	9.00	meq/l		0.08		SW6010B	11/10/08 10:07 / sld
Sodium, sat. paste	15.0	meq/l		0.04		SW6010B	11/10/08 10:07 / sld
Sodium Adsorption Ratio (SAR)	5.6	unitless		0.01		Calculation	11/21/08 13:59 / sah
Bicarbonate, sat. paste	1.79	meq/L		0.02		ASA10-3	11/05/08 12:32 / abb
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	62	%		1		ASA15-5	10/30/08 15:30 / sah
Silt	24	%		1		ASA15-5	10/30/08 15:30 / sah
Clay	14	%		1		ASA15-5	10/30/08 15:30 / sah
Texture	SL	unitless				ASA15-5	10/30/08 15:30 / sah
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	15.5	meq/100g		0.09		SW6010B	11/04/08 13:14 / sld
Lime as CaCO3	7.6	%		0.1		USDA23c	11/03/08 13:00 / sah
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	1.7	meq/100g		0.0044		SW6010B	11/07/08 17:00 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	1.3	meq/100g		0.1		Calculation	11/21/08 13:59 / sah
Exchangeable Sodium Percentage	8.4	%		0.1		USDA20a	11/21/08 13:59 / sah
<b>INORGANICS</b>							
Chloride, sat. paste	0.35	meq/L		0.028		E300.0	11/25/08 00:51 / abb

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc.  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08100303-021  
**Client Sample ID:** T2/LA-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	7.4	s.u.		0.1		ASAM10-3.2	10/30/08 08:01 / sah
Conductivity, sat. paste	0.57	mmhos/cm		0.01		ASA10-3	10/30/08 12:33 / sah
Saturation	56.8	%		0.1		USDA27a	10/30/08 09:12 / sah
Calcium, sat. paste	2.86	meq/l		0.05		SW6010B	11/10/08 10:12 / sld
Magnesium, sat. paste	1.37	meq/l		0.08		SW6010B	11/10/08 10:12 / sld
Sodium, sat. paste	0.98	meq/l		0.04		SW6010B	11/10/08 10:12 / sld
Sodium Adsorption Ratio (SAR)	0.67	unitless		0.01		Calculation	11/21/08 13:59 / sah
Bicarbonate, sat. paste	4.57	meq/L		0.02		ASA10-3	11/05/08 12:32 / abb
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	34	%		1		ASA15-5	10/30/08 15:30 / sah
Silt	42	%		1		ASA15-5	10/30/08 15:30 / sah
Clay	24	%		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	33.4	meq/100g		0.09		SW6010B	11/04/08 13:19 / sld
Lime as CaCO3	4.8	%		0.1		USDA23c	11/03/08 13:00 / sah
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	0.45	meq/100g		0.0044		SW6010B	11/07/08 17:05 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	0.4	meq/100g		0.1		Calculation	11/21/08 13:59 / sah
Exchangeable Sodium Percentage	1.2	%		0.1		USDA20a	11/21/08 13:59 / sah
<b>INORGANICS</b>							
Chloride, sat. paste	0.34	meq/L		0.028		E300.0	11/25/08 01:30 / abb

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