



LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08080285-001  
**Client Sample ID:** T2/BHA-10 (0-6")

**Report Date:** 11/23/08  
**Collection Date:** 08/10/08 17:00  
**Date Received:** 08/18/08  
**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	08/21/08 13:47 / wj
Conductivity, sat. paste	0.71	mmhos/cm		0.01		ASAM10-3	08/21/08 13:47 / wj
Saturation	54.9	%		0.1		USDA27a	08/21/08 13:47 / wj
Sodium Adsorption Ratio (SAR)	2.2	unitless		0.01		Calculation	08/21/08 13:47 / wj
Bicarbonate, sat. paste	4.12	meq/L		0.02		ASA10-3	08/25/08 11:39 / wj
<b>SATURATED PASTE</b>							
Calcium, sat. paste	1.79	meq/l		0.05		SW6010B	08/25/08 16:29 / sld
Magnesium, sat. paste	1.17	meq/l		0.08		SW6010B	08/25/08 16:29 / sld
Sodium, sat. paste	2.69	meq/l		0.04		SW6010B	08/25/08 16:29 / sld
Sulfate, sat. paste	3.46	meq/L		0.02		SW6010B	08/25/08 16:29 / sld
Chloride, sat. paste	0.70	meq/L		0.03		SW6010B	08/27/08 08:00 / skd
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	14	%		1		ASA15-5	08/21/08 13:47 / wj
Silt	42	%		1		ASA15-5	08/21/08 13:47 / wj
Clay	44	%		1		ASA15-5	08/21/08 13:47 / wj
Texture	SiC	unitless				ASA15-5	08/21/08 13:47 / wj
<b>CHEMICAL CHARACTERISTICS</b>							
Fluoride	1.2	mg/kg		1.0		A4500-F C	10/08/08 14:15 / kjw
Potassium, NH4OAc Extractable	292	meq/100g		1		ASA13-3	08/29/08 11:47 / sld
Organic Matter	1.32	%		0.02		ASA29-3	08/21/08 13:21 / wj
Cation Exchange Capacity	33.3	meq/100g		0.09		SW6010B	08/26/08 15:21 / sld
Lime as CaCO3	2.5	%		0.1		USDA23c	08/25/08 00:00 / wj
Phosphorus	2	mg/kg		2		ASA24-5	08/27/08 09:51 / sld
Nitrate as N, KCL Extract	6.4	mg/kg		1.0		ASA38-3	08/27/08 17:47 / sld
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	1.21	meq/100g		0.04		SW6010B	08/29/08 11:47 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	1.1	meq/100g		0.1		Calculation	08/21/08 13:47 / wj
Exchangeable Sodium Percentage	3.2	%		0.1		USDA20a	08/21/08 13:47 / wj
<b>METALS, WATER SOLUBLE</b>							
Selenium	ND	mg/kg		0.05		E270.3	09/08/08 15:45 / eau
<b>METALS, DTPA EXTRACTABLE</b>							
Zinc	0.69	mg/kg		0.02		SW6010B	09/04/08 10:54 / sld

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

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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:** H08080285-001  
**Client Sample ID:** T2/BHA-10 (0-6")

**Report Date:** 11/23/08  
**Collection Date:** 08/10/08 17:00  
**Date Received:** 08/18/08  
**Matrix:** Soil

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Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>METALS, CACL2 EXTRACTABLE</b>							
Barium	0.71	mg/kg		0.20		SW6010B	09/11/08 09:30 / sld
Boron	0.37	mg/kg		0.20		SW6010B	09/04/08 13:45 / sld

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08080285-002  
**Client Sample ID:** T2/BHA-10 (6-12")

**Report Date:** 11/23/08  
**Collection Date:** 08/10/08 17:00  
**Date Received:** 08/18/08  
**Matrix:** Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SATURATED PASTE</b>							
pH, sat. paste	7.6	s.u.		0.1		ASAM10-3.2	08/21/08 13:47 / wj
Conductivity, sat. paste	0.52	mmhos/cm		0.01		ASAM10-3	08/21/08 13:47 / wj
Saturation	52.7	%		0.1		USDA27a	08/21/08 13:47 / wj
Sodium Adsorption Ratio (SAR)	2.3	unitless		0.01		Calculation	08/21/08 13:47 / wj
Bicarbonate, sat. paste	3.41	meq/L		0.02		ASA10-3	08/25/08 11:39 / wj
<b>SATURATED PASTE</b>							
Calcium, sat. paste	1.73	meq/l		0.05		SW6010B	08/25/08 16:32 / sld
Magnesium, sat. paste	0.82	meq/l		0.08		SW6010B	08/25/08 16:32 / sld
Sodium, sat. paste	2.60	meq/l		0.04		SW6010B	08/25/08 16:32 / sld
Sulfate, sat. paste	3.18	meq/L		0.02		SW6010B	08/25/08 16:32 / sld
Chloride, sat. paste	0.33	meq/L		0.03		SW6010B	08/27/08 08:00 / skd
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	12	%		1		ASA15-5	08/21/08 13:47 / wj
Silt	43	%		1		ASA15-5	08/21/08 13:47 / wj
Clay	45	%		1		ASA15-5	08/21/08 13:47 / wj
Texture	SiC	unitless				ASA15-5	08/21/08 13:47 / wj
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	30.2	meq/100g		0.09		SW6010B	08/26/08 15:23 / sld
Lime as CaCO3	4.0	%		0.1		USDA23c	08/25/08 00:00 / wj
Nitrate as N, KCL Extract	5.2	mg/kg		1.0		ASA38-3	08/27/08 17:49 / sld
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	1.29	meq/100g		0.04		SW6010B	08/29/08 11:54 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	1.2	meq/100g		0.1		Calculation	08/21/08 13:47 / wj
Exchangeable Sodium Percentage	3.8	%		0.1		USDA20a	08/21/08 13:47 / wj

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08080285-003  
**Client Sample ID:** T2/BHA-10 (12-24")

**Report Date:** 11/23/08  
**Collection Date:** 08/10/08 17:00  
**Date Received:** 08/18/08  
**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	08/21/08 13:47 / wj
Conductivity, sat. paste	0.63	mmhos/cm		0.01		ASAM10-3	08/21/08 13:47 / wj
Saturation	53.0	%		0.1		USDA27a	08/21/08 13:47 / wj
Sodium Adsorption Ratio (SAR)	2.4	unitless		0.01		Calculation	08/21/08 13:47 / wj
Bicarbonate, sat. paste	2.91	meq/L		0.02		ASA10-3	08/25/08 11:39 / wj
<b>SATURATED PASTE</b>							
Calcium, sat. paste	2.48	meq/l		0.05		SW6010B	08/25/08 16:39 / sld
Magnesium, sat. paste	1.18	meq/l		0.08		SW6010B	08/25/08 16:39 / sld
Sodium, sat. paste	3.23	meq/l		0.04		SW6010B	08/25/08 16:39 / sld
Sulfate, sat. paste	5.03	meq/L		0.02		SW6010B	08/25/08 16:39 / sld
Chloride, sat. paste	0.33	meq/L		0.03		SW6010B	08/27/08 08:00 / skd
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	11	%		1		ASA15-5	08/21/08 13:47 / wj
Silt	45	%		1		ASA15-5	08/21/08 13:47 / wj
Clay	44	%		1		ASA15-5	08/21/08 13:47 / wj
Texture	SiC	unitless				ASA15-5	08/21/08 13:47 / wj
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	19.2	meq/100g		0.09		SW6010B	08/26/08 15:26 / sld
Lime as CaCO3	4.9	%		0.1		USDA23c	08/25/08 00:00 / wj
Nitrate as N, KCL Extract	4.0	mg/kg		1.0		ASA38-3	08/27/08 17:51 / sld
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	1.32	meq/100g		0.04		SW6010B	08/29/08 11:57 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	1.2	meq/100g		0.1		Calculation	08/21/08 13:47 / wj
Exchangeable Sodium Percentage	6.0	%		0.1		USDA20a	08/21/08 13:47 / wj

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08080285-004  
**Client Sample ID:** T2/BHA-10 (24-36")

**Report Date:** 11/23/08  
**Collection Date:** 08/10/08 17:00  
**Date Received:** 08/18/08  
**Matrix:** Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SATURATED PASTE</b>							
pH, sat. paste	7.6	s.u.		0.1		ASAM10-3.2	08/21/08 13:47 / wj
Conductivity, sat. paste	2.38	mmhos/cm		0.01		ASAM10-3	08/21/08 13:47 / wj
Saturation	55.0	%		0.1		USDA27a	08/21/08 13:47 / wj
Sodium Adsorption Ratio (SAR)	1.6	unitless		0.01		Calculation	08/21/08 13:47 / wj
Bicarbonate, sat. paste	1.41	meq/L		0.02		ASA10-3	08/25/08 11:39 / wj
<b>SATURATED PASTE</b>							
Calcium, sat. paste	19.1	meq/l		0.05		SW6010B	08/25/08 16:42 / sld
Magnesium, sat. paste	8.21	meq/l		0.08		SW6010B	08/25/08 16:42 / sld
Sodium, sat. paste	6.03	meq/l		0.04		SW6010B	08/25/08 16:42 / sld
Chloride, sat. paste	0.34	meq/L		0.03		SW6010B	08/27/08 08:00 / skd
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	8	%		1		ASA15-5	08/21/08 13:47 / wj
Silt	46	%		1		ASA15-5	08/21/08 13:47 / wj
Clay	46	%		1		ASA15-5	08/21/08 13:47 / wj
Texture	SiC	unitless				ASA15-5	08/21/08 13:47 / wj
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	20.7	meq/100g		0.09		SW6010B	08/26/08 15:28 / sld
Lime as CaCO3	4.0	%		0.1		USDA23c	08/25/08 00:00 / wj
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	1.36	meq/100g		0.04		SW6010B	08/29/08 12:00 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	1.0	meq/100g		0.1		Calculation	08/21/08 13:47 / wj
Exchangeable Sodium Percentage	5.0	%		0.1		USDA20a	08/21/08 13:47 / wj

**Report Definitions:** RL - Analyte reporting limit.  
 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:** H08080285-005  
**Client Sample ID:** T2/BHA-10 (36-60")

**Report Date:** 11/23/08  
**Collection Date:** 08/10/08 17:00  
**Date Received:** 08/18/08  
**Matrix:** Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SATURATED PASTE</b>							
pH, sat. paste	7.6	s.u.		0.1		ASAM10-3.2	08/21/08 13:47 / wj
Conductivity, sat. paste	2.22	mmhos/cm		0.01		ASAM10-3	08/21/08 13:47 / wj
Saturation	50.6	%		0.1		USDA27a	08/21/08 13:47 / wj
Sodium Adsorption Ratio (SAR)	1.6	unitless		0.01		Calculation	08/21/08 13:47 / wj
Bicarbonate, sat. paste	1.31	meq/L		0.02		ASA10-3	08/25/08 11:39 / wj
<b>SATURATED PASTE</b>							
Calcium, sat. paste	19.6	meq/l		0.05		SW6010B	08/25/08 16:45 / sld
Magnesium, sat. paste	6.81	meq/l		0.08		SW6010B	08/25/08 16:45 / sld
Sodium, sat. paste	5.66	meq/l		0.04		SW6010B	08/25/08 16:45 / sld
Chloride, sat. paste	0.51	meq/L		0.03		SW6010B	08/27/08 08:00 / skd
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	16	%		1		ASA15-5	08/21/08 13:47 / wj
Silt	48	%		1		ASA15-5	08/21/08 13:47 / wj
Clay	36	%		1		ASA15-5	08/21/08 13:47 / wj
Texture	SiCL	unitless				ASA15-5	08/21/08 13:47 / wj
<b>CHEMICAL CHARACTERISTICS</b>							
Fluoride	1.3	mg/kg		1.0		A4500-F C	10/08/08 14:15 / kjw
Cation Exchange Capacity	20.6	meq/100g		0.09		SW6010B	08/26/08 15:36 / sld
Lime as CaCO3	2.5	%		0.1		USDA23c	08/25/08 00:00 / wj
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	1.33	meq/100g		0.04		SW6010B	08/29/08 12:02 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	1.0	meq/100g		0.1		Calculation	08/21/08 13:47 / wj
Exchangeable Sodium Percentage	5.0	%		0.1		USDA20a	08/21/08 13:47 / wj
<b>METALS, WATER SOLUBLE</b>							
Selenium	ND	mg/kg		0.05		E270.3	09/08/08 15:47 / eau
<b>METALS, CaCL2 EXTRACTABLE</b>							
Barium	ND	mg/kg		0.20		SW6010B	09/11/08 09:33 / sld
Boron	0.59	mg/kg		0.20		SW6010B	09/04/08 13:48 / sld

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08080285-006  
**Client Sample ID:** T2/BHA-10 (60-96")

**Report Date:** 11/23/08  
**Collection Date:** 08/10/08 17:00  
**Date Received:** 08/18/08  
**Matrix:** Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SATURATED PASTE</b>							
pH, sat. paste	7.6	s.u.		0.1		ASAM10-3.2	08/21/08 13:47 / wj
Conductivity, sat. paste	2.48	mmhos/cm		0.01		ASAM10-3	08/21/08 13:47 / wj
Saturation	46.3	%		0.1		USDA27a	08/21/08 13:47 / wj
Sodium Adsorption Ratio (SAR)	1.6	unitless		0.01		Calculation	08/21/08 13:47 / wj
Bicarbonate, sat. paste	1.51	meq/L		0.02		ASA10-3	08/25/08 11:39 / wj
<b>SATURATED PASTE</b>							
Calcium, sat. paste	20.4	meq/l		0.05		SW6010B	08/25/08 16:47 / sld
Magnesium, sat. paste	9.42	meq/l		0.08		SW6010B	08/25/08 16:47 / sld
Sodium, sat. paste	6.09	meq/l		0.04		SW6010B	08/25/08 16:47 / sld
Chloride, sat. paste	0.57	meq/L		0.03		SW6010B	08/27/08 08:00 / skd
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	28	%		1		ASA15-5	08/21/08 13:47 / wj
Silt	38	%		1		ASA15-5	08/21/08 13:47 / wj
Clay	34	%		1		ASA15-5	08/21/08 13:47 / wj
Texture	CL	unitless				ASA15-5	08/21/08 13:47 / wj
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	25.6	meq/100g		0.09		SW6010B	08/26/08 15:44 / sld
Lime as CaCO3	6.6	%		0.1		USDA23c	08/25/08 00:00 / wj
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	1.31	meq/100g		0.04		SW6010B	08/29/08 12:05 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	1.0	meq/100g		0.1		Calculation	08/21/08 13:47 / wj
Exchangeable Sodium Percentage	4.0	%		0.1		USDA20a	08/21/08 13:47 / wj

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LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc  
**Project:** TRIP Tier II (formerly referred to as AMPP)  
**Lab ID:** H08080285-007  
**Client Sample ID:** T2/BHA-10 (0-2")

**Report Date:** 11/23/08  
**Collection Date:** 08/10/08 17:00  
**Date Received:** 08/18/08  
**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	08/21/08 13:47 / wj
Conductivity, sat. paste	0.69	mmhos/cm		0.01		ASAM10-3	08/21/08 13:47 / wj
Saturation	49.9	%		0.1		USDA27a	08/21/08 13:47 / wj
Sodium Adsorption Ratio (SAR)	2.2	unitless		0.01		Calculation	08/21/08 13:47 / wj
Bicarbonate, sat. paste	5.12	meq/L		0.02		ASA10-3	08/25/08 11:39 / wj
<b>SATURATED PASTE</b>							
Calcium, sat. paste	2.91	meq/l		0.05		SW6010B	08/25/08 16:50 / sld
Magnesium, sat. paste	1.22	meq/l		0.08		SW6010B	08/25/08 16:50 / sld
Sodium, sat. paste	3.19	meq/l		0.04		SW6010B	08/25/08 16:50 / sld
Chloride, sat. paste	1.93	meq/L		0.03		SW6010B	08/27/08 08:00 / skd
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	24	%		1		ASA15-5	08/21/08 13:47 / wj
Silt	34	%		1		ASA15-5	08/21/08 13:47 / wj
Clay	42	%		1		ASA15-5	08/21/08 13:47 / wj
Texture	C	unitless				ASA15-5	08/21/08 13:47 / wj
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	32.0	meq/100g		0.09		SW6010B	08/26/08 15:47 / sld
Lime as CaCO3	2.5	%		0.1		USDA23c	08/25/08 00:00 / wj
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	1.14	meq/100g		0.04		SW6010B	08/29/08 12:13 / sld
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	1.0	meq/100g		0.1		Calculation	08/21/08 13:47 / wj
Exchangeable Sodium Percentage	3.1	%		0.1		USDA20a	08/21/08 13:47 / wj

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MCL - Maximum contaminant level.  
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