



LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc  
**Project:** Tier II  
**Lab ID:** H06120136-078  
**Client Sample ID:** T2/YBA-10 (0-6")

**Report Date:** 01/17/07  
**Collection Date:** 12/13/06 17:00  
**Date Received:** 12/15/06  
**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	01/04/07 12:21 / jjm
Conductivity, sat. paste	0.75	mmhos/cm		0.01		ASAM10-3	01/04/07 12:21 / jjm
Saturation	47.2	%		0.1		USDA27a	01/04/07 12:21 / jjm
Sodium Adsorption Ratio (SAR)	0.80	unitless		0.01		Calculation	01/04/07 12:21 / jjm
Bicarbonate, sat. paste	5.68	meq/L		0.02		ASA10-3	01/09/07 10:33 / abb
<b>SATURATED PASTE</b>							
Calcium, sat. paste	4.08	meq/l		0.05		SW6010B	01/08/07 14:25 / rp
Magnesium, sat. paste	1.55	meq/l		0.08		SW6010B	01/08/07 14:25 / rp
Sodium, sat. paste	1.35	meq/l		0.04		SW6010B	01/08/07 14:25 / rp
Sulfate, sat. paste	1.31	meq/L		0.02		SW6010B	01/08/07 14:25 / rp
Chloride, sat. paste	0.17	meq/L		0.03		SW6010B	01/08/07 14:25 / rp
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	18	%		1		ASA15-5	01/04/07 12:21 / jjm
Silt	62	%		1		ASA15-5	01/04/07 12:21 / jjm
Clay	20	%		1		ASA15-5	01/04/07 12:21 / jjm
Texture	SiL	unitless				ASA15-5	01/04/07 12:21 / jjm
<b>CHEMICAL CHARACTERISTICS</b>							
Fluoride	1.2	mg/kg		1.0		A4500-F C	01/15/07 10:45 / abb
Potassium, NH4OAc Extractable	174	meq/100g	H	1		ASA13-3	01/12/07 09:43 / rp
Organic Matter	1.87	%		0.02		ASA29-3	01/05/07 16:02 / skr
Cation Exchange Capacity	30.5	meq/100g		0.09		SW6010B	01/12/07 17:43 / rp
Lime as CaCO3	6.4	%		0.1		USDA23c	01/08/07 00:00 / jjm
Phosphorus	11	mg/kg		0.1		ASA24-5	01/05/07 14:14 / sld
Nitrate as N, KCL Extract	12	mg/kg		1.0		ASA38-3	01/08/07 14:46 / sld
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	0.56	meq/100g		0.04		SW6010B	01/12/07 09:43 / rp
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	0.5	meq/100g		0.1		Calculation	01/04/07 12:21 / jjm
Exchangeable Sodium Percentage	1.6	%		0.1		USDA20a	01/04/07 12:21 / jjm
<b>METALS, DTPA EXTRACTABLE</b>							
Zinc	0.68	mg/kg		0.02		SW6010B	01/04/07 16:59 / rp
<b>METALS, CACL2 EXTRACTABLE</b>							
Barium	1.3	mg/kg		0.20		SW6010B	01/04/07 15:33 / rp
Boron	0.24	mg/kg		0.20		SW6010B	01/04/07 15:33 / rp

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

H - Analysis performed past recommended holding time.

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



LABORATORY ANALYTICAL REPORT

Client: HydroSolutions Inc  
Project: Tier II  
Lab ID: H06120136-078  
Client Sample ID: T2/YBA-10 (0-6")

Report Date: 01/17/07  
Collection Date: 12/13/06 17:00  
DateReceived: 12/15/06  
Matrix: Soil

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Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>METALS, CACL2 EXTRACTABLE</b>							
Selenium	0.043	mg/kg		0.010		SW6010B	01/04/07 15:33 / rp

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

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



### LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc  
**Project:** Tier II  
**Lab ID:** H06120136-079  
**Client Sample ID:** T2/YBA-10 (6-12")

**Report Date:** 01/17/07  
**Collection Date:** 12/13/06 17:00  
**Date Received:** 12/15/06  
**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	01/04/07 12:21 / jjm
Conductivity, sat. paste	0.75	mmhos/cm		0.01		ASAM10-3	01/04/07 12:21 / jjm
Saturation	46.4	%		0.1		USDA27a	01/04/07 12:21 / jjm
Sodium Adsorption Ratio (SAR)	1.5	unitless		0.01		Calculation	01/04/07 12:21 / jjm
Bicarbonate, sat. paste	4.87	meq/L		0.02		ASA10-3	01/09/07 10:33 / abb
<b>SATURATED PASTE</b>							
Calcium, sat. paste	3.67	meq/l		0.05		SW6010B	01/09/07 08:02 / rp
Magnesium, sat. paste	1.66	meq/l		0.08		SW6010B	01/09/07 08:02 / rp
Sodium, sat. paste	2.45	meq/l		0.04		SW6010B	01/09/07 08:02 / rp
Sulfate, sat. paste	2.91	meq/L		0.02		SW6010B	01/09/07 08:02 / rp
Chloride, sat. paste	0.21	meq/L		0.03		SW6010B	01/09/07 08:02 / rp
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	16	%		1		ASA15-5	01/04/07 12:21 / jjm
Silt	63	%		1		ASA15-5	01/04/07 12:21 / jjm
Clay	21	%		1		ASA15-5	01/04/07 12:21 / jjm
Texture	SiL	unitless				ASA15-5	01/04/07 12:21 / jjm
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	31.1	meq/100g		0.09		SW6010B	01/12/07 17:46 / rp
Lime as CaCO3	6.9	%		0.1		USDA23c	01/08/07 00:00 / jjm
Nitrate as N, KCL Extract	6.9	mg/kg		1.0		ASA38-3	01/08/07 13:50 / sld
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	0.74	meq/100g		0.04		SW6010B	01/12/07 09:46 / rp
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	0.6	meq/100g		0.1		Calculation	01/04/07 12:21 / jjm
Exchangeable Sodium Percentage	2.0	%		0.1		USDA20a	01/04/07 12:21 / jjm

**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:** Tier II  
**Lab ID:** H06120136-080  
**Client Sample ID:** T2/YBA-10 (12-24")

**Report Date:** 01/17/07  
**Collection Date:** 12/13/06 17:00  
**Date Received:** 12/15/06  
**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	01/04/07 12:21 / jjm
Conductivity, sat. paste	1.72	mmhos/cm		0.01		ASAM10-3	01/04/07 12:21 / jjm
Saturation	44.7	%		0.1		USDA27a	01/04/07 12:21 / jjm
Sodium Adsorption Ratio (SAR)	3.4	unitless		0.01		Calculation	01/04/07 12:21 / jjm
Bicarbonate, sat. paste	2.84	meq/L		0.02		ASA10-3	01/09/07 10:33 / abb
<b>SATURATED PASTE</b>							
Calcium, sat. paste	5.35	meq/l		0.05		SW6010B	01/09/07 08:05 / rp
Magnesium, sat. paste	3.67	meq/l		0.08		SW6010B	01/09/07 08:05 / rp
Sodium, sat. paste	7.24	meq/l		0.04		SW6010B	01/09/07 08:05 / rp
Sulfate, sat. paste	14.0	meq/L		0.02		SW6010B	01/09/07 08:05 / rp
Chloride, sat. paste	0.56	meq/L		0.03		SW6010B	01/09/07 08:05 / rp
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	18	%		1		ASA15-5	01/04/07 12:21 / jjm
Silt	65	%		1		ASA15-5	01/04/07 12:21 / jjm
Clay	17	%		1		ASA15-5	01/04/07 12:21 / jjm
Texture	SiL	unitless				ASA15-5	01/04/07 12:21 / jjm
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	25.5	meq/100g		0.09		SW6010B	01/12/07 17:49 / rp
Lime as CaCO3	7.5	%		0.1		USDA23c	01/08/07 00:00 / jjm
Nitrate as N, KCL Extract	4.8	mg/kg		1.0		ASA38-3	01/08/07 13:56 / sld
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	1.40	meq/100g		0.04		SW6010B	01/12/07 09:55 / rp
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	1.1	meq/100g		0.1		Calculation	01/04/07 12:21 / jjm
Exchangeable Sodium Percentage	4.2	%		0.1		USDA20a	01/04/07 12:21 / jjm

**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:** Tier II  
**Lab ID:** H06120136-081  
**Client Sample ID:** T2/YBA-10 (24-36")

**Report Date:** 01/17/07  
**Collection Date:** 12/13/06 17:00  
**Date Received:** 12/15/06  
**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	01/04/07 12:21 / jjm
Conductivity, sat. paste	3.79	mmhos/cm		0.01		ASAM10-3	01/04/07 12:21 / jjm
Saturation	45.8	%		0.1		USDA27a	01/04/07 12:21 / jjm
Sodium Adsorption Ratio (SAR)	6.3	unitless		0.01		Calculation	01/04/07 12:21 / jjm
Bicarbonate, sat. paste	2.84	meq/L		0.02		ASA10-3	01/09/07 10:33 / abb
<b>SATURATED PASTE</b>							
Calcium, sat. paste	11.0	meq/l		0.05		SW6010B	01/09/07 08:11 / rp
Magnesium, sat. paste	8.24	meq/l		0.08		SW6010B	01/09/07 08:11 / rp
Sodium, sat. paste	19.6	meq/l		0.04		SW6010B	01/09/07 08:11 / rp
Chloride, sat. paste	0.49	meq/L		0.03		SW6010B	01/09/07 08:11 / rp
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	21	%		1		ASA15-5	01/04/07 12:21 / jjm
Silt	63	%		1		ASA15-5	01/04/07 12:21 / jjm
Clay	16	%		1		ASA15-5	01/04/07 12:21 / jjm
Texture	SiL	unitless				ASA15-5	01/04/07 12:21 / jjm
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	23.4	meq/100g		0.09		SW6010B	01/12/07 17:55 / rp
Lime as CaCO3	6.6	%		0.1		USDA23c	01/08/07 00:00 / jjm
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	2.23	meq/100g		0.04		SW6010B	01/12/07 10:01 / rp
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	1.3	meq/100g		0.1		Calculation	01/04/07 12:21 / jjm
Exchangeable Sodium Percentage	5.7	%		0.1		USDA20a	01/04/07 12:21 / jjm

**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:** Tier II  
**Lab ID:** H06120136-082  
**Client Sample ID:** T2/YBA-10 (36-60")

**Report Date:** 01/17/07  
**Collection Date:** 12/13/06 17:00  
**Date Received:** 12/15/06  
**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	01/04/07 12:21 / jjm
Conductivity, sat. paste	2.57	mmhos/cm		0.01		ASAM10-3	01/04/07 12:21 / jjm
Saturation	50.1	%		0.1		USDA27a	01/04/07 12:21 / jjm
Sodium Adsorption Ratio (SAR)	9.5	unitless		0.01		Calculation	01/04/07 12:21 / jjm
Bicarbonate, sat. paste	2.84	meq/L		0.02		ASA10-3	01/09/07 10:33 / abb
<b>SATURATED PASTE</b>							
Calcium, sat. paste	4.38	meq/l		0.05		SW6010B	01/09/07 08:14 / rp
Magnesium, sat. paste	2.97	meq/l		0.08		SW6010B	01/09/07 08:14 / rp
Sodium, sat. paste	18.2	meq/l		0.04		SW6010B	01/09/07 08:14 / rp
Chloride, sat. paste	0.57	meq/L		0.03		SW6010B	01/09/07 08:14 / rp
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	23	%		1		ASA15-5	01/04/07 12:21 / jjm
Silt	56	%		1		ASA15-5	01/04/07 12:21 / jjm
Clay	21	%		1		ASA15-5	01/04/07 12:21 / jjm
Texture	SiL	unitless				ASA15-5	01/04/07 12:21 / jjm
<b>CHEMICAL CHARACTERISTICS</b>							
Fluoride	1.5	mg/kg		1.0		A4500-F C	01/15/07 10:45 / abb
Cation Exchange Capacity	28.1	meq/100g		0.09		SW6010B	01/12/07 17:58 / rp
Lime as CaCO3	5.6	%		0.1		USDA23c	01/08/07 00:00 / jjm
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	3.06	meq/100g		0.04		SW6010B	01/12/07 10:04 / rp
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	2.2	meq/100g		0.1		Calculation	01/04/07 12:21 / jjm
Exchangeable Sodium Percentage	7.7	%		0.1		USDA20a	01/04/07 12:21 / jjm
<b>METALS, CACL2 EXTRACTABLE</b>							
Barium	ND	mg/kg		0.20		SW6010B	01/04/07 15:36 / rp
Boron	0.55	mg/kg		0.20		SW6010B	01/04/07 15:36 / rp
Selenium	0.036	mg/kg		0.010		SW6010B	01/04/07 15:36 / rp

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

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



### LABORATORY ANALYTICAL REPORT

**Client:** HydroSolutions Inc  
**Project:** Tier II  
**Lab ID:** H06120136-083  
**Client Sample ID:** T2/YBA-10 (60-96")

**Report Date:** 01/17/07  
**Collection Date:** 12/13/06 17:00  
**Date Received:** 12/15/06  
**Matrix:** Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SATURATED PASTE</b>							
pH, sat. paste	8.3	s.u.		0.1		ASAM10-3.2	01/04/07 12:21 / jjm
Conductivity, sat. paste	1.68	mmhos/cm		0.01		ASAM10-3	01/04/07 12:21 / jjm
Saturation	59.4	%		0.1		USDA27a	01/04/07 12:21 / jjm
Sodium Adsorption Ratio (SAR)	17	unitless		0.01		Calculation	01/04/07 12:21 / jjm
Bicarbonate, sat. paste	4.56	meq/L		0.02		ASA10-3	01/09/07 10:33 / abb
<b>SATURATED PASTE</b>							
Calcium, sat. paste	1.50	meq/l		0.05		SW6010B	01/09/07 08:17 / rp
Magnesium, sat. paste	1.04	meq/l		0.08		SW6010B	01/09/07 08:17 / rp
Sodium, sat. paste	19.2	meq/l		0.04		SW6010B	01/09/07 08:17 / rp
Chloride, sat. paste	0.14	meq/L		0.03		SW6010B	01/09/07 08:17 / rp
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	19	%		1		ASA15-5	01/04/07 12:21 / jjm
Silt	54	%		1		ASA15-5	01/04/07 12:21 / jjm
Clay	27	%		1		ASA15-5	01/04/07 12:21 / jjm
Texture	SiCL	unitless				ASA15-5	01/04/07 12:21 / jjm
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	32.8	meq/100g		0.09		SW6010B	01/12/07 18:01 / rp
Lime as CaCO3	6.0	%		0.1		USDA23c	01/08/07 00:00 / jjm
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	5.60	meq/100g		0.04		SW6010B	01/12/07 10:07 / rp
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	4.5	meq/100g		0.1		Calculation	01/04/07 12:21 / jjm
Exchangeable Sodium Percentage	14	%		0.1		USDA20a	01/04/07 12:21 / jjm

**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:** Tier II  
**Lab ID:** H06120136-084  
**Client Sample ID:** T2/YBA-10 (0-2")

**Report Date:** 01/17/07  
**Collection Date:** 12/13/06 17:00  
**Date Received:** 12/15/06  
**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	01/04/07 12:21 / jjm
Conductivity, sat. paste	0.74	mmhos/cm		0.01		ASAM10-3	01/04/07 12:21 / jjm
Saturation	53.4	%		0.1		USDA27a	01/04/07 12:21 / jjm
Sodium Adsorption Ratio (SAR)	0.68	unitless		0.01		Calculation	01/04/07 12:21 / jjm
Bicarbonate, sat. paste	5.68	meq/L		0.02		ASA10-3	01/09/07 10:33 / abb
<b>SATURATED PASTE</b>							
Calcium, sat. paste	4.28	meq/l		0.05		SW6010B	01/09/07 08:20 / rp
Magnesium, sat. paste	1.48	meq/l		0.08		SW6010B	01/09/07 08:20 / rp
Sodium, sat. paste	1.15	meq/l		0.04		SW6010B	01/09/07 08:20 / rp
Chloride, sat. paste	0.61	meq/L		0.03		SW6010B	01/09/07 08:20 / rp
<b>PHYSICAL CHARACTERISTICS</b>							
Sand	19	%		1		ASA15-5	01/04/07 12:21 / jjm
Silt	60	%		1		ASA15-5	01/04/07 12:21 / jjm
Clay	21	%		1		ASA15-5	01/04/07 12:21 / jjm
Texture	SiL	unitless				ASA15-5	01/04/07 12:21 / jjm
<b>CHEMICAL CHARACTERISTICS</b>							
Cation Exchange Capacity	31.1	meq/100g		0.09		SW6010B	01/12/07 18:04 / rp
Lime as CaCO3	6.2	%		0.1		USDA23c	01/08/07 00:00 / jjm
<b>METALS, AMMONIUM ACETATE EXTRACTABLE</b>							
Sodium, Extractable	0.51	meq/100g		0.04		SW6010B	01/12/07 10:10 / rp
<b>EXCHANGEABLES</b>							
Exchangeable Sodium	0.4	meq/100g		0.1		Calculation	01/04/07 12:21 / jjm
Exchangeable Sodium Percentage	1.4	%		0.1		USDA20a	01/04/07 12:21 / jjm

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

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