



LABORATORY ANALYTICAL REPORT

Client: AMPP
Project: Tongue River Monitoring, Set 3
Lab ID: H03100052-001
Client Sample ID: T2/MA-20-(0-6")

Report Date: 01/20/04
Collection Date: 10/01/03 17:00
Date Received: 10/07/03
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/06/03 20:50 / jdh
COND	0.65	mmhos/cm		0.01		ASAM10-3	11/06/03 20:50 / jdh
Percent Sat	49.5	wt%		0.1		USDA27a	11/06/03 20:50 / jdh
Ca-SatPst	3.9	meq/l		0.1		SW6010B	10/23/03 07:51 / rp
Mg-SatPst	1.4	meq/l		0.1		SW6010B	10/23/03 07:51 / rp
Na-SatPst	1.3	meq/l		0.1		SW6010B	10/23/03 07:51 / rp
SAR	0.8	unitless		0.1		Calculation	11/06/03 20:50 / jdh
Alk-SatPst	6.5	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	6.5	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	1.3	meq/L		0.1		ASA10-3	10/24/03 01:29 / rp
PHYSICAL CHARACTERISTICS							
Sand	21	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Silt	52	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Clay	27	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Texture	CL	unitless				ASA15-5	11/06/03 20:50 / jdh
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	42.9	meq/100g		0.1		SW6010B	10/24/03 11:20 / rp
ESP	1.1	%		0.1		USDA20b	11/06/03 20:50 / jdh
Lime as CaCO3	7.1	wt%		0.1		USDA23c	10/27/03 00:00 / nh
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/24/03 08:31 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-001
 Client Sample ID: T2/MA-10-(0-6")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.4	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.81	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	41.3	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	4.4	meq/l		0.1		SW6010B	10/23/03 09:36 / rp
Mg-SatPst	2.1	meq/l		0.1		SW6010B	10/23/03 09:36 / rp
Na-SatPst	2.6	meq/l		0.1		SW6010B	10/23/03 09:36 / rp
SAR	1.5	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	5.5	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
Nitrate as N, Saturated Paste	1.5	mg/L		0.1		ASA10-3	10/23/03 12:00 / cwH
SO4-SatPst	2.4	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	26	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	50	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	24	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
F	< 1.0	mg/kg		1.0		A4500-F C	10/31/03 11:30 / ddb
K-EXT	521	mg/kg		1		AAA13-3	01/15/04 00:00 / jdh
OM-WB	2.32	wt%		0.02		ASA29-3	10/30/03 00:00 / rp
CEC	26.3	meq/100g		0.1		SW6010B	10/23/03 01:43 / rp
ESP	2.0	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	8.6	wt%		0.1		USDA23c	11/04/03 18:06 / rp
P-Olsen	8.8	mg/kg		0.1		ASA24-5	11/04/03 02:30 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 11:33 / rp
METALS, HOT WATER EXTRACTABLE							
Ba-H2O	< 5	mg/kg		5		SW6020	10/31/03 14:41 / jjw
B-H2O	0.5	mg/kg		0.1		SW6020	10/31/03 14:41 / jjw
Se-H2O	< 0.01	mg/kg		0.01		SW6020	10/31/03 14:41 / jjw
METALS, DTPA EXTRACTABLE							
Zn-DTPA	0.60	mg/kg		0.02		SW6010B	10/31/03 01:43 / rp

Report RL - Analyte reporting limit.
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 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-002
 Client Sample ID: T2/MA-10-(6-12")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.5	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.82	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	42.2	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	4.6	meq/l		0.1		SW6010B	10/23/03 09:39 / rp
Mg-SatPst	2.6	meq/l		0.1		SW6010B	10/23/03 09:39 / rp
Na-SatPst	2.3	meq/l		0.1		SW6010B	10/23/03 09:39 / rp
SAR	1.2	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	4.1	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
Nitrate as N, Saturated Paste	23.4	mg/L		0.6		ASA10-3	10/23/03 12:00 / cwh
SO4-SatPst	2.5	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	26	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	51	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	23	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	23.2	meq/100g		0.1		SW6010B	10/23/03 01:45 / rp
ESP	2.4	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	9.0	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 11:35 / rp

Report Definitions: RL - Analyte reporting limit.
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 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-003
 Client Sample ID: T2/MA-10-(12-24")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.7	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	1.33	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	42.8	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	4.4	meq/l		0.1		SW6010B	10/23/03 09:41 / rp
Mg-SatPst	5.0	meq/l		0.1		SW6010B	10/23/03 09:41 / rp
Na-SatPst	4.7	meq/l		0.1		SW6010B	10/23/03 09:41 / rp
SAR	2.2	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	3.5	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
Nitrate as N, Saturated Paste	33.6	mg/L		0.6		ASA10-3	10/23/03 12:00 / cwh
SO4-SatPst	6.8	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	26	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	50	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	24	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	17.7	meq/100g		0.1		SW6010B	10/23/03 01:48 / rp
ESP	4.7	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	10.5	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	1.0	meq/100g		0.1		SW6010B	10/23/03 11:38 / rp

Report Definitions: RL - Analyte reporting limit.
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MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-004
 Client Sample ID: T2/MA-10-(24-36")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.7	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	3.61	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	41.9	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	15.5	meq/l		0.1		SW6010B	10/23/03 09:44 / rp
Mg-SatPst	28.3	meq/l		0.1		SW6010B	10/23/03 09:44 / rp
Na-SatPst	13.3	meq/l		0.1		SW6010B	10/23/03 09:44 / rp
SAR	2.8	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	2.5	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	28	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	48	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	24	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	L	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	25.3	meq/100g		0.1		SW6010B	10/23/03 01:51 / rp
ESP	3.9	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	10	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	1.5	meq/100g		0.1		SW6010B	10/23/03 11:41 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-005
 Client Sample ID: T2/MA-10-(36-60")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.7	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	2.90	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	36.5	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	9.3	meq/l		0.1		SW6010B	10/23/03 09:47 / rp
Mg-SatPst	21.5	meq/l		0.1		SW6010B	10/23/03 09:47 / rp
Na-SatPst	10	meq/l		0.1		SW6010B	10/23/03 09:47 / rp
SAR	2.6	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	2.4	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	44	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	37	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	19	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	L	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
F	1.2	mg/kg		1.0		A4500-F C	10/31/03 11:30 / ddb
CEC	16.5	meq/100g		0.1		SW6010B	10/23/03 01:53 / rp
ESP	4.6	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	9.2	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	1.1	meq/100g		0.1		SW6010B	10/23/03 11:43 / rp
METALS, HOT WATER EXTRACTABLE							
Ba-H2O	< 5	mg/kg		5		SW6020	10/31/03 14:45 / jjw
B-H2O	0.5	mg/kg		0.1		SW6020	10/31/03 14:45 / jjw
Se-H2O	0.01	mg/kg		0.01		SW6020	10/31/03 14:45 / jjw

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-006
 Client Sample ID: T2/MA-10-(60-96")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.7	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	1.52	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	29.0	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	4.8	meq/l		0.1		SW6010B	10/23/03 09:49 / rp
Mg-SatPst	6.8	meq/l		0.1		SW6010B	10/23/03 09:49 / rp
Na-SatPst	5.3	meq/l		0.1		SW6010B	10/23/03 09:49 / rp
SAR	2.2	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	2.4	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	58	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	29	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	13	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	15.4	meq/100g		0.1		SW6010B	10/23/03 01:56 / rp
ESP	4.0	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	8.5	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.8	meq/100g		0.1		SW6010B	10/23/03 11:46 / rp

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: AMPP
Project: Tongue River Monitoring, Set 2
Lab ID: H03100039-007
Client Sample ID: T2/MA-10-(0-2")

Report Date: 01/20/04
Collection Date: 10/01/03 17:00
Date Received: 10/07/03
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.76	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	40.7	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	3.8	meq/l		0.1		SW6010B	10/23/03 09:52 / rp
Mg-SatPst	1.8	meq/l		0.1		SW6010B	10/23/03 09:52 / rp
Na-SatPst	2.0	meq/l		0.1		SW6010B	10/23/03 09:52 / rp
SAR	1.2	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	5.4	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	31	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	49	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	20	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	L	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	27.1	meq/100g		0.1		SW6010B	10/23/03 01:58 / rp
ESP	2.2	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	8.4	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.7	meq/100g		0.1		SW6010B	10/23/03 11:48 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-008
 Client Sample ID: T2/MA-1-(0-5")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.64	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	40.7	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	3.7	meq/l		0.1		SW6010B	10/23/03 09:54 / rp
Mg-SatPst	1.7	meq/l		0.1		SW6010B	10/23/03 09:54 / rp
Na-SatPst	1.1	meq/l		0.1		SW6010B	10/23/03 09:54 / rp
SAR	0.7	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	4.8	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
Nitrate as N, Saturated Paste	10.9	mg/L		0.2		ASA10-3	10/23/03 12:00 / cwH
SO4-SatPst	1.8	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	24	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	52	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	24	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
K-EXT	502	mg/kg		1		AAA13-3	01/15/04 00:00 / jdH
OM-WB	2.05	wt%		0.02		ASA29-3	10/30/03 00:00 / rp
CEC	27.2	meq/100g		0.1		SW6010B	10/23/03 02:01 / rp
ESP	2.1	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	8.4	wt%		0.1		USDA23c	11/04/03 18:06 / rp
P-Olsen	23	mg/kg		0.1		ASA24-5	11/04/03 02:33 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 11:51 / rp
METALS, DTPA EXTRACTABLE							
Zn-DTPA	0.38	mg/kg		0.02		SW6010B	11/05/03 12:46 / jdH
CLAY MINEROLOGY							
Smectite	17	%		1		XrayDiffraction	11/07/03 00:00 / wjj
Illite	52	%		1		XrayDiffraction	11/07/03 00:00 / wjj
Kaolinite	26	%		1		XrayDiffraction	11/07/03 00:00 / wjj
Chlorite	5	%		1		XrayDiffraction	11/07/03 00:00 / wjj

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-009
 Client Sample ID: T2/MA-1-(5-10")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.72	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	40.6	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	4.7	meq/l		0.1		SW6010B	10/23/03 09:57 / rp
Mg-SatPst	2.3	meq/l		0.1		SW6010B	10/23/03 09:57 / rp
Na-SatPst	0.8	meq/l		0.1		SW6010B	10/23/03 09:57 / rp
SAR	0.4	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	3.2	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
Nitrate as N, Saturated Paste	34.8	mg/L		0.6		ASA10-3	10/23/03 12:00 / cwh
SO4-SatPst	1.8	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	24	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	54	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	22	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	22.3	meq/100g		0.1		SW6010B	10/23/03 02:04 / rp
ESP	2.3	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	9.6	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 11:54 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-010
 Client Sample ID: T2/MA-1-(10-26")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	1.45	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	48.4	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	6.8	meq/l		0.1		SW6010B	10/23/03 10:00 / rp
Mg-SatPst	5.1	meq/l		0.1		SW6010B	10/23/03 10:00 / rp
Na-SatPst	1.5	meq/l		0.1		SW6010B	10/23/03 10:00 / rp
SAR	0.6	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	2.6	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
Nitrate as N, Saturated Paste	124	mg/L		1.1		ASA10-3	10/23/03 12:00 / cwh
SO4-SatPst	1.1	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	12	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	61	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	27	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiCL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	30.0	meq/100g		0.1		SW6010B	10/23/03 02:06 / rp
ESP	1.8	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	11.1	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 11:56 / rp
CLAY MINEROLOGY							
Smectite	17	%		1		XrayDiffraction	11/07/03 00:00 / wjj
Illite	43	%		1		XrayDiffraction	11/07/03 00:00 / wjj
Kaolinite	37	%		1		XrayDiffraction	11/07/03 00:00 / wjj
Chlorite	2	%		1		XrayDiffraction	11/07/03 00:00 / wjj

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-011
 Client Sample ID: T2/MA-1-(26-37")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	1.85	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	45.7	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	9.0	meq/l		0.1		SW6010B	10/23/03 10:02 / rp
Mg-SatPst	9.3	meq/l		0.1		SW6010B	10/23/03 10:02 / rp
Na-SatPst	2.8	meq/l		0.1		SW6010B	10/23/03 10:02 / rp
SAR	0.9	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	2.1	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	16	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	57	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	27	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiCL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	25.3	meq/100g		0.1		SW6010B	10/23/03 02:11 / rp
ESP	2.1	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	15.4	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 12:01 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-012
 Client Sample ID: T2/MA-1-(37-65")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.5	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.98	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	47.8	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	4.7	meq/l		0.1		SW6010B	10/23/03 10:05 / rp
Mg-SatPst	3.4	meq/l		0.1		SW6010B	10/23/03 10:05 / rp
Na-SatPst	2.0	meq/l		0.1		SW6010B	10/23/03 10:05 / rp
SAR	1.0	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	2.2	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	16	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	54	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	30	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiCL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	29.3	meq/100g		0.1		SW6010B	10/23/03 02:14 / rp
ESP	2.2	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	8.5	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.7	meq/100g		0.1		SW6010B	10/23/03 12:04 / rp

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: AMPP
Project: Tongue River Monitoring, Set 2
Lab ID: H03100039-018
Client Sample ID: T2/MA-11-(0-6")

Report Date: 01/20/04
Collection Date: 09/30/03 17:00
Date Received: 10/07/03
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.70	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	38.7	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	3.2	meq/l		0.1		SW6010B	10/23/03 10:07 / rp
Mg-SatPst	2.0	meq/l		0.1		SW6010B	10/23/03 10:07 / rp
Na-SatPst	1.9	meq/l		0.1		SW6010B	10/23/03 10:07 / rp
SAR	1.2	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	4.7	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	4.7	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	1.9	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	45	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	36	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	19	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	L	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	21.5	meq/100g		0.1		SW6010B	10/23/03 02:16 / rp
ESP	1.8	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	8.6	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.5	meq/100g		0.1		SW6010B	10/23/03 12:07 / rp

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: AMPP
Project: Tongue River Monitoring, Set 2
Lab ID: H03100039-019
Client Sample ID: T2/MA-11-(6-12")

Report Date: 01/20/04
Collection Date: 09/30/03 17:00
Date Received: 10/07/03
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.93	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	35.7	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	4.0	meq/l		0.1		SW6010B	10/23/03 10:10 / rp
Mg-SatPst	2.1	meq/l		0.1		SW6010B	10/23/03 10:10 / rp
Na-SatPst	2.8	meq/l		0.1		SW6010B	10/23/03 10:10 / rp
SAR	1.6	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	3.2	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	3.2	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	2.1	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	45	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	37	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	18	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	L	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	18.1	meq/100g		0.1		SW6010B	10/23/03 02:19 / rp
ESP	2.8	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	9.0	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 12:09 / 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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-020
 Client Sample ID: T2/MA-11-(12-24")

Report Date: 01/20/04
 Collection Date: 09/30/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.7	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.57	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	32.9	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	2.4	meq/l		0.1		SW6010B	10/23/03 10:13 / rp
Mg-SatPst	1.7	meq/l		0.1		SW6010B	10/23/03 10:13 / rp
Na-SatPst	2.3	meq/l		0.1		SW6010B	10/23/03 10:13 / rp
SAR	1.6	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	3.2	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	3.2	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	1.9	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	51	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	33	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	16	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	L	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	17.2	meq/100g		0.1		SW6010B	10/23/03 02:22 / rp
ESP	3.0	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	9.0	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 12:12 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-021
 Client Sample ID: T2/MA-12-(0-6")

Report Date: 01/20/04
 Collection Date: 09/30/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.67	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	48.5	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	2.7	meq/l		0.1		SW6010B	10/23/03 10:15 / rp
Mg-SatPst	2.0	meq/l		0.1		SW6010B	10/23/03 10:15 / rp
Na-SatPst	2.9	meq/l		0.1		SW6010B	10/23/03 10:15 / rp
SAR	1.8	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	4.8	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	4.8	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	1.7	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	18	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	55	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	27	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiCL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	29.0	meq/100g		0.1		SW6010B	10/23/03 02:27 / rp
ESP	2.6	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	14.5	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.9	meq/100g		0.1		SW6010B	10/23/03 12:17 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-022
 Client Sample ID: T2/MA-12-(6-12")

Report Date: 01/20/04
 Collection Date: 09/30/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.9	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.76	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	60.8	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	2.0	meq/l		0.1		SW6010B	10/23/03 10:18 / rp
Mg-SatPst	3.2	meq/l		0.1		SW6010B	10/23/03 10:18 / rp
Na-SatPst	3.2	meq/l		0.1		SW6010B	10/23/03 10:18 / rp
SAR	2.0	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	4.3	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	4.3	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	2.0	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	6.0	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	57	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	37	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiCL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	30.3	meq/100g		0.1		SW6010B	10/23/03 02:29 / rp
ESP	3.1	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	7.9	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	1.1	meq/100g		0.1		SW6010B	10/23/03 12:20 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-023
 Client Sample ID: T2/MA-12-(12-24")

Report Date: 01/20/04
 Collection Date: 09/30/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	8.4	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	1.28	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	44.2	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	0.7	meq/l		0.1		SW6010B	10/23/03 10:26 / rp
Mg-SatPst	3.6	meq/l		0.1		SW6010B	10/23/03 10:26 / rp
Na-SatPst	9.2	meq/l		0.1		SW6010B	10/23/03 10:26 / rp
SAR	6.3	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	7.0	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	6.3	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	0.7	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	4.8	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	18	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	58	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	24	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	21.8	meq/100g		0.1		SW6010B	10/23/03 02:32 / rp
ESP	6.1	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	8.0	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	1.7	meq/100g		0.1		SW6010B	10/23/03 12:22 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-024
 Client Sample ID: T2/MA-13-(0-6")

Report Date: 01/20/04
 Collection Date: 09/30/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.9	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.91	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	43.9	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	4.6	meq/l		0.1		SW6010B	10/23/03 10:28 / rp
Mg-SatPst	2.1	meq/l		0.1		SW6010B	10/23/03 10:28 / rp
Na-SatPst	2.3	meq/l		0.1		SW6010B	10/23/03 10:28 / rp
SAR	1.3	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	4.6	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	4.6	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	4.2	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	18	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	58	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	24	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	25.4	meq/100g		0.1		SW6010B	10/23/03 02:40 / rp
ESP	2.3	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	8.4	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.7	meq/100g		0.1		SW6010B	10/23/03 12:30 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-025
 Client Sample ID: T2/MA-13-(6-12")

Report Date: 01/20/04
 Collection Date: 09/30/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.98	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	45.1	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	5.6	meq/l		0.1		SW6010B	10/23/03 10:31 / rp
Mg-SatPst	3.2	meq/l		0.1		SW6010B	10/23/03 10:31 / rp
Na-SatPst	2.4	meq/l		0.1		SW6010B	10/23/03 10:31 / rp
SAR	1.2	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	3.2	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	3.2	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	2.7	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	14	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	61	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	25	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	25.1	meq/100g		0.1		SW6010B	10/23/03 02:43 / rp
ESP	2.4	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	9.1	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.7	meq/100g		0.1		SW6010B	10/23/03 12:33 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-026
 Client Sample ID: T2/MA-13-(12-24")

Report Date: 01/20/04
 Collection Date: 09/30/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.68	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	44.5	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	3.0	meq/l		0.1		SW6010B	10/23/03 10:34 / rp
Mg-SatPst	3.1	meq/l		0.1		SW6010B	10/23/03 10:34 / rp
Na-SatPst	1.7	meq/l		0.1		SW6010B	10/23/03 10:34 / rp
SAR	1.0	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	2.8	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	2.8	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	2.1	meq/L		0.1		ASA10-3	10/24/03 01:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	12	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	65	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	23	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	23.0	meq/100g		0.1		SW6010B	10/23/03 02:45 / rp
ESP	2.3	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	11.8	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 12:35 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-027
 Client Sample ID: T2/MA-14-(0-6")

Report Date: 01/20/04
 Collection Date: 09/30/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.7	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.53	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	42.7	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	3.2	meq/l		0.1		SW6010B	10/23/03 10:36 / rp
Mg-SatPst	1.4	meq/l		0.1		SW6010B	10/23/03 10:36 / rp
Na-SatPst	1.1	meq/l		0.1		SW6010B	10/23/03 10:36 / rp
SAR	0.7	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	4.5	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	18	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	59	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	23	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	26.7	meq/100g		0.1		SW6010B	10/23/03 02:48 / rp
ESP	1.9	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	8.6	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 12:38 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-028
 Client Sample ID: T2/MA-14-(6-12")

Report Date: 01/20/04
 Collection Date: 09/30/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.5	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.69	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	44.0	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	4.5	meq/l		0.1		SW6010B	10/23/03 10:39 / rp
Mg-SatPst	2.3	meq/l		0.1		SW6010B	10/23/03 10:39 / rp
Na-SatPst	0.8	meq/l		0.1		SW6010B	10/23/03 10:39 / rp
SAR	0.4	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	2.8	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	18	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	59	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	23	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	25.9	meq/100g		0.1		SW6010B	10/23/03 02:51 / rp
ESP	1.7	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	4.3	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.5	meq/100g		0.1		SW6010B	10/23/03 12:41 / rp

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: AMPP
Project: Tongue River Monitoring, Set 2
Lab ID: H03100039-029
Client Sample ID: T2/MA-14-(12-24")

Report Date: 01/20/04
Collection Date: 09/30/03 17:00
Date Received: 10/07/03
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	1.38	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	48.1	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	6.7	meq/l		0.1		SW6010B	10/23/03 10:41 / rp
Mg-SatPst	5.1	meq/l		0.1		SW6010B	10/23/03 10:41 / rp
Na-SatPst	1.3	meq/l		0.1		SW6010B	10/23/03 10:41 / rp
SAR	0.5	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	2.0	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	7.0	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	66	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	27	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiCL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	27.4	meq/100g		0.1		SW6010B	10/23/03 02:53 / rp
ESP	2.0	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	7.1	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 12:43 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-030
 Client Sample ID: T2/MA-15-(0-6")

Report Date: 01/20/04
 Collection Date: 09/30/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.64	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	33.3	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	3.6	meq/l		0.1		SW6010B	10/23/03 10:44 / rp
Mg-SatPst	1.5	meq/l		0.1		SW6010B	10/23/03 10:44 / rp
Na-SatPst	0.9	meq/l		0.1		SW6010B	10/23/03 10:44 / rp
SAR	0.6	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	4.3	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	25	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	53	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	22	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	25.7	meq/100g		0.1		SW6010B	10/23/03 02:56 / rp
ESP	2.2	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	7.5	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 12:46 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-031
 Client Sample ID: T2/MA-15-(6-12")

Report Date: 01/20/04
 Collection Date: 09/30/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.5	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.95	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	43.5	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	5.7	meq/l		0.1		SW6010B	10/23/03 10:47 / rp
Mg-SatPst	3.1	meq/l		0.1		SW6010B	10/23/03 10:47 / rp
Na-SatPst	0.8	meq/l		0.1		SW6010B	10/23/03 10:47 / rp
SAR	0.4	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	2.9	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	29	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	49	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	22	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	L	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	26.1	meq/100g		0.1		SW6010B	10/23/03 03:01 / rp
ESP	1.8	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	7.6	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.5	meq/100g		0.1		SW6010B	10/23/03 12:51 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-032
 Client Sample ID: T2/MA-15-(12-24")

Report Date: 01/20/04
 Collection Date: 09/30/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.5	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	1.10	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	42.2	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	5.2	meq/l		0.1		SW6010B	10/23/03 10:49 / rp
Mg-SatPst	4.0	meq/l		0.1		SW6010B	10/23/03 10:49 / rp
Na-SatPst	1.2	meq/l		0.1		SW6010B	10/23/03 10:49 / rp
SAR	0.6	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	2.7	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	29	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	49	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	22	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	L	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	23.7	meq/100g		0.1		SW6010B	10/23/03 03:04 / rp
ESP	2.3	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	13.3	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 12:54 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-033
 Client Sample ID: T2/MA-16-(0-6")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.60	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	41.0	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	3.7	meq/l		0.1		SW6010B	10/23/03 10:52 / rp
Mg-SatPst	1.6	meq/l		0.1		SW6010B	10/23/03 10:52 / rp
Na-SatPst	1.0	meq/l		0.1		SW6010B	10/23/03 10:52 / rp
SAR	0.6	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	4.6	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	29	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	51	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	20	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	23.5	meq/100g		0.1		SW6010B	10/23/03 03:06 / rp
ESP	2.0	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	9.2	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.5	meq/100g		0.1		SW6010B	10/23/03 12:56 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-034
 Client Sample ID: T2/MA-16-(6-12")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.5	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	1.11	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	41.8	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	6.6	meq/l		0.1		SW6010B	10/23/03 10:54 / rp
Mg-SatPst	3.4	meq/l		0.1		SW6010B	10/23/03 10:54 / rp
Na-SatPst	1.2	meq/l		0.1		SW6010B	10/23/03 10:54 / rp
SAR	0.5	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	2.6	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	28	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	52	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	20	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	21.8	meq/100g		0.1		SW6010B	10/23/03 03:09 / rp
ESP	2.2	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	8.8	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.5	meq/100g		0.1		SW6010B	10/23/03 12:59 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-035
 Client Sample ID: T2/MA-16-(12-24")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.81	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	40.8	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	4.3	meq/l		0.1		SW6010B	10/23/03 10:57 / rp
Mg-SatPst	2.9	meq/l		0.1		SW6010B	10/23/03 10:57 / rp
Na-SatPst	1.0	meq/l		0.1		SW6010B	10/23/03 10:57 / rp
SAR	0.5	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	2.4	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	31	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	50	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	19	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	19.7	meq/100g		0.1		SW6010B	10/23/03 03:11 / rp
ESP	2.5	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	10.2	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.5	meq/100g		0.1		SW6010B	10/23/03 01:01 / rp

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: AMPP
Project: Tongue River Monitoring, Set 2
Lab ID: H03100039-036
Client Sample ID: T2/MA-17-(0-6")

Report Date: 01/20/04
Collection Date: 10/01/03 17:00
Date Received: 10/07/03
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.62	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	42.8	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	2.8	meq/l		0.1		SW6010B	10/23/03 11:00 / rp
Mg-SatPst	1.4	meq/l		0.1		SW6010B	10/23/03 11:00 / rp
Na-SatPst	1.5	meq/l		0.1		SW6010B	10/23/03 11:00 / rp
SAR	1.1	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	4.7	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	23	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	54	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	23	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	28.0	meq/100g		0.1		SW6010B	10/23/03 03:14 / rp
ESP	2.4	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	8.5	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.7	meq/100g		0.1		SW6010B	10/23/03 01:04 / 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: AMPP
Project: Tongue River Monitoring, Set 2
Lab ID: H03100039-037
Client Sample ID: T2/MA-17-(6-12")

Report Date: 01/20/04
Collection Date: 10/01/03 17:00
Date Received: 10/07/03
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.85	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	42.9	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	3.6	meq/l		0.1		SW6010B	10/23/03 11:02 / rp
Mg-SatPst	1.5	meq/l		0.1		SW6010B	10/23/03 11:02 / rp
Na-SatPst	2.6	meq/l		0.1		SW6010B	10/23/03 11:02 / rp
SAR	1.6	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	4.5	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	21	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	57	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	22	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	26.6	meq/100g		0.1		SW6010B	10/23/03 03:17 / rp
ESP	2.2	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	9.8	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.7	meq/100g		0.1		SW6010B	10/23/03 01:07 / 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: AMPP
Project: Tongue River Monitoring, Set 2
Lab ID: H03100039-038
Client Sample ID: T2/MA-17-(12-24")

Report Date: 01/20/04
Collection Date: 10/01/03 17:00
Date Received: 10/07/03
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.7	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.91	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	46.5	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	3.8	meq/l		0.1		SW6010B	10/23/03 11:05 / rp
Mg-SatPst	3.7	meq/l		0.1		SW6010B	10/23/03 11:05 / rp
Na-SatPst	2.1	meq/l		0.1		SW6010B	10/23/03 11:05 / rp
SAR	1.1	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	4.2	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	23	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	55	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	22	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	23.3	meq/100g		0.1		SW6010B	10/23/03 03:19 / rp
ESP	2.4	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	11.4	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 01:09 / 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: AMPP
Project: Tongue River Monitoring, Set 2
Lab ID: H03100039-039
Client Sample ID: T2/MA-18-(0-6")

Report Date: 01/20/04
Collection Date: 10/01/03 17:00
Date Received: 10/07/03
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.7	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.68	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	43.1	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	3.1	meq/l		0.1		SW6010B	10/23/03 11:07 / rp
Mg-SatPst	1.6	meq/l		0.1		SW6010B	10/23/03 11:07 / rp
Na-SatPst	2.2	meq/l		0.1		SW6010B	10/23/03 11:07 / rp
SAR	1.4	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	5.3	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	19	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	58	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	23	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	26.2	meq/100g		0.1		SW6010B	10/23/03 03:22 / rp
ESP	2.2	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	8.9	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.7	meq/100g		0.1		SW6010B	10/23/03 01:12 / 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: AMPP
Project: Tongue River Monitoring, Set 2
Lab ID: H03100039-040
Client Sample ID: T2/MA-18-(6-12")

Report Date: 01/20/04
Collection Date: 10/01/03 17:00
Date Received: 10/07/03
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.7	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.64	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	46.7	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	3.5	meq/l		0.1		SW6010B	10/23/03 11:10 / rp
Mg-SatPst	1.8	meq/l		0.1		SW6010B	10/23/03 11:10 / rp
Na-SatPst	1.9	meq/l		0.1		SW6010B	10/23/03 11:10 / rp
SAR	1.2	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	3.7	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	10	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	64	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	26	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	27.4	meq/100g		0.1		SW6010B	10/23/03 01:40 / rp
ESP	2.1	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	10.2	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.7	meq/100g		0.1		SW6010B	10/23/03 01:14 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-041
 Client Sample ID: T2/MA-18-(12-24")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.8	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	1.53	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	49.1	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	4.4	meq/l		0.1		SW6010B	10/23/03 11:13 / rp
Mg-SatPst	7.3	meq/l		0.1		SW6010B	10/23/03 11:13 / rp
Na-SatPst	4.7	meq/l		0.1		SW6010B	10/23/03 11:13 / rp
SAR	2.0	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	3.1	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	18	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	57	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	25	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	29.5	meq/100g		0.1		SW6010B	10/23/03 03:30 / rp
ESP	2.6	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	11.8	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	1.0	meq/100g		0.1		SW6010B	10/23/03 01:20 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-042
 Client Sample ID: T2/MA-19-(0-6")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.56	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	39.6	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	3.2	meq/l		0.1		SW6010B	10/23/03 11:15 / rp
Mg-SatPst	1.2	meq/l		0.1		SW6010B	10/23/03 11:15 / rp
Na-SatPst	1.2	meq/l		0.1		SW6010B	10/23/03 11:15 / rp
SAR	0.8	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	4.1	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	33	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	46	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	21	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	L	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	25.5	meq/100g		0.1		SW6010B	10/23/03 03:32 / rp
ESP	2.0	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	7.7	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/23/03 01:22 / rp

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: AMPP
Project: Tongue River Monitoring, Set 2
Lab ID: H03100039-043
Client Sample ID: T2/MA-19-(6-12")

Report Date: 01/20/04
Collection Date: 10/01/03 17:00
Date Received: 10/07/03
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.6	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	0.48	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	37.0	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	3.2	meq/l		0.1		SW6010B	10/23/03 11:18 / rp
Mg-SatPst	1.2	meq/l		0.1		SW6010B	10/23/03 11:18 / rp
Na-SatPst	1.0	meq/l		0.1		SW6010B	10/23/03 11:18 / rp
SAR	0.6	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	3.2	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	27	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	52	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	21	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	SiL	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	22.4	meq/100g		0.1		SW6010B	10/23/03 03:35 / rp
ESP	1.9	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	9.4	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.5	meq/100g		0.1		SW6010B	10/23/03 01:25 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 2
 Lab ID: H03100039-044
 Client Sample ID: T2/MA-19-(12-24")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.8	s.u.		0.1		ASAM10-3.2	11/04/03 18:06 / rp
COND	1.09	mmhos/cm		0.01		ASAM10-3	11/04/03 18:06 / rp
Percent Sat	44.3	wt%		0.1		USDA27a	11/04/03 18:06 / rp
Ca-SatPst	3.0	meq/l		0.1		SW6010B	10/23/03 11:20 / rp
Mg-SatPst	4.0	meq/l		0.1		SW6010B	10/23/03 11:20 / rp
Na-SatPst	5.0	meq/l		0.1		SW6010B	10/23/03 11:20 / rp
SAR	2.7	unitless		0.1		Calculation	11/04/03 18:06 / rp
Alk-SatPst	3.4	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
PHYSICAL CHARACTERISTICS							
Sand	45	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Silt	39	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Clay	16	wt%		1.0		ASA15-5	11/04/03 18:06 / rp
Texture	L	unitless				ASA15-5	11/04/03 18:06 / rp
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	20.8	meq/100g		0.1		SW6010B	10/23/03 03:37 / rp
ESP	4.4	%		0.1		USDA20b	11/04/03 18:06 / rp
Lime as CaCO3	12.7	wt%		0.1		USDA23c	11/04/03 18:06 / rp
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	1.0	meq/100g		0.1		SW6010B	10/23/03 01:27 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 3
 Lab ID: H03100052-002
 Client Sample ID: T2/MA-20-(6-12")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.8	s.u.		0.1		ASAM10-3.2	11/06/03 20:50 / jdh
COND	0.81	mmhos/cm		0.01		ASAM10-3	11/06/03 20:50 / jdh
Percent Sat	52.2	wt%		0.1		USDA27a	11/06/03 20:50 / jdh
Ca-SatPst	4.2	meq/l		0.1		SW6010B	10/23/03 07:54 / rp
Mg-SatPst	1.6	meq/l		0.1		SW6010B	10/23/03 07:54 / rp
Na-SatPst	1.3	meq/l		0.1		SW6010B	10/23/03 07:54 / rp
SAR	0.8	unitless		0.1		Calculation	11/06/03 20:50 / jdh
Alk-SatPst	3.2	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	3.2	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	2.6	meq/L		0.1		ASA10-3	10/24/03 01:32 / rp
PHYSICAL CHARACTERISTICS							
Sand	18	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Silt	56	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Clay	26	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Texture	SiL	unitless				ASA15-5	11/06/03 20:50 / jdh
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	20.9	meq/100g		0.1		SW6010B	10/24/03 11:30 / rp
ESP	2.3	%		0.1		USDA20b	11/06/03 20:50 / jdh
Lime as CaCO3	7.0	wt%		0.1		USDA23c	10/27/03 00:00 / nh
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/24/03 08:33 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 3
 Lab ID: H03100052-003
 Client Sample ID: T2/MA-20-(12-24")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.8	s.u.		0.1		ASAM10-3.2	11/06/03 20:50 / jdh
COND	0.62	mmhos/cm		0.01		ASAM10-3	11/06/03 20:50 / jdh
Percent Sat	55.2	wt%		0.1		USDA27a	11/06/03 20:50 / jdh
Ca-SatPst	3.7	meq/l		0.1		SW6010B	10/23/03 07:56 / rp
Mg-SatPst	1.6	meq/l		0.1		SW6010B	10/23/03 07:56 / rp
Na-SatPst	1.0	meq/l		0.1		SW6010B	10/23/03 07:56 / rp
SAR	0.6	unitless		0.1		Calculation	11/06/03 20:50 / jdh
Alk-SatPst	2.7	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	2.7	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	2.7	meq/L		0.1		ASA10-3	10/24/03 01:35 / rp
PHYSICAL CHARACTERISTICS							
Sand	14	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Silt	56	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Clay	30	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Texture	SiCL	unitless				ASA15-5	11/06/03 20:50 / jdh
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	45.2	meq/100g		0.1		SW6010B	10/24/03 11:33 / rp
ESP	1.2	%		0.1		USDA20b	11/06/03 20:50 / jdh
Lime as CaCO3	7.8	wt%		0.1		USDA23c	10/27/03 00:00 / nh
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/24/03 08:36 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 3
 Lab ID: H03100052-004
 Client Sample ID: T2/MA-21-(0-6")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.7	s.u.		0.1		ASAM10-3.2	11/06/03 20:50 / jdh
COND	0.65	mmhos/cm		0.01		ASAM10-3	11/06/03 20:50 / jdh
Percent Sat	42.8	wt%		0.1		USDA27a	11/06/03 20:50 / jdh
Ca-SatPst	3.3	meq/l		0.1		SW6010B	10/23/03 07:59 / rp
Mg-SatPst	1.3	meq/l		0.1		SW6010B	10/23/03 07:59 / rp
Na-SatPst	1.7	meq/l		0.1		SW6010B	10/23/03 07:59 / rp
SAR	1.1	unitless		0.1		Calculation	11/06/03 20:50 / jdh
Alk-SatPst	5.1	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	5.1	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	1.3	meq/L		0.1		ASA10-3	10/24/03 01:37 / rp
PHYSICAL CHARACTERISTICS							
Sand	25	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Silt	53	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Clay	22	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Texture	SiL	unitless				ASA15-5	11/06/03 20:50 / jdh
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	34.1	meq/100g		0.1		SW6010B	10/24/03 11:35 / rp
ESP	1.7	%		0.1		USDA20b	11/06/03 20:50 / jdh
Lime as CaCO3	7.9	wt%		0.1		USDA23c	10/27/03 00:00 / nh
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/24/03 08:39 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 3
 Lab ID: H03100052-005
 Client Sample ID: T2/MA-21-(6-12")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.8	s.u.		0.1		ASAM10-3.2	11/06/03 20:50 / jdh
COND	0.59	mmhos/cm		0.01		ASAM10-3	11/06/03 20:50 / jdh
Percent Sat	41.6	wt%		0.1		USDA27a	11/06/03 20:50 / jdh
Ca-SatPst	2.6	meq/l		0.1		SW6010B	10/23/03 08:01 / rp
Mg-SatPst	1.0	meq/l		0.1		SW6010B	10/23/03 08:01 / rp
Na-SatPst	1.2	meq/l		0.1		SW6010B	10/23/03 08:01 / rp
SAR	0.9	unitless		0.1		Calculation	11/06/03 20:50 / jdh
Alk-SatPst	3.2	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	3.2	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	1.7	meq/L		0.1		ASA10-3	10/24/03 01:40 / rp
PHYSICAL CHARACTERISTICS							
Sand	26	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Silt	54	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Clay	20	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Texture	SiL	unitless				ASA15-5	11/06/03 20:50 / jdh
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	34.4	meq/100g		0.1		SW6010B	10/24/03 11:38 / rp
ESP	1.5	%		0.1		USDA20b	11/06/03 20:50 / jdh
Lime as CaCO3	8.5	wt%		0.1		USDA23c	10/27/03 00:00 / nh
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/24/03 08:41 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 3
 Lab ID: H03100052-006
 Client Sample ID: T2/MA-21-(12-24")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.7	s.u.		0.1		ASAM10-3.2	11/06/03 20:50 / jdh
COND	0.76	mmhos/cm		0.01		ASAM10-3	11/06/03 20:50 / jdh
Percent Sat	46.7	wt%		0.1		USDA27a	11/06/03 20:50 / jdh
Ca-SatPst	4.4	meq/l		0.1		SW6010B	10/23/03 08:09 / rp
Mg-SatPst	2.1	meq/l		0.1		SW6010B	10/23/03 08:09 / rp
Na-SatPst	1.1	meq/l		0.1		SW6010B	10/23/03 08:09 / rp
SAR	0.6	unitless		0.1		Calculation	11/06/03 20:50 / jdh
Alk-SatPst	3.6	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	3.6	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	2.8	meq/L		0.1		ASA10-3	10/24/03 01:43 / rp
PHYSICAL CHARACTERISTICS							
Sand	24	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Silt	52	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Clay	24	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Texture	SiL	unitless				ASA15-5	11/06/03 20:50 / jdh
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	34.0	meq/100g		0.1		SW6010B	10/24/03 11:40 / rp
ESP	1.4	%		0.1		USDA20b	11/06/03 20:50 / jdh
Lime as CaCO3	8.6	wt%		0.1		USDA23c	10/27/03 00:00 / nh
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.5	meq/100g		0.1		SW6010B	10/24/03 08:44 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 3
 Lab ID: H03100052-007
 Client Sample ID: T2/MA-22-(0-6")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.8	s.u.		0.1		ASAM10-3.2	11/06/03 20:50 / jdh
COND	0.80	mmhos/cm		0.01		ASAM10-3	11/06/03 20:50 / jdh
Percent Sat	40.4	wt%		0.1		USDA27a	11/06/03 20:50 / jdh
Ca-SatPst	3.9	meq/l		0.1		SW6010B	10/23/03 08:12 / rp
Mg-SatPst	2.1	meq/l		0.1		SW6010B	10/23/03 08:12 / rp
Na-SatPst	1.2	meq/l		0.1		SW6010B	10/23/03 08:12 / rp
SAR	0.7	unitless		0.1		Calculation	11/06/03 20:50 / jdh
Alk-SatPst	5.0	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	5.0	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	1.6	meq/L		0.1		ASA10-3	10/24/03 01:46 / rp
PHYSICAL CHARACTERISTICS							
Sand	30	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Silt	50	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Clay	20	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Texture	SiL	unitless				ASA15-5	11/06/03 20:50 / jdh
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	30.2	meq/100g		0.1		SW6010B	10/24/03 11:49 / rp
ESP	1.8	%		0.1		USDA20b	11/06/03 20:50 / jdh
Lime as CaCO3	8.7	wt%		0.1		USDA23c	10/27/03 00:00 / nh
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/24/03 08:46 / rp

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: AMPP
 Project: Tongue River Monitoring, Set 3
 Lab ID: H03100052-008
 Client Sample ID: T2/MA-22-(6-12")

Report Date: 01/20/04
 Collection Date: 10/01/03 17:00
 Date Received: 10/07/03
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	7.8	s.u.		0.1		ASAM10-3.2	11/06/03 20:50 / jdh
COND	0.75	mmhos/cm		0.01		ASAM10-3	11/06/03 20:50 / jdh
Percent Sat	40.8	wt%		0.1		USDA27a	11/06/03 20:50 / jdh
Ca-SatPst	3.4	meq/l		0.1		SW6010B	10/23/03 08:15 / rp
Mg-SatPst	2.4	meq/l		0.1		SW6010B	10/23/03 08:15 / rp
Na-SatPst	1.0	meq/l		0.1		SW6010B	10/23/03 08:15 / rp
SAR	0.6	unitless		0.1		Calculation	11/06/03 20:50 / jdh
Alk-SatPst	2.8	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	2.8	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	0.8	meq/L		0.1		ASA10-3	10/24/03 01:49 / rp
PHYSICAL CHARACTERISTICS							
Sand	28	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Silt	50	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Clay	22	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Texture	SiL	unitless				ASA15-5	11/06/03 20:50 / jdh
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	32.3	meq/100g		0.1		SW6010B	10/24/03 11:51 / rp
ESP	1.8	%		0.1		USDA20b	11/06/03 20:50 / jdh
Lime as CaCO3	10.1	wt%		0.1		USDA23c	10/27/03 00:00 / nh
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	0.6	meq/100g		0.1		SW6010B	10/24/03 08:54 / rp

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: AMPP
Project: Tongue River Monitoring, Set 3
Lab ID: H03100052-009
Client Sample ID: T2/MA-22-(12-24")

Report Date: 01/20/04
Collection Date: 10/01/03 17:00
Date Received: 10/07/03
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SATURATED PASTE							
pH-SatPst	8.2	s.u.		0.1		ASAM10-3.2	11/06/03 20:50 / jdh
COND	3.00	mmhos/cm		0.01		ASAM10-3	11/06/03 20:50 / jdh
Percent Sat	48.7	wt%		0.1		USDA27a	11/06/03 20:50 / jdh
Ca-SatPst	4.8	meq/l		0.1		SW6010B	10/23/03 08:17 / rp
Mg-SatPst	17.4	meq/l		0.1		SW6010B	10/23/03 08:17 / rp
Na-SatPst	14.9	meq/l		0.1		SW6010B	10/23/03 08:17 / rp
SAR	4.5	unitless		0.1		Calculation	11/06/03 20:50 / jdh
Alk-SatPst	3.1	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
HCO3	3.1	meq/L		1.0		ASA10-3	10/22/03 00:00 / rp
CO3	< 0.5	meq/L		0.5		ASA10-3	10/22/03 00:00 / rp
SO4-SatPst	33.9	meq/L		0.1		ASA10-3	10/24/03 01:52 / rp
PHYSICAL CHARACTERISTICS							
Sand	14	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Silt	62	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Clay	24	wt%		1.0		ASA15-5	11/06/03 20:50 / jdh
Texture	SiL	unitless				ASA15-5	11/06/03 20:50 / jdh
C=Clay, S=Sand(y), Si=Silt(y), L=Loam(y)							
CHEMICAL CHARACTERISTICS							
CEC	29.3	meq/100g		0.1		SW6010B	10/24/03 11:54 / rp
ESP	5.1	%		0.1		USDA20b	11/06/03 20:50 / jdh
Lime as CaCO3	10.3	wt%		0.1		USDA23c	10/27/03 00:00 / nh
METALS, AMMONIUM ACETATE EXTRACTABLE							
Na-Av	2.2	meq/100g		0.1		SW6010B	10/24/03 08:57 / rp

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

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