CHLORIDE

Method EPA300.0

Calibration Verifications

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080228-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
ICV	Initial Calibration	2/28/2008	5	4.75	0.2	N/A	95	90 - 110
CCV1	Continuing Calibration	2/28/2008	10	10	0.2	N/A	100	90 - 110

Data Package ID: *ic0802215-1*

FLUORIDE

Method EPA300.0

Calibration Verifications

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080228-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
ICV	Initial Calibration	2/28/2008	2.5	2.38	0.1	N/A	95	90 - 110
CCV1	Continuing Calibration	2/28/2008	5	4.95	0.1	N/A	99	90 - 110

Data Package ID: *ic0802215-1*

NITRATE AS N

Method EPA300.0

Calibration Verifications

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080228-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
ICV	Initial Calibration	2/28/2008	5	4.68	0.2	N/A	94	90 - 110
CCV1	Continuing Calibration	2/28/2008	10	10	0.2	N/A	100	90 - 110

Data Package ID: *ic0802215-1*

NITRITE AS N

Method EPA300.0

Calibration Verifications

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080228-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
ICV	Initial Calibration	2/28/2008	2	1.92	0.1	N/A	96	90 - 110
CCV1	Continuing Calibration	2/28/2008	5	4.99	0.1	N/A	100	90 - 110

Data Package ID: *ic0802215-1*

ORTHOPHOSPHATE AS P

Method EPA300.0

Calibration Verifications

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080228-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
ICV	Initial Calibration	2/28/2008	5	4.64	0.5	N/A	93	90 - 110
CCV1	Continuing Calibration	2/28/2008	10	9.49	0.5	N/A	95	90 - 110

Data Package ID: *ic0802215-1*

SULFATE

Method EPA300.0

Calibration Verifications

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080228-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
ICV	Initial Calibration	2/28/2008	25	22.5	1	N/A	90	90 - 110
CCV1	Continuing Calibration	2/28/2008	50	49.9	1	N/A	100	90 - 110

Data Package ID: *ic0802215-1*

ORTHOPHOSPHATE AS P

Method EPA300.0

Calibration Verifications

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080229-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
ICV	Initial Calibration	2/28/2008	5	4.64	0.5	N/A	93	90 - 110
CCV1	Continuing Calibration	2/29/2008	10	10.6	0.5	N/A	106	90 - 110
CCV2	Continuing Calibration	2/29/2008	10	9.7	0.5	N/A	97	90 - 110

Data Package ID: *ic0802215-1*

SULFATE

Method EPA300.0

Calibration Verifications

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080229-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
ICV	Initial Calibration	2/28/2008	25	22.5	1	N/A	90	90 - 110
CCV1	Continuing Calibration	2/29/2008	50	49.8	1	N/A	100	90 - 110
CCV2	Continuing Calibration	2/29/2008	50	48.8	1	N/A	98	90 - 110

Data Package ID: *ic0802215-1*

CHLORIDE

Method EPA300.0

Calibration Blanks

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080228-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Result	Reporting Limit	Flag
ICB	Initial Calibration	2/28/2008	0.2	0.2	U
CCB1	Continuing Calibration	2/28/2008	0.2	0.2	U

Data Package ID: *ic0802215-1*

FLUORIDE

Method EPA300.0

Calibration Blanks

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080228-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Result	Reporting Limit	Flag
ICB	Initial Calibration	2/28/2008	0.1	0.1	U
CCB1	Continuing Calibration	2/28/2008	0.1	0.1	U

Data Package ID: *ic0802215-1*

NITRATE AS N

Method EPA300.0

Calibration Blanks

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080228-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Result	Reporting Limit	Flag
ICB	Initial Calibration	2/28/2008	0.2	0.2	U
CCB1	Continuing Calibration	2/28/2008	0.2	0.2	U

Data Package ID: *ic0802215-1*

NITRITE AS N

Method EPA300.0

Calibration Blanks

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080228-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Result	Reporting Limit	Flag
ICB	Initial Calibration	2/28/2008	0.1	0.1	U
CCB1	Continuing Calibration	2/28/2008	0.1	0.1	U

Data Package ID: *ic0802215-1*

ORTHOPHOSPHATE AS P

Method EPA300.0

Calibration Blanks

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080228-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Result	Reporting Limit	Flag
ICB	Initial Calibration	2/28/2008	0.5	0.5	U
CCB1	Continuing Calibration	2/28/2008	0.5	0.5	U

Data Package ID: *ic0802215-1*

SULFATE

Method EPA300.0

Calibration Blanks

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080228-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Result	Reporting Limit	Flag
ICB	Initial Calibration	2/28/2008	1	1	U
CCB1	Continuing Calibration	2/28/2008	1	1	U

Data Package ID: *ic0802215-1*

ORTHOPHOSPHATE AS P

Method EPA300.0

Calibration Blanks

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080229-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Result	Reporting Limit	Flag
ICB	Initial Calibration	2/28/2008	0.5	0.5	U
CCB1	Continuing Calibration	2/29/2008	0.881	0.5	
CCB2	Continuing Calibration	2/29/2008	0.601	0.5	

Data Package ID: *ic0802215-1*

SULFATE

Method EPA300.0

Calibration Blanks

Lab Name: Paragon Analytics
Work Order Number: 0802215
Client Name: URS
ClientProject ID: NOBLE 22239457-00002

Date Analyzed: 28-Feb-08
Run ID: ic080229-1a
Result Units: mg/l

Lab ID	Verification Type	Date Analyzed	Result	Reporting Limit	Flag
ICB	Initial Calibration	2/28/2008	1	1	U
CCB1	Continuing Calibration	2/29/2008	1	1	U
CCB2	Continuing Calibration	2/29/2008	1	1	U

Data Package ID: *ic0802215-1*

Prep Batch ID: IC080228-1

Start Date: 02/28/08
Start Time: 14:00
Prep Analyst: Eric Allen Lintner
End Date: 02/28/08
End Time: 15:00
Concentration Method: NONE
Extract Method: NONE
Initial Volume Units: ml
Final Volume Units: ml
Batch Created By: EAL
Date Created: 02/28/08
Time Created: 14:37
Validated By: EAL
Date Validated: 02/28/08
Time Validated: 14:49

Comments:

QC Batch ID: IC080228-1-1

Lab ID	QC Type	Field ID	Matrix	Date Collected	Initial Wt/Vol	Final Wt/Vol	Cleanup Method	Cleanup DF	Order Number
IC080228-1	MB	XXXXXX	WATER	XXXXXX	5	5	NONE	1	0802219
IC080228-1	LCS	XXXXXX	WATER	XXXXXX	5	5	NONE	1	0802219
0802219-9	MS	XXXXXX	WATER	XXXXXX	5	5	NONE	1	0802219
0802219-9	MSD	XXXXXX	WATER	XXXXXX	5	5	NONE	1	0802219
0801189-4	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	0801189
0801255-3	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	0801255
0801255-7	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	0801255
0802215-1	SMP	BM35-32A-FB-022720	WATER	2/27/2008	5	5	NONE	1	0802215
0802219-1	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	0802219
0802219-11	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	0802219
0802219-3	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	0802219
0802219-5	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	0802219
0802219-7	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	0802219
0802219-9	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	0802219

QC Types

CAR	Carrier reference sample	DUP	Laboratory Duplicate
LCS	Laboratory Control Sample	LCSD	Laboratory Control Sample Duplicat
MB	Method Blank	MS	Laboratory Matrix Spike
MSD	Laboratory Matrix Spike Duplicate	REP	Sample replicate
SMP	Field Sample	SYS	Sample Yield Spike

Supporting Raw Data

Alkalinity Raw Data Worksheet

Anal Run ID **AK080229-1A** 0930-1100 JBM 2/29/08

Anal Start Date **2/29/2008**

Standardization Ref ID **AlkalinityCAL080229-1** Rm. 2/29/08

Standardization Of Alkalinity

Rep Num	THAM Conc	Aliq Titrated (mL)	vol to pH 4.5(mL)	HCl Conc(N)	Conc Units
1	0.2	1	11.75	0.0170213	N
2	0.2	1	11.65	0.0171674	N
3	0.2	1	11.67	0.017138	N

Avg HCl Conc: 0.01710887

Num	Don't Use	ReRun Num	Lab ID	QC Type	Anal Dil	Aliq Titrated (mL)	vol to pH 8.3(mL)	vol to pH 4.5(mL)	total vol(mL)	HCO3 (mg/L as CaCO3)	CO3 (mg/L as CaCO3)	OH (mg/L as CaCO3)	Total Alk (mg/L as CaCO3)	Expected	%Rec
1	☐	0	ICV	ICV SMP	1	100	5.7	5.85	11.55	1.283162	97.52057	0	98.80373		
2	☐	0	ICB	ICB SMP	1	100	0	0.28	0.28	2.395242	0	0	2.395242		
3	☐	0	AK080229-1	MB SMP	1	100	0	0.27	0.27	2.309698	0	0	2.309698		
4	☐	0	AK080229-1	LCS SMP	1	100	5.6	5.91	11.51	2.651879	95.80968	0	98.46156		
5	☐	0	0802209-1	SMP	1	100	0	9.03	9.03	77.24655	0	0	77.24655		
6	☐	0	0802211-2	SMP	1	10	0.49	6.71	7.2	532.0859	83.83347	0	615.9194		
7	☐	0	0802211-2	Dup SMP	1	10	0.54	6.59	7.13	517.5434	92.38792	0	609.9313		
8	☐	0	0802211-9	SMP	1	10	0.15	8.4	8.549999	705.7409	25.66331	0	731.4042		
9	☐	0	0802215-1	SMP	1	5	0	11.72	11.72	2005.16	0	0	2005.16		
10	☐	0	0802217-2	SMP	1	50	0	5.26	5.26	89.99268	0	0	89.99268		
11	☐	0	0802217-10	SMP	1	10	0.33	5.72	6.05	461.0841	56.45928	0	517.5434		
12	☐	0	0802219-1	SMP	1	25	0	6.17	6.17	211.1235	0	0	211.1235		
13	☐	0	0802219-3	SMP	1	100	0	0.94	0.94	8.04117	0	0	8.04117		
14	☐	0	0802219-5	SMP	1	25	0	7.14	7.14	244.3147	0	0	244.3147		
15	☐	0	0802219-7	SMP	1	25	0	7.08	7.08	242.2616	0	0	242.2616		
16	☐	0	0802219-9	SMP	1	25	0	5.43	5.43	185.8024	0	0	185.8024		
17	☐	0	0802219-9	Dup SMP	1	25	0	5.54	5.54	189.5663	0	0	189.5663		
18	☐	0	0802219-11	SMP	1	100	0	0	0	0	0	0	0		

JBM 2/29/08

Comments:

Standards, Batch QC, and Matrix Spike Information

ID	Parent ID	Parent Conc	Parent Vol.	Final Vol.
ICV	ST071128-4	10000	1	100
CCV	ST071128-4	10000	1	100

Reagent List:

0.020 N HCl Titrant	RG080215-5
Phenolphthalein Indicator	RG070824-2
Bromocresol Green Indicator	RG080215-6
0.20 N Std. THAM	ST071128-3
0.20 N NaCO3 (ICV, LCS, CCV's - 1.0 mL)	ST071128-4

JBM 2/29/08

Ammonia as N Daily Verification

JBM
3/4/08

Analysis Date: 03/04/08
Analyst: EAL

Ammonia as N - Method EPA350.1/SM4500 NH3-N H/QC10-107-06-1-C - SOP 1129		
	Standards Information:	
Instrument : LACHAT Quickchem 8000	**1st Source 50 ppm NH3-N:**	* ST080116-2
	2nd Source 50 ppm NH3-N:	** ST080116-3

Standards, Batch QC, and Matrix Spike Information				
I.D.	Pmt Std I.D.	Pmt Std. Conc.	Pmt Std. Vol. (mL)	Final Vol. (mL)
5.0 mg/L NH3-N	*	50 mg/L NH3-N	0.500	5.0
2.0 mg/L NH3-N	*	50 mg/L NH3-N	0.200	5.0
1.0 mg/L NH3-N	*	50 mg/L NH3-N	0.100	5.0
0.50 mg/L NH3-N	*	50 mg/L NH3-N	0.050	5.0
0.20 mg/L NH3-N	*	50 mg/L NH3-N	0.020	5.0
0.10 mg/L NH3-N	*	50 mg/L NH3-N	0.010	5.0
ICV (1.0 mg/L NH3-N)	**	50 mg/L NH3-N	0.100	5.0
LCS (AQ)(1.0 mg/L NH3-N)	**	50 mg/L NH3-N	0.100	5.0
LCS (SOIL)(2.0 mg/L NH3-N)	**	50 mg/L NH3-N	1.600	40.0
MS/MSD(AQ) (1.0mg/L NH3-N)	*	50 mg/L NH3-N	0.100	5.0
MS/MSD(SOIL) (1.0mg/L NH3-N)	*	50 mg/L NH3-N	0.800	40.0
CCV (2.0 mg/L NH3-N)	*	50 mg/L NH3-N	0.200	5.0
CRC (2.0 mg/L NH3-N)	*	50 mg/L NH3-N	0.500	5.0
LLC (0.05 mg/L NH3-N)	*	50 mg/L NH3-N	0.010	5.0

Creator: WETCHEM
Creation Date: Mar 4, 2008 11:11:22
Last Modified: Mar 4, 2008 13:04:23
Description: NH3-N(350.1);50PPM(1ST)NH3-N:ST080116-2;50PPM(2ND)NH3-N:ST080116-3;EDTABUFFER:RG08 NAOH:RG080115-3

3/4/08 BM 3/4/08

Cup #	Sample ID	Manual Dilution	Sample Type	
1	5.00 mg/l NH3-N	1.0000	CalStd	
2	2.00 mg/l NH3-N	1.0000	CalStd	
3	1.00 mg/l NH3-N	1.0000	CalStd	
4	0.50 mg/l NH3-N	1.0000	CalStd	
5	0.20 mg/l NH3-N	1.0000	CalStd	
6	0.10 mg/l NH3-N	1.0000	CalStd	
7	0.00 mg/l NH3-N	1.0000	CalStd	
1	ICV	1.0000	Unknown	
2	ICB	1.0000	Unknown	
3	NH080304-1MB	1.0000	Unknown	
~~4~~	NH080304-1LCS	1.0000	Unknown	
5	NH080304-2MB	1.0000	Unknown	
6	NH080304-2LCS	1.0000	Unknown	
(7)	0802215-1	1.0000	Unknown	
(8)	0802215-1MS	1.0000	Unknown	
(9)	0802215-1MSD	1.0000	Unknown	
10	0802223-1	1.0000	Unknown	
(11)	0802223-5	1.0000	Unknown	
(12)	0802223-10	1.0000	Unknown	
13	CCV	1.0000	Unknown	
14	CCB	1.0000	Unknown	
(15)	0802223-15	1.0000	Unknown	
16	0802234-21	1.0000	Unknown	
17	0802234-1	1.0000	Unknown	
18	0802234-1MS	1.0000	Unknown	
19	0802234-1MSD	1.0000	Unknown	
(20)	0802234-5	1.0000	Unknown	
(21)	0802234-10	1.0000	Unknown	
(22)	0802234-15	1.0000	Unknown	
(23)	0802234-20	1.0000	Unknown	
24	NH080304-1LCS	1.0000	Unknown	
25	CCV	1.0000	Unknown	
26	CCB	1.0000	Unknown	
27	0802215-1 100X	1.0000	Unknown	
~~28~~	0802223-2 200X	1.0000	Unknown	
~~29~~	0802223-3 200X	1.0000	Unknown	
30	0802223-4	1.0000	Unknown	
31	0802223-5 200X	1.0000	Unknown	
~~32~~	0802223-6 200X	1.0000	Unknown	
33	0802223-7 200X	1.0000	Unknown	
34	0802223-8	1.0000	Unknown	
~~35~~	0802223-9 200X	1.0000	Unknown	

O.K
ST[illegible]

Cup #	Sample ID	Manual Dilution	Sample Type	
36	0802223-10 200X	1.0000	Unknown	
37	CCV	1.0000	Unknown	
38	CCB	1.0000	Unknown	
39	0802223-11 200X	1.0000	Unknown	
40	0802223-12 200X	1.0000	Unknown	
41	0802223-13 200X	1.0000	Unknown	
42	0802223-14 200X	1.0000	Unknown	
43	0802223-15 200X	1.0000	Unknown	
44	0802223-16 200X	1.0000	Unknown	
45	0802234-2	1.0000	Unknown	
46	0802234-3	1.0000	Unknown	
47	0802234-4	1.0000	Unknown	
48	0802234-5 200X	1.0000	Unknown	
49	CCV	1.0000	Unknown	
50	CCB	1.0000	Unknown	
51	0802234-6	1.0000	Unknown	
52	0802234-7	1.0000	Unknown	
53	0802234-8 200X	1.0000	Unknown	
54	0802234-9 200X	1.0000	Unknown	
55	0802234-10 200X	1.0000	Unknown	
56	0802234-11 200X	1.0000	Unknown	
57	0802234-12 200X	1.0000	Unknown	
58	0802234-13 200X	1.0000	Unknown	
59	0802234-14 200X	1.0000	Unknown	
60	0802234-16	1.0000	Unknown	
61	CCV	1.0000	Unknown	
62	CCB	1.0000	Unknown	
63	0802234-17 200X	1.0000	Unknown	
64	0802234-18	1.0000	Unknown	
65	0802234-19 200X	1.0000	Unknown	
66	0802234-20 200X	1.0000	Unknown	
67	0802223-2	1.0000	Unknown	
68	0802223-3	1.0000	Unknown	
69	0802223-6 10X	1.0000	Unknown	
70	0802223-9	1.0000	Unknown	
71	CCV	1.0000	Unknown	
72	CCB	1.0000	Unknown	

INSTRUMENT: Flow Injection Analysis
TRAY: 0304NH.TRA METHOD: 0304NH.MET DATAFILE: 0304NH.FDT
DATE/TIME: Tue Mar 04 11:40:07 2008 OPERATOR: WETCHEM

*** Begin Calibration ***
Cup# 1 Sample: 5.00 mg/l NH3-N Type: CalStd Level: 1 Rep# 1/1
Ch 2: Ammonia Peak Area = 65673992.0 µv-s
Cup# 2 Sample: 2.00 mg/l NH3-N Type: CalStd Level: 2 Rep# 1/1
Ch 2: Ammonia Peak Area = 26354952.0 µv-s
Cup# 3 Sample: 1.00 mg/l NH3-N Type: CalStd Level: 3 Rep# 1/1
Ch 2: Ammonia Peak Area = 13188811.0 µv-s
Cup# 4 Sample: 0.50 mg/l NH3-N Type: CalStd Level: 4 Rep# 1/1
Ch 2: Ammonia Peak Area = 6308294.5 µv-s
Cup# 5 Sample: 0.20 mg/l NH3-N Type: CalStd Level: 5 Rep# 1/1
Ch 2: Ammonia Peak Area = 2504160.3 µv-s
Cup# 6 Sample: 0.10 mg/l NH3-N Type: CalStd Level: 6 Rep# 1/1
Ch 2: Ammonia Peak Area = 1527553.0 µv-s
Cup# 7 Sample: 0.00 mg/l NH3-N Type: CalStd Level: 7 Rep# 1/1
Ch 2: Ammonia Peak Area = 146250.8 µv-s
*** Updated Calibration ***
Ch 2: Ammonia
** 1st Order Poly Calibration **
C[0] = 7.61469e-008
C[1] = -0.00150058
r = 1.0000
*** End Calibration Block ***
*** Calibration Passed ***
Cup# 1 Sample: ICV Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.9413 mg/L
Cup# 2 Sample: ICB Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0134 mg/L
Cup# 3 Sample: NH080304-1MB Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0057 mg/L
Cup# 4 Sample: NH080304-1LCS Type: Unknown Rep# 1/1
Ch 2: Ammonia = 2.7433 mg/L
Cup# 5 Sample: NH080304-2MB Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0135 mg/L
Cup# 6 Sample: NH080304-2LCS Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.9821 mg/L
Cup# 7 Sample: 0802215-1 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 15.9894 mg/L
Cup# 8 Sample: 0802215-1MS Type: Unknown Rep# 1/1
Ch 2: Ammonia = 15.9421 mg/L
Cup# 9 Sample: 0802215-1MSD Type: Unknown Rep# 1/1
Ch 2: Ammonia = 15.8600 mg/L
Cup# 10 Sample: 0802223-1 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0943 mg/L
Cup# 11 Sample: 0802223-5 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 21.4660 mg/L
Cup# 12 Sample: 0802223-10 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 18.9484 mg/L
Cup# 13 Sample: CCV Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.9095 mg/L
Cup# 14 Sample: CCB Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0269 mg/L
Cup# 15 Sample: 0802223-15 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 20.1786 mg/L
Cup# 16 Sample: 0802234-21 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.1365 mg/L
Cup# 17 Sample: 0802234-1 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0923 mg/L
Cup# 18 Sample: 0802234-1MS Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.9943 mg/L
Cup# 19 Sample: 0802234-1MSD Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.9838 mg/L
Cup# 20 Sample: 0802234-5 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 17.0606 mg/L
Cup# 21 Sample: 0802234-10 Type: Unknown Rep# 1/1

Ch 2: Ammonia = 21.1344 mg/L
Cup# 22 Sample: 0802234-15 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.6252 mg/L
Cup# 23 Sample: 0802234-20 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 20.5544 mg/L
Cup# 24 Sample: NH080304-1LCS Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.9941 mg/L
Cup# 25 Sample: CCV Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.9253 mg/L
Cup# 26 Sample: CCB Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0317 mg/L
Cup# 27 Sample: 0802215-1 100X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.5458 mg/L
Cup# 28 Sample: 0802223-2 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0109 mg/L
Cup# 29 Sample: 0802223-3 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0050 mg/L
Cup# 30 Sample: 0802223-4 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.1074 mg/L
Cup# 31 Sample: 0802223-5 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 2.1004 mg/L
Cup# 32 Sample: 0802223-6 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0754 mg/L
Cup# 33 Sample: 0802223-7 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.7704 mg/L
Cup# 34 Sample: 0802223-8 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0854 mg/L
Cup# 35 Sample: 0802223-9 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0043 mg/L
Cup# 36 Sample: 0802223-10 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.7061 mg/L
Cup# 37 Sample: CCV Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.9015 mg/L
Cup# 38 Sample: CCB Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0248 mg/L
Cup# 39 Sample: 0802223-11 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.9948 mg/L
Cup# 40 Sample: 0802223-12 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.5048 mg/L
Cup# 41 Sample: 0802223-13 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.6815 mg/L
Cup# 42 Sample: 0802223-14 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.9289 mg/L
Cup# 43 Sample: 0802223-15 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.2131 mg/L
Cup# 44 Sample: 0802223-16 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 2.7621 mg/L
Cup# 45 Sample: 0802234-2 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.1048 mg/L
Cup# 46 Sample: 0802234-3 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.1579 mg/L
Cup# 47 Sample: 0802234-4 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 2.0541 mg/L
Cup# 48 Sample: 0802234-5 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.3513 mg/L
Cup# 49 Sample: CCV Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.8465 mg/L
Cup# 50 Sample: CCB Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0253 mg/L
Cup# 51 Sample: 0802234-6 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.1421 mg/L
Cup# 52 Sample: 0802234-7 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.8071 mg/L
Cup# 53 Sample: 0802234-8 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.1190 mg/L
Cup# 54 Sample: 0802234-9 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.8573 mg/L
Cup# 55 Sample: 0802234-10 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.9800 mg/L

Cup# 56 Sample: 0802234-11 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.6979 mg/L
Cup# 57 Sample: 0802234-12 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.4943 mg/L
Cup# 58 Sample: 0802234-13 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.1957 mg/L
Cup# 59 Sample: 0802234-14 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.3571 mg/L
Cup# 60 Sample: 0802234-16 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.7158 mg/L
Cup# 61 Sample: CCV Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.9230 mg/L
Cup# 62 Sample: CCB Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0166 mg/L
Cup# 63 Sample: 0802234-17 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 3.9163 mg/L
Cup# 64 Sample: 0802234-18 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 2.1397 mg/L
Cup# 65 Sample: 0802234-19 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.8985 mg/L
Cup# 66 Sample: 0802234-20 200X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.5644 mg/L
Cup# 67 Sample: 0802223-2 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.1729 mg/L
Cup# 68 Sample: 0802223-3 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0128 mg/L
Cup# 69 Sample: 0802223-6 10X Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.4318 mg/L
Cup# 70 Sample: 0802223-9 Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.3407 mg/L
Cup# 71 Sample: CCV Type: Unknown Rep# 1/1
Ch 2: Ammonia = 1.9153 mg/L
Cup# 72 Sample: CCB Type: Unknown Rep# 1/1
Ch 2: Ammonia = 0.0199 mg/L
******* Tray Run Complete *******

pH Calculations and Quality Control Results

Prep & Analysis Date: 2/28/2008
Prep & Analysis Time: 0930-1500
Analyst: JBM

JBM 2/28/08

RW Ca 2/28/08

Reagent List:		
4.01		10.01:
ST071129-1	JBM 2/28/08	**ST071129-3**
7.00 (CCV):		7.00 (ICV):
ST071129-2		**ST071129-4**

ID	Temp. (°C)	Method	sample vol (g)	sample vol (mL)	pH Value	QC Accdeptance Range (pH units)
pH 4.01	24.6	NA	NA	NA	4.01	
pH 7.00	24.6	NA	NA	NA	7.00	
pH 10.01	24.6	NA	NA	NA	10.01	
ICV - pH 7.00	24.6	NA	NA	NA	7.00	+/- 0.05
0802207-1	24.6	SW9040	NA	20.0	7.78	
0802207-2	24.6	SW9040	NA	20.0	7.87	
0802207-3	24.6	SW9040	NA	20.0	7.72	
0802207-4	24.6	SW9040	NA	20.0	7.78	
0802207-5	24.6	SW9040	NA	20.0	7.78	
0802215-1	24.6	SW9040	NA	20.0	7.08	
0802208-1	24.6	SW9040	NA	20.0	7.85	
0802208-1dup	24.6	SW9040	NA	20.0	7.91	
CCV- pH 7.00	24.6	NA	NA	NA	6.95	+/- 0.10

DUPLICATE SUMMARY (Aq)

ID	native pH Value	duplic pH Value	difference of native - dup	accept. limit
0802208-1	7.85	7.91	0.06	0.2 pH units

pH INFORMATION:
SOP 1126 / EPA Method 150.1, 9040B and 9045C
Instrument : Fisher Scientific pH / mV meter model 50 (SN C0000643)
Electrode : Orion - Ross Sure-Flow Electrode Model 81-72BN

JBM 2/28/08

TDS Raw Data Worksheet

Anal Run ID **TD080229-1A** Prep 2/28/08 1200-1300
Anal Start Date **2/29/2008** Analyze 2/29/08 0845-1300
JBM 3/3/08

Num	Don't Use	ReRun Num	Lab ID	QC Type	Samp Vol (ml)	Empty Beaker (g)	A - Beaker + Residue gross (g)	A - Net mass (mg)	B - Beaker + Residue gross (g)	B - Net mass (mg)	gross A vs gross B (+/- 0.5mg)	% mass loss (<= 4%)	calculated conc (mg/L)	DL (mg/L)
1	☐	0	TD080228-1	~~SMP~~ MB	100	77.55	77.5503	0.3	77.5508	0.8	0.5	NA	8	20
2	☐	0	TD080228-1	~~SMP~~ LCS	100	65.6734	65.7136	40.2	65.7145	41.1	0.9	2.21%	411	20
3	☐	0	0802194-1	SMP	50	66.0294	66.0755	46.1	66.0763	46.9	0.8	1.72%	938	40
4	☐	0	0802194-3	SMP	25	51.0882	51.2328	144.6	51.233	144.8	0.2	0.14%	5792	80
5	☐	0	0802209-1	SMP	100	78.1437	78.1831	39.4	78.184	40.3	0.9	2.26%	403	20
6	☐	0	0802211-2	SMP	50	65.8841	65.9317	47.6	65.9326	48.5	0.9	1.87%	970	40
7	☐	0	0802211-2	~~SMP~~ DUP	50	66.0062	66.0535	47.3	66.0545	48.3	1	2.09%	966	40
8	☐	0	0802211-9	SMP	25	43.791	43.838	47	43.8385	47.5	0.5	1.06%	1900	80
9	☐	0	0802215-1	SMP	1	21.2149	21.2653	50.4	21.2656	50.7	0.3	0.59%	50700	2000
10	☐	0	0802217-2	SMP	2	21.1817	21.2215	39.8	21.2218	40.1	0.3	0.75%	20050	1000
11	☐	0	0802217-10	SMP	50	65.8608	65.8911	30.3	65.8917	30.9	0.6	1.96%	618	40
12	☐	0	0802219-1	SMP	100	78.2704	78.3195	49.1	78.3201	49.7	0.6	1.21%	497	20
13	☐	0	0802219-3	SMP	50	66.6966	66.8052	108.6	66.8057	109.1	0.5	0.46%	2182	40
14	☐	0	0802219-5	SMP	50	78.2626	78.3695	106.9	78.37	107.4	0.5	0.47%	2148	40
15	☐	0	0802219-7	SMP	50	66.3425	66.4493	106.8	66.45	107.5	0.7	0.65%	2150	40
16	☐	0	0802219-9	SMP	50	65.8762	65.9557	79.5	65.9562	80	0.5	0.63%	1600	40
17	☐	0	0802219-9	DUP	50	65.217	65.2974	80.4	65.2979	80.9	0.5	0.62%	1618	40
18	☑	0	0802219-11	SMP	25	50.2185	50.4819	263.4	50.4813	262.8	0.6	0.23%	10512	80
19	☐	0	0802219-11	SMP	2	21.1475	21.1682	20.7	21.168	20.5	0.2	0.97%	10250	1000

mg/3/08

Comments: 0802219-11 REPREPPED 2/29/2008; Analyzed 3/3/2008

Standards, Batch QC, and Matrix Spike Information

ID	Parent ID	Parent Conc	Parent Vol.	Final Vol.
LCS	ST070410-1	40000	1	100

Reagent List:

TDS Spike Solution: 40.0 mg NaCl/mL **ST070410-1**

JBM
3/3/08

CONDUCTIVITY SCREENING WORKSHEET

Instrument ID: VWR Digital Conductivity Meter S/N A22036

Workorder ID / Sample No.		Estimated µS	Dilution(s)	Anion(s)	Date	Initials	Comments
0802134	1	4600		TDS ONLY	2/19/08	JBM	
	2	3600 ~~4200~~ 2/21/08					
	3	750					
	4	800					
0802095	1	80	1X	SCAN			
0802153	1	4500		TDS ONLY	2/22/08	BSW	
	2	7500					
	3	6000					
0802155	2	1000	1 20	Cl, F, SCAN			
0802159	1	400	1 5	F, Cl, NO3, SCAN			
0802167	1	1600	20	Cl, SCAN	2/25/08	JBM	
	3	1800	20				
	5	2100	50				
	7	2400	50				
	9	2100	50				
	11	2200	50				
	13	1600	20				
	15	350	2				
0802173	2	2100	2 50	F, Cl SCAN			
0802174	2	900	~~2~~ 1X 20	2/25/08			
0802194	1	800	10	Cl SCAN	2/27/08	JBM	
	3	3000	50				
0802209	1	580	5	Cl, SCAN			
0802211	2	1000	1 20	Br, F, Cl SCAN	2/27/08		
	9	2200	5 50				
0802215	1	75000	100, 5000	SCAN	2/28/08	JBM	
0802217	2	35000	50, 500	Cl, F, SCAN			
	19	950	1 20				
0802219	1	600	5	Cl SCAN			
	3	1600	20				
	5	1700					
	7						
	9	1300					
	11	4500	50				
0802223	1	650	1 10	Br, Cl, SCAN	2/29/08	JBM	
	2	2200	5 50				
	3	2800	5 50				
	4	700	1 10				
	5	11000	20 200				
	6	1200	2 20				

Reviewed by / Date 3/3/08

Form 1116r4.fm (6/29/04)

Schedule File: C:\PeakNet\schedule\080228.sch

Line	Sample	Sample Type	Method	Data File	Comment
1	5X STD	Calibration	080228.met	c:\peaknet\data\080228\080228_001.dxd	
2	10X STD	Calibration	080228.met	c:\peaknet\data\080228\080228_002.dxd	
3	25X STD	Calibration	080228.met	c:\peaknet\data\080228\080228_003.dxd	
4	100X STD	Calibration	080228.met	c:\peaknet\data\080228\080228_004.dxd	
5	1000X STD	Calibration	080228.met	c:\peaknet\data\080228\080228_005.dxd	
6	0 STD	Calibration	080228.met	c:\peaknet\data\080228\080228_006.dxd	
7	ICV	Sample	080228.met	c:\peaknet\data\080228\080228_007.dxd	ICV
8	ICB	Sample	080228.met	c:\peaknet\data\080228\080228_008.dxd	ICB
9	IC080228-1MB	Sample	080228.met	c:\peaknet\data\080228\080228_009.dxd	WATER
10	IC080228-1LCS	Sample	080228.met	c:\peaknet\data\080228\080228_010.dxd	WATER - PO4 - 87% ; SO4 - 89 %
11	0802215-1 100X	Sample	080228.met	c:\peaknet\data\080228\080228_011.dxd	F,CL,NO2,NO3,PO4,SO4-300.0
12	0802215-1 5000X	Sample	080228.met	c:\peaknet\data\080228\080228_012.dxd	~~F~~,CL,~~NO2,NO3,PO4,SO4~~-300.0
13	0802217-2 50X	Sample	080228.met	c:\peaknet\data\080228\080228_013.dxd	F,CL,SO4-300.0
14	0802217-2MS 50X	Sample	080228.met	c:\peaknet\data\080228\080228_014.dxd	F,CL,SO4-300.0
15	0802217-2MSD 50X	Sample	080228.met	c:\peaknet\data\080228\080228_015.dxd	F,CL,SO4-300.0
16	0802217-10	Sample	080228.met	c:\peaknet\data\080228\080228_016.dxd	F,CL,SO4-300.0
17	0802217-2 500X	Sample	080228.met	c:\peaknet\data\080228\080228_017.dxd	~~F~~,CL,~~SO4~~-300.0
18	0802217-10 20X	Sample	080228.met	c:\peaknet\data\080228\080228_018.dxd	~~F,CL,SO4-300~~.0
19	CCV	Sample	080228.met	c:\peaknet\data\080228\080228_019.dxd	CCV
20	CCB1	Sample	080228.met	c:\peaknet\data\080228\080228_020.dxd	CCB
21	0801189-4	Sample	080228.met	c:\peaknet\data\080228\080228_021.dxd	~~NO3~~,PO4-300.0
22	0801189-4 RR1	Sample	080228.met	c:\peaknet\data\080228\080228_022.dxd	~~NO3~~,PO4-300.0
23	0801189-4 RR2	Sample	080228.met	c:\peaknet\data\080228\080228_023.dxd	~~NO3~~,PO4-300.0
24	0801255-7	Sample	080228.met	c:\peaknet\data\080228\080228_024.dxd	BR-300.0
25	0801255-7 RR1	Sample	080228.met	c:\peaknet\data\080228\080228_025.dxd	BR-300.0
26	0801255-7 RR2	Sample	080228.met	c:\peaknet\data\080228\080228_026.dxd	BR-300.0
27	0801255-3	Sample	080228.met	c:\peaknet\data\080228\080228_027.dxd	~~F,CL,NO2,NO3~~,PO4,~~SO4~~-300.0
28	0801255-3 RR1	Sample	080228.met	c:\peaknet\data\080228\080228_028.dxd	~~F,CL,NO2,NO3~~,PO4,~~SO4~~-300.0
29	0801255-3 RR2	Sample	080228.met	c:\peaknet\data\080228\080228_029.dxd	~~F,CL,NO2,NO3~~,PO4,~~SO4~~-300.0
30	0802212-1 50X	Sample	080228.met	c:\peaknet\data\080228\080228_030.dxd	CL-300.0
31	CCV	Sample	080228.met	c:\peaknet\data\080228\080228_031.dxd	CCV
32	CCB2	Sample	080228.met	c:\peaknet\data\080228\080228_032.dxd	CCB - PO_4 - 0.50 mg/L
33	0802212-2 50X	Sample	080228.met	c:\peaknet\data\080228\080228_033.dxd	CL-300.0
34	0802219-1 5X	Sample	080228.met	c:\peaknet\data\080228\080228_034.dxd	CL,SO4-300.0
35	0802219-3 20X	Sample	080228.met	c:\peaknet\data\080228\080228_035.dxd	~~CL~~,SO4-300.0
36	0802219-5 20X	Sample	080228.met	c:\peaknet\data\080228\080228_036.dxd	~~CL~~,SO4-300.0
37	0802219-7 20X	Sample	080228.met	c:\peaknet\data\080228\080228_037.dxd	~~CL~~,SO4-300.0
38	0802219-9 20X	Sample	080228.met	c:\peaknet\data\080228\080228_038.dxd	CL,SO4-300.0
39	0802219-9MS 20X	Sample	080228.met	c:\peaknet\data\080228\080228_039.dxd	CL,SO4-300.0
40	0802219-9MSD 20X	Sample	080228.met	c:\peaknet\data\080228\080228_040.dxd	CL,SO4-300.0
41	0802219-11 50X	Sample	080228.met	c:\peaknet\data\080228\080228_041.dxd	CL,SO4-300.0
42	CCV	Sample	080228.met	c:\peaknet\data\080228\080228_042.dxd	CCV
43	CCB	Sample	080228.met	c:\peaknet\data\080228\080228_043.dxd	CCB - PO_4 - 0.51 X (2/29/08) mg/L
44	STOP.MET	Sample	stop.met		

Default Method Path: C:\PEAKNET\METHOD
Default Data Path: C:\PEAKNET\DATA\080227
Comment:
BatchDx created schedule. Analyst: 2/29/08

JBM 2/29/08

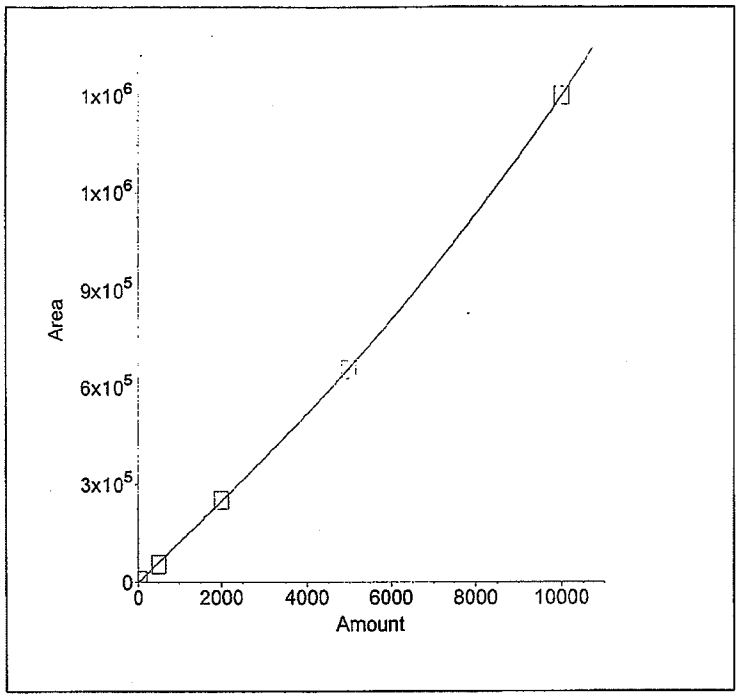
Instrument #1: DIONEX DX-120. ID Serial Number: 99060762
Analytical Column: Dionex IonPac AS14 S/N 022150
Methods: EPA 300.0 and SW9056. Paragon SOP 1113
Eluent: Made daily, 10mL of Eluent Concentrate ID: RG080227-1 to 1000mL of DI water.

	Final	ID	Aliq
cal std level 1 (1000x)	10.00	ST080219-8, ST080219-14	0.01
cal std level 2 (100x)	5.00	" "	0.05
cal std level 3 (25x)	5.00	" "	0.20
cal std level 4 (10x)	5.00	" "	0.50
cal std level 5 (5x)	5.00	" "	1.00
CCV	5.00	ST008219-8, ST080219-14	0.50
ICV	5.00	ST071228-10	0.25
		ST080219-13	0.05
LCS(aq)	5.00	ST080225-1	0.25
		ST080119-13	0.05
MS/MSD (waters)	5.00	ST080219-9	0.05
		ST080219-12	0.05

Dilutions Table: All to 5mL Final Volume
10X 0.5mL
20X 0.25mL
25X 0.2mL
50X 0.1mL
100X 0.05mL
200X 0.025mL
500X 0.01mL

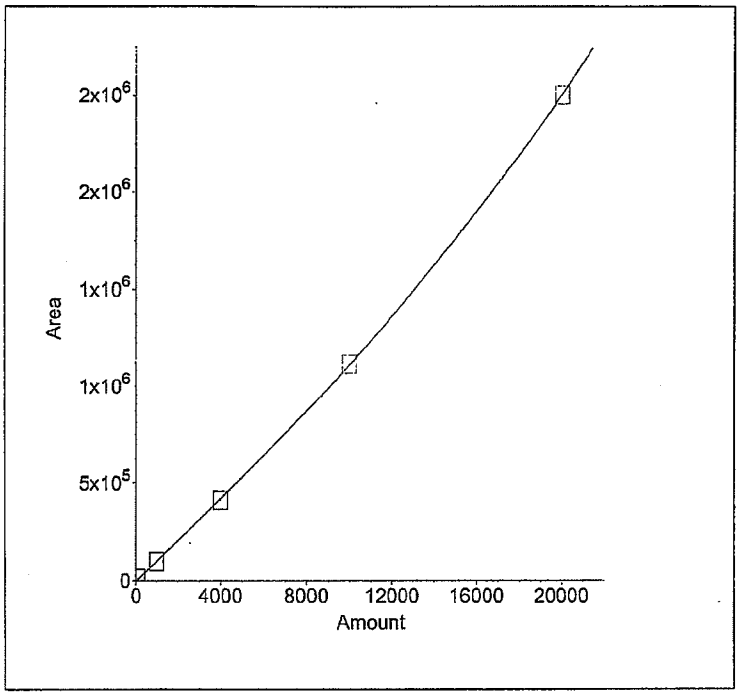
Method:C:\PEAKNET\METHOD\080228.MET Updated:2/28/08 3:42:38 PM Total:8

1. Component:Fluoride
Standard:External Fit Type:Quadratic
Origin:Ignore Calibration:Area
r^2=0.999966
Amt=-9.946737e-010*Resp^2+
7.935669e-003*Resp+21.55

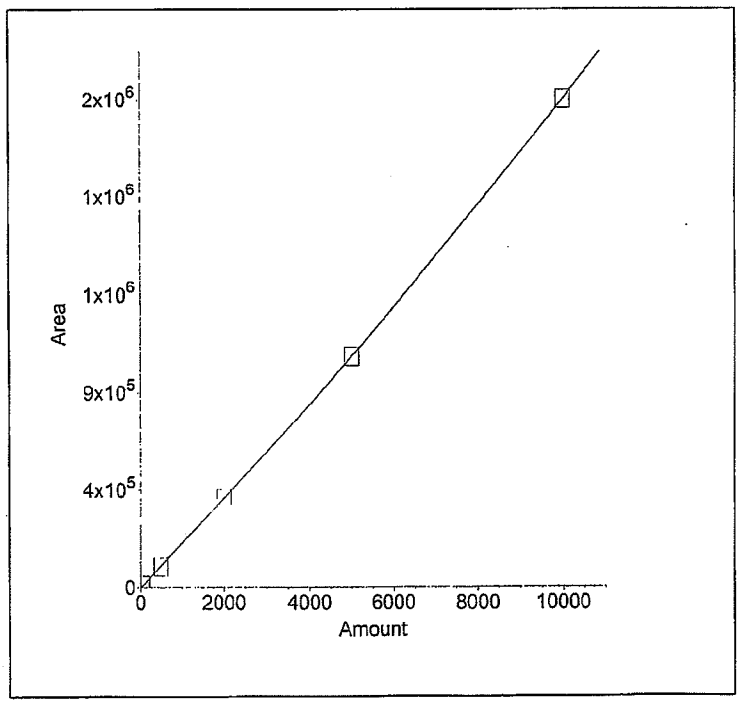


2. Component:Chloride
Standard:External Fit Type:Quadratic
Origin:Ignore Calibration:Area
r^2=0.999968
Amt=-6.579106e-010*Resp^2+
9.406875e-003*Resp+65.82

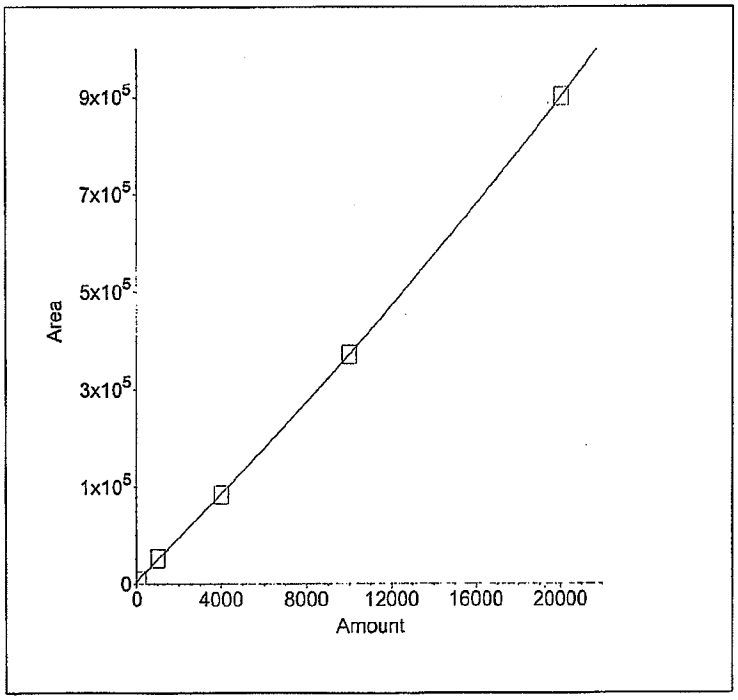
JPM 2/29/08



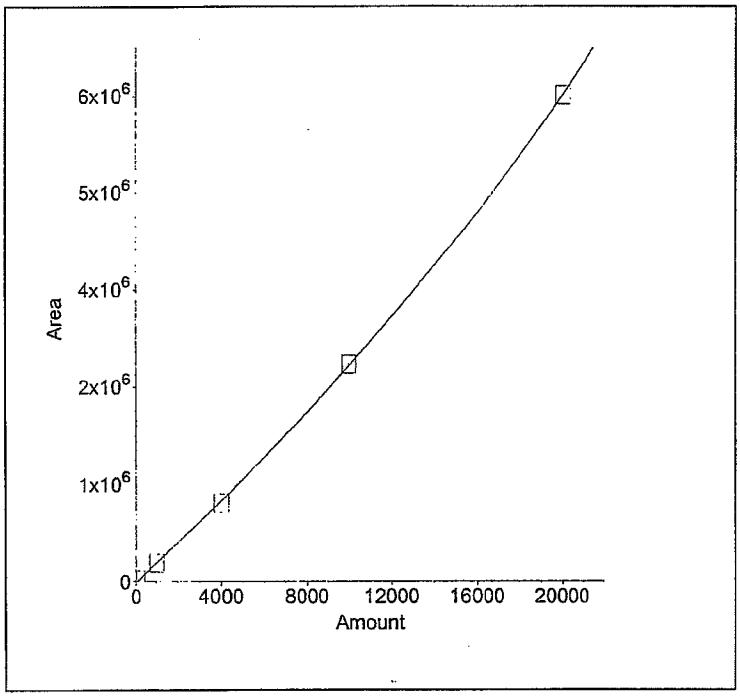
3. Component:Nitrite as N
Standard:External Fit Type:Quadratic
Origin:Ignore Calibration:Area
r^2=0.999988
Amt=-1.917135e-010*Resp^2+
4.715326e-003*Resp+30.08



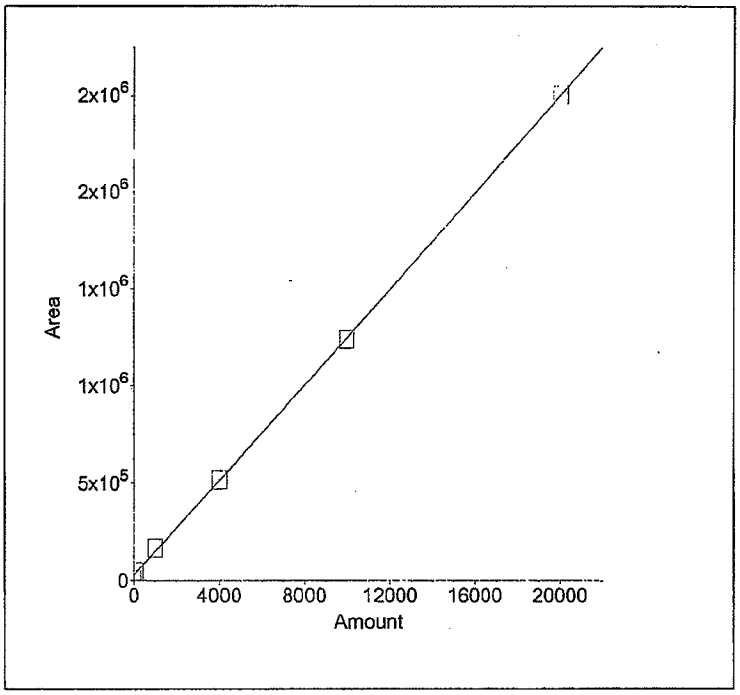
4. Component:Bromide
Standard:External Fit Type:Quadratic
Origin:Ignore Calibration:Area
r^2=0.999967
Amt=-2.658206e-009*Resp^2+
2.312782e-002*Resp+-96.55



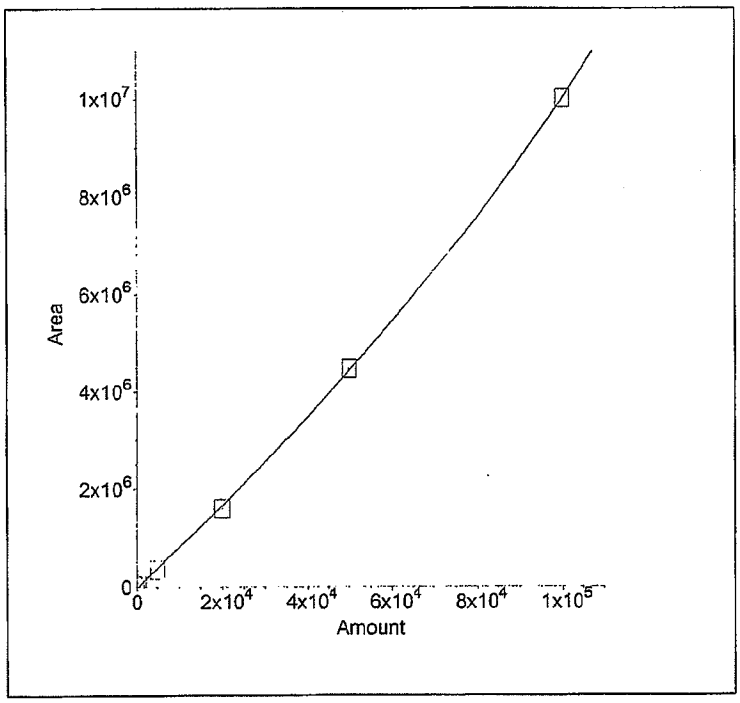
5. Component:Nitrate as N
Standard:External Fit Type:Quadratic
Origin:Ignore Calibration:Area
r^2=0.999928
Amt=-1.022363e-010*Resp^2+
3.668651e-003*Resp+76.68



6. Component:Orthophosphate as P
Standard:External Fit Type:Quadratic
Origin:Ignore Calibration:Area
r^2=0.999786
Amt=-6.578040e-011*Resp^2+
7.475540e-003*Resp+-214



7. Component:Sulfate
Standard:External Fit Type:Quadratic
Origin:Ignore Calibration:Area
r^2=0.999869
Amt=-2.190204e-010*Resp^2+
1.204844e-002*Resp+381.4



8. Component:Nitrate/Nitrite as N
Standard:External Fit Type:
Origin:Ignore Calibration:Area

(No Levels Component)

Method Information : Select Module(s)

System Name : DX120
System Number : 1
Method Type : Ion Chromatography
Column : AS14 4-MM
Analyst : SJL
Comment : Flow rate = 1.2 mL/min,
Eluent = 3.5mM Na2CO3 / 1.0 mM NaHCO3

DX-120 Timed Events

Module Name :
Module Serial Number :
System Mode : Column
Column : A
Pump : On
SRS / Cell : On
Eluent Pressure : On
Pressure Unit : psi
TTL 1 Label : TTL 1
TTL 2 Label : TTL 2
Comment :

Time	Offset	Valve	TTL1	TTL2	AC	Collect
Init	*	Load	Low	Low	Off	
0.00		Load	Low	Low	Off	Begin
0.01		Inject	Low	Low	Off	
0.40		Load	Low	Low	Off	
8.80		Load	High	Low	Off	
8.90		Load	Low	Low	Off	

DX-120 Detector Parameters

Detector Type : DX-120
Data collection time (minutes) : 11.00
Data Collection Rate : 5.00
Real time plot scale maximum (μS) : 40.000
Real time plot scale minimum (μS) : -3.000

DX-120 Integration Parameters

Peak detection algorithm : Standard
Starting peak width (seconds) : 8.00
Peak threshold : 0.50
Peak area reject (area counts) : 800.00
Reference peak area reject (area counts) : 800.00

DX-120 Smoothing Parameters

Filter Type : No filter

DX-120 Report Data

Report Format File : C:\PeakNet\method\Default2.rpt
Print Sample Analysis : Yes
Print Calibration Update : Yes
Print Check Standard : No
System Suitability Tests :
No system suitability tests selected.

DX-120 Integration Data Events

Time	Description
0.00	Stop peak detection
0.05	Force baseline at start of all peaks
1.90	Start peak detection
2.20	Void volume treatment for this peak
3.00	Void volume treatment for this peak

DX-120 Calibration Parameters

External or internal calibration : EXTERNAL
Number of replicates for calibration : 1
Rejection : Manual
Level Weighting : Equal
Calibration standard volume : 1.00
Default sample volume : 1.00
Amount units : ug/L
Replace retention time : Yes
Update response : Yes
Default dilution factor : 1.00
Default response factor for unknown peaks : 0.00
Calculate unknowns by area or height : Area

DX-120 Component Identification Table

Component	Retention	Tolerance	Reference
Fluoride	2.60 min	5.00 %	
Chloride	3.73 min	5.00 %	
Nitrite as N	4.57 min	4.90 %	
Bromide	5.95 min	7.30 %	
Nitrate as N	7.00 min	10.00 %	
Orthophosphate as P	8.25 min	4.10 %	
Sulfate	9.75 min	4.10 %	
Nitrate/Nitrite as N	20.00 min	5.00 %	

DX-120 Component Quantitation Table

Component	Retention	Low Limit	High Limit
Fluoride	2.60 min	100	10000
Chloride	3.73 min	200	20000
Nitrite as N	4.57 min	100	10000
Bromide	5.95 min	200	20000
Nitrate as N	7.00 min	200	20000
Orthophosphate as P	8.25 min	300	20000
Sulfate	9.75 min	500	100000
Nitrate/Nitrite as N	20.00 min	0	0

DX-120 Component Calibration Table

Component	Retention Time	Curve Fit	Origin	Cal. by	Response Component	Relative Factor
Fluoride	2.60 min	Quadratic	Ignore	Area		0.00
Chloride	3.73 min	Quadratic	Ignore	Area		0.00
Nitrite as N	4.57 min	Quadratic	Ignore	Area		0.00
Bromide	5.95 min	Quadratic	Ignore	Area		0.00
Nitrate as N	7.00 min	Quadratic	Ignore	Area		0.00
Orthophosphate as P	8.25 min	Quadratic	Ignore	Area		0.00
Sulfate	9.75 min	Quadratic	Ignore	Area		0.00
Nitrate/Nitrite as N	20.00 min	"	Ignore	Area	Fluoride	0.00

DX-120 Component = Fluoride Levels Table

Retention Time : 2.60 min
Amount units : ug/L
Replicate unit type : Area
Number of levels : 6
Number of replicates : 1

Level	Amount	Replicate 1
1	50.00	4648.6
2	500.00	57009.6
3	2000.00	262229
4	5000.00	684083
5	10000.00	1.56444e+006
6	0.00	0

DX-120 Component = Chloride Levels Table

Retention Time : 3.73 min
Amount units : ug/L
Replicate unit type : Area
Number of levels : 6
Number of replicates : 1

Level	Amount	Replicate 1
1	100.00	9110.8
2	1000.00	98007.8
3	4000.00	423844
4	10000.00	1.15312e+006
5	20000.00	2.58632e+006
6	0.00	0

DX-120 Component = Nitrite as N Levels Table

Retention Time : 4.57 min
Amount units : ug/L
Replicate unit type : Area
Number of levels : 6
Number of replicates : 1

Level	Amount	Replicate 1
1	50.00	8224.6
2	500.00	95764.7
3	2000.00	424675
4	5000.00	1.10446e+006
5	10000.00	2.33607e+006
6	0.00	0

DX-120 Component = Bromide Levels Table

Retention Time : 5.95 min
Amount units : ug/L
Replicate unit type : Area
Number of levels : 6
Number of replicates : 1

Level	Amount	Replicate 1
1	100.00	6135.8
2	1000.00	50930.2
3	4000.00	180061
4	10000.00	460865
5	20000.00	979172
6	0.00	0

DX-120 Component = Nitrate as N Levels Table

Retention Time : 7.00 min
Amount units : ug/L
Replicate unit type : Area
Number of levels : 6
Number of replicates : 1

Level	Amount	Replicate 1
1	100.00	22358.4
2	1000.00	254053
3	4000.00	1.07095e+006
4	10000.00	2.96643e+006
5	20000.00	6.66689e+006
6	0.00	0

DX-120 Component = Orthophosphate as P Levels Table

Retention Time : 8.25 min
Amount units : ug/L
Replicate unit type : Area
Number of levels : 6
Number of replicates : 1

Level	Amount	Replicate 1
1	100.00	49445.5
2	1000.00	182573
3	4000.00	571362
4	10000.00	1.37451e+006
5	20000.00	2.77348e+006
6	0.00	3170.8

DX-120 Component = Sulfate Levels Table

Retention Time : 9.75 min
Amount units : ug/L
Replicate unit type : Area
Number of levels : 6
Number of replicates : 1

Level	Amount	Replicate 1
1	500.00	34789.3
2	5000.00	354245
3	20000.00	1.6203e+006
4	50000.00	4.52463e+006
5	100000.00	1.01272e+007
6	0.00	1672.9

DX-120 Component = Nitrate/Nitrite as N Levels Table

Retention Time : 20.00 min
Amount units : ug/L
Replicate unit type : Area
Number of levels : 0
Number of replicates : 1

DX-120 XY Data Parameters

Calibration Update Report

Sample Name : 5X STD
Data File Name : c:\peaknet\data\080228\080228_001.DXD

Method File Name : c:\peaknet\method\080228.met
Schedule File Name : c:\peaknet\schedule\080228.sch
Date Time Acquired : 2/28/08 2:08:16 PM
Calibration Date : 2/28/08 2:19:19 PM

System Operator : WETCHEM
Datafile Updated : 2/28/08 2:19:19 PM
Method Comment : Flow rate = 1.2 mL/min, Eluent = ...

Peak Information : All Components

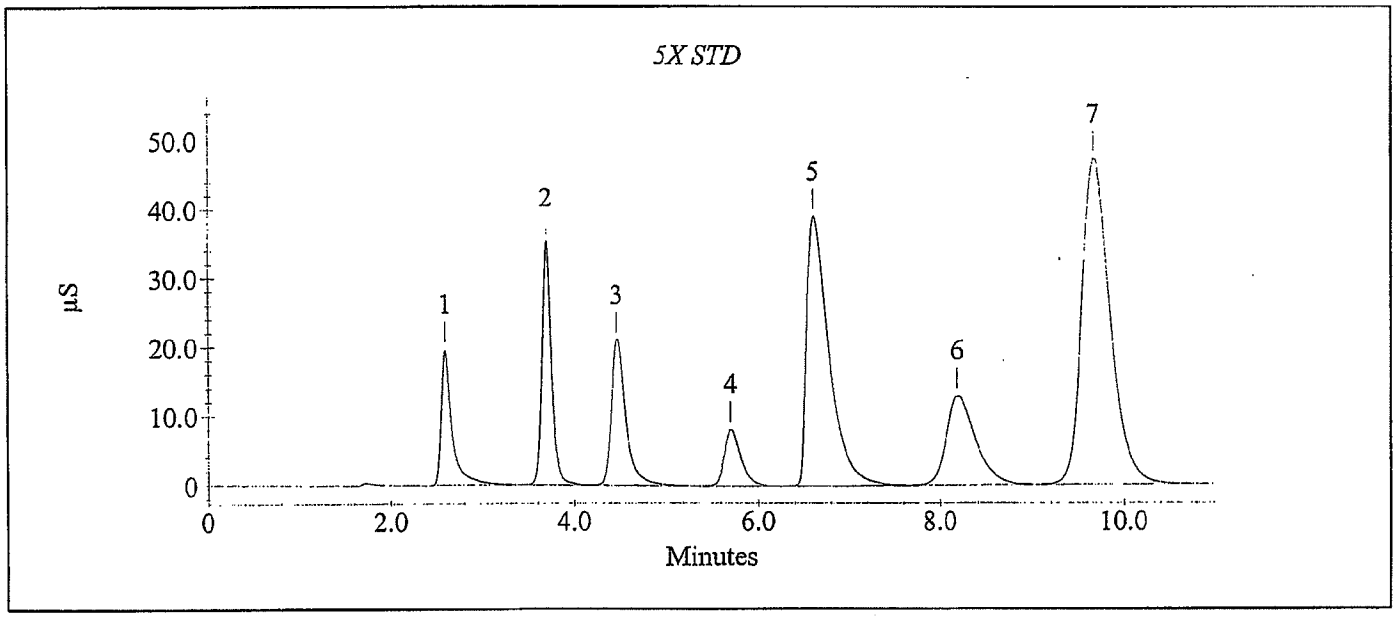
Peak #	Analyte	Retention Time (min.)	Concentration (ug/L)	Peak Area
1	Fluoride	2.60	10000	1564441
2	Chloride	3.69	20000	2586315
3	Nitrite as N	4.47	10000	2336069
4	Bromide	5.71	20000	979172
5	Nitrate as N	6.60	20000	6666890
6	Orthophosphate as P	8.19	20000	2773480
7	Sulfate	9.67	100000	10127164
	Nitrate/Nitrite as N			

Calibration Update Report

Sample Name : 5X STD
Data File Name : c:\peaknet\data\080228\080228_001.DXD

Method File Name : c:\peaknet\method\080228.met
Schedule File Name : c:\peaknet\schedule\080228.sch
Date Time Acquired : 2/28/08 2:08:16 PM
Calibration Date : 2/28/08 2:19:19 PM

System Operator : WETCHEM
Datafile Updated : 2/28/08 2:19:19 PM
Method Comment : Flow rate = 1.2 mL/min, Eluent = ...



Calibration Update Report

Sample Name : 10X STD
Data File Name : c:\peaknet\data\080228\080228_002.DXD

Method File Name : c:\peaknet\method\080228.met
Schedule File Name : c:\peaknet\schedule\080228.sch
Date Time Acquired : 2/28/08 2:19:20 PM
Calibration Date : 2/28/08 2:30:21 PM

System Operator : WETCHEM
Datafile Updated : 2/28/08 2:30:21 PM
Method Comment : Flow rate = 1.2 mL/min, Eluent = ...

Peak Information : All Components

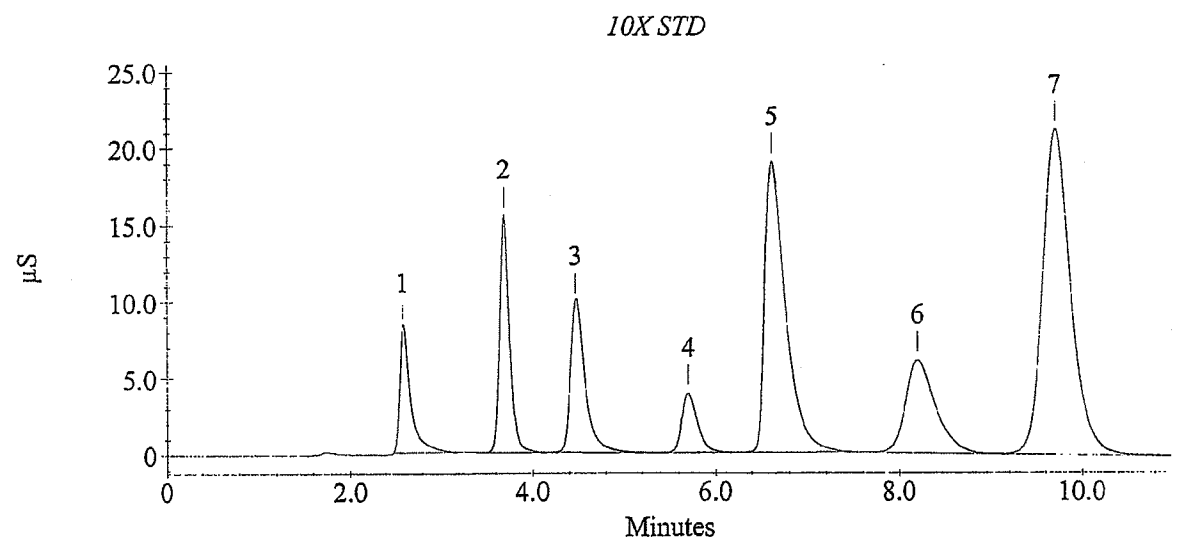
Peak #	Analyte	Retention Time (min.)	Concentration (ug/L)	Peak Area
1	Fluoride	2.59	5000	684083
2	Chloride	3.69	10000	1153117
3	Nitrite as N	4.47	5000	1104461
4	Bromide	5.71	10000	460865
5	Nitrate as N	6.61	10000	2966435
6	Orthophosphate as P	8.20	10000	1374513
7	Sulfate	9.69	50000	4524635
	Nitrate/Nitrite as N			

Calibration Update Report

Sample Name : 10X STD
Data File Name : c:\peaknet\data\080228\080228_002.DXD

Method File Name : c:\peaknet\method\080228.met
Schedule File Name : c:\peaknet\schedule\080228.sch
Date Time Acquired : 2/28/08 2:19:20 PM
Calibration Date : 2/28/08 2:30:21 PM

System Operator : WETCHEM
Datafile Updated : 2/28/08 2:30:21 PM
Method Comment : Flow rate = 1.2 mL/min, Eluent = ...



Calibration Update Report

Sample Name : 25X STD
Data File Name : c:\peaknet\data\080228\080228_003.DXD

Method File Name : c:\peaknet\method\080228.met
Schedule File Name : c:\peaknet\schedule\080228.sch
Date Time Acquired : 2/28/08 2:30:23 PM
Calibration Date : 2/28/08 2:41:24 PM

System Operator : WETCHEM
Datafile Updated : 2/28/08 2:41:24 PM
Method Comment : Flow rate = 1.2 mL/min, Eluent = ...

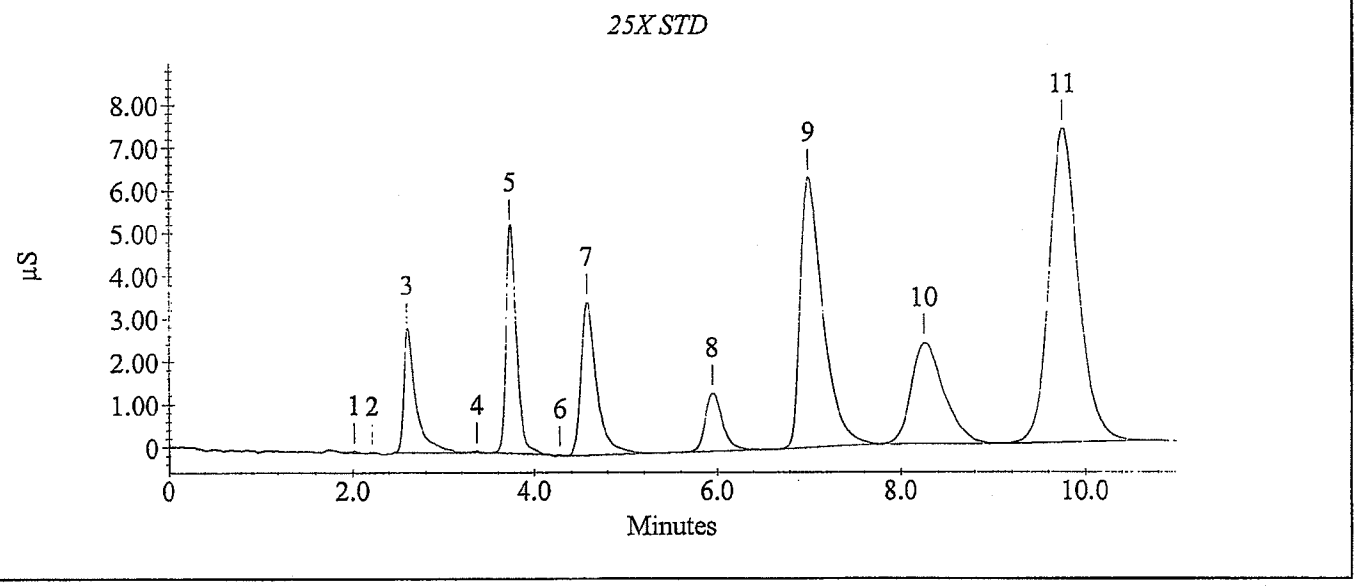
Peak Information : All Components

Peak #	Analyte	Retention Time (min.)	Concentration (ug/L)	Peak Area
3	Fluoride	2.60	2000	262229
5	Chloride	3.73	4000	423844
7	Nitrite as N	4.57	2000	424675
8	Bromide	5.95	4000	180061
9	Nitrate as N	7.00	4000	1070951
10	Orthophosphate as P	8.25	4000	571362
11	Sulfate	9.75	20000	1620298
	Nitrate/Nitrite as N			

Calibration Update Report

Sample Name : 25X STD
Data File Name : c:\peaknet\data\080228\080228_003.DXD

Method File Name : c:\peaknet\method\080228.met	System Operator : WETCHEM
Schedule File Name : c:\peaknet\schedule\080228.sch	Datafile Updated : 2/28/08 2:41:24 PM
Date Time Acquired : 2/28/08 2:30:23 PM	Method Comment : Flow rate = 1.2 mL/min, Eluent = ...
Calibration Date : 2/28/08 2:41:24 PM	



Calibration Update Report

Sample Name : 100X STD
Data File Name : c:\peaknet\data\080228\080228_004.DXD

Method File Name : c:\peaknet\method\080228.met
Schedule File Name : c:\peaknet\schedule\080228.sch
Date Time Acquired : 2/28/08 2:41:26 PM
Calibration Date : 2/28/08 2:52:26 PM

System Operator : WETCHEM
Datafile Updated : 2/28/08 2:52:26 PM
Method Comment : Flow rate = 1.2 mL/min, Eluent = ...

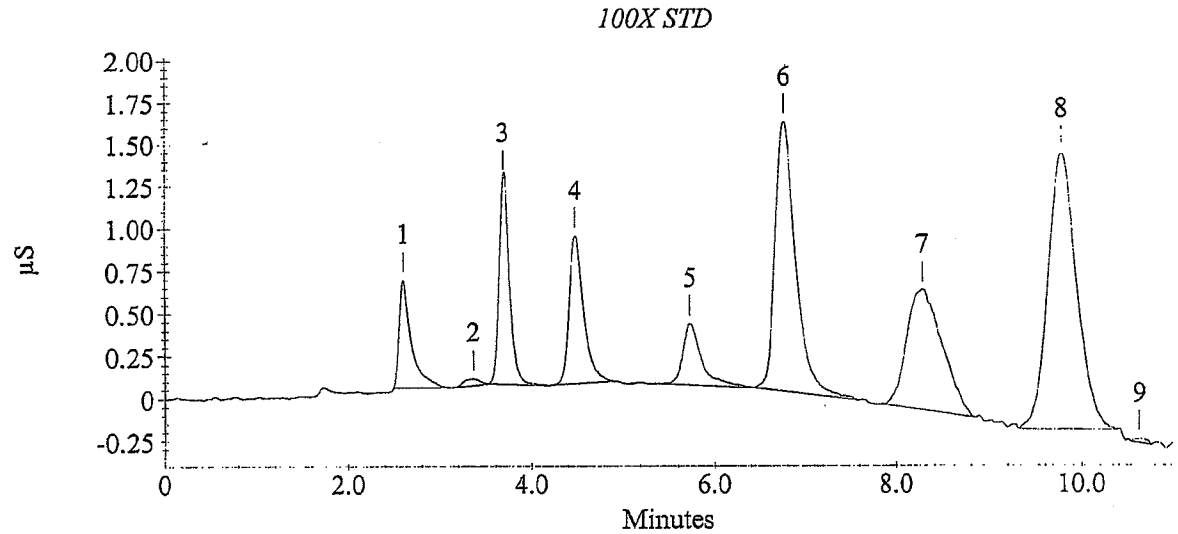
Peak Information : All Components

Peak #	Analyte	Retention Time (min.)	Concentration (ug/L)	Peak Area
1	Fluoride	2.60	500	57010
3	Chloride	3.68	1000	98008
4	Nitrite as N	4.48	500	95765
5	Bromide	5.73	1000	50930
6	Nitrate as N	6.76	1000	254053
7	Orthophosphate as P	8.28	1000	182573
8	Sulfate	9.77	5000	354245
	Nitrate/Nitrite as N			

Calibration Update Report

Sample Name : 100X STD
Data File Name : c:\peaknet\data\080228\080228_004.DXD

Method File Name : c:\peaknet\method\080228.met	System Operator : WETCHEM
Schedule File Name : c:\peaknet\schedule\080228.sch	Datafile Updated : 2/28/08 2:52:26 PM
Date Time Acquired : 2/28/08 2:41:26 PM	Method Comment : Flow rate = 1.2 mL/min, Eluent = ...
Calibration Date : 2/28/08 2:52:26 PM	



Calibration Update Report

Sample Name : 1000X STD
Data File Name : c:\peaknet\data\080228\080228_005.DXD

Method File Name : c:\peaknet\method\080228.met
Schedule File Name : c:\peaknet\schedule\080228.sch
Date Time Acquired : 2/28/08 2:52:29 PM
Calibration Date : 2/28/08 3:03:29 PM

System Operator : WETCHEM
Datafile Updated : 2/28/08 3:03:29 PM
Method Comment : Flow rate = 1.2 mL/min, Eluent = ...

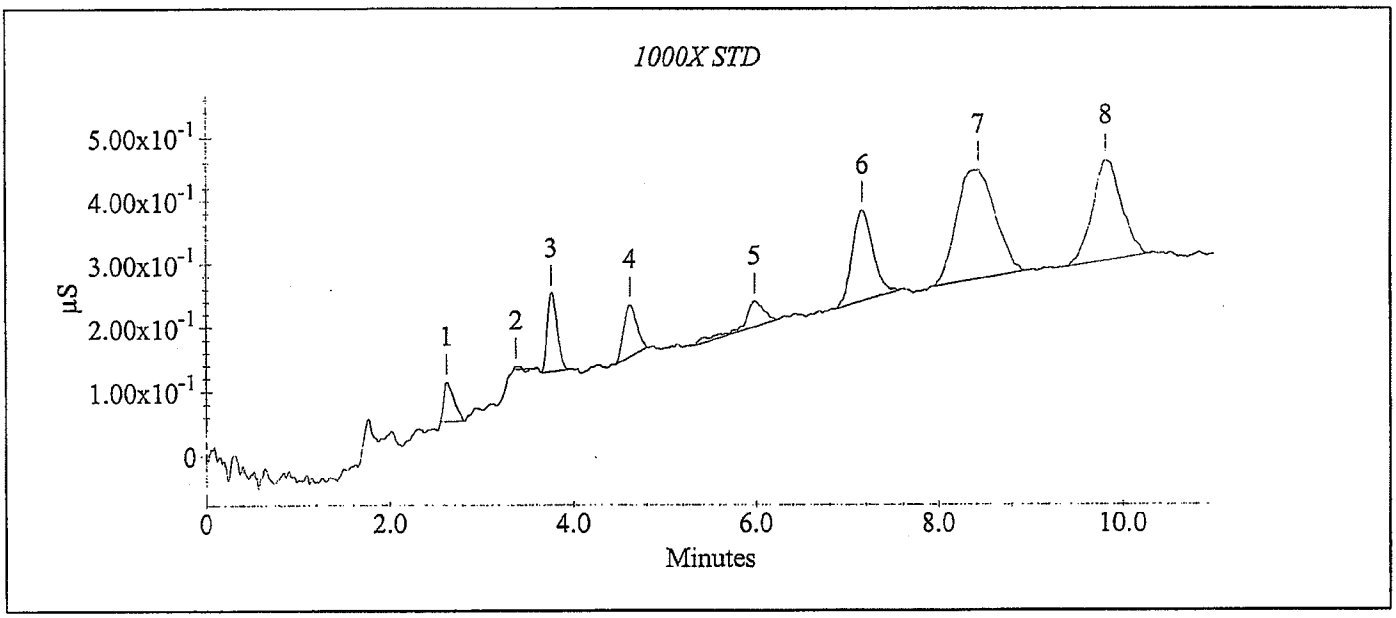
Peak Information : All Components

Peak #	Analyte	Retention Time (min.)	Concentration (ug/L)	Peak Area
1	Fluoride	2.63	50	4649
3	Chloride	3.76	100	9111
4	Nitrite as N	4.61	50	8225
5	Bromide	5.99	100	6136
6	Nitrate as N	7.16	100	22358
7	Orthophosphate as P	8.43	100	49446
8	Sulfate	9.81	500	34789
	Nitrate/Nitrite as N			

Calibration Update Report

Sample Name : 1000X STD
Data File Name : c:\peaknet\data\080228\080228_005.DXD

Method File Name : c:\peaknet\method\080228.met	System Operator : WETCHEM
Schedule File Name : c:\peaknet\schedule\080228.sch	Datafile Updated : 2/28/08 3:03:29 PM
Date Time Acquired : 2/28/08 2:52:29 PM	Method Comment : Flow rate = 1.2 mL/min, Eluent = ...
Calibration Date : 2/28/08 3:03:29 PM	



Calibration Update Report

Sample Name : 0 STD
Data File Name : c:\peaknet\data\080228\080228_006.DXD

Method File Name : c:\peaknet\method\080228.met
Schedule File Name : c:\peaknet\schedule\080228.sch
Date Time Acquired : 2/28/08 3:03:31 PM
Calibration Date : 2/28/08 3:14:31 PM

System Operator : WETCHEM
Datafile Updated : 2/28/08 3:14:31 PM
Method Comment : Flow rate = 1.2 mL/min, Eluent = ...

Peak Information : All Components

Peak #	Analyte	Retention Time (min.)	Concentration (ug/L)	Peak Area
1	Chloride Nitrite as N Bromide Nitrate as N	3.31	0	
2	Orthophosphate as P	8.35	0	3171
5	Sulfate Nitrate/Nitrite as N	9.69	0	1673

Calibration Update Report

Sample Name : 0 STD
Data File Name : c:\peaknet\data\080228\080228_006.DXD

Method File Name : c:\peaknet\method\080228.met	System Operator : WETCHEM
Schedule File Name : c:\peaknet\schedule\080228.sch	Datafile Updated : 2/28/08 3:14:31 PM
Date Time Acquired : 2/28/08 3:03:31 PM	Method Comment : Flow rate = 1.2 mL/min, Eluent = ...
Calibration Date : 2/28/08 3:14:31 PM