TRIMATRIX
LABORATORIES

SECTION - I

INORGANIC – WET CHEMISTRY

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Individual sample results relate only to the sample tested.

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STATEMENT OF DATA QUALIFICATIONS

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Qualification: The CRL recovery for this analyte was outside of the laboratory control limits. However, the only requirement is that the analyte be detected. No qualifications are necessary.

Analysis: SM 4500-NO3 F 20th

Sample/Analyte:	
2D13009-CRL1	Nitrogen, Nitrate+Nitrite
2E01020-CRL1	Nitrogen, Nitrate+Nitrite

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was greater than 5 times the MB value, is not considered estimated.

Analysis: SM 2320 B 20th

Sample/Analyte:	
1204091-01 KAFB-003	Alkalinity, Bicarbonate
1204091-01 KAFB-003	Alkalinity, Total
1204205-01 106042	Alkalinity, Bicarbonate
1204205-01 106042	Alkalinity, Total
1204205-02 106089	Alkalinity, Bicarbonate
1204205-02 106089	Alkalinity, Total
1204329-01 106058	Alkalinity, Bicarbonate
1204329-01 106058	Alkalinity, Total
1204454-01 106053	Alkalinity, Bicarbonate
1204454-01 106053	Alkalinity, Total
1204454-02 106054	Alkalinity, Bicarbonate
1204454-02 106054	Alkalinity, Total

Analysis: SM 4500-Cl E 20th

Sample/Analyte:	
1204091-01 KAFB-003	Chloride
1204205-01 106042	Chloride
1204205-02 106089	Chloride
1204329-01 106058	Chloride
1204454-01 106053	Chloride
1204454-02 106054	Chloride

Qualification: The MS and/or MSD recovery was outside the control limit. The non-spiked sample result is considered estimated.

Analysis: SM 4500-NO3 F 20th

Sample/Analyte:	
1204091-01 KAFB-003	Nitrogen, Nitrate+Nitrite

TriMatrix Laboratories, Inc.

TechLaw

Project: KNM

SDG: KNM040512

ASTM D516-90 (02)

SAMPLE ID SUMMARY

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

SDG: KNM040512

Project: KNM

Client Sample Id:	Lab Sample Id:
KAFB-003	1204091-01
106042	1204205-01
106089	1204205-02
106058	1204329-01
106053	1204454-01
106054	1204454-02

INORGANIC ANALYSIS DATA SHEET

ASTM D516-90 (02)

KAFB-003

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/04/12 13:31
Solids: 0.00
QC Batch: 1204492

SDG: KNM040512
Project: KNM
Laboratory ID: 1204091-01
Prepared: 04/11/12 06:20
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
14808-79-8	Sulfate	1	32	mg/L	0.35	5.0		04/11/12 08:44

INORGANIC ANALYSIS DATA SHEET

ASTM D516-90 (02)

106042

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/10/12 13:48
Solids: 0.00
QC Batch: 1204890

SDG: KNM040512
Project: KNM
Laboratory ID: 1204205-01
Prepared: 04/19/12 06:30
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
14808-79-8	Sulfate	2	48	mg/L	0.70	10		04/19/12 08:46

02140

INORGANIC ANALYSIS DATA SHEET

ASTM D516-90 (02)

106089

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/10/12 14:45
Solids: 0.00
QC Batch: 1204890

SDG: KNM040512
Project: KNM
Laboratory ID: 1204205-02
Prepared: 04/19/12 06:30
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
14808-79-8	Sulfate	2	33	mg/L	0.70	10		04/19/12 08:46

02141

INORGANIC ANALYSIS DATA SHEET

ASTM D516-90 (02)

106058

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/17/12 12:31
Solids: 0.00
QC Batch: 1204890

SDG: KNM040512
Project: KNM
Laboratory ID: 1204329-01
Prepared: 04/19/12 06:30
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
14808-79-8	Sulfate	1	33	mg/L	0.35	5.0		04/19/12 08:39

02142

INORGANIC ANALYSIS DATA SHEET

ASTM D516-90 (02)

106053

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/24/12 10:20
Solids: 0.00
QC Batch: 1205322

SDG: KNM040512
Project: KNM
Laboratory ID: 1204454-01
Prepared: 04/27/12 06:30
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
14808-79-8	Sulfate	2	48	mg/L	0.70	10		04/27/12 10:37

02143

INORGANIC ANALYSIS DATA SHEET

ASTM D516-90 (02)

106054

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/24/12 13:30
Solids: 0.00
QC Batch: 1205322

SDG: KNM040512
Project: KNM
Laboratory ID: 1204454-02
Prepared: 04/27/12 06:30
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
14808-79-8	Sulfate	2	57	mg/L	0.70	10		04/27/12 10:40

02144

ANALYSIS BATCH (SEQUENCE) SUMMARY

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D11053

SDG: KNM040512
Project: KNM
Calibration: 2D11013
Instrument: 298

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2D11053-CAL1	041112so4-001	04/11/12 06:55
Cal Standard	2D11053-CAL2	041112so4-002	04/11/12 06:55
Cal Standard	2D11053-CAL3	041112so4-003	04/11/12 06:55
Cal Standard	2D11053-CAL4	041112so4-004	04/11/12 06:55
Cal Standard	2D11053-CAL5	041112so4-005	04/11/12 06:55
Cal Standard	2D11053-CAL6	041112so4-006	04/11/12 06:55
Cal Standard	2D11053-CAL7	041112so4-007	04/11/12 06:55
Cal Standard	2D11053-CAL8	041112so4-008	04/11/12 06:55
Calibration Check	2D11053-CCV1	041112so4-009	04/11/12 07:38
Calibration Blank	2D11053-CCB1	041112so4-010	04/11/12 07:38
Instrument RL Check	2D11053-CRL1	041112so4-011	04/11/12 07:38
Secondary Cal Check	2D11053-SCV1	041112so4-012	04/11/12 07:38
Blank	1204492-BLK1	041112so4-013	04/11/12 07:38
LCS	1204492-BS1	041112so4-014	04/11/12 07:38
Calibration Check	2D11053-CCV2	041112so4-015	04/11/12 08:05
Calibration Blank	2D11053-CCB2	041112so4-016	04/11/12 08:05
KAFB-003	1204091-01	041112so4-028	04/11/12 08:44
Calibration Check	2D11053-CCV3	041112so4-030	04/11/12 08:47
Calibration Blank	2D11053-CCB3	041112so4-031	04/11/12 08:47
KAFB-003	1204492-MS1	041112so4-057	04/11/12 09:08
KAFB-003	1204492-MSD1	041112so4-058	04/11/12 09:08
Calibration Check	2D11053-CCV4	041112so4-061	04/11/12 09:11
Calibration Blank	2D11053-CCB4	041112so4-062	04/11/12 09:11

ANALYSIS BATCH (SEQUENCE) SUMMARY

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D20030

SDG: KNM040512

Project: KNM

Calibration: 2D20010

Instrument: 298

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2D20030-CAL1	041912so4-001	04/19/12 07:12
Cal Standard	2D20030-CAL2	041912so4-002	04/19/12 07:12
Cal Standard	2D20030-CAL3	041912so4-003	04/19/12 07:12
Cal Standard	2D20030-CAL4	041912so4-004	04/19/12 07:12
Cal Standard	2D20030-CAL5	041912so4-005	04/19/12 07:12
Cal Standard	2D20030-CAL6	041912so4-006	04/19/12 07:12
Cal Standard	2D20030-CAL7	041912so4-007	04/19/12 07:12
Cal Standard	2D20030-CAL8	041912so4-008	04/19/12 07:12
Calibration Check	2D20030-CCV1	041912so4-009	04/19/12 07:53
Calibration Blank	2D20030-CCB1	041912so4-010	04/19/12 07:53
Instrument RL Check	2D20030-CRL1	041912so4-011	04/19/12 07:53
Secondary Cal Check	2D20030-SCV1	041912so4-012	04/19/12 07:53
Blank	1204890-BLK1	041912so4-013	04/19/12 07:53
LCS	1204890-BS1	041912so4-014	04/19/12 07:53
Calibration Check	2D20030-CCV2	041912so4-015	04/19/12 07:59
Calibration Blank	2D20030-CCB2	041912so4-016	04/19/12 07:59
106058	1204329-01	041912so4-032	04/19/12 08:39
Calibration Check	2D20030-CCV3	041912so4-033	04/19/12 08:40
Calibration Blank	2D20030-CCB3	041912so4-034	04/19/12 08:40
106042	1204205-01	041912so4-035	04/19/12 08:46
106042	1204890-MS1	041912so4-036	04/19/12 08:46
106042	1204890-MSD1	041912so4-037	04/19/12 08:46
106089	1204205-02	041912so4-038	04/19/12 08:46
Calibration Check	2D20030-CCV4	041912so4-039	04/19/12 08:57
Calibration Blank	2D20030-CCB4	041912so4-040	04/19/12 08:57

ANALYSIS BATCH (SEQUENCE) SUMMARY
ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2E02049

SDG: KNM040512
Project: KNM
Calibration: 2E02014
Instrument: 303

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2E02049-CAL1	042712so4-001	04/27/12 06:53
Cal Standard	2E02049-CAL2	042712so4-002	04/27/12 06:53
Cal Standard	2E02049-CAL3	042712so4-003	04/27/12 06:53
Cal Standard	2E02049-CAL4	042712so4-004	04/27/12 06:53
Cal Standard	2E02049-CAL5	042712so4-005	04/27/12 06:53
Cal Standard	2E02049-CAL6	042712so4-006	04/27/12 06:53
Cal Standard	2E02049-CAL7	042712so4-007	04/27/12 06:53
Cal Standard	2E02049-CAL8	042712so4-008	04/27/12 06:53
Calibration Check	2E02049-CCV1	042712so4-009	04/27/12 07:15
Calibration Blank	2E02049-CCB1	042712so4-010	04/27/12 07:15
Instrument RL Check	2E02049-CRL1	042712so4-011	04/27/12 07:15
Secondary Cal Check	2E02049-SCV1	042712so4-012	04/27/12 07:15
Calibration Check	2E02049-CCV2	042712so4-015	04/27/12 07:27
Calibration Blank	2E02049-CCB2	042712so4-016	04/27/12 07:27
Blank	1205322-BLK1	042712so4-069	04/27/12 09:17
LCS	1205322-BS1	042712so4-072	04/27/12 09:20
Calibration Check	2E02049-CCV3	042712so4-073	04/27/12 09:20
Calibration Blank	2E02049-CCB3	042712so4-074	04/27/12 09:20
106053	1204454-01	042712so4-116	04/27/12 10:37
106053	1205322-MS1	042712so4-119	04/27/12 10:40
106053	1205322-MSD1	042712so4-120	04/27/12 10:40
106054	1204454-02	042712so4-121	04/27/12 10:40
Calibration Check	2E02049-CCV4	042712so4-122	04/27/12 10:46
Calibration Blank	2E02049-CCB4	042712so4-123	04/27/12 10:46

02147

INITIAL AND CONTINUING CALIBRATION CHECK

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D11053
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: 2D11013
Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D11053-CCV1	Sulfate	10.0	9.76	98	mg/L	04/11/12 07:38
2D11053-CCV2	Sulfate	10.0	10.1	101	mg/L	04/11/12 08:05
2D11053-CCV3	Sulfate	25.0	25.0	100	mg/L	04/11/12 08:47
2D11053-CCV4	Sulfate	20.0	19.7	99	mg/L	04/11/12 09:11

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Sequence: 2D20030
Calibration: 2D20010
Control Limt: +/- 15.00%
Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D20030-CCV1	Sulfate	10.0	9.68	97	mg/L	04/19/12 07:53
2D20030-CCV2	Sulfate	10.0	9.82	98	mg/L	04/19/12 07:59
2D20030-CCV3	Sulfate	10.0	9.52	95	mg/L	04/19/12 08:40
2D20030-CCV4	Sulfate	10.0	9.69	97	mg/L	04/19/12 08:57

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2E02049
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: 2E02014
Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2E02049-CCV1	Sulfate	10.0	9.99	100	mg/L	04/27/12 07:15
2E02049-CCV2	Sulfate	10.0	10.2	102	mg/L	04/27/12 07:27
2E02049-CCV3	Sulfate	25.0	26.4	106	mg/L	04/27/12 09:20
2E02049-CCV4	Sulfate	20.0	19.5	97	mg/L	04/27/12 10:46

* Values outside of QC limits

02150

SECOND-SOURCE CALIBRATION VERIFICATION

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D11053-SCV1
Sequence: 2D11053

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2D11013

Analyte	Expected	Found	% R	QC Limit	Units
Sulfate	20.0	19.0	95	85-115	mg/L

* Values outside of QC limits

02151

SECOND-SOURCE CALIBRATION VERIFICATION

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Laboratory ID: 2D20030-SCV1
Instrument: 298
Sequence: 2D20030
Calibration: 2D20010

Analyte	Expected	Found	% R	QC Limit	Units
Sulfate	20.0	19.1	96	85-115	mg/L

* Values outside of QC limits

02152

SECOND-SOURCE CALIBRATION VERIFICATION

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Laboratory ID: 2E02049-SCV1
Instrument: 303
Sequence: 2E02049
Calibration: 2E02014

Analyte	Expected	Found	% R	QC Limit	Units
Sulfate	20.0	19.3	97	85-115	mg/L

* Values outside of QC limits

02153

CRDL STANDARD

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D11053

SDG: KNM040512

Project: KNM

Calibration: 2D11013

Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2D11053-CRL1	Sulfate	5.00	4.85	97	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D20030

SDG: KNM040512

Project: KNM

Calibration: 2D20010

Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2D20030-CRL1	Sulfate	5.00	4.71	94	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2E02049

SDG: KNM040512

Project: KNM

Calibration: 2E02014

Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2E02049-CRL1	Sulfate	5.00	4.94	99	mg/L	50 - 150

* Values outside of QC limits

BLANKS
ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D11053

SDG: KNM040512
Project: KNM
Calibration: 2D11013
Instrument ID: 298

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2D11053-CCB1	Sulfate	0.20	mg/L	0.35	1.0	U	04/11/12 07:38
2D11053-CCB2	Sulfate	0.22	mg/L	0.35	1.0	U	04/11/12 08:05
2D11053-CCB3	Sulfate	0.23	mg/L	0.35	1.0	U	04/11/12 08:47
2D11053-CCB4	Sulfate	0.21	mg/L	0.35	1.0	U	04/11/12 09:11

* Values outside of QC limits

BLANKS
ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D20030

SDG: KNM040512
Project: KNM
Calibration: 2D20010
Instrument ID: 298

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2D20030-CCB1	Sulfate	0.21	mg/L	0.35	1.0	U	04/19/12 07:53
2D20030-CCB2	Sulfate	0.22	mg/L	0.35	1.0	U	04/19/12 07:59
2D20030-CCB3	Sulfate	0.22	mg/L	0.35	1.0	U	04/19/12 08:40
2D20030-CCB4	Sulfate	0.22	mg/L	0.35	1.0	U	04/19/12 08:57

* Values outside of QC limits

BLANKS
ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2E02049

SDG: KNM040512
Project: KNM
Calibration: 2E02014
Instrument ID: 303

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2E02049-CCB1	Sulfate	0.054	mg/L	0.35	1.0	U	04/27/12 07:15
2E02049-CCB2	Sulfate	0.10	mg/L	0.35	1.0	U	04/27/12 07:27
2E02049-CCB3	Sulfate	0.24	mg/L	0.35	1.0	U	04/27/12 09:20
2E02049-CCB4	Sulfate	0.14	mg/L	0.35	1.0	U	04/27/12 10:46

* Values outside of QC limits

QC BATCH SUMMARY

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204492 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
KAFB-003	1204091-01	04/11/12 06:20	must report at 1mg/L
Blank	1204492-BLK1	04/11/12 06:20	
LCS	1204492-BS1	04/11/12 06:20	
KAFB-003	1204492-MS1	04/11/12 06:20	
KAFB-003	1204492-MSD1	04/11/12 06:20	

QC BATCH SUMMARY

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204890 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
106042	1204205-01	04/19/12 06:30	must report at 1mg/L
106089	1204205-02	04/19/12 06:30	must report at 1mg/L
106058	1204329-01	04/19/12 06:30	must report at 1mg/L
Blank	1204890-BLK1	04/19/12 06:30	
LCS	1204890-BS1	04/19/12 06:30	
106042	1204890-MS1	04/19/12 06:30	
106042	1204890-MSD1	04/19/12 06:30	

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QC BATCH SUMMARY

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1205322

QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
106053	1204454-01	04/27/12 06:30	must report at 1mg/L
106054	1204454-02	04/27/12 06:30	must report at 1mg/L
Blank	1205322-BLK1	04/27/12 06:30	
LCS	1205322-BS1	04/27/12 06:30	
106053	1205322-MS1	04/27/12 06:30	
106053	1205322-MSD1	04/27/12 06:30	

02162

METHOD BLANK DATA SHEET
ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204492-BLK1
File ID: 041112so4-013
Prepared: 04/11/12 06:20
Analyzed: 04/11/12 07:38
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL
QC Batch: 1204492
Sequence: 2D11053
Calibration: 2D11013
Instrument: 298

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
14808-79-8	Sulfate	1.0	mg/L	0.35	1.0	U

02163

METHOD BLANK DATA SHEET
ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204890-BLK1
File ID: 041912so4-013
Prepared: 04/19/12 06:30
Analyzed: 04/19/12 07:53
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL
QC Batch: 1204890
Sequence: 2D20030
Calibration: 2D20010
Instrument: 298

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
14808-79-8	Sulfate	1.0	mg/L	0.35	1.0	U

02164

METHOD BLANK DATA SHEET
ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1205322-BLK1
File ID: 042712so4-069
Prepared: 04/27/12 06:30
Analyzed: 04/27/12 09:17
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL
QC Batch: 1205322
Sequence: 2E02049
Calibration: 2E02014
Instrument: 303

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
14808-79-8	Sulfate	1.0	mg/L	0.35	1.0	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

KAFB-003

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204492

SDG: KNM040512

Project: KNM

Laboratory ID: 1204492-MS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Sulfate	20.0	31.6	50.3	93	55 - 151	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02166

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

KAFB-003

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204492

SDG: KNM040512

Project: KNM

Laboratory ID: 1204492-MSD1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Sulfate	20.0	48.9	86	3	20	55 - 151	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02167

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106042

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204890

SDG: KNM040512

Project: KNM

Laboratory ID: 1204890-MS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Sulfate	20.0	47.9	66.7	94	55 - 151	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02168

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106042

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204890

SDG: KNM040512

Project: KNM

Laboratory ID: 1204890-MSD1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Sulfate	20.0	66.4	92	0.6	20	55 - 151	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02169

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106053

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205322

SDG: KNM040512

Project: KNM

Laboratory ID: 1205322-MS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Sulfate	20.0	48.0	65.8	89	55 - 151	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106053

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205322

SDG: KNM040512

Project: KNM

Laboratory ID: 1205322-MSD1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Sulfate	20.0	68.0	100	3	20	55 - 151	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02171

LCS / LCS DUPLICATE RECOVERY

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204492

SDG: KNM040512

Project: KNM

Laboratory ID: 1204492-BS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Sequence: 2D11053

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Sulfate	20.0	18.8	94	88 - 116	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204890

SDG: KNM040512

Project: KNM

Laboratory ID: 1204890-BS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Sequence: 2D20030

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Sulfate	20.0	19.5	98	88 - 116	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205322

SDG: KNM040512

Project: KNM

Laboratory ID: 1205322-BS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Sequence: 2E02049

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Sulfate	20.0	20.1	101	88 - 116	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

HOLDING TIME SUMMARY
ASTM D516-90 (02)

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Analyte: Sulfate

SDG: KNM040512

Project: KNM

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
KAFB-003	04/04/12	04/05/12		04/11/12	7	NA	04/11/12	7	28	
106042	04/10/12	04/11/12		04/19/12	9	NA	04/19/12	9	28	
106089	04/10/12	04/11/12		04/19/12	9	NA	04/19/12	9	28	
106058	04/17/12	04/18/12		04/19/12	2	NA	04/19/12	2	28	
106053	04/24/12	04/25/12		04/27/12	3	NA	04/27/12	3	28	
106054	04/24/12	04/25/12		04/27/12	3	NA	04/27/12	3	28	

Inorganic - Wet Chemistry, Water, Apr-11-12

Instrument = 298, Calibration = 2D11013

Sequence Analyses:
Sulfate ASTM D516-90 (Low Level)

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D11053-CAL1	QC		2031198		CAL STANDARD	
2D11053-CAL2	QC		2031195		CAL STANDARD	
2D11053-CAL3	QC		2031194		CAL STANDARD	
2D11053-CAL4	QC		2031193		CAL STANDARD	
2D11053-CAL5	QC		2031192		CAL STANDARD	
2D11053-CAL6	QC		2031191		CAL STANDARD	
2D11053-CAL7	QC		2031190		CAL STANDARD	
2D11053-CAL8	QC		2031189		CAL STANDARD	
2D11053-CCV1	QC		2031194		CALIBRATION CHECK	
2D11053-CCB1	QC		2031198		CALIBRATION BLANK	
2D11053-CRL1	QC		2031195		INSTRUMENT RL CHECK	
2D11053-SCV1	QC		2040483		SECONDARY CAL CHECK	
1204492-BLK1	QC				BLANK	
1204492-BS1	QC				LCS	
2D11053-CCV2	QC		2031194		CALIBRATION CHECK	
2D11053-CCB2	QC		2031198		CALIBRATION BLANK	
1204091-01	Sulfate ASTM D516-90 (Low Level)	J			TechLaw	must report at 1mg/L
2D11053-CCV3	QC		2031191		CALIBRATION CHECK	
2D11053-CCB3	QC		2031198		CALIBRATION BLANK	
1204492-MS1	QC				MATRIX SPIKE	
1204492-MSD1	QC				MATRIX SPIKE DUP	
2D11053-CCV4	QC		2031192		CALIBRATION CHECK	
2D11053-CCB4	QC		2031198		CALIBRATION BLANK	

Comments:

Analyst Initials:

TriMatrix Laboratories, Inc.

due 04/18/12

PREPARATION BATCH 1204492

Printed: 4/11/2012 10:32:32AM

NLB 4-16-12

4MD

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

021 77

Standard	Description	Solvent	LotNum
1101252	Sulfate 10000 ppm	di h20	K19623(E#1090032)
2030007	Konelab Sulfate Reagent	di H2O	varies

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204091	Sulfate ASTM D516-90 (Low Level)				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	pH Surrogate	Source ID	Spike ID	pH Spike	Client QC Type	Extraction Comments
1204492-BLK1		Apr-11-12 06:20	LMA	10	10					BLANK	
1204492-BS1		Apr-11-12 06:20	LMA	10	10			1101252	20	LCS	
1204492-MS1		Apr-11-12 06:20	LMA	10	10		1204091-01	1101252	20	MATRIX SPIKE	
1204492-MSD1		Apr-11-12 06:20	LMA	10	10		1204091-01	1101252	20	MATRIX SPIKE DUP	
1204091-01	J	Apr-11-12 06:20	LMA	10	10					TechLaw	must report at 1mg/L

Comments:

Analyst Initials:

Calibration results Aquakem 7.2AQ1 Page: 1

TriMatrix Laboratories Inst #298
Konelab User

4/11/2012 6:55

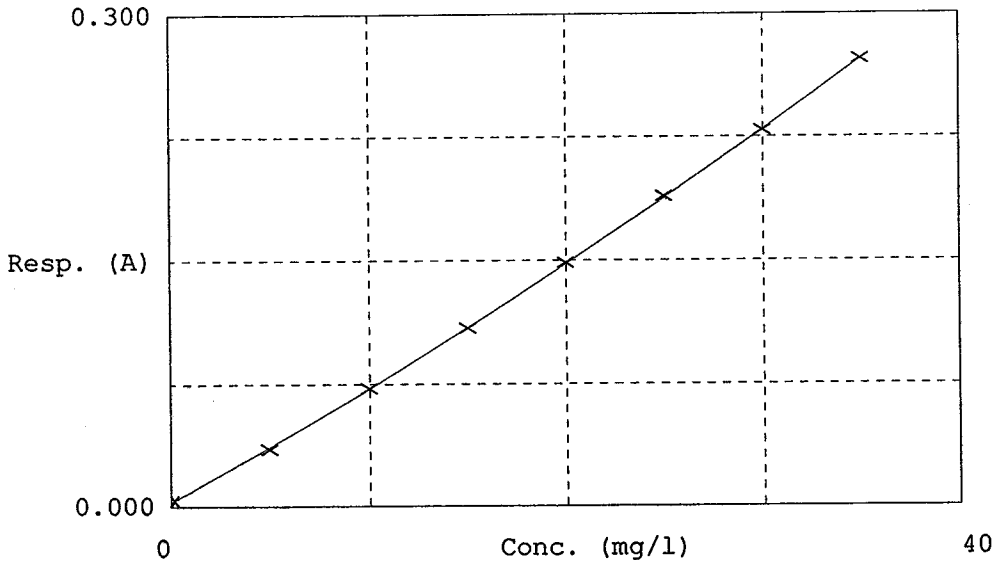
Test SO4 HIGH

Accepted 4/11/2012 6:55

Resp. = A * Conc. ^ 2 + B * Conc. + C
A = 0.00003
B = 0.00669
C = 0.00240

Coeff. of det. 0.999920

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	SO4-0	0.00342	0.15228	0.00000	
2	SO4- 5	0.03505	4.78334	5.00000	
3	SO4-10	0.07230	10.01426	10.00000	
4	SO4-15	0.10886	14.94338	15.00000	
5	SO4-20	0.14849	20.08143	20.00000	
6	SO4-25	0.18874	25.10742	25.00000	
7	SO4-30	0.22880	29.93543	30.00000	
8	SO4-35	0.27213	34.98233	35.00000	

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/11/2012
Time : 10:47

Test SO4 HIGH
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
SO4 CCV 1	9.7642	0.070	4/11/2012 7:38		
SO4 CCB	0.1999	0.004	4/11/2012 7:38		
so4 crl 5.0	4.8510	0.036	4/11/2012 7:38		
so4 scv	19.0205	0.140	4/11/2012 7:38		
blk 1	0.2569	0.004	4/11/2012 7:38		
bs 1	18.8352	0.139	4/11/2012 7:38		
SO4 CCV 2	10.0541	0.073	4/11/2012 8:05		
SO4 CCB	0.2158	0.004	4/11/2012 8:05		
so4 40 1+1	38.6939	0.143	4/11/2012 8:05	1+1.0	
so4 100 1+4	97.9645	0.145	4/11/2012 8:05	1+4.0	
so4 200 1+9	201.9242	0.149	4/11/2012 8:05	1+9.0	
so4 500 1+24	503.1762	0.149	4/11/2012 8:05	1+24.0	
SO4 CCV	9.7993	0.071	4/11/2012 8:11		
SO4 CCB	0.2898	0.004	4/11/2012 8:11		
so4 1000 1+49	1e+003	0.151	4/11/2012 8:11	1+49.0	
SO4 CCV	9.7727	0.071	4/11/2012 8:25		
SO4 CCB	0.1413	0.003	4/11/2012 8:25		
SO4 CCV	25.1699	0.189	4/11/2012 8:44		
SO4 CCB	0.1866	0.004	4/11/2012 8:44		
1204091-01	31.6490	0.243	4/11/2012 8:44		
1204091-01ms	_____	0.407	-	Dilute	
1204091-01msd	_____	0.399	-	↓	
blk 2	0.2595	0.004	4/11/2012 8:44		
SO4 CCV 3	24.9943	0.188	4/11/2012 8:47		
SO4 CCB	0.2287	0.004	4/11/2012 8:47		
bs 2	19.9900	0.148	4/11/2012 8:47		
1204130-03	_____	-	-	Low Level	
1204130-04	_____	-	-	↓	
1204130-07	_____	0.369	-	Dilute	
SO4 CCV	24.6002	0.185	4/11/2012 8:50		
SO4 CCB	0.1878	0.004	4/11/2012 8:50		
1204130-07ms	_____	0.515	-	Dilute	
1204130-07msd	_____	0.514	-	↓	
1204130-09	_____	-	-	Low level	
1204130-11	_____	-	-	↓	
SO4 CCV	23.5621	0.176	4/11/2012 8:53		
SO4 CCB	0.1794	0.004	4/11/2012 8:53		
1204130-12	_____	-	-	Low Level	
1204153-01	24.7416	0.186	4/11/2012 8:53		
1204153-01ms	_____	0.343	-	Dilute	
1204153-01msd	_____	0.347	-	↓	
SO4 CCV	24.5321	0.184	4/11/2012 8:56		
SO4 CCB	0.2258	0.004	4/11/2012 8:56		
1204153-02	26.5877	0.201	4/11/2012 8:56		
1204184-01	_____	-	-	Low level	
1204184-02	_____	0.894	-	Dilute	
1204184-03	_____	-	-	Low level	
SO4 CCV	24.0505	0.180	4/11/2012 8:59		
SO4 CCB	0.2301	0.004	4/11/2012 8:59		
1204190-01	19.0811	0.141	4/11/2012 8:59		
1204190-01ms	_____	0.301	-	Dilute	
1204190-01msd	_____	0.302	-	↓	
1204190-03	_____	-	-	Low level	

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/11/2012
Time : 10:47

Test SO4 HIGH
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
SO4 CCV	24.2378	0.182	4/11/2012 9:02		
SO4 CCB	0.1768	0.004	4/11/2012 9:02		
1204190-05		-	- Lowlevel		
1204141-01	0.1651	0.004	4/11/2012 9:02		
1204141-01ms	19.2706	0.142	4/11/2012 9:02		
1204141-01msd	19.4285	0.143	4/11/2012 9:02		
SO4 CCV	18.2230	0.134	4/11/2012 9:04		
SO4 CCB	0.1911	0.004	4/11/2012 9:05		
1204142-01	0.1876	0.004	4/11/2012 9:05		
1204183-01	-0.8426	-0.003	4/11/2012 9:05		
blk ww	0.2343	0.004	4/11/2012 9:05		
bs ww	19.8234	0.146	4/11/2012 9:05		
SO4 CCV	19.7835	0.146	4/11/2012 9:08		
SO4 CCB	0.2366	0.004	4/11/2012 9:08		
1204091-01ms	50.3200	0.189	4/11/2012 9:08	1+1.0	
1204091-01msd	48.8872	0.183	4/11/2012 9:08	1+1.0	
1204130-07	45.0548	0.168	4/11/2012 9:08	1+1.0	
1204130-07ms	63.3325	0.243	4/11/2012 9:08	1+1.0	
SO4 CCV 4	19.7024	0.146	4/11/2012 9:11		
SO4 CCB	0.2076	0.004	4/11/2012 9:11		
1204130-07msd	63.2787	0.243	4/11/2012 9:11	1+1.0	
1204153-01ms	41.7685	0.155	4/11/2012 9:14	1+1.0	
1204153-01msd	41.9785	0.156	4/11/2012 9:14	1+1.0	
1204184-02	142.7137	0.104	4/11/2012 9:14	1+9.0	
SO4 CCV	19.7781	0.146	4/11/2012 9:16		
SO4 CCB	0.2264	0.004	4/11/2012 9:16		
1204190-01ms	36.2407	0.133	4/11/2012 9:22	1+1.0	
1204190-01msd	35.8648	0.132	4/11/2012 9:22	1+1.0	
SO4 CCV	19.3542	0.143	4/11/2012 9:22		
SO4 CCB	0.2016	0.004	4/11/2012 9:22		

Inorganic - Wet Chemistry, Water, Apr-19-12

Instrument = 298, Calibration = 2D20010

Sequence Analyses:
Sulfate ASTM D516-90 (Low Level)

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D20030-CAL1	QC		2031198		CAL STANDARD	
2D20030-CAL2	QC		2031195		CAL STANDARD	
2D20030-CAL3	QC		2031194		CAL STANDARD	
2D20030-CAL4	QC		2031193		CAL STANDARD	
2D20030-CAL5	QC		2031192		CAL STANDARD	
2D20030-CAL6	QC		2031191		CAL STANDARD	
2D20030-CAL7	QC		2031190		CAL STANDARD	
2D20030-CAL8	QC		2031189		CAL STANDARD	
2D20030-CCV1	QC		2031194		CALIBRATION CHECK	
2D20030-CCB1	QC		2031198		CALIBRATION BLANK	
2D20030-CRL1	QC		2031195		INSTRUMENT RL CHECK	
2D20030-SCV1	QC		2040483		SECONDARY CAL CHECK	
1204890-BLK1	QC				BLANK	
1204890-BS1	QC				LCS	
2D20030-CCV2	QC		2031194		CALIBRATION CHECK	
2D20030-CCB2	QC		2031198		CALIBRATION BLANK	
1204329-01	Sulfate ASTM D516-90 (Low Level)	J			TechLaw	must report at 1mg/L
2D20030-CCV3	QC		2031194		CALIBRATION CHECK	
2D20030-CCB3	QC		2031198		CALIBRATION BLANK	
1204205-01	Sulfate ASTM D516-90 (Low Level)	J			TechLaw	must report at 1mg/L
1204890-MS1	QC				MATRIX SPIKE	
1204890-MSD1	QC				MATRIX SPIKE DUP	
1204205-02	Sulfate ASTM D516-90 (Low Level)	J			TechLaw	must report at 1mg/L
2D20030-CCV4	QC		2031194		CALIBRATION CHECK	
2D20030-CCB4	QC		2031198		CALIBRATION BLANK	

Comments:	Analyst Initials:

TriMatrix Laboratories, Inc.

due 04/24/12

PREPARATION BATCH 1204890

Printed: 4/19/2012 1:58:06PM

NLB 4-23-12

4MD

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

02182

Standard	Description	Solvent	LotNum
1101252	Sulfate 10000 ppm	di h20	K19623(E#1090032)
2030007	Konelab Sulfate Reagent	di H2O	varies

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204205	Sulfate ASTM D516-90 (Low Level)	1204329	Sulfate ASTM D516-90 (Low Level)		

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1204890-BLK1		Apr-19-12 06:30	LMA	10	10					BLANK	
1204890-BS1		Apr-19-12 06:30	LMA	10	10			1101252	20	LCS	
1204890-MS1		Apr-19-12 06:30	LMA	10	10		1204205-01	1101252	20	MATRIX SPIKE	
1204890-MSD1		Apr-19-12 06:30	LMA	10	10		1204205-01	1101252	20	MATRIX SPIKE DUP	
1204205-01	J	Apr-19-12 06:30	LMA	10	10					TechLaw	must report at 1mg/L
1204205-02	J	Apr-19-12 06:30	LMA	10	10					TechLaw	must report at 1mg/L
1204329-01	J	Apr-19-12 06:30	LMA	10	10					TechLaw	must report at 1mg/L

Comments:

Analyst Initials:

TriMatrix Laboratories Inst #298
Konelab User

4/19/2012 7:12

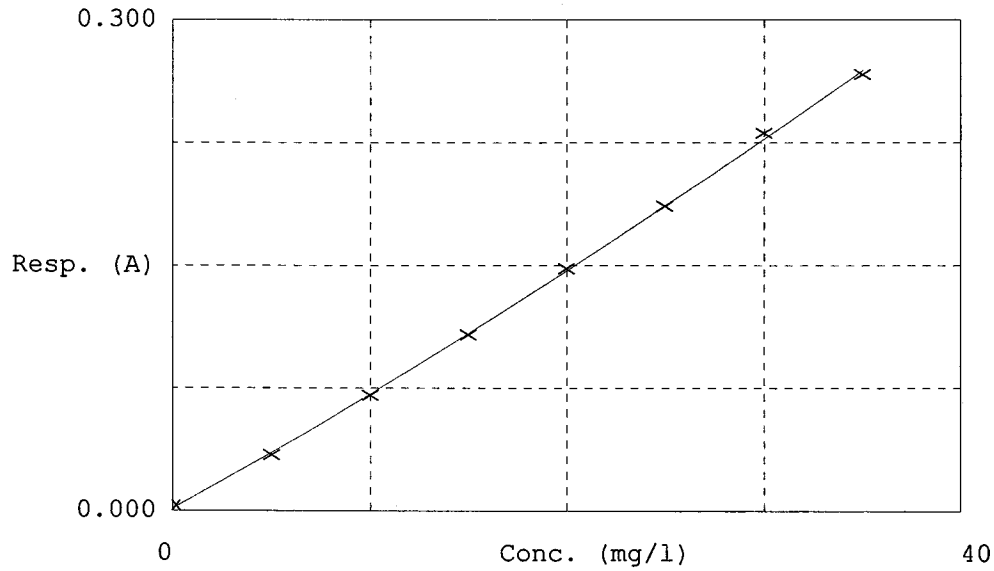
Test SO4 HIGH

Accepted 4/19/2012 7:12

Resp. = A * Conc. ^ 2 + B * Conc. + C
A = 0.00003
B = 0.00677
C = 0.00131

Coeff. of det. 0.999518

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	SO4-0	0.00308	0.26148	0.00000	
2	SO4- 5	0.03421	4.77683	5.00000	
3	SO4-10	0.07045	9.85506	10.00000	
4	SO4-15	0.10742	14.85495	15.00000	
5	SO4-20	0.14804	20.16193	20.00000	
6	SO4-25	0.18590	24.94905	25.00000	
7	SO4-30	0.23078	30.44169	30.00000	
8	SO4-35	0.26661	34.69796	35.00000	

Result Report | Aquakem 7.2AQ1 | Page: 1

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/19/2012
Time : 13:00

Test: SO4 HIGH
Unit: mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
SO4 CCV	9.6784	0.069	4/19/2012 7:53		
SO4 CCB 1	0.2132	0.003	4/19/2012 7:53		
so4 crl 5.0	4.7146	0.034	4/19/2012 7:53		
so4 scv	19.0891	0.140	4/19/2012 7:53		
blk 1	0.2293	0.003	4/19/2012 7:53		
bs 1	19.5457	0.143	4/19/2012 7:53		
SO4 CCV	9.8209	0.070	4/19/2012 7:59		
SO4 CCB 2	0.2234	0.003	4/19/2012 7:59		
bsd 1	19.2789	0.141	4/19/2012 7:59		
lod/loq	0.9809	0.008	4/19/2012 7:59		
40 1+1	38.2652	0.140	4/19/2012 8:03	1+1.0	
100 1+4	97.7407	0.143	4/19/2012 8:03	1+4.0	
SO4 CCV	9.8198	0.070	4/19/2012 8:03		
SO4 CCB	0.2379	0.003	4/19/2012 8:03		
200 1+9	197.7988	0.145	4/19/2012 8:03	1+9.0	
500 1+24	507.6724	0.149	4/19/2012 8:03	1+24.0	
1000 1+49	998.1488	0.146	4/19/2012 8:08	1+49.0	
SO4 CCV	9.6378	0.069	4/19/2012 8:19		
SO4 CCB	0.2603	0.003	4/19/2012 8:19		
SO4 CCV	9.9307	0.071	4/19/2012 8:33		
SO4 CCB	0.2263	0.003	4/19/2012 8:33		
1204205-01	_____	0.381	-	Dilute	
1204205-01ms	_____	0.521	-	↓	
1204205-01msd	_____	0.518	-		
1204205-02	_____	0.267	-		
SO4 CCV	9.6837	0.069	4/19/2012 8:39		
SO4 CCB	0.2552	0.003	4/19/2012 8:39		
1204329-01	32.6319	0.249	4/19/2012 8:39		
SO4 CCV	9.5209	0.068	4/19/2012 8:40		
SO4 CCB 3	0.2234	0.003	4/19/2012 8:40		
1204205-01	47.9071	0.178	4/19/2012 8:46	1+1.0	
1204205-01ms	66.7495	0.255	4/19/2012 8:46	1+1.0	
1204205-01msd	66.3807	0.254	4/19/2012 8:46	1+1.0	
1204205-02	33.1506	0.120	4/19/2012 8:46	1+1.0	
SO4 CCV	9.6945	0.069	4/19/2012 8:57		
SO4 CCB 4	0.2158	0.003	4/19/2012 8:57		
SO4 CCV	25.1915	0.188	4/19/2012 9:15		
SO4 CCB	0.2356	0.003	4/19/2012 9:15		
blk 2	0.1706	0.002	4/19/2012 9:15		
bs 2	19.7118	0.145	4/19/2012 9:15		
1204227-01	32.5537	0.248	4/19/2012 9:15		
1204227-02	_____	0.412	-	Dilute	
SO4 CCV	23.3810	0.173	4/19/2012 9:18		
SO4 CCB	0.2796	0.003	4/19/2012 9:18		
1204227-03	_____	0.400	-	Dilute	
1204227-04	_____	0.361	-	↓	
1204227-05	_____	-	-	Low level	
1204227-06	6.7275	0.048	4/19/2012 9:18		
SO4 CCV	24.4336	0.182	4/19/2012 9:21		
SO4 CCB	0.2477	0.003	4/19/2012 9:21		
1204227-07	13.8921	0.100	4/19/2012 9:21		
1204227-08	_____	-	-	Low level	
1204227-09	34.3728	0.264	4/19/2012 9:21		

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/19/2012
Time : 13:00

Test SO4 HIGH
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204227-10		0.367	-	Dilute	
SO4 CCV	24.5067	0.182	4/19/2012 9:24		
SO4 CCB	0.2349	0.003	4/19/2012 9:24		
1204227-11	17.7624	0.129	4/19/2012 9:24		
1204227-12		0.416	-	Dilute	
1204227-13		-	-	Low level	
1204227-14	6.5150	0.046	4/19/2012 9:24		
SO4 CCV	24.7318	0.184	4/19/2012 9:27		
SO4 CCB	0.2408	0.003	4/19/2012 9:27		
1204227-15		-	-	Low level	
1204227-15ms		-	-	↓	
1204227-15msd		-	-		
1204227-16		-	-		
SO4 CCV	24.8639	0.185	4/19/2012 9:30		
SO4 CCB	0.2256	0.003	4/19/2012 9:30		
1204227-17		-	-	Low level	
blk 3	0.2609	0.003	4/19/2012 9:30		
bs 3	19.5338	0.143	4/19/2012 9:30		
1204238-01		-	-	Low level	
SO4 CCV	25.0170	0.186	4/19/2012 9:33		
SO4 CCB	0.3915	0.004	4/19/2012 9:33		
1204238-01ms		-	-	Low level	
1204238-01msd		-	-	↓	
1204238-03		-	-		
1204227-05		-	-		
SO4 CCV	24.3184	0.181	4/19/2012 9:36		
SO4 CCB	0.2426	0.003	4/19/2012 9:36		
1204238-05		-	-	Low level	
1204238-07		-	-	↓	
1204238-10		-	-		
1204239-01	35.0040	0.269	4/19/2012 9:39		
SO4 CCV	24.6327	0.183	4/19/2012 9:39		
SO4 CCB	0.2981	0.003	4/19/2012 9:39		
1204239-02	29.5624	0.223	4/19/2012 9:39		
1204239-03		0.384	-	dilute	
1204242-01		1.983	-	↓	
1204243-01		0.967	-		
SO4 CCV	24.7038	0.184	4/19/2012 9:42		
SO4 CCB	0.2978	0.003	4/19/2012 9:42		
1204243-02		1.058	-	Dilute	
1204266-01		-	-	Low level	
1204266-01ms		-	-	↓	
1204266-01msd		-	-		
SO4 CCV	24.6002	0.183	4/19/2012 9:45		
SO4 CCB	0.2264	0.003	4/19/2012 9:45		
1204266-03		-	-	Low level	
1204266-05		-	-	↓	
1204274-01		-	-		
1204274-02		-	-		
SO4 CCV	19.1758	0.140	4/19/2012 9:48		
SO4 CCB	0.3092	0.003	4/19/2012 9:48		
1204275-08		1.225	-	Dilute	
1204275-08ms		1.263	-	↓	

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/19/2012
Time : 13:00

Test SO4 HIGH
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204275-08msd		1.226	-	Dilute	
1204321-01		-	-	Low level	
SO4 CCV	19.1493	0.140	4/19/2012 9:51		
SO4 CCB	0.2281	0.003	4/19/2012 9:51		
1204321-03		-	-	Low level	
blk 4	0.1831	0.003	4/19/2012 9:51		
bs 4	19.5939	0.144	4/19/2012 9:51		
1204316-01	29.1030	0.220	4/19/2012 9:54		
SO4 CCV	19.4898	0.143	4/19/2012 9:54		
SO4 CCB	0.2662	0.003	4/19/2012 9:54		
1204316-01ms		0.369	-	Dilute	
1204316-01msd		0.379	-	↓	
1204316-02	28.8581	0.218	4/19/2012 9:54		
1204316-03	-1.2224	-0.007	4/19/2012 9:57		
SO4 CCV	19.5230	0.143	4/19/2012 9:57		
SO4 CCB	0.2433	0.003	4/19/2012 9:57		
1204316-04	31.7474	0.242	4/19/2012 9:57		
1204316-05	11.5240	0.083	4/19/2012 9:57		
1204316-06	0.2848	0.003	4/19/2012 9:57		
1204316-07	3.6357	0.026	4/19/2012 10:00		
SO4 CCV	19.3401	0.142	4/19/2012 10:00		
SO4 CCB	0.2290	0.003	4/19/2012 10:00		
1204316-08	0.2196	0.003	4/19/2012 10:00		
1204227-02	51.4964	0.192	4/19/2012 10:03	1+1.0	
1204227-03	50.0230	0.186	4/19/2012 10:03	1+1.0	
1204227-04	44.4353	0.164	4/19/2012 10:03	1+1.0	
SO4 CCV	19.4656	0.143	4/19/2012 10:03		
SO4 CCB	0.2634	0.003	4/19/2012 10:03		
1204227-10	45.1156	0.167	4/19/2012 10:03	1+1.0	
1204227-12	52.3549	0.196	4/19/2012 10:06	1+1.0	
SO4 CCV	19.8425	0.146	4/19/2012 10:06		
SO4 CCB	0.2614	0.003	4/19/2012 10:06		
1204239-03	49.6864	0.185	4/19/2012 10:10	1+1.0	
1204242-01		0.061	-	Dilute	1+49.0
1204243-01		0.040	-	↓	1+24.0
1204243-02		0.048	-		1+24.0
SO4 CCV	19.6496	0.144	4/19/2012 10:10		
SO4 CCB	0.2892	0.003	4/19/2012 10:10		
1204275-08		0.068	-	Dilute	1+24.0
SO4 CCV	19.6591	0.144	4/19/2012 10:13		
SO4 CCB	0.2773	0.003	4/19/2012 10:13		
1204275-08ms		0.073	-	Dilute	1+24.0
1204275-08msd		0.073	-	↓	1+24.0
1204316-01ms	47.0247	0.174	4/19/2012 10:16	1+1.0	
1204316-01msd	46.8162	0.174	4/19/2012 10:16	1+1.0	
SO4 CCV	19.6046	0.144	4/19/2012 10:18		
SO4 CCB	0.2453	0.003	4/19/2012 10:18		
SO4 CCV	19.3812	0.142	4/19/2012 10:28		
SO4 CCB	0.2178	0.003	4/19/2012 10:28		
1204242-01	411.6316	0.120	4/19/2012 10:28	1+24.0	
1204243-01	139.6931	0.101	4/19/2012 10:28	1+9.0	
1204243-02	171.3545	0.125	4/19/2012 10:28	1+9.0	
1204275-08	239.2231	0.178	4/19/2012 10:28	1+9.0	

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/19/2012
Time : 13:00

Test SO4 HIGH
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
SO4 CCV	19.4810	0.143	4/19/2012 10:31		
SO4 CCB	0.2266	0.003	4/19/2012 10:31		
1204275-08ms	256.4825	0.192	4/19/2012 10:31	1+9.0	
1204275-08msd	259.0941	0.194	4/19/2012 10:31	1+9.0	
SO4 CCV	19.5271	0.143	4/19/2012 10:33		
SO4 CCB	0.2363	0.003	4/19/2012 10:33		

Inorganic - Wet Chemistry, Water, Apr-27-12

Instrument = 303, Calibration = 2E02014

Sequence Analyses:
Sulfate ASTM D516-90 (Low Level)

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2E02049-CAL1	QC		2031198		CAL STANDARD	
2E02049-CAL2	QC		2031195		CAL STANDARD	
2E02049-CAL3	QC		2031194		CAL STANDARD	
2E02049-CAL4	QC		2031193		CAL STANDARD	
2E02049-CAL5	QC		2031192		CAL STANDARD	
2E02049-CAL6	QC		2031191		CAL STANDARD	
2E02049-CAL7	QC		2031190		CAL STANDARD	
2E02049-CAL8	QC		2031189		CAL STANDARD	
2E02049-CCV1	QC		2031194		CALIBRATION CHECK	
2E02049-CCB1	QC		2031198		CALIBRATION BLANK	
2E02049-CRL1	QC		2031195		INSTRUMENT RL CHECK	
2E02049-SCV1	QC		2040483		SECONDARY CAL CHECK	
2E02049-CCV2	QC		2031194		CALIBRATION CHECK	
2E02049-CCB2	QC		2031198		CALIBRATION BLANK	
1205322-BLK1	QC				BLANK	
1205322-BS1	QC				LCS	
2E02049-CCV3	QC		2031191		CALIBRATION CHECK	
2E02049-CCB3	QC		2031198		CALIBRATION BLANK	
1204454-01	Sulfate ASTM D516-90 (Low Level)	J			TechLaw	must report at 1mg/L
1205322-MS1	QC				MATRIX SPIKE	
1205322-MSD1	QC				MATRIX SPIKE DUP	
1204454-02	Sulfate ASTM D516-90 (Low Level)	J			TechLaw	must report at 1mg/L
2E02049-CCV4	QC		2031192		CALIBRATION CHECK	
2E02049-CCB4	QC		2031198		CALIBRATION BLANK	

Comments:	Analyst Initials:

due 05/08/12

TriMatrix Laboratories, Inc.

NLB 5-7-12

PREPARATION BATCH **1205322** Page 1 of 1

Printed: 4/27/2012 1:55:37PM

4MD

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

62189

Standard	Description	Solvent	LotNum
1101252	Sulfate 10000 ppm	di h20	K19623(E#1090032)
2040982	Konelab Sulfate Reagent	di H2O	varies

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204454	Sulfate ASTM D516-90 (Low Level)				

Balance ID: _____ **pH Meter:** _____

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1205322-BLK1		Apr-27-12 06:30	LMA	10	10					BLANK	
1205322-BS1		Apr-27-12 06:30	LMA	10	10			1101252	20	LCS	
1205322-MS1		Apr-27-12 06:30	LMA	10	10		1204454-01	1101252	20	MATRIX SPIKE	
1205322-MSD1		Apr-27-12 06:30	LMA	10	10		1204454-01	1101252	20	MATRIX SPIKE DUP	
1204454-01	J	Apr-27-12 06:30	LMA	10	10					TechLaw	must report at 1mg/L
1204454-02	J	Apr-27-12 06:30	LMA	10	10					TechLaw	must report at 1mg/L

Comments:	Analyst Initials:

Laboratory inst#303
Konelab User

27.04.2012 06:53

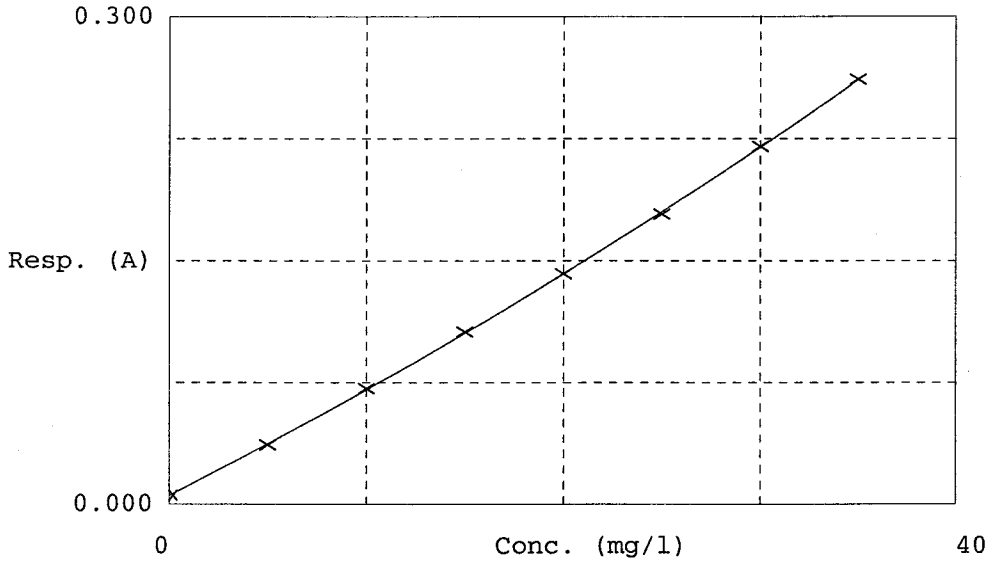
Test SO4 high

Accepted 27.04.2012 06:53

Resp. = A * Conc. ^ 2 + B * Conc. + C
A = 0.00003
B = 0.00621
C = 0.00542

Coeff. of det. 0.999928

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	so4-0	0.00544	0.00303	0.00000	
2	so4-5	0.03655	4.89126	5.00000	
3	so4-10	0.07131	10.09493	10.00000	
4	so4-15	0.10655	15.12940	15.00000	
5	so4-20	0.14202	19.98273	20.00000	
6	so4-25	0.17882	24.81735	25.00000	
7	so4-30	0.22028	30.04922	30.00000	
8	so4-35	0.26135	35.03155	35.00000	

Laboratory inst#303
Konelab User

Date : 2012-04-27
Time : 13.28

Test SO4 high
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
so4 ccv 1	9.9899	0.071	2012-04-27 07.15		
so4 ccb 1	0.0537	0.006	2012-04-27 07.15		
so4 crl 5.0	4.9370	0.037	2012-04-27 07.15		
so4 scv	19.2503	0.137	2012-04-27 07.15		
blk 1	0.1210	0.006	2012-04-27 07.15		
bs 1	19.0807	0.135	2012-04-27 07.15		
so4 ccv 2	10.1589	0.072	2012-04-27 07.27		
so4 ccb 2	0.1015	0.006	2012-04-27 07.27		
500 1+24	509.3568	0.145	2012-04-27 07.27	1+24.0	
1000 1+49	1e+003	0.144	2012-04-27 07.29	1+49.0	
so4 ccv	10.0540	0.071	2012-04-27 07.39		
so4 ccb	0.0796	0.006	2012-04-27 07.39		
bsd 1	19.4112	0.138	2012-04-27 07.45		
40 1+1	38.8637	0.138	2012-04-27 07.46	1+1.0	
100 1+4	96.7124	0.137	2012-04-27 07.46	1+4.0	
200 1+9	196.9410	0.140	2012-04-27 07.46	1+9.0	
so4 ccv	9.9187	0.070	2012-04-27 07.48		
so4 ccb	0.0576	0.006	2012-04-27 07.48		
so4 ccv	24.9731	0.180	2012-04-27 08.44		
so4 ccb	0.1481	0.006	2012-04-27 08.44		
1204427-01	7.5240	0.054	2012-04-27 08.44		
1204427-01ms	27.3250	0.198	2012-04-27 08.44		
1204427-01msd	27.8765	0.203	2012-04-27 08.44		
1204427-02	6.7187	0.049	2012-04-27 08.44		
so4 ccv	25.7879	0.186	2012-04-27 08.47		
so4 ccb	0.1883	0.007	2012-04-27 08.47		
1204427-05	7.9129	0.057	2012-04-27 08.47		
so4 ccv	25.0471	0.181	2012-04-27 08.50		
so4 ccb	0.1224	0.006	2012-04-27 08.50		
1204427-07	5.2709	0.039	2012-04-27 08.50		
so4 ccv	25.1687	0.182	2012-04-27 08.53		
so4 ccb	0.1222	0.006	2012-04-27 08.53		
so4 ccv	25.1022	0.181	2012-04-27 08.56		
so4 ccb	0.5754	0.009	2012-04-27 08.56		
blk 2	0.1331	0.006	2012-04-27 08.56		
bs 2	19.5748	0.139	2012-04-27 08.56		
1204435-01	18.4907	0.131	2012-04-27 08.59		
so4 ccv	24.8779	0.179	2012-04-27 08.59		
so4 ccb	0.1550	0.006	2012-04-27 08.59		
1204435-02	30.3701	0.223	2012-04-27 08.59		
so4 ccv	25.2696	0.182	2012-04-27 09.02		
so4 ccb	0.1507	0.006	2012-04-27 09.02		
1204435-03	11.0160	0.078	2012-04-27 09.04		
1204345-04	8.6767	0.062	2012-04-27 09.05		
so4 ccv	25.2506	0.182	2012-04-27 09.05		
so4 ccb	0.1459	0.006	2012-04-27 09.05		
1204435-06	11.1075	0.078	2012-04-27 09.08		
1204435-07	15.3235	0.108	2012-04-27 09.08		
1204435-08	15.6737	0.110	2012-04-27 09.08		
so4 ccv	24.9971	0.180	2012-04-27 09.08		
so4 ccb	0.1070	0.006	2012-04-27 09.08		
1204435-11	11.8940	0.084	2012-04-27 09.11		
1204435-12	19.5601	0.139	2012-04-27 09.11		

Laboratory inst#303
Konelab User

Date : 2012-04-27
Time : 13.28

Test SO4 high
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204435-13	23.1526	0.166	2012-04-27 09.11		
so4 ccv	25.0967	0.181	2012-04-27 09.11		
so4 ccb	0.1072	0.006	2012-04-27 09.11		
1204463-01	20.1283	0.143	2012-04-27 09.14		
so4 ccv	24.7484	0.178	2012-04-27 09.14		
so4 ccb	0.0895	0.006	2012-04-27 09.14		
1204463-04	22.5361	0.161	2012-04-27 09.17		
blk 3 1205322	0.1678	0.006	2012-04-27 09.17		
so4 ccv	24.8897	0.179	2012-04-27 09.17		
so4 ccb	0.1217	0.006	2012-04-27 09.17		
bs 3 1205322	20.1001	0.143	2012-04-27 09.20		
so4 ccv	26.3933	0.191	2012-04-27 09.20		
so4 ccb 3	0.2417	0.007	2012-04-27 09.20		
so4 ccv	27.9429	0.203	2012-04-27 09.23		
so4 ccb	0.4832	0.008	2012-04-27 09.23		
so4 ccv	26.9111	0.195	2012-04-27 09.26		
so4 ccb	0.5008	0.009	2012-04-27 09.26		
so4 ccv	24.7492	0.178	2012-04-27 09.32		
so4 ccb	0.2105	0.007	2012-04-27 09.32		
bs 4	20.4746	0.146	2012-04-27 09.34		
so4 ccv	24.8352	0.179	2012-04-27 09.34		
so4 ccb	0.2065	0.007	2012-04-27 09.34		
1204435-02ms	46.2840	0.166	2012-04-27 09.40	1+1.0	
so4 ccv	26.0163	0.188	2012-04-27 09.40		
so4 ccb	0.2420	0.007	2012-04-27 09.40		
1204435-02msd	49.0572	0.177	2012-04-27 09.40	1+1.0	
so4 ccv	24.4451	0.176	2012-04-27 09.43		
so4 ccb	0.1290	0.006	2012-04-27 09.43		
so4 ccv	19.8037	0.141	2012-04-27 10.18		
so4 ccb	0.3301	0.007	2012-04-27 10.18		
blk 4	0.9930	0.012	2012-04-27 10.18		
1204463-03	56.4311	0.206	2012-04-27 10.20	1+1.0	
so4 ccv	19.6326	0.139	2012-04-27 10.20		
so4 ccb	0.1690	0.006	2012-04-27 10.20		
1204451-02	734.7389	0.103	2012-04-27 10.26	1+49.0	
1204451-03	676.3400	0.095	2012-04-27 10.26	1+49.0	
1204451-05	927.6028	0.131	2012-04-27 10.26	1+49.0	
1204451-06	550.1795	0.078	2012-04-27 10.26	1+49.0	
so4 ccv	19.6144	0.139	2012-04-27 10.26		
so4 ccb	0.2591	0.007	2012-04-27 10.26		
1204451-07	1e+003	0.217	2012-04-27 10.30	1+49.0	
1204451-09	730.0891	0.103	2012-04-27 10.30	1+49.0	
1204451-10	1e+003	0.178	2012-04-27 10.30	1+49.0	
1204451-10ms	1e+003	0.183	2012-04-27 10.30	1+49.0	
so4 ccv	19.8336	0.141	2012-04-27 10.30		
so4 ccb	0.1788	0.007	2012-04-27 10.30		
1204451-10msd	1e+003	0.182	2012-04-27 10.34	1+49.0	
1204451-11	1e+003	0.152	2012-04-27 10.34	1+49.0	
1204451-12	1e+003	0.151	2012-04-27 10.34	1+49.0	
1204451-13	2e+003	0.235	2012-04-27 10.34	1+49.0	
so4 ccv	19.8156	0.141	2012-04-27 10.34		
so4 ccb	0.1909	0.007	2012-04-27 10.34		
1204451-08	96.9246	0.138	2012-04-27 10.37	1+4.0	

Laboratory inst#303
Konelab User

Date : 2012-04-27
Time : 13.28

Test SO4 high
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204451-14	85.0617	0.120	2012-04-27 10.37	1+4.0	
1204454-01	47.9930	0.172	2012-04-27 10.37	1+1.0	
so4 ccv	19.4471	0.138	2012-04-27 10.37		
so4 ccb	0.1334	0.006	2012-04-27 10.37		
1204454-01ms	65.7968	0.093	2012-04-27 10.40	1+4.0	
1204454-01msd	67.9906	0.096	2012-04-27 10.40	1+4.0	
1204454-02	57.4358	0.210	2012-04-27 10.40	1+1.0	
so4 ccv 4	19.4658	0.138	2012-04-27 10.46		
so4 ccb 4	0.1379	0.006	2012-04-27 10.46		
1204451-01	446.3961	0.126	2012-04-27 10.47	1+24.0	
1204451-04	191.4875	0.136	2012-04-27 10.47	1+9.0	
so4 ccv	19.7676	0.140	2012-04-27 10.52		
so4 ccb	0.2682	0.007	2012-04-27 10.52		
so4 ccv	10.0787	0.071	2012-04-27 11.54		
so4 ccb	0.2284	0.007	2012-04-27 11.54		
1204435-05	24.5362	0.177	2012-04-27 11.55		
so4 ccv	9.9383	0.070	2012-04-27 11.58		
so4 ccb	0.2107	0.007	2012-04-27 11.58		
so4 ccv	10.0598	0.071	2012-04-27 12.40		
so4 ccb	0.2817	0.007	2012-04-27 12.40		
1204458-02	10.3509	0.073	2012-04-27 12.40		
1204458-02ms	30.8069	0.226	2012-04-27 12.40		
1204458-02msd	30.6019	0.225	2012-04-27 12.40		
so4 ccv	9.8825	0.070	2012-04-27 12.43		
so4 ccb	0.1881	0.007	2012-04-27 12.43		
so4 ccv	10.9596	0.077	2012-04-27 12.45		
so4 ccb	0.2249	0.007	2012-04-27 12.45		
1204463-05	22.4406	0.161	2012-04-27 12.49		
so4 ccv	9.9911	0.071	2012-04-27 12.49		
so4 ccb	0.2052	0.007	2012-04-27 12.49		
so4 ccv	10.1388	0.072	2012-04-27 12.52		
so4 ccb	0.5870	0.009	2012-04-27 12.52		
so4 ccv	10.2860	0.073	2012-04-27 13.26		
so4 ccb	0.1888	0.007	2012-04-27 13.26		

TriMatrix Laboratories, Inc.

TechLaw

Project: KNM

SDG: KNM040512

SM 2320 B 20th

SAMPLE ID SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

Client Sample Id:	Lab Sample Id:
KAFB-003	1204091-01
106042	1204205-01
106089	1204205-02
106058	1204329-01
106053	1204454-01
106054	1204454-02

INORGANIC ANALYSIS DATA SHEET

SM 2320 B 20th

KAFB-003

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/04/12 13:31
Solids: 0.00
QC Batch: 1204425

SDG: KNM040512
Project: KNM
Laboratory ID: 1204091-01
Prepared: 04/10/12 07:52
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Alkalinity, Bicarbonate	1	110	mg/L	0.50	20		04/10/12 11:15

02196

INORGANIC ANALYSIS DATA SHEET

SM 2320 B 20th

KAFB-003

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/04/12 13:31
Solids: 0.00
QC Batch: 1204427

SDG: KNM040512
Project: KNM
Laboratory ID: 1204091-01
Prepared: 04/10/12 07:56
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Alkalinity, Total	1	110	mg/L	0.50	20		04/10/12 11:15

INORGANIC ANALYSIS DATA SHEET

SM 2320 B 20th

106042

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/10/12 13:48
Solids: 0.00
QC Batch: 1204658

SDG: KNM040512
Project: KNM
Laboratory ID: 1204205-01
Prepared: 04/16/12 09:57
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Alkalinity, Bicarbonate	1	130	mg/L	0.50	20		04/16/12 14:41

INORGANIC ANALYSIS DATA SHEET

SM 2320 B 20th

106042

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/10/12 13:48
Solids: 0.00
QC Batch: 1204660

SDG: KNM040512
Project: KNM
Laboratory ID: 1204205-01
Prepared: 04/16/12 10:00
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Alkalinity, Total	1	130	mg/L	0.50	20		04/16/12 14:41

INORGANIC ANALYSIS DATA SHEET

SM 2320 B 20th

106089

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/10/12 14:45
Solids: 0.00
QC Batch: 1204658

SDG: KNM040512
Project: KNM
Laboratory ID: 1204205-02
Prepared: 04/16/12 09:57
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Alkalinity, Bicarbonate	1	130	mg/L	0.50	20		04/16/12 14:41

INORGANIC ANALYSIS DATA SHEET

SM 2320 B 20th

106089

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/10/12 14:45
Solids: 0.00
QC Batch: 1204660

SDG: KNM040512
Project: KNM
Laboratory ID: 1204205-02
Prepared: 04/16/12 10:00
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Alkalinity, Total	1	130	mg/L	0.50	20		04/16/12 14:41

INORGANIC ANALYSIS DATA SHEET

SM 2320 B 20th

106058

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/17/12 12:31
Solids: 0.00
QC Batch: 1204919

SDG: KNM040512
Project: KNM
Laboratory ID: 1204329-01
Prepared: 04/20/12 07:46
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Alkalinity, Bicarbonate	1	120	mg/L	0.50	20		04/20/12 10:22

INORGANIC ANALYSIS DATA SHEET

SM 2320 B 20th

106058

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/17/12 12:31
Solids: 0.00
QC Batch: 1204920

SDG: KNM040512
Project: KNM
Laboratory ID: 1204329-01
Prepared: 04/20/12 07:48
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Alkalinity, Total	1	120	mg/L	0.50	20		04/20/12 10:22

INORGANIC ANALYSIS DATA SHEET

SM 2320 B 20th

106053

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/24/12 10:20
Solids: 0.00
QC Batch: 1205276

SDG: KNM040512
Project: KNM
Laboratory ID: 1204454-01
Prepared: 04/27/12 09:33
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Alkalinity, Bicarbonate	1	100	mg/L	0.50	20		04/27/12 11:23

INORGANIC ANALYSIS DATA SHEET

SM 2320 B 20th

106053

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/24/12 10:20
Solids: 0.00
QC Batch: 1205750

SDG: KNM040512
Project: KNM
Laboratory ID: 1204454-01
Prepared: 05/08/12 08:02
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Alkalinity, Total	1	100	mg/L	0.50	20		05/08/12 11:58

INORGANIC ANALYSIS DATA SHEET

SM 2320 B 20th

106054

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/24/12 13:30
Solids: 0.00
QC Batch: 1205276

SDG: KNM040512
Project: KNM
Laboratory ID: 1204454-02
Prepared: 04/27/12 09:33
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Alkalinity, Bicarbonate	1	100	mg/L	0.50	20		04/27/12 11:23

INORGANIC ANALYSIS DATA SHEET

SM 2320 B 20th

106054

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/24/12 13:30
Solids: 0.00
QC Batch: 1205750

SDG: KNM040512
Project: KNM
Laboratory ID: 1204454-02
Prepared: 05/08/12 08:02
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Alkalinity, Total	1	100	mg/L	0.50	20		05/08/12 11:58

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D11007

SDG: KNM040512

Project: KNM

Calibration: UNASSIGNED

Instrument: 309

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2D11007-CCV1		04/10/12 11:15
Blank	1204425-BLK1		04/10/12 11:15
LCS	1204425-BS1		04/10/12 11:15
Secondary Cal Check	2D11007-SCV1		04/10/12 11:15
KAFB-003	1204091-01		04/10/12 11:15
KAFB-003	1204425-DUP1		04/10/12 11:15
KAFB-003	1204425-MS1		04/10/12 11:15
Calibration Check	2D11007-CCV2		04/10/12 11:15

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D11010

SDG: KNM040512

Project: KNM

Calibration: UNASSIGNED

Instrument: 309

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2D11010-CCV1		04/10/12 11:15
Blank	1204427-BLK1		04/10/12 11:15
LCS	1204427-BS1		04/10/12 11:15
Secondary Cal Check	2D11010-SCV1		04/10/12 11:15
KAFB-003	1204091-01		04/10/12 11:15
KAFB-003	1204427-DUP1		04/10/12 11:15
KAFB-003	1204427-MS1		04/10/12 11:15
Calibration Check	2D11010-CCV2		04/10/12 11:15

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D17009

SDG: KNM040512

Project: KNM

Calibration: UNASSIGNED

Instrument: 309

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2D17009-CCV1		04/16/12 14:41
Blank	1204658-BLK1		04/16/12 14:41
LCS	1204658-BS1		04/16/12 14:41
Secondary Cal Check	2D17009-SCV1		04/16/12 14:41
106042	1204205-01		04/16/12 14:41
106042	1204658-DUP1		04/16/12 14:41
106042	1204658-MS1		04/16/12 14:41
106089	1204205-02		04/16/12 14:41
Calibration Check	2D17009-CCV2		04/16/12 14:41

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D17010

SDG: KNM040512

Project: KNM

Calibration: UNASSIGNED

Instrument: 309

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2D17010-CCV1		04/16/12 14:41
Blank	1204660-BLK1		04/16/12 14:41
LCS	1204660-BS1		04/16/12 14:41
Secondary Cal Check	2D17010-SCV1		04/16/12 14:41
106042	1204205-01		04/16/12 14:41
106042	1204660-DUP1		04/16/12 14:41
106042	1204660-MS1		04/16/12 14:41
106089	1204205-02		04/16/12 14:41
Calibration Check	2D17010-CCV2		04/16/12 14:41

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D20035

SDG: KNM040512

Project: KNM

Calibration: UNASSIGNED

Instrument: 309

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2D20035-CCV1		04/20/12 10:22
Blank	1204919-BLK1		04/20/12 10:22
LCS	1204919-BS1		04/20/12 10:22
Secondary Cal Check	2D20035-SCV1		04/20/12 10:22
106058	1204329-01		04/20/12 10:22
106058	1204919-DUP1		04/20/12 10:22
106058	1204919-MS1		04/20/12 10:22
Calibration Check	2D20035-CCV2		04/20/12 10:22

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D20036

SDG: KNM040512

Project: KNM

Calibration: UNASSIGNED

Instrument: 309

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2D20036-CCV1		04/20/12 10:22
Blank	1204920-BLK1		04/20/12 10:22
LCS	1204920-BS1		04/20/12 10:22
Secondary Cal Check	2D20036-SCV1		04/20/12 10:22
106058	1204329-01		04/20/12 10:22
106058	1204920-DUP1		04/20/12 10:22
106058	1204920-MS1		04/20/12 10:22
Calibration Check	2D20036-CCV2		04/20/12 10:22

02213

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2E07078

SDG: KNM040512

Project: KNM

Calibration: UNASSIGNED

Instrument: 309

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2E07078-CCV1		04/27/12 11:23
Blank	1205276-BLK1		04/27/12 11:23
LCS	1205276-BS1		04/27/12 11:23
Secondary Cal Check	2E07078-SCV1		04/27/12 11:23
106053	1204454-01		04/27/12 11:23
106053	1205276-DUP1		04/27/12 11:23
106053	1205276-MS1		04/27/12 11:23
106054	1204454-02		04/27/12 11:23
Calibration Check	2E07078-CCV2		04/27/12 11:23

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2E08057

SDG: KNM040512

Project: KNM

Calibration: UNASSIGNED

Instrument: 309

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2E08057-CCV1		05/08/12 11:58
Blank	1205750-BLK1		05/08/12 11:58
LCS	1205750-BS1		05/08/12 11:58
Secondary Cal Check	2E08057-SCV1		05/08/12 11:58
106053	1204454-01		05/08/12 11:58
106054	1204454-02		05/08/12 11:58
Calibration Check	2E08057-CCV2		05/08/12 11:58
Calibration Check	2E08057-CCV3		05/08/12 11:58

INITIAL AND CONTINUING CALIBRATION CHECK

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D11007
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: UNASSIGNED
Instrument ID: 309

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D11007-CCV1	Alkalinity, Bicarbonate	238	239	100	mg/L	04/10/12 11:15
2D11007-CCV2	Alkalinity, Bicarbonate	238	236	99	mg/L	04/10/12 11:15

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D11010
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: UNASSIGNED
Instrument ID: 309

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D11010-CCV1	Alkalinity, Total	238	239	100	mg/L	04/10/12 11:15
2D11010-CCV2	Alkalinity, Total	238	236	99	mg/L	04/10/12 11:15

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D17009
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: UNASSIGNED
Instrument ID: 309

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D17009-CCV1	Alkalinity, Bicarbonate	238	241	101	mg/L	04/16/12 14:41
2D17009-CCV2	Alkalinity, Bicarbonate	238	240	101	mg/L	04/16/12 14:41

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D17010
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: UNASSIGNED
Instrument ID: 309

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D17010-CCV1	Alkalinity, Total	238	241	101	mg/L	04/16/12 14:41
2D17010-CCV2	Alkalinity, Total	238	240	101	mg/L	04/16/12 14:41

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D20035
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: UNASSIGNED
Instrument ID: 309

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D20035-CCV1	Alkalinity, Bicarbonate	238	241	101	mg/L	04/20/12 10:22
2D20035-CCV2	Alkalinity, Bicarbonate	238	241	101	mg/L	04/20/12 10:22

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D20036
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: UNASSIGNED
Instrument ID: 309

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D20036-CCV1	Alkalinity, Total	238	241	101	mg/L	04/20/12 10:22
2D20036-CCV2	Alkalinity, Total	238	241	101	mg/L	04/20/12 10:22

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2E07078
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: UNASSIGNED
Instrument ID: 309

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2E07078-CCV1	Alkalinity, Bicarbonate	238	238	100	mg/L	04/27/12 11:23
2E07078-CCV2	Alkalinity, Bicarbonate	238	236	99	mg/L	04/27/12 11:23

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2E08057
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: UNASSIGNED
Instrument ID: 309

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2E08057-CCV1	Alkalinity, Total	238	238	100	mg/L	05/08/12 11:58
2E08057-CCV2	Alkalinity, Total	238	238	100	mg/L	05/08/12 11:58
2E08057-CCV3	Alkalinity, Total	238	238	100	mg/L	05/08/12 11:58

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D11007-SCV1
Sequence: 2D11007

SDG: KNM040512
Project: KNM
Instrument: 309
Calibration: UNASSIGNED

Analyte	Expected	Found	% R	QC Limit	Units
Alkalinity, Bicarbonate	238	238	100	92-108	mg/L

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D11010-SCV1
Sequence: 2D11010

SDG: KNM040512
Project: KNM
Instrument: 309
Calibration: UNASSIGNED

Analyte	Expected	Found	% R	QC Limit	Units
Alkalinity, Total	238	238	100	89-111	mg/L

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D17009-SCV1
Sequence: 2D17009

SDG: KNM040512
Project: KNM
Instrument: 309
Calibration: UNASSIGNED

Analyte	Expected	Found	% R	QC Limit	Units
Alkalinity, Bicarbonate	238	239	100	92-108	mg/L

* Values outside of QC limits

02226

SECOND-SOURCE CALIBRATION VERIFICATION

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D17010-SCV1
Sequence: 2D17010

SDG: KNM040512
Project: KNM
Instrument: 309
Calibration: UNASSIGNED

Analyte	Expected	Found	% R	QC Limit	Units
Alkalinity, Total	238	239	100	89-111	mg/L

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D20035-SCV1
Sequence: 2D20035

SDG: KNM040512
Project: KNM
Instrument: 309
Calibration: UNASSIGNED

Analyte	Expected	Found	% R	QC Limit	Units
Alkalinity, Bicarbonate	238	242	102	92-108	mg/L

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D20036-SCV1
Sequence: 2D20036

SDG: KNM040512
Project: KNM
Instrument: 309
Calibration: UNASSIGNED

Analyte	Expected	Found	% R	QC Limit	Units
Alkalinity, Total	238	242	102	89-111	mg/L

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2E07078-SCV1
Sequence: 2E07078

SDG: KNM040512
Project: KNM
Instrument: 309
Calibration: UNASSIGNED

Analyte	Expected	Found	% R	QC Limit	Units
Alkalinity, Bicarbonate	238	235	99	92-108	mg/L

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2E08057-SCV1
Sequence: 2E08057

SDG: KNM040512
Project: KNM
Instrument: 309
Calibration: UNASSIGNED

Analyte	Expected	Found	% R	QC Limit	Units
Alkalinity, Total	238	238	100	89-111	mg/L

* Values outside of QC limits

02231

QC BATCH SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204425

QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
KAFB-003	1204091-01	04/10/12 07:52	
Blank	1204425-BLK1	04/10/12 07:52	
LCS	1204425-BS1	04/10/12 07:52	
KAFB-003	1204425-DUP1	04/10/12 07:52	
KAFB-003	1204425-MS1	04/10/12 07:52	

QC BATCH SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204427

QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
KAFB-003	1204091-01	04/10/12 07:56	
Blank	1204427-BLK1	04/10/12 07:56	
LCS	1204427-BS1	04/10/12 07:56	
KAFB-003	1204427-DUP1	04/10/12 07:56	
KAFB-003	1204427-MS1	04/10/12 07:56	

QC BATCH SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204658

QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
106042	1204205-01	04/16/12 09:57	
106089	1204205-02	04/16/12 09:57	
Blank	1204658-BLK1	04/16/12 09:57	
LCS	1204658-BS1	04/16/12 09:57	
106042	1204658-DUP1	04/16/12 09:57	
106042	1204658-MS1	04/16/12 09:57	

QC BATCH SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204660

QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
106042	1204205-01	04/16/12 10:00	
106089	1204205-02	04/16/12 10:00	
Blank	1204660-BLK1	04/16/12 10:00	
LCS	1204660-BS1	04/16/12 10:00	
106042	1204660-DUP1	04/16/12 10:00	
106042	1204660-MS1	04/16/12 10:00	

QC BATCH SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204919

QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
106058	1204329-01	04/20/12 07:46	
Blank	1204919-BLK1	04/20/12 07:46	
LCS	1204919-BS1	04/20/12 07:46	
106058	1204919-DUP1	04/20/12 07:46	
106058	1204919-MS1	04/20/12 07:46	

QC BATCH SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204920 QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
106058	1204329-01	04/20/12 07:48	
Blank	1204920-BLK1	04/20/12 07:48	
LCS	1204920-BS1	04/20/12 07:48	
106058	1204920-DUP1	04/20/12 07:48	
106058	1204920-MS1	04/20/12 07:48	

QC BATCH SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1205276 QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
106053	1204454-01	04/27/12 09:33	
106054	1204454-02	04/27/12 09:33	
Blank	1205276-BLK1	04/27/12 09:33	
LCS	1205276-BS1	04/27/12 09:33	
106053	1205276-DUP1	04/27/12 09:33	
106053	1205276-MS1	04/27/12 09:33	

QC BATCH SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1205750

QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
106053	1204454-01	05/08/12 08:02	
106054	1204454-02	05/08/12 08:02	
Blank	1205750-BLK1	05/08/12 08:02	
LCS	1205750-BS1	05/08/12 08:02	

METHOD BLANK DATA SHEET
SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: KNM040512

Client: TechLaw Project: KNM

Matrix: Water Laboratory ID: 1204425-BLK1 File ID:

Prepared: 04/10/12 07:52 Analyzed: 04/10/12 11:15

Preparation: Method-Specific Preparat Initial/Final: 100 mL / 100 mL

QC Batch: 1204425 Sequence: 2D11007 Calibration: UNASSIGNE Instrument: 309

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Alkalinity, Bicarbonate	1.0	mg/L	0.50	20	J

METHOD BLANK DATA SHEET
SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204427-BLK1
File ID:
Prepared: 04/10/12 07:56
Analyzed: 04/10/12 11:15
Preparation: Method-Specific Preparat
Initial/Final: 100 mL / 100 mL
QC Batch: 1204427
Sequence: 2D11010
Calibration: UNASSIGNE
Instrument: 309

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Alkalinity, Total	1.0	mg/L	0.50	20	J

METHOD BLANK DATA SHEET
SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204658-BLK1
File ID:
Prepared: 04/16/12 09:57
Analyzed: 04/16/12 14:41
Preparation: Method-Specific Preparat
Initial/Final: 100 mL / 100 mL
QC Batch: 1204658
Sequence: 2D17009
Calibration: UNASSIGNE
Instrument: 309

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Alkalinity, Bicarbonate	1.0	mg/L	0.50	20	J

METHOD BLANK DATA SHEET
SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204660-BLK1
File ID:
Prepared: 04/16/12 10:00
Analyzed: 04/16/12 14:41
Preparation: Method-Specific Preparat
Initial/Final: 100 mL / 100 mL
QC Batch: 1204660
Sequence: 2D17010
Calibration: UNASSIGNE
Instrument: 309

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Alkalinity, Total	1.0	mg/L	0.50	20	J

METHOD BLANK DATA SHEET
SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204919-BLK1
File ID:
Prepared: 04/20/12 07:46
Analyzed: 04/20/12 10:22
Preparation: Method-Specific Preparat
Initial/Final: 100 mL / 100 mL
QC Batch: 1204919
Sequence: 2D20035
Calibration: UNASSIGNE
Instrument: 309

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Alkalinity, Bicarbonate	2.0	mg/L	0.50	20	J

METHOD BLANK DATA SHEET
SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204920-BLK1
File ID:
Prepared: 04/20/12 07:48
Analyzed: 04/20/12 10:22
Preparation: Method-Specific Preparat
Initial/Final: 100 mL / 100 mL
QC Batch: 1204920
Sequence: 2D20036
Calibration: UNASSIGNE
Instrument: 309

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Alkalinity, Total	2.0	mg/L	0.50	20	J

METHOD BLANK DATA SHEET
SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1205276-BLK1
File ID:
Prepared: 04/27/12 09:33
Analyzed: 04/27/12 11:23
Preparation: Method-Specific Preparat
Initial/Final: 100 mL / 100 mL
QC Batch: 1205276
Sequence: 2E07078
Calibration: UNASSIGNE
Instrument: 309

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Alkalinity, Bicarbonate	0.88	mg/L	0.50	20	J

02246

METHOD BLANK DATA SHEET
SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1205750-BLK1
File ID:
Prepared: 05/08/12 08:02
Analyzed: 05/08/12 11:58
Preparation: Method-Specific Preparat
Initial/Final: 100 mL / 100 mL
QC Batch: 1205750
Sequence: 2E08057
Calibration: UNASSIGNE
Instrument: 309

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Alkalinity, Total	1.4	mg/L	0.50	20	J

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SM 2320 B 20th

KAFB-003

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204425

SDG: KNM040512

Project: KNM

Laboratory ID: 1204425-MS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Alkalinity, Bicarbonate	238	112	345	98	78 - 117	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

KAFB-003

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204427

SDG: KNM040512

Project: KNM

Laboratory ID: 1204427-MS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Alkalinity, Total	238	112	345	98	82 - 121	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106042

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204658

SDG: KNM040512

Project: KNM

Laboratory ID: 1204658-MS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Alkalinity, Bicarbonate	238	135	370	99	78 - 117	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02250

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106042

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204660

SDG: KNM040512

Project: KNM

Laboratory ID: 1204660-MS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Alkalinity, Total	238	135	370	99	82 - 121	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106058

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204919

SDG: KNM040512

Project: KNM

Laboratory ID: 1204919-MS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Alkalinity, Bicarbonate	238	116	356	101	78 - 117	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106058

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204920

SDG: KNM040512

Project: KNM

Laboratory ID: 1204920-MS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Alkalinity, Total	238	116	356	101	82 - 121	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SM 2320 B 20th

106053

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205276

SDG: KNM040512

Project: KNM

Laboratory ID: 1205276-MS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Alkalinity, Bicarbonate	238	103	337	98	78 - 117	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

DUPLICATES
SM 2320 B 20th

KAFB-003

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Lab Source ID: 1204091-01
% Solids:
QC Batch: 1204425

SDG: KNM040512
Project: KNM
Laboratory ID: 1204425-DUP1
Source Sample Name: KAFB-003
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

Analyte	Control Limit	Sample Conc.	C	Dup. Conc.	C	RPD %	Q	Method	Units
Alkalinity, Bicarbonate	20	112		114		2		SM 2320 B 20th	mg/L

* Values outside of QC limits

DUPLICATES
SM 2320 B 20th

KAFB-003

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Lab Source ID: 1204091-01
% Solids:
QC Batch: 1204427

SDG: KNM040512
Project: KNM
Laboratory ID: 1204427-DUP1
Source Sample Name: KAFB-003
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

Analyte	Control Limit	Sample Conc.	C	Dup. Conc.	C	RPD %	Q	Method	Units
Alkalinity, Total	20	112		114		2		SM 2320 B 20th	mg/L

* Values outside of QC limits

DUPLICATES
SM 2320 B 20th

106042

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Lab Source ID: 1204205-01
% Solids:
QC Batch: 1204658

SDG: KNM040512
Project: KNM
Laboratory ID: 1204658-DUP1
Source Sample Name: 106042
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

Analyte	Control Limit	Sample Conc.	C	Dup. Conc.	C	RPD %	Q	Method	Units
Alkalinity, Bicarbonate	20	135		135		0		SM 2320 B 20th	mg/L

* Values outside of QC limits

DUPLICATES
SM 2320 B 20th

106042

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Lab Source ID: 1204205-01
% Solids:
QC Batch: 1204660

SDG: KNM040512
Project: KNM
Laboratory ID: 1204660-DUP1
Source Sample Name: 106042
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

Analyte	Control Limit	Sample Conc.	C	Dup. Conc.	C	RPD %	Q	Method	Units
Alkalinity, Total	20	135		135		0		SM 2320 B 20th	mg/L

* Values outside of QC limits

DUPLICATES
SM 2320 B 20th

106058

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Lab Source ID: 1204329-01
% Solids:
QC Batch: 1204919

SDG: KNM040512
Project: KNM
Laboratory ID: 1204919-DUP1
Source Sample Name: 106058
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

Analyte	Control Limit	Sample Conc.	C	Dup. Conc.	C	RPD %	Q	Method	Units
Alkalinity, Bicarbonate	20	116		116		0		SM 2320 B 20th	mg/L

* Values outside of QC limits

DUPLICATES
SM 2320 B 20th

106058

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Lab Source ID: 1204329-01
% Solids:
QC Batch: 1204920

SDG: KNM040512
Project: KNM
Laboratory ID: 1204920-DUP1
Source Sample Name: 106058
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

Analyte	Control Limit	Sample Conc.	C	Dup. Conc.	C	RPD %	Q	Method	Units
Alkalinity, Total	20	116		116		0		SM 2320 B 20th	mg/L

* Values outside of QC limits

DUPLICATES
SM 2320 B 20th

106053

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Lab Source ID: 1204454-01
% Solids:
QC Batch: 1205276

SDG: KNM040512
Project: KNM
Laboratory ID: 1205276-DUP1
Source Sample Name: 106053
Preparation: Method-Specific Preparation
Initial/Final: 50 mL / 50 mL

Analyte	Control Limit	Sample Conc.	C	Dup. Conc.	C	RPD %	Q	Method	Units
Alkalinity, Bicarbonate	20	103		102		0.9		SM 2320 B 20th	mg/L

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

SDG: KNM040512

Project: KNM

Laboratory ID: 1204425-BS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

QC Batch: 1204425

Sequence: 2D11007

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Alkalinity, Bicarbonate	238	237	100	74 - 123	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02262

LCS / LCS DUPLICATE RECOVERY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204427

SDG: KNM040512

Project: KNM

Laboratory ID: 1204427-BS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

Sequence: 2D11010

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Alkalinity, Total	238	237	100	91 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02263

LCS / LCS DUPLICATE RECOVERY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204658

SDG: KNM040512

Project: KNM

Laboratory ID: 1204658-BS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

Sequence: 2D17009

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Alkalinity, Bicarbonate	238	240	101	74 - 123	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02264

LCS / LCS DUPLICATE RECOVERY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204660

SDG: KNM040512

Project: KNM

Laboratory ID: 1204660-BS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

Sequence: 2D17010

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Alkalinity, Total	238	240	101	91 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02265

LCS / LCS DUPLICATE RECOVERY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204919

SDG: KNM040512

Project: KNM

Laboratory ID: 1204919-BS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

Sequence: 2D20035

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Alkalinity, Bicarbonate	238	242	102	74 - 123	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02266

LCS / LCS DUPLICATE RECOVERY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204920

SDG: KNM040512

Project: KNM

Laboratory ID: 1204920-BS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

Sequence: 2D20036

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Alkalinity, Total	238	242	102	91 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

SDG: KNM040512

Project: KNM

Laboratory ID: 1205276-BS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

QC Batch: 1205276

Sequence: 2E07078

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Alkalinity, Bicarbonate	238	235	99	74 - 123	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02268

LCS / LCS DUPLICATE RECOVERY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205750

SDG: KNM040512

Project: KNM

Laboratory ID: 1205750-BS1

Preparation: Method-Specific Preparation

Initial/Final: 50 mL / 50 mL

Sequence: 2E08057

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Alkalinity, Total	238	239	101	91 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

HOLDING TIME SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

Analyte: Alkalinity, Bicarbonate

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
KAFB-003	04/04/12	04/05/12		04/10/12	6	NA	04/10/12	6	14	
106042	04/10/12	04/11/12		04/16/12	6	NA	04/16/12	6	14	
106089	04/10/12	04/11/12		04/16/12	6	NA	04/16/12	6	14	
106058	04/17/12	04/18/12		04/20/12	3	NA	04/20/12	3	14	
106053	04/24/12	04/25/12		04/27/12	3	NA	04/27/12	3	14	
106054	04/24/12	04/25/12		04/27/12	3	NA	04/27/12	3	14	

02270

HOLDING TIME SUMMARY

SM 2320 B 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Analyte: Alkalinity, Total

SDG: KNM040512

Project: KNM

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
KAFB-003	04/04/12	04/05/12		04/10/12	6	NA	04/10/12	6	14	
106042	04/10/12	04/11/12		04/16/12	6	NA	04/16/12	6	14	
106089	04/10/12	04/11/12		04/16/12	6	NA	04/16/12	6	14	
106058	04/17/12	04/18/12		04/20/12	3	NA	04/20/12	3	14	
106053	04/24/12	04/25/12		05/08/12	14	NA	05/08/12	14	14	
106054	04/24/12	04/25/12		05/08/12	14	NA	05/08/12	14	14	

02271

Inorganic - Wet Chemistry, Water, Apr-10-12

Instrument = 309, Calibration = UNASSIGNED

Sequence Analyses:
Alkalinity, Bicarbonate 2320 B

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D11007-CCV1	QC		1120887		CALIBRATION CHECK	
1204425-BLK1	QC				BLANK	
1204425-BS1	QC				LCS	
2D11007-SCV1	QC		1120888		SECONDARY CAL CHECK	
1204091-01	Alkalinity, Bicarbonate 2320 B	J			TechLaw	
1204425-DUP1	QC				DUPLICATE	
1204425-MS1	QC				MATRIX SPIKE	
2D11007-CCV2	QC		1120887		CALIBRATION CHECK	

Comments:

Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1204425

Printed: 4/10/2012 7:53:54AM

NLB 4-11-12

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

Due 4/18/12 LV4

S2273

Standard	Description	Solvent	LotNum
2030101	Alkalinity BS 1190 mg/L	DI H20	081495

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204091	Alkalinity, Bicarbonate 2320 B				

Balance ID: _____ **pH Meter:** _____

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1204425-BLK1		Apr-10-12 07:52	SKA	100	100					BLANK	
1204425-DUP1		Apr-10-12 07:52	SKA	50	50		1204091-01			DUPLICATE	
1204425-BS1		Apr-10-12 07:52	SKA	50	50			2030101	10000	LCS	
1204425-MS1		Apr-10-12 07:52	SKA	50	50		1204091-01	2030101	10000	MATRIX SPIKE	
1204091-01	J	Apr-10-12 07:52	SKA	50	50					TechLaw	

Comments:	Analyst Initials:

INORGANIC BENCHSHEET -- ALKALINITY

Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:

Alkalinity: bicarbonate | ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA

Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:

Reference Citation: 310.1/SM 2320 B | Due: 04/18/12 | Stock Standards ID: | Supervisor:

Batch: 1204425 | Run Date: 04/10/12 | Results Approved by: | Date Approved:

Comments: Med Cal 4-7-10 Slope: 100.4 Start: 11:15am End: 12:55pm

V1 = mL of titrant C to pH 8.3

V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.6500

B (mL) = 10.0

C (mL) = 24.9

Normality = 0.020080321

Standards ID for A: 9110986 | Standards ID for B: 2030690 | Standards ID for C: 2040085

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)		Bicarbonate Alkalinity Result (mg/L)	SEQ	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	8.3		11.900	11.900	50	FALSE	239.0		238	FALSE
	BLK	5.26		0.100	0.100	100	FALSE	1.0			FALSE
	BS	8.3		11.800	11.800	50	FALSE	236.9		238	FALSE
	SCV	8.3		11.850	11.850	50	FALSE	238.0		238	FALSE
1204091-01	S	7.69		5.600	5.600	50	FALSE	112.4			FALSE
1204091-01	DUP	7.71		5.700	5.700	50	FALSE	114.5			FALSE
1204091-01	MS	8.22		17.200	17.200	50	FALSE	345.4			FALSE
	CCV2	8.3		11.750	11.750	50	FALSE	235.9			FALSE
					0.000		#DIV/0!	#DIV/0!			#DIV/0!

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%
CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: | Calibration Buffer 7.0:

02274

INORGANIC BENCHSHEET -- ALKALINITY

Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:

Alkalinity: bicarbonate | ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA

Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:

Reference Citation: 310.1/SM 2320 B | Due: 04/18/12 | Stock Standards ID: | Supervisor:

Batch: 1204425 | Run Date: 04/10/12 | Results Approved by: | Date Approved:

Comments: Med Cal 4-7-10 Slope: 100.4 Start: 11:15 am End: 12:55 pm

V1 = mL of titrant C to pH 8.3

V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.6500

B (mL) = 10.0

C (mL) = 24.90

Normality = #DIV/0! 0.020080

Standards ID for A: 9110986 | Standards ID for B: 2030690 | Standards ID for C: 2040085

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)		Bicarbonate Alkalinity Result (mg/L)	S E Q	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	8.3	—	11.90	0.000	50	#DIV/0!	#DIV/0! 4.43	238.95	238	#DIV/0!
	BLK	5.26	—	0.10	0.000	100	#DIV/0!	#DIV/0! 4.40	1.50		#DIV/0!
	BS	8.3	—	11.80	0.000	50	#DIV/0!	#DIV/0! 4.45	236.94	238	#DIV/0!
	SCV	8.3	—	11.85	0.000	50	#DIV/0!	#DIV/0! 4.44	237.95	238	#DIV/0!
1204091-01	S	7.69	—	5.60	0.000	50	#DIV/0!	4.44 #DIV/0! SA 4.40	4/10/12	112.45	#DIV/0!
1204091-01	DUP	7.71	—	5.70	0.000	50	#DIV/0!	#DIV/0! 4.46		114.46	#DIV/0!
1204091-01	MS	8.22	—	17.20	0.000	50	#DIV/0!	#DIV/0! 4.49		345.38	#DIV/0!
	CCV2	8.3	—	11.75	0.000	50	#DIV/0!	#DIV/0! 4.48		235.94	#DIV/0!
					0.000		#DIV/0!	#DIV/0!			#DIV/0!

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%

CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: | Calibration Buffer 7.0:

9275

Inorganic - Wet Chemistry, Water, Apr-10-12

Instrument = 309, Calibration = UNASSIGNED

Sequence Analyses:
Alkalinity, Total 2320 B

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D11010-CCV1	QC		2030102		CALIBRATION CHECK	
1204427-BLK1	QC				BLANK	
1204427-BS1	QC				LCS	
2D11010-SCV1	QC		2030103		SECONDARY CAL CHECK	
1204091-01	Alkalinity, Total 2320 B	J			TechLaw	
1204427-DUP1	QC				DUPLICATE	
1204427-MS1	QC				MATRIX SPIKE	
2D11010-CCV2	QC		2030102		CALIBRATION CHECK	

Comments:	Analyst Initials:

TriMatrix Laboratories, Inc.

ANB 4-11-12

PREPARATION BATCH **1204427** Page 1 of 1

Printed: 4/10/2012 7:58:21AM

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

Due 4/18/12 LVH

L1220

Standard	Description	Solvent	LotNum
2030101	Alkalinity BS 1190 mg/L	DI H20	081495

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204091	Alkalinity, Total 2320 B				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1204427-BLK1		Apr-10-12 07:56	SKA	100	100					BLANK	
1204427-DUP1		Apr-10-12 07:56	SKA	50	50		1204091-01			DUPLICATE	
1204427-BS1		Apr-10-12 07:56	SKA	50	50			2030101	10000	LCS	
1204427-MS1		Apr-10-12 07:56	SKA	50	50		1204091-01	2030101	10000	MATRIX SPIKE	
1204091-01	J	Apr-10-12 07:56	SKA	50	50					TechLaw .	

Comments:

Analyst Initials:

INORGANIC BENCHSHEET -- ALKALINITY

Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:

Alkalinity: total | ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA

Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:

Reference Citation: 310.1/SM 2320 B | Due: 04/18/12 | Stock Standards ID: | Supervisor:

Batch: 1204427 | Run Date: 04/10/12 | Results Approved by: | Date Approved:

Comments: Med Cal 4-7-10 Slope: 100.4 Start: 11:15am End: 12:55pm

02278

V1 = mL of titrant C to pH 8.3

V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.6500

B (mL) = 10.0

C (mL) = 24.9

Normality = 0.020080321

Standards ID for A: 9110986 | Standards ID for B: 2030690 | Standards ID for C: 2040085

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)	Total Alkalinity Result (mg/L)		S E Q	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	8.3		11.900	11.900	50	239.0			238	239.0
	BLK	5.26		0.100	0.100	100	1.00				1.0
	BS	8.3		11.800	11.800	50	236.95			238	236.9
	SCV	8.3		11.850	11.850	50	237.95			238	238.0
1204091-01	S	7.69		5.600	5.600	50	112				112.45
1204091-01	DUP	7.71		5.700	5.700	50	114				114.46
1204091-01	MS	8.22		17.200	17.200	50	345				345.38
	CCV2	8.3		11.750	11.750	50	236				235.94
					0.000		#DIV/0!				#DIV/0!

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%

CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: | Calibration Buffer 7.0:

INORGANIC BENCHSHEET -- ALKALINITY

Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:

Alkalinity: total | ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA

Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:

Reference Citation: 310.1/SM 2320 B | Due: 04/18/12 | Stock Standards ID: | Supervisor:

Batch: 1204427 | Run Date: 04/10/12 | Results Approved by: | Date Approved:

Comments: Med Cal 4-7-10 Slope: 100.4 Start: 11:15am End: 12:55pm

V1 = mL of titrant C to pH 8.3

V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

Normality = #DIV/0! 0.020080

A (gm) = 2.6500

B (mL) = 10.0

C (mL) = 24.90

Standards ID for A: 9110986 | Standards ID for B: 2030690 | Standards ID for C: 2040085

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)	Total Alkalinity Result (mg/L)		S E Q	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	8.3	—	11.90	0.000	50	#DIV/0! 4.43	238.95		238	#DIV/0!
	BLK	5.26	—	0.10	0.000	100	#DIV/0! 4.40	1.00			#DIV/0!
	BS	8.3	—	11.80	0.000	50	#DIV/0! 4.45	236.94		238	#DIV/0!
	SCV	8.3	—	11.85	0.000	50	#DIV/0! 4.44	237.95		238	#DIV/0!
1204091-01	S	7.69	—	5.60	0.000	50	#DIV/0! 4.44	112.45			#DIV/0!
1204091-01	DUP	7.71	—	5.70	0.000	50	#DIV/0! 4.46	114.46			#DIV/0!
1204091-01	MS	8.22	—	17.20	0.000	50	#DIV/0! 4.49	345.38			#DIV/0!
	CCV2	8.3	—	11.75	0.000	50	#DIV/0! 4.48	235.94			#DIV/0!
					0.000		#DIV/0!				#DIV/0!

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%

CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: | Calibration Buffer 7.0:

62279

Inorganic - Wet Chemistry, Water, Apr-16-12

Instrument = 309, Calibration = UNASSIGNED

Sequence Analyses:
Alkalinity, Bicarbonate 2320 B

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D17009-CCV1	QC		1120887		CALIBRATION CHECK	
1204658-BLK1	QC				BLANK	
1204658-BS1	QC				LCS	
2D17009-SCV1	QC		1120888		SECONDARY CAL CHECK	
1204205-01	Alkalinity, Bicarbonate 2320 B	J			TechLaw	
1204658-DUP1	QC				DUPLICATE	
1204658-MS1	QC				MATRIX SPIKE	
1204205-02	Alkalinity, Bicarbonate 2320 B	J			TechLaw	
2D17009-CCV2	QC		1120887		CALIBRATION CHECK	

Comments:

Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1204658

Printed: 4/16/2012 9:59:46AM

NLB 4-23-12

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

Due 4/24/12

Level 4

02281

Standard	Description	Solvent	LotNum
2030101	Alkalinity BS 1190 mg/L	DI H20	081495

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204205	Alkalinity, Bicarbonate 2320 B				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client/QC Type	Extraction Comments
1204658-BLK1		Apr-16-12 09:57	SKA	100	100					BLANK	
1204658-DUP1		Apr-16-12 09:57	SKA	50	50		1204205-01			DUPLICATE	
1204658-BS1		Apr-16-12 09:57	SKA	50	50			2030101	10000	LCS	
1204658-MS1		Apr-16-12 09:57	SKA	50	50		1204205-01	2030101	10000	MATRIX SPIKE	
1204205-01	J	Apr-16-12 09:57	SKA	50	50					TechLaw	
1204205-02	J	Apr-16-12 09:57	SKA	50	50					TechLaw	

Comments:

Analyst Initials:

4/17/2012

INORGANIC BENCHSHEET -- ALKALINITY

Alkalinity: bicarbonate
Method: ALK/TITRI/WTR
Reference Citation: 310.1/SM 2320 B
Batch: 1204658

Instrument: 309
ODL: 2.0
Default Units: mg/L
Due: 04/24/12
Run Date: 04/16/12

Est. Analytical hrs: 6.4
Actual Analytical hrs:
Samples in Batch:
Stock Standards ID:
Results Approved by:

Benchsheet ID:
Batch Owner: SKA
Batch Open Date:
Supervisor:
Date Approved:

Comments: Med Cal 4-7-10 Slope: 100.4 Start: 2:41pm End: 3:02pm

V1 = mL of titrant C to pH 8.3
V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.6500
B (mL) = 10.0
C (mL) = 25.04

Normality = 0.019968051

Standards ID for A: 9110986 Standards ID for B: 2030690 Standards ID for C: 2040085

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)		Bicarbonate Alkalinity Result (mg/L)	S E Q	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	8.3		12.050	12.050	50		240.62		238	FALSE
	BLK	5.15		0.100	0.100	100		1.00		238	FALSE
	BS	8.3		12.000	12.000	50		239.62		238	FALSE
	SCV	8.3		11.950	11.950	50		238.62		238	FALSE
1204205-01	S	7.43		6.750	6.750	50		134.78			FALSE
1204205-01	DUP	7.45		6.750	6.750	50		134.78			FALSE
1204205-01	MS	8.2		18.550	18.550	50		370.41			FALSE
1204205-02	S	7.67		6.300	6.300	50		125.80			FALSE
	CCV2	8.3		12.000	12.000	50		239.62			FALSE

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%
CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: Calibration Buffer 7.0:

revision 08/17/11

S2232

INORGANIC BENCHSHEET -- ALKALINITY

Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:
Alkalinity: bicarbonate | ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA
Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:
Reference Citation: 310.1/SM 2320 B | Due: 04/24/12 | Stock Standards ID: | Supervisor:
Batch: 1204658 | Run Date: 04/16/12 | Results Approved by: | Date Approved:

Comments: Med Cal 4-7-10 Slope: 100.4 Start: 2:41 pm End: 3:02 pm

9228

V1 = mL of titrant C to pH 8.3
V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.6500
B (mL) = 10.0
C (mL) = 25.04

Normality = #DIV/0! 0.019968

Standards ID for A: 9110986 Standards ID for B: 2030690 Standards ID for C: 2040085

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)		Bicarbonate Alkalinity Result (mg/L)	S E Q	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	8.3	—	12.05	0.000	50	240.60	#DIV/0! 4.47		238	#DIV/0!
	BLK	5.15	—	0.10	0.000	100	1.00	#DIV/0! 4.41		238	#DIV/0!
	BS	8.3	—	12.00	0.000	50	239.62	#DIV/0! 4.49		238	#DIV/0!
	SCV	8.3	—	11.95	0.000	50	238.62	#DIV/0! 4.48		238	#DIV/0!
1204205-01	S	7.43	—	6.75	0.000	50	134.78	#DIV/0! 4.49			#DIV/0!
1204205-01	DUP	7.45	—	6.75	0.000	50	134.78	#DIV/0! 4.46			#DIV/0!
1204205-01	MS	8.20	—	18.55	0.000	50	370.41	#DIV/0! 4.48			#DIV/0!
1204205-02	S	7.67	—	6.30	0.000	50	125.80	#DIV/0! 4.44			#DIV/0!
	CCV2	8.3	—	12.00	0.000	50	239.62	#DIV/0! 4.45			#DIV/0!

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%
CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: Calibration Buffer 7.0:

Inorganic - Wet Chemistry, Water, Apr-16-12

Instrument = 309, Calibration = UNASSIGNED

Sequence Analyses:
Alkalinity, Total 2320 B

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D17010-CCV1	QC		2030102		CALIBRATION CHECK	
1204660-BLK1	QC				BLANK	
1204660-BS1	QC				LCS	
2D17010-SCV1	QC		2030103		SECONDARY CAL CHECK	
1204205-01	Alkalinity, Total 2320 B	J			TechLaw	
1204660-DUP1	QC				DUPLICATE	
1204660-MS1	QC				MATRIX SPIKE	
1204205-02	Alkalinity, Total 2320 B	J			TechLaw	
2D17010-CCV2	QC		2030102		CALIBRATION CHECK	

Comments:

Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1204660

Printed: 4/16/2012 10:01:12AM

NLD 4-23-12

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

Due 4/24/12 Level 4

92285

Standard	Description	Solvent	LotNum
2030101	Alkalinity BS 1190 mg/L	DI H20	081495

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204205	Alkalinity, Total 2320 B				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1204660-BLK1		Apr-16-12 10:00	SKA	100	100					BLANK	
1204660-DUP1		Apr-16-12 10:00	SKA	50	50		1204205-01			DUPLICATE	
1204660-BS1		Apr-16-12 10:00	SKA	50	50			2030101	10000	LCS	
1204660-MS1		Apr-16-12 10:00	SKA	50	50		1204205-01	2030101	10000	MATRIX SPIKE	
1204205-01	J	Apr-16-12 10:00	SKA	50	50					TechLaw	
1204205-02	J	Apr-16-12 10:00	SKA	50	50					TechLaw	

Comments:

Analyst Initials:

INORGANIC BENCHSHEET -- ALKALINITY

02289

Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:
Alkalinity: total | ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA
Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:
Reference Citation: 310.1/SM 2320 B | Due: 04/24/12 | Stock Standards ID: | Supervisor:
Batch: 1204660 | Run Date: 04/16/12 | Results Approved by: | Date Approved:
Comments: Med Cal 4-7-10 Slope: 100.4 Start: 2:41pm End: 3:02pm

V1 = mL of titrant C to pH 8.3
V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.6500
B (mL) = 10.0
C (mL) = 25.04

Normality = 0.019968051

Standards ID for A: 9110986 Standards ID for B: 2030690 Standards ID for C: 2040085

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)	Total Alkalinity Result (mg/L)		S E Q	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	8.3		12.050	12.050	50	240.62			238	240.6
	BLK	5.15		0.100	0.100	100	1.00			238	1.0
	BS	8.3		12.000	12.000	50	239.62			238	239.6
	SCV	8.3		11.950	11.950	50	238.62			238	238.6
1204205-01	S	7.43		6.750	6.750	50	134.78				134.78
1204205-01	DUP	7.45		6.750	6.750	50	134.78				134.78
1204205-01	MS	8.2		18.550	18.550	50	370.41				370.41
1204205-02	S	7.67		6.300	6.300	50	125.80				125.80
	CCV2	8.3		12.000	12.000	50	239.62				239.62

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%
CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: Calibration Buffer 7.0:

INORGANIC BENCHSHEET -- ALKALINITY

Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:
Alkalinity: total | ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA
Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:
Reference Citation: 310.1/SM 2320 B | Due: 04/24/12 | Stock Standards ID: | Supervisor:
Batch: 1204660 | Run Date: 04/16/12 | Results Approved by: | Date Approved:
Comments: Med Cal 4-7-10 Slope: 100.4 Start: 2:41pm End: 3:02pm

V1 = mL of titrant C to pH 8.3
V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.6500
B (mL) = 10.0
C (mL) = 25.04

Normality = #DIV/0! 0.019968

Standards ID for A: 9110986 | Standards ID for B: 2030690 | Standards ID for C: 2040085

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)	Total Alkalinity Result (mg/L)		SEQ	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	8.3	—	12.05	0.000	50	#DIV/0! 4.47	240.61		238	#DIV/0!
	BLK	5.15	—	0.10	0.000	100	#DIV/0! 4.41	1.00		238	#DIV/0!
	BS	8.3	—	12.00	0.000	50	#DIV/0! 4.49	239.62		238	#DIV/0!
	SCV	8.3	—	11.95	0.000	50	#DIV/0! 4.48	238.62		238	#DIV/0!
1204205-01	S	7.43	—	6.75	0.000	50	#DIV/0! 4.49	134.78			#DIV/0!
1204205-01	DUP	7.45	—	6.75	0.000	50	#DIV/0! 4.46	134.78			#DIV/0!
1204205-01	MS	8.20	—	18.55	0.000	50	#DIV/0! 4.48	370.41			#DIV/0!
1204205-02	S	7.67	—	6.30	0.000	50	#DIV/0! 4.44	125.80			#DIV/0!
	CCV2	8.3	—	12.00	0.000	50	#DIV/0! 4.45	239.62			#DIV/0!

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%
CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: | Calibration Buffer 7.0:

02287

Inorganic - Wet Chemistry, Water, Apr-20-12

Instrument = 309, Calibration = UNASSIGNED

Sequence Analyses:
Alkalinity, Bicarbonate 2320 B

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D20035-CCV1	QC		1120887		CALIBRATION CHECK	
1204919-BLK1	QC				BLANK	
1204919-BS1	QC				LCS	
2D20035-SCV1	QC		1120888		SECONDARY CAL CHECK	
1204329-01	Alkalinity, Bicarbonate 2320 B	J			TechLaw	
1204919-DUP1	QC				DUPLICATE	
1204919-MS1	QC				MATRIX SPIKE	
2D20035-CCV2	QC		1120887		CALIBRATION CHECK	

Comments:	Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1204920

Printed: 4/20/2012 7:49:36AM

NB 5-3-12

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

Due 5/1/12 level 4

62289

Standard	Description	Solvent	LotNum
2030101	Alkalinity BS 1190 mg/L	DI H20	081495

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204329	Alkalinity, Total 2320 B				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client/QC Type	Extraction Comments
1204920-BLK1		Apr-20-12 07:48	SKA	100	100					BLANK	
1204920-DUP1		Apr-20-12 07:48	SKA	50	50		1204329-01			DUPLICATE	
1204920-BS1		Apr-20-12 07:48	SKA	50	50			2030101	10000	LCS	
1204920-MS1		Apr-20-12 07:48	SKA	50	50		1204329-01	2030101	10000	MATRIX SPIKE	
1204329-01	J	Apr-20-12 07:48	SKA	50	50					TechLaw	

Comments:	Analyst Initials:

INORGANIC BENCHSHEET -- ALKALINITY

92298

Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:
Alkalinity: bicarbonate | ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA
Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:
Reference Citation: 310.1/SM 2320 B | Due: 04/26/12 | Stock Standards ID: | Supervisor:
Batch: 1204919 | Run Date: 04/20/12 | Results Approved by: | Date Approved:
Comments: Med Cal 4-7-10 Slope: 99.9 Start: 10:22am End: 11:57am

V1 = mL of titrant C to pH 8.3
V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.6500
B (mL) = 10.0
C (mL) = 25.03

Normality = 0.019976029

Standards ID for A: 9110986 | Standards ID for B: 2030690 | Standards ID for C: 2040085

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)		Bicarbonate Alkalinity Result (mg/L)	S E Q	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	7.2		12.050	12.050	50		240.71		238	FALSE
	BLK	5.66		0.200	0.200	100		2.00		238	FALSE
	BS	8.3		12.100	12.100	50		241.71		238	FALSE
	SCV	8.3		12.100	12.100	50		241.71		238	FALSE
1204329-01	S	7.89		5.800	5.800	50		115.86			FALSE
1204329-01	DUP	7.89		5.800	5.800	50		115.86			FALSE
1204329-01	MS	8.26		17.800	17.800	50		355.57			FALSE
	CCV2	8.3		12.050	12.050	50		240.71			FALSE
					0.000			#DIV/0!			#DIV/0!

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%
CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: Calibration Buffer 7.0:

INORGANIC BENCHSHEET -- ALKALINITY

02221

Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:

Alkalinity: bicarbonate | ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA

Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:

Reference Citation: 310.1/SM 2320 B | Due: 04/26/12 | Stock Standards ID: | Supervisor:

Batch: 1204919 | Run Date: 04/20/12 | Results Approved by: | Date Approved:

Comments: Med Cal 4-7-10 Slope: 99.9 Start: 10:22am End: 11:57am

V1 = mL of titrant C to pH 8.3

V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.6500

B (mL) = 10.0

C (mL) = 25.03

Normality = #DIV/0! 0.019976

Standards ID for A: 9110986 Standards ID for B: 2030690 Standards ID for C: ~~2040085~~ 2040843 SA 4/20/12

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)		Bicarbonate Alkalinity Result (mg/L)	S E Q	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	7.20	—	12.05	0.000	50	240.71	#DIV/0! 4.47		238	#DIV/0!
	BLK	5.66	—	0.20	0.000	100	2.00	#DIV/0! 4.46		238	#DIV/0!
	BS	8.3	—	12.10	0.000	50	241.71	#DIV/0! 4.46		238	#DIV/0!
	SCV	8.3	—	12.10	0.000	50	241.71	#DIV/0! 4.46		238	#DIV/0!
1204329-01	S	7.89	—	5.80	0.000	50	115.86	~~#DIV/0! 4.40~~ 4.44	SA 4/20/12		#DIV/0!
1204329-01	DUP	7.89	—	5.80	0.000	50	115.86	#DIV/0! 4.43			#DIV/0!
1204329-01	MS	8.26	—	17.80	0.000	50	355.57	#DIV/0! 4.44			#DIV/0!
	CCV2	8.3	—	12.05	0.000	50	240.71	#DIV/0! 4.50			#DIV/0!
					0.000			#DIV/0!			#DIV/0!

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%

CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: Calibration Buffer 7.0:

Inorganic - Wet Chemistry, Water, Apr-20-12

Instrument = 309, Calibration = UNASSIGNED

Sequence Analyses:
Alkalinity, Total 2320 B

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D20036-CCV1	QC		2040811		CALIBRATION CHECK	
1204920-BLK1	QC				BLANK	
1204920-BS1	QC				LCS	
2D20036-SCV1	QC		2040812		SECONDARY CAL CHECK	
1204329-01	Alkalinity, Total 2320 B	J			TechLaw	
1204920-DUP1	QC				DUPLICATE	
1204920-MS1	QC				MATRIX SPIKE	
2D20036-CCV2	QC		2040811		CALIBRATION CHECK	

Comments:	Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1204919** Page 1 of 1

Printed: 4/20/2012 7:47:46AM

NLB 5-3-12

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

Due 5/1/12 level 4

82293

Standard	Description	Solvent	LotNum
2030101	Alkalinity BS 1190 mg/L	DI H20	081495

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204329	Alkalinity, Bicarbonate 2320 B				

Balance ID: _____ **pH Meter:** _____

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1204919-BLK1		Apr-20-12 07:46	SKA	100	100					BLANK	
1204919-DUP1		Apr-20-12 07:46	SKA	50	50		1204329-01			DUPLICATE	
1204919-BS1		Apr-20-12 07:46	SKA	50	50			2030101	10000	LCS	
1204919-MS1		Apr-20-12 07:46	SKA	50	50		1204329-01	2030101	10000	MATRIX SPIKE	
1204329-01	J	Apr-20-12 07:46	SKA	50	50					TechLaw	

Comments:

Analyst Initials:

INORGANIC BENCHSHEET -- ALKALINITY

Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:
Alkalinity: total | ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA
Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:
Reference Citation: 310.1/SM 2320 B | Due: 04/26/12 | Stock Standards ID: | Supervisor:
Batch: 1204920 | Run Date: 04/20/12 | Results Approved by: | Date Approved:
Comments: Med Cal 4-7-10 Slope: 99.9 Start: 10:22am End: 11:57am

V1 = mL of titrant C to pH 8.3
V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.6500
B (mL) = 10.0
C (mL) = 25.03

Normality = 0.019976029

Standards ID for A: 9110986 | Standards ID for B: 2030690 | Standards ID for C: 2040085

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)	Total Alkalinity Result (mg/L)		SEQ	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	7.2		12.050	12.050	50	240.71			238	240.7
	BLK	5.66		0.200	0.200	100	2.00			238	2.0
	BS	8.3		12.100	12.100	50	241.71			238	241.7
	SCV	8.3		12.100	12.100	50	241.71			238	241.7
1204329-01	S	7.89		5.800	5.800	50	115.86				115.86
1204329-01	DUP	7.89		5.800	5.800	50	115.86				115.86
1204329-01	MS	8.26		17.800	17.800	50	355.57				355.57
	CCV2	8.3		12.050	12.050	50	240.71				240.71
					0.000		#DIV/0!				#DIV/0!

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%
CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: Calibration Buffer 7.0:

92294

INORGANIC BENCHSHEET -- ALKALINITY

82295

Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:
Alkalinity: total | ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA
Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:
Reference Citation: 310.1/SM 2320 B | Due: 04/26/12 | Stock Standards ID: | Supervisor:
Batch: 1204920 | Run Date: 04/20/12 | Results Approved by: | Date Approved:
Comments: Med Cal 4-7-10 Slope: 99.9 Start: 10:22am End: 11:57am

V1 = mL of titrant C to pH 8.3
V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.6500
B (mL) = 10.0
C (mL) = 25.03

Normality = #DIV/0! 0.01997C

Standards ID for A: 9110986 Standards ID for B: 2030690 Standards ID for C: ~~2040085~~ 2040843 SB 4/20/12

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)	Total Alkalinity Result (mg/L)		S E Q	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	7.20	—	12.05	0.000	50	#DIV/0! 4.47	240.71		238	#DIV/0!
	BLK	5.66	—	0.20	0.000	100	#DIV/0! 4.46	2.00		238	#DIV/0!
	BS	8.3	—	12.10	0.000	50	#DIV/0! 4.46	241.71		238	#DIV/0!
	SCV	8.3	—	12.10	0.000	50	#DIV/0! 4.46	241.71		238	#DIV/0!
1204329-01	S	7.89	—	5.80	0.000	50	#DIV/0! 4.44	115.86			#DIV/0!
1204329-01	DUP	7.89	—	5.80	0.000	50	#DIV/0! 4.43	115.86			#DIV/0!
1204329-01	MS	8.26	—	17.80	0.000	50	#DIV/0! 4.44	355.57			#DIV/0!
	CCV2	8.3	—	12.05	0.000	50	#DIV/0! 4.50	240.71			#DIV/0!
					0.000		#DIV/0!				#DIV/0!

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%
CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: Calibration Buffer 7.0:

Inorganic - Wet Chemistry, Water, Apr-27-12

Instrument = 309, Calibration = UNASSIGNED

Sequence Analyses:
Alkalinity, Bicarbonate 2320 B

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2E07078-CCV1	QC		2040811		CALIBRATION CHECK	
1205276-BLK1	QC				BLANK	
1205276-BS1	QC				LCS	
2E07078-SCV1	QC		2040812		SECONDARY CAL CHECK	
1204454-01	Alkalinity, Bicarbonate 2320 B	J			TechLaw	
1205276-DUP1	QC				DUPLICATE	
1205276-MS1	QC				MATRIX SPIKE	
1204454-02	Alkalinity, Bicarbonate 2320 B	J			TechLaw	
2E07078-CCV2	QC		2040811		CALIBRATION CHECK	

Comments:	Analyst Initials:

TriMatrix Laboratories, Inc.

NLB 5-9-12

PREPARATION BATCH 1205276

Printed: 4/27/2012 9:35:06AM

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

Due 5/8/12

02297

Standard	Description	Solvent	LotNum
2030101	Alkalinity BS 1190 mg/L	DI H20	081495

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204454	Alkalinity, Bicarbonate 2320 B				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1205276-BLK1		Apr-27-12 09:33	SKA	100	100					BLANK	
1205276-DUP1		Apr-27-12 09:33	SKA	50	50		1204454-01			DUPLICATE	
1205276-BS1		Apr-27-12 09:33	SKA	50	50			2030101	10000	LCS	
1205276-MS1		Apr-27-12 09:33	SKA	50	50		1204454-01	2030101	10000	MATRIX SPIKE	
1204454-01	J	Apr-27-12 09:33	SKA	50	50					TechLaw	
1204454-02	J	Apr-27-12 09:33	SKA	50	50					TechLaw	

Comments:	Analyst Initials:

INORGANIC BENCHSHEET -- ALKALINITY

Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:
Alkalinity: bicarbonate | ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA
Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:
Reference Citation: 310.1/SM 2320 B | Due: 05/08/12 | Stock Standards ID: | Supervisor:
Batch: 1205276 | Run Date: 04/27/12 | Results Approved by: | Date Approved:
Comments: Med Cal 4-7-10 Slope: 100.8 Start: 11.23am End: 5.05pm

92298

V1 = mL of titrant C to pH 8.3
V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.6500
B (mL) = 10.0
C (mL) = 25.7

Normality = 0.019455253

Standards ID for A: 9110986 | Standards ID for B: 2030690 | Standards ID for C: 2041275

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)		Bicarbonate Alkalinity Result (mg/L)	S E Q	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	8.30		12.25	12.250	50		238.33		238	FALSE
	BLK	5.61		0.09	0.090	100		0.88		238	FALSE
	BS	8.30		12.10	12.100	50		235.41		238	FALSE
	SCV	8.30		12.10	12.100	50		235.41		238	FALSE
1204454-01	S	7.77		5.30	5.300	50		103.11			FALSE
1204454-01	DUP	7.76		5.25	5.250	50		102.14			FALSE
1204454-01	MS	8.10		17.30	17.300	50		336.58			FALSE
1204454-02	S	7.77		5.30	5.300	50		103.11			FALSE
	CCV2	8.30		12.15	12.150	50		236.38			FALSE

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%
CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: Calibration Buffer 7.0:

INORGANIC BENCHSHEET -- ALKALINITY

Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:
Alkalinity: bicarbonate | ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA
Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:
Reference Citation: 310.1/SM 2320 B | Due: 05/08/12 | Stock Standards ID: | Supervisor:
Batch: 1205276 | Run Date: 04/27/12 | Results Approved by: | Date Approved:
Comments: Med Cal 4-7-10 Slope: 100.8 Start: 11:23am End: 5:05pm

S6226

V1 = mL of titrant C to pH 8.3
V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.6500
B (mL) = 10.0
C (mL) = 25.70

Normality = #DIV/0! 0.019760

Standards ID for A: 9110986 | Standards ID for B: 2030690 | Standards ID for C: 2041275

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)		Bicarbonate Alkalinity Result (mg/L)	S E Q	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	8.3	—	12.25	0.000	50	238.37	#DIV/0!		238	#DIV/0!
	BLK	5.61	—	0.09	0.000	100	0.89	#DIV/0!		238	#DIV/0!
	BS	8.3	—	12.10	0.000	50	235.47	#DIV/0!		238	#DIV/0!
	SCV	8.3	—	12.10	0.000	50	235.47	#DIV/0!		238	#DIV/0!
1204454-01	S	7.77	—	5.30	0.000	50	103.14	#DIV/0! 4.416			#DIV/0!
1204454-01	DUP	7.76	—	5.25	0.000	50	102.17	#DIV/0! 4.44			#DIV/0!
1204454-01	MS	8.10	—	17.30	0.000	50	336.66	#DIV/0! 4.445			#DIV/0!
1204454-02	S	7.77	—	5.30	0.000	50	103.14	#DIV/0! 4.44			#DIV/0!
	CCV2	8.3	—	12.15	0.000	50	236.44	#DIV/0!			#DIV/0!

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%
CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: | Calibration Buffer 7.0:

Inorganic - Wet Chemistry, Water, May-08-12

Instrument = 309, Calibration = UNASSIGNED

Sequence Analyses:
Alkalinity, Total 2320 B

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2E08057-CCV1	QC		2040811		CALIBRATION CHECK	
1205750-BLK1	QC				BLANK	
1205750-BS1	QC				LCS	
2E08057-SCV1	QC		2040812		SECONDARY CAL CHECK	
1204454-01	Alkalinity, Total 2320 B	J			TechLaw	
1204454-02	Alkalinity, Total 2320 B	J			TechLaw	
1205072-01	Alkalinity, Total 2320 B	J			TechLaw	
1205073-01	Alkalinity, Total 2320 B	J			TechLaw	
1205085-01	Alkalinity, Total 2320 B	J			TechLaw	
1205085-02	Alkalinity, Total 2320 B	T			TechLaw	
1205750-DUP1	QC				DUPLICATE	
2E08057-CCV2	QC		2040811		CALIBRATION CHECK	
1205750-MS1	QC				MATRIX SPIKE	
2E08057-CCV3	QC		2040811		CALIBRATION CHECK	

Comments:	Analyst Initials:

TriMatrix Laboratories, Inc.

NLB 5-9-12

PREPARATION BATCH 1205750

Printed: 5/8/2012 8:07:07AM

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

Due 5/8/12

level 4

02391

Standard	Description	Solvent	LotNum
2030101	Alkalinity BS 1190 mg/L	DI H20	081495

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204454	Alkalinity, Total 2320 B	1205072	Alkalinity, Total 2320 B	1205073	Alkalinity, Total 2320 B
1205085	Alkalinity, Total 2320 B				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client/QC Type	Extraction Comments
1205750-BLK1		May-08-12 08:02	SKA	100	100					BLANK	
1205750-DUP1		May-08-12 08:02	SKA	50	50		1205085-02			DUPLICATE	
1205750-BS1		May-08-12 08:02	SKA	50	50			2030101	10000	LCS	
1205750-MS1		May-08-12 08:02	SKA	50	50		1205085-02	2030101	10000	MATRIX SPIKE	
1204454-01	J	May-08-12 08:02	SKA	50	50					TechLaw	
1204454-02	J	May-08-12 08:02	SKA	50	50					TechLaw	
1205072-01	J	May-08-12 08:02	SKA	50	50					TechLaw	
1205073-01	J	May-08-12 08:02	SKA	50	50					TechLaw	
1205085-01	J	May-08-12 08:02	SKA	50	50					TechLaw	
1205085-02	T	May-08-12 08:02	SKA	50	50					TechLaw	

Comments:	Analyst Initials:

INORGANIC BENCHSHEET -- ALKALINITY

Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:

Alkalinity: total | ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA

Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:

Reference Citation: 310.1/SM 2320 B | Due: 05/08/12 | Stock Standards ID: | Supervisor:

Batch: 1205750 | Run Date: 05/08/12 | Results Approved by: | Date Approved:

Comments: Med Cal 4-7-10 Slope: 99.4 Start: 11.58am End: 1.02pm

02302

V1 = mL of titrant C to pH 8.3

V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.6500
B (mL) = 10.0
C (mL) = 25.06

Normality = 0.019952115

Standards ID for A: 9110986 | Standards ID for B: 2030690 | Standards ID for C: 2050317

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)	Total Alkalinity Result (mg/L)		S E Q	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	8.30		11.95	11.950	50	238.43			238	238.4
	BLK	5.52		0.14	0.140	100	1.40			238	1.4
	BS	8.30		12.00	12.000	50	239.43			238	239.4
	SCV	8.30		11.95	11.950	50	238.43			238	238.4
1204454-01	S	7.70		5.00	5.000	50	99.76				99.76
1204454-02	S	7.73		5.20	5.200	50	103.75				103.75
1205072-01	S	7.47		6.55	6.550	50	130.69				130.69
1205073-01	S	7.80		5.55	5.550	50	110.73				110.73
1205085-01	S	7.62		6.35	6.350	50	126.70				126.70

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%
CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: Calibration Buffer 7.0:

INORGANIC BENCHSHEET -- ALKALINITY

Test #: 467. 1- 21 **Instrument:** 309 **Est. Analytical hrs:** 6.4 **Benchsheet ID:** 0

Alkalinity: total **ODL:** 2.0 **Actual Analytical hrs:** 0 **Batch Owner:** SKA

Method: ALK/TITRI/WTR **Default Units:** mg/L **Samples in Batch:** 0 **Batch Open Date:** 01/00/00

Reference Citation: 310.1/SM 2320 B **Due:** 05/08/12 **Stock Standards ID:** 0 **Supervisor:** DEK

Batch: 1205750 **Run Date:** 05/08/12 **Results Approved by:** **Date Approved:** 01/00/00

Comments: Med Cal 4-7-10 Slope: 99.4 Start: 11.58am End: 1.02pm

V1 = mL of titrant C to pH 8.3

V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.65
B (mL) = 10
C (mL) = 25.06

Normality = 0.019952115

Standards ID for A: 9110986 **Standards ID for B:** 2030690 **Standards ID for C:** 2050317

Sample ID	QC Type	pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)	Total Alkalinity Result (mg/L)		S E Q	QC Conc. (mg/L)	QC Result (mg/L)
1205085-02	S	7.73		5.60	5.6000	50	111.73				111.7
1205085-02	DUP	7.73		5.55	5.5500	50	110.73				110.7
	CCV2	8.30		11.95	11.9500	50	238.43				238.4
1205085-02	MS	8.02		17.60	17.6000	50	351.16				351.2
	CCV3	8.30		11.95	11.9500	50	238.43				238.4
					0.0000		#DIV/0!				#DIV/0!
					0.0000		#DIV/0!				#DIV/0!
					0.0000		#DIV/0!				#DIV/0!
					0.0000		#DIV/0!				#DIV/0!

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%
CCV Control Limits: ±0.05

Calibration Buffer 4.0: 0 Calibration Buffer 7.0: 0

02303

1326.18

INORGANIC BENCHSHEET -- ALKALINITY

Alkalinity: ~~bicarbonate~~ Total
Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID:
ODL: 2.0 | Actual Analytical hrs: | Batch Owner: SKA
Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: | Batch Open Date:
Reference Citation: 310.1/SM 2320 B | Due: 05/08/12 | Stock Standards ID: | Supervisor:
Batch: 1205750 | Run Date: 05/08/12 | Results Approved by: | Date Approved:
Comments: Med Cal 4-7-10 Slope: 99.4 Start: 11:58 am End: 1:02 pm

V1 = mL of titrant C to pH 8.3
V2 = mL of titrant C to pH 4.5

$$\text{Normality} = \frac{A*B}{53.00*C}$$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

Normality = #DIV/0! 0.018952

A (gm) = 2.6500
B (mL) = 10.0
C (mL) = 25.06

Standards ID for A: 9110986 Standards ID for B: 2030690 Standards ID for C: 2050317

Sample ID	QC Type	Initial Sample pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)		Bicarbonate Alkalinity Result (mg/L)	S E Q	QC Conc. (mg/L)	QC Result (mg/L)
	CCV1	8.3	—	11.95	0.000	50	238.43	#DIV/0! 4.50		238	#DIV/0!
	BLK	5.52	—	0.14	0.000	100	1.40	#DIV/0! 4.41		238	#DIV/0!
	BS	8.3	—	12.00	0.000	50	239.42	#DIV/0! 4.41		238	#DIV/0!
	SCV	8.3	—	11.95	0.000	50	238.43	#DIV/0! 4.44		238	#DIV/0!
1204454-01	S	7.70	—	5.00	0.000	50	99.76	#DIV/0! 4.49			#DIV/0!
1204454-02	S	7.73	—	5.20	0.000	50	103.75	#DIV/0! 4.48			#DIV/0!
1205072-01	S	7.47	—	6.55	0.000	50	130.69	#DIV/0! 4.46			#DIV/0!
1205073-01	S	7.80	—	5.55	0.000	50	110.73	#DIV/0! 4.44			#DIV/0!
1205085-01	S	7.62	—	6.35	0.000	50	126.70	#DIV/0! 4.42			#DIV/0!

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%
CCV Control Limits (pH): ±0.05

Calibration Buffer 4.0: Calibration Buffer 7.0:

23361

INORGANIC BENCHSHEET -- ALKALINITY

Test #: 467. 1- 21 | Instrument: 309 | Est. Analytical hrs: 6.4 | Benchsheet ID: 0
Alkalinity: ~~bicarbonate~~ Total | ODL: 2.0 | Actual Analytical hrs: 0 | Batch Owner: SKA
Method: ALK/TITRI/WTR | Default Units: mg/L | Samples in Batch: 0 | Batch Open Date: 01/00/00
Reference Citation: 310.1/SM 2320 B | Due: 05/08/12 | Stock Standards ID: 0 | Supervisor: DEK
Batch: 1205750 | Run Date: 05/08/12 | Results Approved by: | Date Approved: 01/00/00
Comments: Med Cal 4-7-10 Slope: 99.4 Start: 11:58 am End: 1:08 pm

V1 = mL of titrant C to pH 8.3
V2 = mL of titrant C to pH 4.5

Normality = $\frac{A*B}{53.00*C}$

where: A = Sodium Carbonate weighted into a 1 L volumetric flask (grams)
B = Sodium Carbonate solution titrated (mL)
C = Acid titrant used to Inflection Point (mL)

A (gm) = 2.65
B (mL) = 10
C (mL) = ~~0~~ 25.06

Normality = #DIV/0! 0.01952

Standards ID for A: 9110986 | Standards ID for B: 2030690 | Standards ID for C: 2050317

Sample ID	QC Type	pH	C_{V1} (mL)	V_2 (mL)	C_{V2} (mL)	Sample Volume (mL)		Bicarbonate Alkalinity Result (mg/L)	S E Q	QC Conc. (mg/L)	QC Result (mg/L)
1205085-02	S	7.73	—	5.60	0.0000	50	111.73	#DIV/0! 4.45			#DIV/0!
1205085-02	DUP	7.73	—	5.55	0.0000	50	110.73	#DIV/0! 4.46			#DIV/0!
	CCV2	8.3	—	11.95	0.0000	50	238.43	#DIV/0! 4.50			#DIV/0!
1205085-02	MS	8.02	—	17.60	0.0000	50	351.16	#DIV/0! 4.50			#DIV/0!
	CCV3	8.3	—	11.95	0.0000	50	238.43	#DIV/0!			#DIV/0!
					0.0000			#DIV/0!			#DIV/0!
					0.0000			#DIV/0!			#DIV/0!
					0.0000			#DIV/0!			#DIV/0!
					0.0000			#DIV/0!			#DIV/0!

DUP Control Limits: UCL = 20 % RPD LCS Control Limits: 89 % recovery to 111% SPK Control Limits: 81% recovery to 111%
CCV Control Limits: ±0.05

Calibration Buffer 4.0: 0 Calibration Buffer 7.0: 0

02305

TriMatrix Laboratories, Inc.

TechLaw

Project: KNM

SDG: KNM040512

SM 4500-Cl E 20th

02306

SAMPLE ID SUMMARY

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

Client Sample Id:	Lab Sample Id:
KAFB-003	1204091-01
106042	1204205-01
106089	1204205-02
106058	1204329-01
106053	1204454-01
106054	1204454-02

INORGANIC ANALYSIS DATA SHEET

SM 4500-Cl E 20th

KAFB-003

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/04/12 13:31
Solids: 0.00
QC Batch: 1204497

SDG: KNM040512
Project: KNM
Laboratory ID: 1204091-01
Prepared: 04/11/12 06:20
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	1	24	mg/L	0.24	1.0		04/11/12 10:03

INORGANIC ANALYSIS DATA SHEET

SM 4500-Cl E 20th

106042

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/10/12 13:48
Solids: 0.00
QC Batch: 1204748

SDG: KNM040512
Project: KNM
Laboratory ID: 1204205-01
Prepared: 04/17/12 06:30
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	1	33	mg/L	0.24	1.0		04/17/12 08:02

INORGANIC ANALYSIS DATA SHEET

SM 4500-Cl E 20th

106089

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/10/12 14:45
Solids: 0.00
QC Batch: 1204748

SDG: KNM040512
Project: KNM
Laboratory ID: 1204205-02
Prepared: 04/17/12 06:30
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	1	13	mg/L	0.24	1.0		04/17/12 08:02

INORGANIC ANALYSIS DATA SHEET

SM 4500-Cl E 20th

106058

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/17/12 12:31
Solids: 0.00
QC Batch: 1205077

SDG: KNM040512
Project: KNM
Laboratory ID: 1204329-01
Prepared: 04/24/12 09:30
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	1	9.2	mg/L	0.24	1.0		04/24/12 10:39

INORGANIC ANALYSIS DATA SHEET

SM 4500-Cl E 20th

106053

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/24/12 10:20
Solids: 0.00
QC Batch: 1205313

SDG: KNM040512
Project: KNM
Laboratory ID: 1204454-01
Prepared: 04/27/12 06:30
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	1	28	mg/L	0.24	1.0		04/27/12 08:46

INORGANIC ANALYSIS DATA SHEET

SM 4500-Cl E 20th

106054

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/24/12 13:30
Solids: 0.00
QC Batch: 1205313

SDG: KNM040512
Project: KNM
Laboratory ID: 1204454-02
Prepared: 04/27/12 06:30
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	1	24	mg/L	0.24	1.0		04/27/12 08:46

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D11054

SDG: KNM040512
Project: KNM
Calibration: 2D11014
Instrument: 298

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2D11054-CAL1	041112CL-001	04/11/12 06:42
Cal Standard	2D11054-CAL2	041112CL-002	04/11/12 06:42
Cal Standard	2D11054-CAL3	041112CL-003	04/11/12 06:42
Cal Standard	2D11054-CAL4	041112CL-004	04/11/12 06:42
Cal Standard	2D11054-CAL5	041112CL-005	04/11/12 06:42
Cal Standard	2D11054-CAL6	041112CL-006	04/11/12 06:42
Cal Standard	2D11054-CAL7	041112CL-007	04/11/12 06:42
Cal Standard	2D11054-CAL8	041112CL-008	04/11/12 06:42
Calibration Check	2D11054-CCV1	041112CL-009	04/11/12 07:40
Calibration Blank	2D11054-CCB1	041112CL-010	04/11/12 07:40
Low Cal Check	2D11054-LCV1	041112CL-011	04/11/12 07:40
High Cal Check	2D11054-HCV1	041112CL-012	04/11/12 07:40
Instrument RL Check	2D11054-CRL1	041112CL-013	04/11/12 07:40
Secondary Cal Check	2D11054-SCV1	041112CL-014	04/11/12 07:40
Blank	1204497-BLK1	041112CL-015	04/11/12 07:40
LCS	1204497-BS1	041112CL-016	04/11/12 07:40
Calibration Check	2D11054-CCV2	041112CL-017	04/11/12 07:53
Calibration Blank	2D11054-CCB2	041112CL-018	04/11/12 07:53
KAFB-003	1204091-01	041112CL-028	04/11/12 10:03
KAFB-003	1204497-MS1	041112CL-029	04/11/12 10:03
KAFB-003	1204497-MSD1	041112CL-030	04/11/12 10:03
Calibration Check	2D11054-CCV3	041112CL-035	04/11/12 10:13
Calibration Blank	2D11054-CCB3	041112CL-036	04/11/12 10:13
Low Cal Check	2D11054-LCV2	041112CL-057	04/11/12 10:53
High Cal Check	2D11054-HCV2	041112CL-058	04/11/12 10:53
Calibration Check	2D11054-CCV4	041112CL-061	04/11/12 10:55
Calibration Blank	2D11054-CCB4	041112CL-062	04/11/12 10:55

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D17056

SDG: KNM040512
Project: KNM
Calibration: 2D17020
Instrument: 298

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2D17056-CAL1	041712CL-001	04/17/12 06:55
Cal Standard	2D17056-CAL2	041712CL-002	04/17/12 06:55
Cal Standard	2D17056-CAL3	041712CL-003	04/17/12 06:55
Cal Standard	2D17056-CAL4	041712CL-004	04/17/12 06:55
Cal Standard	2D17056-CAL5	041712CL-005	04/17/12 06:55
Cal Standard	2D17056-CAL6	041712CL-006	04/17/12 06:55
Cal Standard	2D17056-CAL7	041712CL-007	04/17/12 06:55
Cal Standard	2D17056-CAL8	041712CL-008	04/17/12 06:55
Calibration Check	2D17056-CCV1	041712CL-009	04/17/12 07:11
Calibration Blank	2D17056-CCB1	041712CL-010	04/17/12 07:11
Low Cal Check	2D17056-LCV1	041712CL-011	04/17/12 07:11
High Cal Check	2D17056-HCV1	041712CL-012	04/17/12 07:11
Instrument RL Check	2D17056-CRL1	041712CL-013	04/17/12 07:11
Secondary Cal Check	2D17056-SCV1	041712CL-014	04/17/12 07:11
Blank	1204748-BLK1	041712CL-015	04/17/12 07:11
LCS	1204748-BS1	041712CL-016	04/17/12 07:11
Calibration Check	2D17056-CCV2	041712CL-021	04/17/12 07:14
Calibration Blank	2D17056-CCB2	041712CL-022	04/17/12 07:14
106042	1204205-01	041712CL-031	04/17/12 08:02
106042	1204748-MS1	041712CL-032	04/17/12 08:02
106042	1204748-MSD1	041712CL-033	04/17/12 08:02
106089	1204205-02	041712CL-034	04/17/12 08:02
Calibration Check	2D17056-CCV3	041712CL-037	04/17/12 08:05
Calibration Blank	2D17056-CCB3	041712CL-038	04/17/12 08:05
Low Cal Check	2D17056-LCV2	041712CL-116	04/17/12 08:47
High Cal Check	2D17056-HCV2	041712CL-117	04/17/12 08:47
Calibration Check	2D17056-CCV4	041712CL-118	04/17/12 08:47
Calibration Blank	2D17056-CCB4	041712CL-119	04/17/12 08:47

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D30026

SDG: KNM040512
Project: KNM
Calibration: 2D30009
Instrument: 298

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2D30026-CAL1	042412CL-001	04/24/12 09:58
Cal Standard	2D30026-CAL2	042412CL-002	04/24/12 09:58
Cal Standard	2D30026-CAL3	042412CL-003	04/24/12 09:58
Cal Standard	2D30026-CAL4	042412CL-004	04/24/12 09:58
Cal Standard	2D30026-CAL5	042412CL-005	04/24/12 09:58
Cal Standard	2D30026-CAL6	042412CL-006	04/24/12 09:58
Cal Standard	2D30026-CAL7	042412CL-007	04/24/12 09:59
Cal Standard	2D30026-CAL8	042412CL-008	04/24/12 09:59
Calibration Check	2D30026-CCV1	042412CL-009	04/24/12 10:11
Calibration Blank	2D30026-CCB1	042412CL-010	04/24/12 10:11
Low Cal Check	2D30026-LCV1	042412CL-011	04/24/12 10:11
High Cal Check	2D30026-HCV1	042412CL-012	04/24/12 10:11
Instrument RL Check	2D30026-CRL1	042412CL-013	04/24/12 10:11
Secondary Cal Check	2D30026-SCV1	042412CL-014	04/24/12 10:11
Blank	1205077-BLK1	042412CL-015	04/24/12 10:11
LCS	1205077-BS1	042412CL-016	04/24/12 10:11
Calibration Check	2D30026-CCV2	042412CL-021	04/24/12 10:14
Calibration Blank	2D30026-CCB2	042412CL-022	04/24/12 10:14
106058	1204329-01	042412CL-030	04/24/12 10:39
106058	1205077-MS1	042412CL-031	04/24/12 10:39
106058	1205077-MSD1	042412CL-032	04/24/12 10:39
Calibration Check	2D30026-CCV3	042412CL-038	04/24/12 10:42
Calibration Blank	2D30026-CCB3	042412CL-039	04/24/12 10:42
Low Cal Check	2D30026-LCV2	042412CL-106	04/24/12 11:42
High Cal Check	2D30026-HCV2	042412CL-107	04/24/12 11:42
Calibration Check	2D30026-CCV4	042412CL-116	04/24/12 11:44
Calibration Blank	2D30026-CCB4	042412CL-117	04/24/12 11:44

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2E02047

SDG: KNM040512
Project: KNM
Calibration: 2E02013
Instrument: 298

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2E02047-CAL1	042712CL-001	04/27/12 06:55
Cal Standard	2E02047-CAL2	042712CL-002	04/27/12 06:55
Cal Standard	2E02047-CAL3	042712CL-003	04/27/12 06:55
Cal Standard	2E02047-CAL4	042712CL-004	04/27/12 06:55
Cal Standard	2E02047-CAL5	042712CL-005	04/27/12 06:55
Cal Standard	2E02047-CAL6	042712CL-006	04/27/12 06:55
Cal Standard	2E02047-CAL7	042712CL-007	04/27/12 06:55
Cal Standard	2E02047-CAL8	042712CL-008	04/27/12 06:55
Calibration Check	2E02047-CCV1	042712CL-009	04/27/12 07:07
Calibration Blank	2E02047-CCB1	042712CL-010	04/27/12 07:07
Low Cal Check	2E02047-LCV1	042712CL-011	04/27/12 07:07
High Cal Check	2E02047-HCV1	042712CL-012	04/27/12 07:07
Instrument RL Check	2E02047-CRL1	042712CL-013	04/27/12 07:07
Secondary Cal Check	2E02047-SCV1	042712CL-014	04/27/12 07:07
Calibration Check	2E02047-CCV2	042712CL-021	04/27/12 07:10
Calibration Blank	2E02047-CCB2	042712CL-022	04/27/12 07:10
Blank	1205313-BLK1	042712CL-089	04/27/12 08:46
LCS	1205313-BS1	042712CL-090	04/27/12 08:46
106053	1204454-01	042712CL-091	04/27/12 08:46
106053	1205313-MS1	042712CL-092	04/27/12 08:46
106053	1205313-MSD1	042712CL-093	04/27/12 08:46
106054	1204454-02	042712CL-094	04/27/12 08:46
Calibration Check	2E02047-CCV3	042712CL-096	04/27/12 08:53
Calibration Blank	2E02047-CCB3	042712CL-097	04/27/12 08:53
Low Cal Check	2E02047-LCV2	042712CL-104	04/27/12 09:14
High Cal Check	2E02047-HCV2	042712CL-105	04/27/12 09:14
Calibration Check	2E02047-CCV4	042712CL-114	04/27/12 09:20
Calibration Blank	2E02047-CCB4	042712CL-115	04/27/12 09:20

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D11054
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: 2D11014
Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D11054-CCV1	Chloride	40.0	39.9	100	mg/L	04/11/12 07:40
2D11054-CCV2	Chloride	40.0	40.1	100	mg/L	04/11/12 07:53
2D11054-CCV3	Chloride	40.0	40.3	101	mg/L	04/11/12 10:13
2D11054-CCV4	Chloride	40.0	39.9	100	mg/L	04/11/12 10:55

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D17056
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: 2D17020
Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D17056-CCV1	Chloride	40.0	40.0	100	mg/L	04/17/12 07:11
2D17056-CCV2	Chloride	40.0	40.6	101	mg/L	04/17/12 07:14
2D17056-CCV3	Chloride	40.0	40.3	101	mg/L	04/17/12 08:05
2D17056-CCV4	Chloride	40.0	40.3	101	mg/L	04/17/12 08:47

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Sequence: 2D30026
Calibration: 2D30009
Control Limt: +/- 15.00%
Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D30026-CCV1	Chloride	40.0	39.9	100	mg/L	04/24/12 10:11
2D30026-CCV2	Chloride	40.0	40.6	102	mg/L	04/24/12 10:14
2D30026-CCV3	Chloride	40.0	40.3	101	mg/L	04/24/12 10:42
2D30026-CCV4	Chloride	40.0	40.6	101	mg/L	04/24/12 11:44

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2E02047
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: 2E02013
Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2E02047-CCV1	Chloride	40.0	40.2	100	mg/L	04/27/12 07:07
2E02047-CCV2	Chloride	40.0	40.5	101	mg/L	04/27/12 07:10
2E02047-CCV3	Chloride	40.0	40.3	101	mg/L	04/27/12 08:53
2E02047-CCV4	Chloride	40.0	40.9	102	mg/L	04/27/12 09:20

* Values outside of QC limits

LOW-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D11054-LCV1
Sequence: 2D11054

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2D11014

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	20.0	19.8	-1.1		mg/L

* Values outside of QC limits

LOW-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D11054-LCV2
Sequence: 2D11054

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2D11014

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	20.0	20.6	3.2		mg/L

* Values outside of QC limits

LOW-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D17056-LCV1
Sequence: 2D17056

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2D17020

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	20.0	19.7	-1.6		mg/L

* Values outside of QC limits

LOW-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D17056-LCV2
Sequence: 2D17056

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2D17020

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	20.0	20.0	-0.1		mg/L

* Values outside of QC limits

LOW-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D30026-LCV1
Sequence: 2D30026

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2D30009

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	20.0	19.6	-2.0		mg/L

* Values outside of QC limits

LOW-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D30026-LCV2
Sequence: 2D30026

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2D30009

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	20.0	20.1	0.3		mg/L

* Values outside of QC limits

LOW-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2E02047-LCV1
Sequence: 2E02047

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2E02013

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	20.0	19.8	-0.8		mg/L

* Values outside of QC limits

LOW-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Laboratory ID: 2E02047-LCV2

Sequence: 2E02047

SDG: KNM040512

Project: KNM

Instrument: 298

Calibration: 2E02013

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	20.0	20.4	2.1		mg/L

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D11054-HCV1
Sequence: 2D11054

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2D11014

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	75.0	74.8	-0.2		mg/L

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D11054-HCV2
Sequence: 2D11054

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2D11014

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	75.0	77.8	3.7		mg/L

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Laboratory ID: 2D17056-HCV1

Sequence: 2D17056

SDG: KNM040512

Project: KNM

Instrument: 298

Calibration: 2D17020

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	75.0	75.6	0.8		mg/L

* Values outside of QC limits

02332

HIGH-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D17056-HCV2
Sequence: 2D17056

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2D17020

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	75.0	76.0	1.3		mg/L

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D30026-HCV1
Sequence: 2D30026

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2D30009

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	75.0	74.4	-0.8		mg/L

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D30026-HCV2
Sequence: 2D30026

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2D30009

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	75.0	75.4	0.5		mg/L

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2E02047-HCV1
Sequence: 2E02047

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2E02013

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	75.0	74.4	-0.9		mg/L

* Values outside of QC limits

02336

HIGH-CONCENTRATION CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Laboratory ID: 2E02047-HCV2

Sequence: 2E02047

SDG: KNM040512

Project: KNM

Instrument: 298

Calibration: 2E02013

Analyte	Expected	Found	% Drift	QC Limit	Units
Chloride	75.0	76.0	1.3		mg/L

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Laboratory ID: 2D11054-SCV1
Instrument: 298
Sequence: 2D11054
Calibration: 2D11014

Analyte	Expected	Found	% R	QC Limit	Units
Chloride	50.0	49.1	98	90-110	mg/L

* Values outside of QC limits

02338

SECOND-SOURCE CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D17056-SCV1
Sequence: 2D17056

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2D17020

Analyte	Expected	Found	% R	QC Limit	Units
Chloride	50.0	50.0	100	90-110	mg/L

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D30026-SCV1
Sequence: 2D30026

SDG: KNM040512
Project: KNM
Instrument: 298
Calibration: 2D30009

Analyte	Expected	Found	% R	QC Limit	Units
Chloride	50.0	49.9	100	90-110	mg/L

* Values outside of QC limits

02340

SECOND-SOURCE CALIBRATION VERIFICATION

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Laboratory ID: 2E02047-SCV1

Sequence: 2E02047

SDG: KNM040512

Project: KNM

Instrument: 298

Calibration: 2E02013

Analyte	Expected	Found	% R	QC Limit	Units
Chloride	50.0	49.6	99	90-110	mg/L

* Values outside of QC limits

CRDL STANDARD

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D11054

SDG: KNM040512

Project: KNM

Calibration: 2D11014

Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2D11054-CRL1	Chloride	1.00	1.31	131	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D17056

SDG: KNM040512

Project: KNM

Calibration: 2D17020

Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2D17056-CRL1	Chloride	1.00	1.27	127	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D30026

SDG: KNM040512

Project: KNM

Calibration: 2D30009

Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2D30026-CRL1	Chloride	1.00	1.22	122	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2E02047

SDG: KNM040512

Project: KNM

Calibration: 2E02013

Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2E02047-CRL1	Chloride	1.00	1.26	126	mg/L	50 - 150

* Values outside of QC limits

BLANKS
SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D11054

SDG: KNM040512
Project: KNM
Calibration: 2D11014
Instrument ID: 298

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2D11054-CCB1	Chloride	0.65	mg/L	0.24	1.0	J	04/11/12 07:40
2D11054-CCB2	Chloride	0.42	mg/L	0.24	1.0	J	04/11/12 07:53
2D11054-CCB3	Chloride	0.50	mg/L	0.24	1.0	J	04/11/12 10:13
2D11054-CCB4	Chloride	0.40	mg/L	0.24	1.0	J	04/11/12 10:55

* Values outside of QC limits

BLANKS
SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Sequence: 2D17056
Calibration: 2D17020
Instrument ID: 298

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2D17056-CCB1	Chloride	0.57	mg/L	0.24	1.0	J	04/17/12 07:11
2D17056-CCB2	Chloride	0.81	mg/L	0.24	1.0	J	04/17/12 07:14
2D17056-CCB3	Chloride	0.61	mg/L	0.24	1.0	J	04/17/12 08:05
2D17056-CCB4	Chloride	0.49	mg/L	0.24	1.0	J	04/17/12 08:47

* Values outside of QC limits

BLANKS
SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D30026

SDG: KNM040512
Project: KNM
Calibration: 2D30009
Instrument ID: 298

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2D30026-CCB1	Chloride	0.53	mg/L	0.24	1.0	J	04/24/12 10:11
2D30026-CCB2	Chloride	0.61	mg/L	0.24	1.0	J	04/24/12 10:14
2D30026-CCB3	Chloride	0.61	mg/L	0.24	1.0	J	04/24/12 10:42
2D30026-CCB4	Chloride	0.80	mg/L	0.24	1.0	J	04/24/12 11:44

* Values outside of QC limits

BLANKS
SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2E02047

SDG: KNM040512
Project: KNM
Calibration: 2E02013
Instrument ID: 298

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2E02047-CCB1	Chloride	0.56	mg/L	0.24	1.0	J	04/27/12 07:07
2E02047-CCB2	Chloride	0.37	mg/L	0.24	1.0	J	04/27/12 07:10
2E02047-CCB3	Chloride	0.43	mg/L	0.24	1.0	J	04/27/12 08:53
2E02047-CCB4	Chloride	0.91	mg/L	0.24	1.0	J	04/27/12 09:20

* Values outside of QC limits

QC BATCH SUMMARY

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204497 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
KAFB-003	1204091-01	04/11/12 06:20	
Blank	1204497-BLK1	04/11/12 06:20	
LCS	1204497-BS1	04/11/12 06:20	
KAFB-003	1204497-MS1	04/11/12 06:20	
KAFB-003	1204497-MSD1	04/11/12 06:20	

02350

QC BATCH SUMMARY

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204748

QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
106042	1204205-01	04/17/12 06:30	
106089	1204205-02	04/17/12 06:30	
Blank	1204748-BLK1	04/17/12 06:30	
LCS	1204748-BS1	04/17/12 06:30	
106042	1204748-MS1	04/17/12 06:30	
106042	1204748-MSD1	04/17/12 06:30	

02351

QC BATCH SUMMARY

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1205077

QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
106058	1204329-01	04/24/12 09:30	
Blank	1205077-BLK1	04/24/12 09:30	
LCS	1205077-BS1	04/24/12 09:30	
106058	1205077-MS1	04/24/12 09:30	
106058	1205077-MSD1	04/24/12 09:30	

02352

QC BATCH SUMMARY

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1205313

QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
106053	1204454-01	04/27/12 06:30	
106054	1204454-02	04/27/12 06:30	
Blank	1205313-BLK1	04/27/12 06:30	
LCS	1205313-BS1	04/27/12 06:30	
106053	1205313-MS1	04/27/12 06:30	
106053	1205313-MSD1	04/27/12 06:30	

METHOD BLANK DATA SHEET
SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204497-BLK1
File ID: 041112CL-015
Prepared: 04/11/12 06:20
Analyzed: 04/11/12 07:40
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL
QC Batch: 1204497
Sequence: 2D11054
Calibration: 2D11014
Instrument: 298

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
16887-00-6	Chloride	0.56	mg/L	0.24	1.0	J

METHOD BLANK DATA SHEET
SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204748-BLK1
File ID: 041712CL-015
Prepared: 04/17/12 06:30
Analyzed: 04/17/12 07:11
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL
QC Batch: 1204748
Sequence: 2D17056
Calibration: 2D17020
Instrument: 298

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
16887-00-6	Chloride	0.64	mg/L	0.24	1.0	J

METHOD BLANK DATA SHEET
SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1205077-BLK1
File ID: 042412CL-015
Prepared: 04/24/12 09:30
Analyzed: 04/24/12 10:11
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL
QC Batch: 1205077
Sequence: 2D30026
Calibration: 2D30009
Instrument: 298

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
16887-00-6	Chloride	0.61	mg/L	0.24	1.0	J

METHOD BLANK DATA SHEET
SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1205313-BLK1
File ID: 042712CL-089
Prepared: 04/27/12 06:30
Analyzed: 04/27/12 08:46
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL
QC Batch: 1205313
Sequence: 2E02047
Calibration: 2E02013
Instrument: 298

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
16887-00-6	Chloride	0.62	mg/L	0.24	1.0	J

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

KAFB-003

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204497

SDG: KNM040512

Project: KNM

Laboratory ID: 1204497-MS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Chloride	50.0	24.0	74.1	100	72 - 123	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

KAFB-003

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204497

SDG: KNM040512

Project: KNM

Laboratory ID: 1204497-MSD1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Chloride	50.0	73.0	98	1	20	72 - 123	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02359

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106042

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204748

SDG: KNM040512

Project: KNM

Laboratory ID: 1204748-MS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Chloride	50.0	33.3	80.2	94	72 - 123	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106042

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204748

SDG: KNM040512

Project: KNM

Laboratory ID: 1204748-MSD1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Chloride	50.0	81.2	96	1	20	72 - 123	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02361

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106058

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205077

SDG: KNM040512

Project: KNM

Laboratory ID: 1205077-MS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Chloride	50.0	9.17	59.4	100	72 - 123	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02362

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106058

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205077

SDG: KNM040512

Project: KNM

Laboratory ID: 1205077-MSD1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Chloride	50.0	59.3	100	0.1	20	72 - 123	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02363

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106053

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205313

SDG: KNM040512

Project: KNM

Laboratory ID: 1205313-MS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Chloride	50.0	27.6	77.6	100	72 - 123	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02364

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106053

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205313

SDG: KNM040512

Project: KNM

Laboratory ID: 1205313-MSD1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Chloride	50.0	76.1	97	2	20	72 - 123	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02365

LCS / LCS DUPLICATE RECOVERY

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204497

SDG: KNM040512

Project: KNM

Laboratory ID: 1204497-BS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Sequence: 2D11054

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Chloride	50.0	48.3	97	90 - 106	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204748

SDG: KNM040512

Project: KNM

Laboratory ID: 1204748-BS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Sequence: 2D17056

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Chloride	50.0	49.2	98	90 - 106	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205077

SDG: KNM040512

Project: KNM

Laboratory ID: 1205077-BS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Sequence: 2D30026

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Chloride	50.0	48.7	97	90 - 106	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205313

SDG: KNM040512

Project: KNM

Laboratory ID: 1205313-BS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Sequence: 2E02047

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Chloride	50.0	50.8	102	90 - 106	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

HOLDING TIME SUMMARY

SM 4500-Cl E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Analyte: Chloride

SDG: KNM040512

Project: KNM

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
KAFB-003	04/04/12	04/05/12		04/11/12	7	NA	04/11/12	7	28	
106042	04/10/12	04/11/12		04/17/12	7	NA	04/17/12	7	28	
106089	04/10/12	04/11/12		04/17/12	7	NA	04/17/12	7	28	
106058	04/17/12	04/18/12		04/24/12	7	NA	04/24/12	7	28	
106053	04/24/12	04/25/12		04/27/12	3	NA	04/27/12	3	28	
106054	04/24/12	04/25/12		04/27/12	3	NA	04/27/12	3	28	

02370

Inorganic - Wet Chemistry, Water, Apr-11-12

Instrument = 298, Calibration = 2D11014

Sequence Analyses:
Chloride 4500-Cl E

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D11054-CAL1	QC		2031179		CAL STANDARD	
2D11054-CAL2	QC		2031178		CAL STANDARD	
2D11054-CAL3	QC		2031177		CAL STANDARD	
2D11054-CAL4	QC		2031176		CAL STANDARD	
2D11054-CAL5	QC		2031175		CAL STANDARD	
2D11054-CAL6	QC		2031174		CAL STANDARD	
2D11054-CAL7	QC		2031173		CAL STANDARD	
2D11054-CAL8	QC		2031172		CAL STANDARD	
2D11054-CCV1	QC		2031174		CALIBRATION CHECK	
2D11054-CCB1	QC		2031179		CALIBRATION BLANK	
2D11054-LCV1	QC		2031175		LOW CAL CHECK	
2D11054-HCV1	QC		2031173		HIGH CAL CHECK	
2D11054-CRL1	QC		2031178		INSTRUMENT RL CHECK	
2D11054-SCV1	QC		2040480		SECONDARY CAL CHECK	
1204497-BLK1	QC				BLANK	
1204497-BS1	QC				LCS	
2D11054-CCV2	QC		2031174		CALIBRATION CHECK	
2D11054-CCB2	QC		2031179		CALIBRATION BLANK	
1204091-01	Chloride 4500-Cl E	J			TechLaw	
1204497-MS1	QC				MATRIX SPIKE	
1204497-MSD1	QC				MATRIX SPIKE DUP	
2D11054-CCV3	QC		2031174		CALIBRATION CHECK	
2D11054-CCB3	QC		2031179		CALIBRATION BLANK	
2D11054-LCV2	QC		2031175		LOW CAL CHECK	
2D11054-HCV2	QC		2031173		HIGH CAL CHECK	
2D11054-CCV4	QC		2031174		CALIBRATION CHECK	
2D11054-CCB4	QC		2031179		CALIBRATION BLANK	

Comments:	Analyst Initials:

due 04/18/12

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1204497** Page 1 of 1

Printed: 4/11/2012 12:14:44PM

4MD

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

82372

Standard	Description	Solvent	LotNum
1101251	Chloride 10000 ppm	di h20	E#7090481
2030794	Konelab Chloride Color Reagent	di H2O	varies

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204091	Chloride 4500-Cl E				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1204497-BLK1		Apr-11-12 06:20	LMA	10	10					BLANK	
1204497-BS1		Apr-11-12 06:20	LMA	10	10			1101251	50	LCS	
1204497-MS1		Apr-11-12 06:20	LMA	10	10		1204091-01	1101251	50	MATRIX SPIKE	
1204497-MSD1		Apr-11-12 06:20	LMA	10	10		1204091-01	1101251	50	MATRIX SPIKE DUP	
1204091-01	J	Apr-11-12 06:20	LMA	10	10					TechLaw	

Comments:	Analyst Initials:

TriMatrix Laboratories Inst #298
Konelab User

4/11/2012 6:42

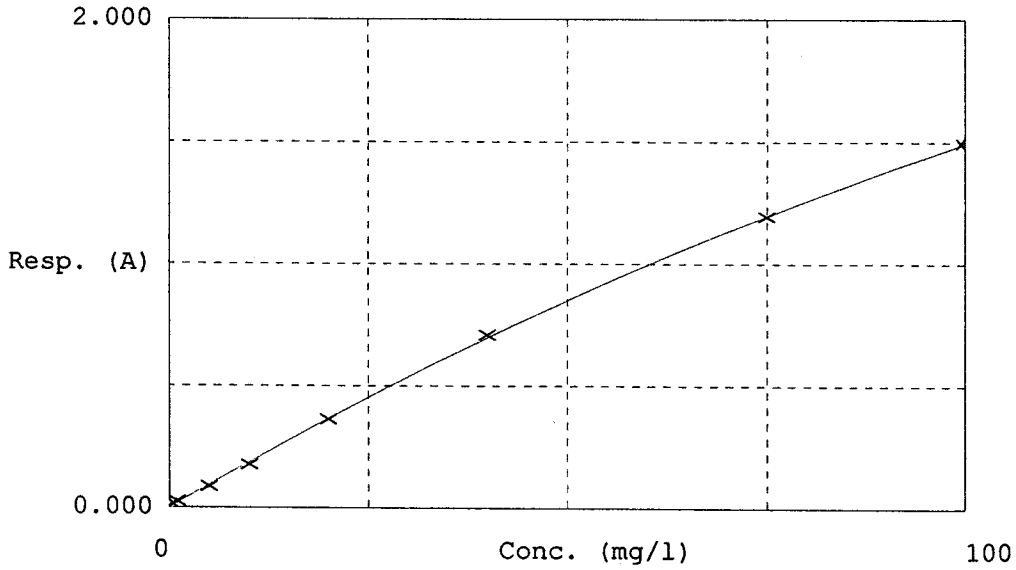
Test Chloride

Accepted 4/11/2012 6:42

Resp. = A * Conc. ^ 2 + B * Conc. + C
A = -0.00004
B = 0.01906
C = 0.00090

Coeff. of det. 0.999793

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	Cl-0	0.01082	0.52111 ✓	0.00000	
2	Cl-1	0.02550	1.29382 ✓	1.00000	
3	Cl-5	0.08696	4.55940 ✓	5.00000	
4	Cl-10	0.17629	9.39204 ✓	10.00000	
5	Cl-20	0.36138	19.75710 ✓	20.00000	
6	Cl-40	0.70816	40.69672 ✓	40.00000	
7	Cl-75	1.19450	74.74402 ✓	75.00000	
8	Cl-100	1.49366	100.03709 ✓	100.00000	

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/11/2012
Time : 12:20

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
Cl CCV 1	39.8901 ✓	0.695	4/11/2012 7:40		
Cl CCB 1	0.6491 ✓	0.013	4/11/2012 7:40		
cl 20	19.7767 ✓	0.362	4/11/2012 7:40		
cl 75	74.8170 ✓	1.195	4/11/2012 7:40		
cl crl 1.0	1.3063 ✓	0.026	4/11/2012 7:40		
cl scv	49.1094 ✓	0.837	4/11/2012 7:40		
blk 1	0.5607 ✓	0.012	4/11/2012 7:40		
bs 1	48.2989 ✓	0.825	4/11/2012 7:40		
Cl CCV 2	40.1453 ✓	0.699	4/11/2012 7:53		
Cl CCB 2	0.4227 ✓	0.009	4/11/2012 7:53		
cl 100 1+1	98.8945	0.842	4/11/2012 7:54	1+1.0	
cl 250 1+4	245.2446	0.836	4/11/2012 7:54	1+4.0	
cl 500 1+9	503.7120	0.856	4/11/2012 7:56	1+9.0	
cl 1000 1+24/+49	1e+003	0.700	4/11/2012 7:56	1+24.0	~~1004.0~~ 1004.406
cl 1000 1+24/+49	994.9176	0.364	4/11/2012 7:56	1+49.0	
Cl CCV	40.2026	0.700	4/11/2012 8:22		
Cl CCB	0.4034	0.009	4/11/2012 8:22		
Cl CCV	39.8526	0.695	4/11/2012 10:03		
Cl CCB	0.5250	0.011	4/11/2012 10:03		
1204091-01	24.0400 ✓	0.435	4/11/2012 10:03		
1204091-01ms	74.0909 ✓	1.186	4/11/2012 10:03		
1204091-01msd	73.0100 ✓	1.172	4/11/2012 10:03		
blk 2	0.5990	0.012	4/11/2012 10:03		
bs 2	50.6563	0.860	4/11/2012 10:03		
1204184-01	_____	9.736	- Dilute		
1204184-02	_____	-	- ↓		
1204184-03	_____	5.711	-		
1204190-01	5.2763	0.100	4/11/2012 10:03		
1204190-01ms	55.4997	0.931	4/11/2012 10:03		
Cl CCV 3	40.3378 ✓	0.703	4/11/2012 10:13		
Cl CCB 3	0.5037 ✓	0.010	4/11/2012 10:13		
1204190-01msd	54.9774	0.924	4/11/2012 10:13		
1204190-03	1.5204	0.030	4/11/2012 10:13		
1204190-05	13.6736	0.254	4/11/2012 10:13		
1204141-01	20.6365	0.377	4/11/2012 10:13		
1204141-01ms	68.7244	1.116	4/11/2012 10:13		
1204141-01msd	71.0111	1.146	4/11/2012 10:13		
1204142-01	22.3399	0.406	4/11/2012 10:13		
1204183-01	_____	5.193	- Dilute		
1204155-01	_____	2.427	- ↓		
blk ww	0.4730	0.010	4/11/2012 10:13		
1204173-01	430.9001	1.336	4/11/2012 10:14	1+4.0	
Cl CCV	40.3051	0.702	4/11/2012 10:18		
Cl CCB	0.5335	0.011	4/11/2012 10:18		
bs ww	52.2058	0.883	4/11/2012 10:18		
Cl CCV	40.1983	0.700	4/11/2012 10:29		
Cl CCB	0.4389	0.009	4/11/2012 10:29		
1204184-01	2e+003	0.557	4/11/2012 10:32	1+49.0	
1204184-02	_____	-	- Dilute	1+49.0	
1204184-03	_____	1.553	- ↓	1+9.0	
1204183-01	_____	1.468	-	1+9.0	1564.528
1204155-01	208.3020	0.723	4/11/2012 10:34	1+4.0	
Cl CCV	40.1986	0.700	4/11/2012 10:39		

WA 04/11/12

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/11/2012
Time : 12:20

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
Cl CCB	0.4133	0.009	4/11/2012 10:39		
Cl CCV	39.9204	0.696	4/11/2012 10:53		
Cl CCB	0.5719	0.012	4/11/2012 10:53		
cl 20	20.6480✓	0.377	4/11/2012 10:53		
cl 75	77.7829✓	1.233	4/11/2012 10:53		
1204184-02 100x	_____	2.937	- Dilute		1+99.0
1204184-03	1e+003	0.733	4/11/2012 10:54	1+24.0	1056619
1204183-01	982.6293	0.686	4/11/2012 10:54	1+24.0	
Cl CCV 4	39.9407✓	0.696	4/11/2012 10:55		
Cl CCB	0.3963✓	0.008	4/11/2012 10:55		
Cl CCV	39.8730	0.695	4/11/2012 11:30		
Cl CCB	0.5334	0.011	4/11/2012 11:30		
blk a	0.8642	0.017	4/11/2012 11:30		
bs a	51.6798	0.876	4/11/2012 11:30		
1204122-01	11.7524	0.219	4/11/2012 11:30		
1204122-01ms	62.9446	1.037	4/11/2012 11:30		
1204122-01msd	62.8114	1.035	4/11/2012 11:30		
1204122-02	4.5262	0.086	4/11/2012 11:30		
1204122-03	12.4546	0.232	4/11/2012 11:30		
1204122-04	5.1891	0.099	4/11/2012 11:30		
1204122-05	13.1708	0.245	4/11/2012 11:30		
1204122-06	10.5860	0.198	4/11/2012 11:31		
Cl CCV	40.1728	0.700	4/11/2012 11:33		
Cl CCB	0.6211	0.013	4/11/2012 11:33		
1204122-07	10.9240	0.204	4/11/2012 11:33		
1204122-08	13.1969	0.245	4/11/2012 11:33		
1204122-09	8.8177	0.166	4/11/2012 11:33		
1204122-10	11.6884	0.218	4/11/2012 11:33		
1204140-01	4.7905	0.091	4/11/2012 11:33		
1204140-01ms	57.0408	0.954	4/11/2012 11:33		
1204140-01msd	55.2747	0.928	4/11/2012 11:33		
1204140-02	3.6631	0.070	4/11/2012 11:34		
1204140-03	2.6466	0.051	4/11/2012 11:34		
1204140-04	64.2361	1.055	4/11/2012 11:34		
Cl CCV	39.9459	0.696	4/11/2012 11:40		
Cl CCB	0.5692	0.012	4/11/2012 11:40		
1204140-05	64.8794	1.063	4/11/2012 11:40		
1204140-06	27.1525	0.488	4/11/2012 11:40		
1204140-07	0.5993	0.012	4/11/2012 11:40		
1204170-01	96.1749	1.451	4/11/2012 11:40		
1204170-02	33.1251	0.587	4/11/2012 11:40		
blk b	0.7360	0.015	4/11/2012 11:40		
bs b	52.7507	0.891	4/11/2012 11:40		
1204170-03	_____	1.638	- Dilute		
1204170-04	13.5743	0.252	4/11/2012 11:43		
1204170-05	1.7979	0.035	4/11/2012 11:43		
Cl CCV	40.3693	0.703	4/11/2012 11:43		
Cl CCB	0.6863	0.014	4/11/2012 11:43		
1204170-06	1.9435	0.038	4/11/2012 11:43		
1204170-07	7.5867	0.143	4/11/2012 11:43		
1204170-08	2.1809	0.042	4/11/2012 11:43		
1204170-09	11.9537	0.223	4/11/2012 11:43		
1204170-10	73.9704	1.185	4/11/2012 11:43		

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/11/2012
Time : 12:20

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204170-11	73.6154	1.180	4/11/2012 11:43		
1204170-12	5.4981	0.104	4/11/2012 11:49		
1204170-12ms	55.7153	0.935	4/11/2012 11:49		
1204170-12msd	55.1154	0.926	4/11/2012 11:49		
1204170-13	64.7932	1.062	4/11/2012 11:49		
Cl CCV	40.4825	0.705	4/11/2012 11:49		
Cl CCB	0.7361	0.015	4/11/2012 11:49		
1204170-14	2.6226	0.051	4/11/2012 11:49		
1204170-15	1.6116	0.032	4/11/2012 11:49		
1204170-16	3.7805	0.072	4/11/2012 11:51		
1204170-17	31.4858	0.560	4/11/2012 11:51		
1204170-18	32.1664	0.571	4/11/2012 11:51		
1204170-19	51.9639	0.880	4/11/2012 11:51		
1204170-20	13.7738	0.256	4/11/2012 11:51		
1204170-21	2.0811	0.040	4/11/2012 11:51		
1204170-22	3.2867	0.063	4/11/2012 11:51		
1204184-02 100x	3e+004	0.959	4/11/2012 11:52	1+4.0	1+99.0 28700.41
Cl CCV	39.7985	0.694	4/11/2012 11:57		
Cl CCB	0.3873	0.008	4/11/2012 11:57		
Cl CCV	40.0473	0.698	4/11/2012 12:15		
Cl CCB	0.6295	0.013	4/11/2012 12:15		
cl 20	20.8648	0.381	4/11/2012 12:15		
cl 75	78.7588	1.246	4/11/2012 12:15		
1204170-03	111.4663	0.935	4/11/2012 12:16	1+1.0	
Cl CCV	40.0032	0.697	4/11/2012 12:17		
Cl CCB	0.5119	0.011	4/11/2012 12:17		

Inorganic - Wet Chemistry, Water, Apr-17-12

Instrument = 298, Calibration = 2D17020

Sequence Analyses:
Chloride 4500-Cl E

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D17056-CAL1	QC		2031179		CAL STANDARD	
2D17056-CAL2	QC		2031178		CAL STANDARD	
2D17056-CAL3	QC		2031177		CAL STANDARD	
2D17056-CAL4	QC		2031176		CAL STANDARD	
2D17056-CAL5	QC		2031175		CAL STANDARD	
2D17056-CAL6	QC		2031174		CAL STANDARD	
2D17056-CAL7	QC		2031173		CAL STANDARD	
2D17056-CAL8	QC		2031172		CAL STANDARD	
2D17056-CCV1	QC		2031174		CALIBRATION CHECK	
2D17056-CCB1	QC		2031179		CALIBRATION BLANK	
2D17056-LCV1	QC		2031175		LOW CAL CHECK	
2D17056-HCV1	QC		2031173		HIGH CAL CHECK	
2D17056-CRL1	QC		2031178		INSTRUMENT RL CHECK	
2D17056-SCV1	QC		2040480		SECONDARY CAL CHECK	
1204748-BLK1	QC				BLANK	
1204748-BS1	QC				LCS	
2D17056-CCV2	QC		2031174		CALIBRATION CHECK	
2D17056-CCB2	QC		2031179		CALIBRATION BLANK	
1204205-01	Chloride 4500-Cl E	J			TechLaw	
1204748-MS1	QC				MATRIX SPIKE	
1204748-MSD1	QC				MATRIX SPIKE DUP	
1204205-02	Chloride 4500-Cl E	J			TechLaw	
2D17056-CCV3	QC		2031174		CALIBRATION CHECK	
2D17056-CCB3	QC		2031179		CALIBRATION BLANK	
2D17056-LCV2	QC		2031175		LOW CAL CHECK	
2D17056-HCV2	QC		2031173		HIGH CAL CHECK	
2D17056-CCV4	QC		2031174		CALIBRATION CHECK	
2D17056-CCB4	QC		2031179		CALIBRATION BLANK	

Comments:

Analyst Initials:

due 04/24/12

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1204748** Page 1 of 1

Printed: 4/17/2012 12:22:08PM

4 MD

NLB 4-23-12

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

92378

Standard	Description	Solvent	LotNum
1101251	Chloride 10000 ppm	di h20	E#7090481
2030794	Konelab Chloride Color Reagent	di H2O	varies

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204205	Chloride 4500-Cl E				

Balance ID: _____ **pH Meter:** _____

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1204748-BLK1		Apr-17-12 06:30	LMA	10	10					BLANK	
1204748-BS1		Apr-17-12 06:30	LMA	10	10			1101251	50	LCS	
1204748-MS1		Apr-17-12 06:30	LMA	10	10		1204205-01	1101251	50	MATRIX SPIKE	
1204748-MSD1		Apr-17-12 06:30	LMA	10	10		1204205-01	1101251	50	MATRIX SPIKE DUP	
1204205-01	J	Apr-17-12 06:30	LMA	10	10					TechLaw	
1204205-02	J	Apr-17-12 06:30	LMA	10	10					TechLaw	

Comments:	Analyst Initials:

TriMatrix Laboratories Inst #298
Konelab User

4/17/2012 6:55

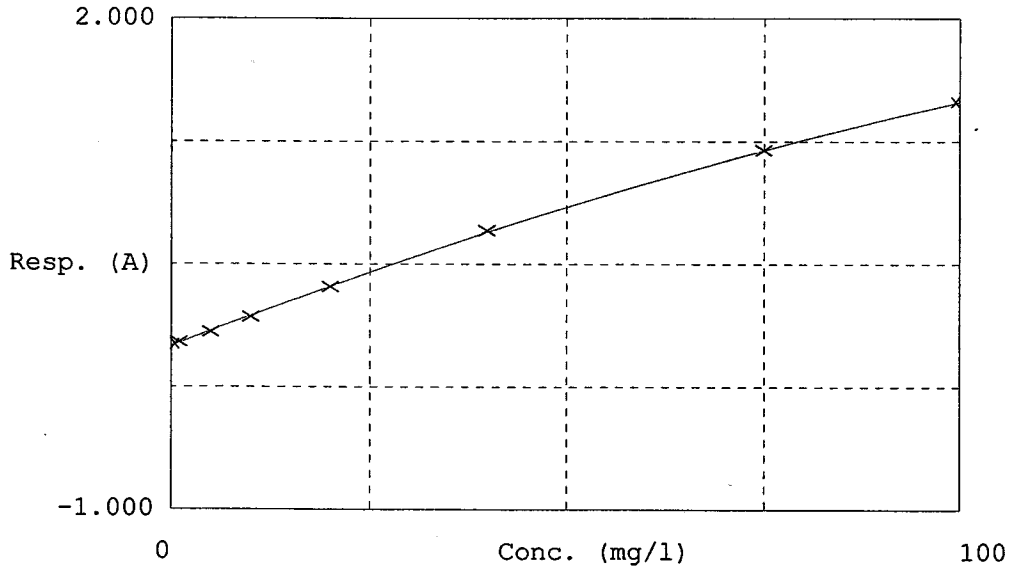
Test Chloride

Accepted 4/17/2012 6:55

Resp. = A * Conc. ^ 2 + B * Conc. + C
A = -0.00004
B = 0.01908
C = -0.00067

Coeff. of det. 0.999840

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	Cl-0	0.00877	0.49533	0.00000	
2	Cl-1	0.02396	1.29484	1.00000	
3	Cl-5	0.08555	4.56528	5.00000	
4	Cl-10	0.17608	9.46033	10.00000	
5	Cl-20	0.36035	19.77794	20.00000	
6	Cl-40	0.70384	40.51162	40.00000	
7	Cl-75	1.19540	74.96079	75.00000	
8	Cl-100	1.48993	99.93200	100.00000	

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/17/2012
Time : 10:25

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
Cl CCV 1	40.0454	0.697	4/17/2012 7:11		
Cl CCB	0.5723	0.010	4/17/2012 7:11		
cl 20	19.6753	0.359	4/17/2012 7:11		
cl 75	75.5780	1.203	4/17/2012 7:11		
cl crl 1.0	1.2659	0.023	4/17/2012 7:11		
cl scv	50.0110	0.849	4/17/2012 7:11		
blk 1	0.6418	0.012	4/17/2012 7:11		
bs 1	49.1557	0.836	4/17/2012 7:11		
blk 2	0.7946	0.014	4/17/2012 7:11		
bs 2	49.2257	0.838	4/17/2012 7:11		
cl 100 1+1	97.6909	0.832	4/17/2012 7:14	1+1.0	
cl 250 1+4	252.2064	0.856	4/17/2012 7:14	1+4.0	
Cl CCV 2	40.5971	0.705	4/17/2012 7:14		
Cl CCB	0.8100	0.015	4/17/2012 7:14		
cl 500 1+9	507.7189	0.861	4/17/2012 7:14	1+9.0	
cl 1000 1+24/+49	981.2380	0.684	4/17/2012 7:14	1+24.0	
cl 1000 1+24/+49	963.6800	0.352	4/17/2012 7:19	1+49.0	
Cl CCV	39.8824	0.694	4/17/2012 7:20		
Cl CCB	0.3359	0.006	4/17/2012 7:20		
Cl CCV	40.0767	0.697	4/17/2012 8:02		
Cl CCB	0.6040	0.011	4/17/2012 8:02		
1204203-01	78.4635	1.240	4/17/2012 8:02		
1204281-01	_____	2.416	-	Dilute	
1204281-01ms	_____	2.740	-	↓	
1204281-01msd	_____	2.730	-		
1204205-01	33.2723	0.588	4/17/2012 8:02		
1204205-01ms	80.1635	1.261	4/17/2012 8:02		
1204205-01msd	81.2484	1.274	4/17/2012 8:02		
1204205-02	12.6169	0.233	4/17/2012 8:02		
blk 3	0.9354	0.017	4/17/2012 8:02		
bs 3	50.8935	0.862	4/17/2012 8:02		
Cl CCV	40.2798	0.700	4/17/2012 8:05		
Cl CCB 3	0.6100	0.011	4/17/2012 8:05		
1204197-01	27.1490	0.487	4/17/2012 8:05		
1204197-02	35.9455	0.631	4/17/2012 8:05		
1204197-03	2.7550	0.052	4/17/2012 8:05		
1204197-04	8.5947	0.160	4/17/2012 8:05		
1204197-05	69.0162	1.118	4/17/2012 8:05		
1204197-06	66.7897	1.088	4/17/2012 8:05		
1204229-01	9.0735	0.169	4/17/2012 8:05		
1204229-01ms	59.5726	0.988	4/17/2012 8:05		
1204229-01msd	58.8070	0.977	4/17/2012 8:05		
1204229-02	19.3143	0.352	4/17/2012 8:05		
Cl CCV	39.9866	0.696	4/17/2012 8:12		
Cl CCB	0.6984	0.013	4/17/2012 8:12		
1204229-03	19.1925	0.350	4/17/2012 8:12		
1204229-04	25.7505	0.463	4/17/2012 8:12		
1204229-05	23.8754	0.431	4/17/2012 8:12		
1204229-06	56.1751	0.940	4/17/2012 8:12		
1204229-07	0.7701	0.014	4/17/2012 8:12		
1204235-01	3.5892	0.067	4/17/2012 8:12		
1204235-02	3.7697	0.071	4/17/2012 8:12		
1204235-03	2.0278	0.038	4/17/2012 8:13		

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/17/2012
Time : 10:25

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204235-04	2.2985	0.043	4/17/2012 8:13		
1204235-05	10.7125	0.199	4/17/2012 8:13		
Cl CCV	40.0494	0.697	4/17/2012 8:15		
Cl CCB	0.7073	0.013	4/17/2012 8:15		
1204235-06	11.9107	0.221	4/17/2012 8:15		
1204235-07	11.4195	0.212	4/17/2012 8:15		
blk 4	0.7836	0.014	4/17/2012 8:15		
bs 4	50.3181	0.854	4/17/2012 8:15		
1204235-08	15.2865	0.281	4/17/2012 8:15		
1204235-08ms	66.0794	1.078	4/17/2012 8:16		
1204235-08msd	64.4986	1.057	4/17/2012 8:16		
1204235-09	22.0044	0.399	4/17/2012 8:16		
1204235-10	24.7033	0.445	4/17/2012 8:16		
1204235-11	24.2146	0.437	4/17/2012 8:16		
Cl CCV	39.9029	0.694	4/17/2012 8:23		
Cl CCB	0.6267	0.011	4/17/2012 8:23		
1204235-12	23.4110	0.423	4/17/2012 8:23		
1204235-13	0.6419	0.012	4/17/2012 8:23		
1204237-01	54.3164	0.913	4/17/2012 8:23		
1204237-02		1.529	- Dilute		
1204237-03	57.6390	0.961	4/17/2012 8:23		
1204238-01	2.3077	0.043	4/17/2012 8:23		
1204238-01ms	52.4315	0.885	4/17/2012 8:23		
1204238-01msd	50.2244	0.852	4/17/2012 8:23		
1204238-03	2.0785	0.039	4/17/2012 8:23		
1204238-05	1.7293	0.032	4/17/2012 8:23		
Cl CCV	40.0680	0.697	4/17/2012 8:26		
Cl CCB	0.7133	0.013	4/17/2012 8:26		
1204238-07	2.0495	0.038	4/17/2012 8:26		
1204238-10	1.2607	0.023	4/17/2012 8:26		
1204239-01	5.2980	0.099	4/17/2012 8:26		
1204239-02	52.9762	0.893	4/17/2012 8:26		
1204239-03		3.312	- Dilute		
1204266-03	1.8054	0.034	4/17/2012 8:26		
1204266-05	1.8271	0.034	4/17/2012 8:26		
1204266-01	1.8773	0.035	4/17/2012 8:26		
1204266-01ms	50.1726	0.852	4/17/2012 8:26		
1204266-01msd	52.1072	0.880	4/17/2012 8:26		
Cl CCV	39.9103	0.694	4/17/2012 8:33		
Cl CCB	0.6939	0.013	4/17/2012 8:33		
blk 5	0.6385	0.011	4/17/2012 8:33		
bs 5	50.9887	0.864	4/17/2012 8:33		
1204241-01	42.3446	0.732	4/17/2012 8:33		
1204241-01ms	90.9151	1.390	4/17/2012 8:33		
1204241-01msd	89.0812	1.368	4/17/2012 8:33		
1204241-02	30.0299	0.535	4/17/2012 8:33		
1204241-03	10.6991	0.199	4/17/2012 8:33		
1204241-04	49.4322	0.841	4/17/2012 8:33		
1204241-05	18.1159	0.331	4/17/2012 8:33		
1204241-06	14.0855	0.260	4/17/2012 8:33		
Cl CCV	39.8279	0.693	4/17/2012 8:36		
Cl CCB	0.6250	0.011	4/17/2012 8:36		
1204281-01	204.8977	0.711	4/17/2012 8:36	1+4.0	

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/17/2012
Time : 10:25

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204281-01ms	251.9864	0.855	4/17/2012 8:36	1+4.0	
1204281-01msd	249.9853	0.849	4/17/2012 8:36	1+4.0	
1204237-02	100.7904	0.855	4/17/2012 8:40	1+1.0	
Cl CCV	39.8056	0.693	4/17/2012 8:41		
Cl CCB	0.4640	0.008	4/17/2012 8:41		
1204239-03	350.9397	1.133	4/17/2012 8:44	1+4.0	
cl 20	19.9727	0.364	4/17/2012 8:47		
cl 75	75.9899	1.209	4/17/2012 8:47		
Cl CCV	40.3006	0.701	4/17/2012 8:47		
Cl CCB	0.4946	0.009	4/17/2012 8:47		
Cl CCV	40.1387	0.698	4/17/2012 9:34		
Cl CCB	0.6728	0.012	4/17/2012 9:34		
1204241-07	19.4023	0.354	4/17/2012 9:34		
1204241-08	22.1767	0.402	4/17/2012 9:34		
1204241-09	9.8747	0.184	4/17/2012 9:34		
1204241-10	7.9431	0.148	4/17/2012 9:34		
1204241-11	49.2531	0.838	4/17/2012 9:34		
1204241-12	8.0551	0.150	4/17/2012 9:34		
1204241-13	21.8899	0.397	4/17/2012 9:35		
1204243-01	25.3525	0.456	4/17/2012 9:35		
1204243-02		1.808	- Dilute		
1204265-01	16.4850	0.303	4/17/2012 9:35		
Cl CCV	39.9631	0.695	4/17/2012 9:37		
Cl CCB	0.6886	0.012	4/17/2012 9:37		
1204265-02	36.2305	0.636	4/17/2012 9:37		
1204265-03	50.9189	0.863	4/17/2012 9:37		
1204265-04	51.1975	0.867	4/17/2012 9:37		
blk 6	0.6808	0.012	4/17/2012 9:37		
bs 6	49.4864	0.841	4/17/2012 9:38		
1204265-05	18.4954	0.338	4/17/2012 9:38		
1204265-06	26.3375	0.473	4/17/2012 9:38		
1204265-07	2.6784	0.050	4/17/2012 9:38		
1204265-08	8.3993	0.157	4/17/2012 9:38		
1204265-09	16.3021	0.299	4/17/2012 9:38		
Cl CCV	40.1329	0.698	4/17/2012 9:44		
Cl CCB	0.7389	0.013	4/17/2012 9:44		
1204265-10	29.7582	0.530	4/17/2012 9:44		
1204265-11	31.1150	0.553	4/17/2012 9:44		
1204265-12	0.7818	0.014	4/17/2012 9:44		
1204265-13	0.8448	0.015	4/17/2012 9:44		
1204275-01	38.4812	0.672	4/17/2012 9:44		
1204275-01ms	85.1751	1.322	4/17/2012 9:44		
1204275-01msd	85.7932	1.330	4/17/2012 9:44		
1204275-02	37.3183	0.653	4/17/2012 9:44		
1204275-03	37.1882	0.651	4/17/2012 9:47		
1204275-04	40.0286	0.696	4/17/2012 9:47		
Cl CCV	40.3284	0.701	4/17/2012 9:47		
Cl CCB	0.8257	0.015	4/17/2012 9:47		
1204275-05	35.6386	0.626	4/17/2012 9:47		
1204275-06	40.3689	0.702	4/17/2012 9:47		
1204275-07	39.7815	0.692	4/17/2012 9:47		
1204275-08	51.7322	0.875	4/17/2012 9:47		
1204275-09	37.4310	0.655	4/17/2012 9:47		

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/17/2012
Time : 10:25

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
blk 7	0.5378	0.010	4/17/2012 9:47		
bs 7	49.5347	0.842	4/17/2012 9:53		
1204275-10	34.8330	0.613	4/17/2012 9:54		
1204275-10ms	82.4081	1.289	4/17/2012 9:54		
1204275-10msd	82.5186	1.290	4/17/2012 9:54		
Cl CCV	40.4169	0.702	4/17/2012 9:54		
Cl CCB	0.9003	0.016	4/17/2012 9:54		
1204275-11	41.8644	0.725	4/17/2012 9:54		
1204275-12	39.1163	0.682	4/17/2012 9:54		
1204275-13	32.1109	0.569	4/17/2012 9:54		
1204275-14	33.1239	0.586	4/17/2012 9:54		
1204275-15	37.3396	0.654	4/17/2012 9:54		
1204275-16	32.4161	0.574	4/17/2012 9:54		
1204275-21	0.6606	0.012	4/17/2012 9:54		
1204242-01	_____	0.240	- Dilute	1+49.0	
1204274-01	2e+003	0.588	4/17/2012 9:58	1+49.0	
1204243-02	128.7409	1.055	4/17/2012 9:58	1+1.0	
Cl CCV	40.7143	0.707	4/17/2012 9:58		
Cl CCB	0.8382	0.015	4/17/2012 9:58		
1204274-02	2e+003	0.646	4/17/2012 9:58	1+49.0	
1204275-17	_____	-	- Dilute	1+4.0	
1204275-18	_____	-	- ↓	1+9.0	
1204275-19	4e+003	1.290	4/17/2012 10:04	1+49.0	
1204275-20	_____	-	- Dilute	1+9.0	
Cl CCV	40.0966	0.697	4/17/2012 10:05		
Cl CCB	0.5062	0.009	4/17/2012 10:05		
1204242-01	653.5305	1.068	4/17/2012 10:12	1+9.0	
Cl CCV	39.9535	0.695	4/17/2012 10:13		
Cl CCB	0.5142	0.009	4/17/2012 10:13		
1204275-17	31.6729	0.562	4/17/2012 10:18		
1204275-18	88.2321	1.358	4/17/2012 10:18		
1204275-20	77.8535	1.232	4/17/2012 10:18		
Cl CCV	39.9698	0.695	4/17/2012 10:18		
Cl CCB	0.5691	0.010	4/17/2012 10:18		
cl 20	20.4138	0.371	4/17/2012 10:23		
cl 75	77.1063	1.223	4/17/2012 10:23		
Cl CCV	39.8597	0.694	4/17/2012 10:24		
Cl CCB	0.5554	0.010	4/17/2012 10:24		

Inorganic - Wet Chemistry, Water, Apr-24-12

Instrument = 298, Calibration = 2D30009

Sequence Analyses:
Chloride 4500-Cl E

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D30026-CAL1	QC		2031179		CAL STANDARD	
2D30026-CAL2	QC		2031178		CAL STANDARD	
2D30026-CAL3	QC		2031177		CAL STANDARD	
2D30026-CAL4	QC		2031176		CAL STANDARD	
2D30026-CAL5	QC		2031175		CAL STANDARD	
2D30026-CAL6	QC		2031174		CAL STANDARD	
2D30026-CAL7	QC		2031173		CAL STANDARD	
2D30026-CAL8	QC		2031172		CAL STANDARD	
2D30026-CCV1	QC		2031174		CALIBRATION CHECK	
2D30026-CCB1	QC		2031179		CALIBRATION BLANK	
2D30026-LCV1	QC		2031175		LOW CAL CHECK	
2D30026-HCV1	QC		2031173		HIGH CAL CHECK	
2D30026-CRL1	QC		2031178		INSTRUMENT RL CHECK	
2D30026-SCV1	QC		2040480		SECONDARY CAL CHECK	
1205077-BLK1	QC				BLANK	
1205077-BS1	QC				LCS	
2D30026-CCV2	QC		2031174		CALIBRATION CHECK	
2D30026-CCB2	QC		2031179		CALIBRATION BLANK	
1204329-01	Chloride 4500-Cl E	J			TechLaw	
1205077-MS1	QC				MATRIX SPIKE	
1205077-MSD1	QC				MATRIX SPIKE DUP	
2D30026-CCV3	QC		2031174		CALIBRATION CHECK	
2D30026-CCB3	QC		2031179		CALIBRATION BLANK	
2D30026-LCV2	QC		2031175		LOW CAL CHECK	
2D30026-HCV2	QC		2031173		HIGH CAL CHECK	
2D30026-CCV4	QC		2031174		CALIBRATION CHECK	
2D30026-CCB4	QC		2031179		CALIBRATION BLANK	

Comments:

Analyst Initials:

due 05/01/12

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1205077

Printed: 4/24/2012 12:44:34PM

MB 5-1-12

4MD

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

92385

Standard	Description	Solvent	LotNum
1101251	Chloride 10000 ppm	di h20	E#7090481
2041159	Konelab Chloride Color Reagent	di H2O	varies

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204329	Chloride 4500-Cl E				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1205077-BLK1		Apr-24-12 09:30	LMA	10	10					BLANK	
1205077-BS1		Apr-24-12 09:30	LMA	10	10			1101251	50	LCS	
1205077-MS1		Apr-24-12 09:30	LMA	10	10		1204329-01	1101251	50	MATRIX SPIKE	
1205077-MSD1		Apr-24-12 09:30	LMA	10	10		1204329-01	1101251	50	MATRIX SPIKE DUP	
1204329-01	J	Apr-24-12 09:30	LMA	10	10					TechLaw	

Comments:	Analyst Initials:

TriMatrix Laboratories Inst #298
Konelab User

4/24/2012 9:59

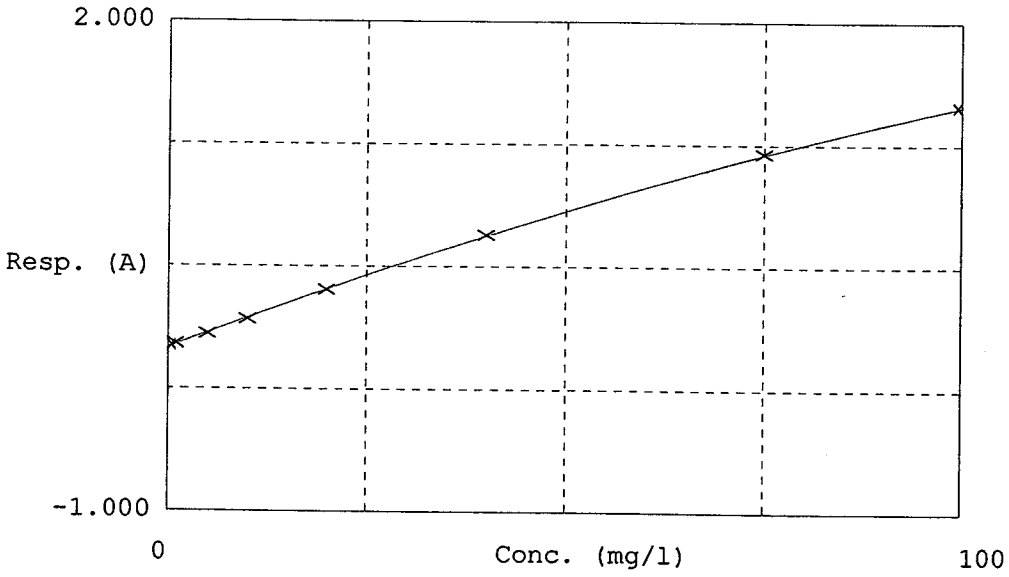
Test Chloride

Accepted 4/24/2012 9:58

Resp. = A * Conc. ^ 2 + B * Conc. + C
A = -0.00004
B = 0.01890
C = -0.00153

Coeff. of det. 0.999839

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	Cl-0	0.00888	0.55147	0.00000	
2	Cl-1	0.02311	1.30753	1.00000	
3	Cl-5	0.08305	4.51847	5.00000	
4	Cl-10	0.17431	9.49520	10.00000	
5	Cl-20	0.35655	19.77728	20.00000	
6	Cl-40	0.69461	40.28254	40.00000	
7	Cl-75	1.19391	75.30817	75.00000	
8	Cl-100	1.48398	99.75440	100.00000	

Result Report | Aquakem 7.2AQ1 | Page: 1

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/24/2012
Time : 14:28

Test: Chloride
Unit: mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
Cl CCV 1	39.9054	0.689	4/24/2012 10:11		
Cl CCB 1	0.5348	0.009	4/24/2012 10:11		
cl 20	19.6045	0.354	4/24/2012 10:11		
cl 75	74.3964	1.182	4/24/2012 10:11		
cl crl 1.0	1.2169	0.021	4/24/2012 10:11		
cl scv	49.8713	0.841	4/24/2012 10:11		
blk 1	0.6121	0.010	4/24/2012 10:11		
bs 1	48.6973	0.824	4/24/2012 10:11		
blk ww	0.6457	0.011	4/24/2012 10:11		
bs ww	48.5723	0.822	4/24/2012 10:11		
cl 100 1+1	97.7338	0.826	4/24/2012 10:14	1+1.0	
cl 250 1+4	252.2558	0.850	4/24/2012 10:14	1+4.0	
Cl CCV 2	40.6223	0.700	4/24/2012 10:14		
Cl CCB 2	0.6090	0.010	4/24/2012 10:14		
cl 500 1+9	513.7878	0.863	4/24/2012 10:14	1+9.0	
cl 1000 1+24/+49	1e+003	0.701	4/24/2012 10:14	1+24.0	1017.429
cl 1000 1+24/+49	975.9775	0.352	4/24/2012 10:19	1+49.0	
Cl CCV	40.2840	0.695	4/24/2012 10:20		
Cl CCB	0.4438	0.007	4/24/2012 10:20		
Cl CCV	40.3442	0.696	4/24/2012 10:39		
Cl CCB	0.6427	0.011	4/24/2012 10:39		
1204329-01	9.1661	0.168	4/24/2012 10:39		
1204329-01ms	59.3922	0.979	4/24/2012 10:39		
1204329-01msd	59.3320	0.978	4/24/2012 10:39		
1204334-01	_____	1.584	-	Dilute	
1204334-02	_____	1.604	-	2	
1204363-01	25.6338	0.457	4/24/2012 10:39		
1204363-01ms	75.2338	1.193	4/24/2012 10:39		
1204363-01msd	75.2466	1.193	4/24/2012 10:39		
1204363-02	1.1189	0.020	4/24/2012 10:39		
1204363-03	0.9872	0.017	4/24/2012 10:39		
Cl CCV 3	40.2679	0.694	4/24/2012 10:42		
Cl CCB 3	0.6087	0.010	4/24/2012 10:42		
1204383-01	_____	2.202	-	Dilute	
1204383-02	_____	2.187	-		
1204383-03	_____	2.175	-	5	
1204393-01	64.9305	1.056	4/24/2012 10:42		
1204414-01	_____	1.581	-	Dilute	
1204423-01	_____	2.431	-	2	
blk 2	0.9921	0.017	4/24/2012 10:42		
bs 2	50.3945	0.849	4/24/2012 10:42		
1204316-01	54.7050	0.912	4/24/2012 10:42		
1204316-01ms	_____	1.516	-	Dilute	
Cl CCV	40.0476	0.691	4/24/2012 10:50	2	
Cl CCB	0.6152	0.010	4/24/2012 10:50		
1204316-01msd	_____	1.490	-	Dilute	
1204316-02	54.2108	0.905	4/24/2012 10:50	2	
1204316-03	3.2500	0.059	4/24/2012 10:50		
1204316-04	35.5356	0.619	4/24/2012 10:50		
1204316-05	8.1344	0.150	4/24/2012 10:50		
1204316-06	1.7925	0.032	4/24/2012 10:50		
1204316-07	3.4359	0.063	4/24/2012 10:50		
1204316-08	0.9239	0.016	4/24/2012 10:50		

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/24/2012
Time : 14:28

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204349-01	22.6247	0.406	4/24/2012 10:50		
1204349-02	1.3526	0.024	4/24/2012 10:50		
Cl CCV	40.0364	0.691	4/24/2012 10:53		
Cl CCB	0.5826	0.009	4/24/2012 10:53		
1204349-03	1.8051	0.032	4/24/2012 10:53		
1204349-04	2.0627	0.037	4/24/2012 10:53		
1204349-05	2.4052	0.044	4/24/2012 10:53		
1204349-06	2.4178	0.044	4/24/2012 10:53		
1204349-07	1.9545	0.035	4/24/2012 10:53		
1204349-08	0.8303	0.014	4/24/2012 10:53		
1204350-01	23.5244	0.421	4/24/2012 10:53		
1204350-02	23.4355	0.419	4/24/2012 10:53		
1204350-03	20.0041	0.360	4/24/2012 10:53		
blk 3	0.6421	0.011	4/24/2012 10:53		
Cl CCV	39.9845	0.690	4/24/2012 11:00		
Cl CCB	0.6456	0.011	4/24/2012 11:00		
bs 3	50.3453	0.848	4/24/2012 11:00		
1204321-01	4.1874	0.077	4/24/2012 11:00		
1204321-01ms	54.5039	0.909	4/24/2012 11:00		
1204321-01msd	54.4531	0.908	4/24/2012 11:00		
1204321-03	1.5362	0.027	4/24/2012 11:00		
1204357-01	_____	-	-	Dilute	
1204357-02	_____	9.738	-		
1204357-03	_____	1.482	-		
1204357-03ms	_____	1.943	-		
1204357-03msd	_____	1.930	-		
Cl CCV	40.2887	0.695	4/24/2012 11:03		
Cl CCB	0.6856	0.011	4/24/2012 11:03		
1204357-04	_____	4.351	-	Dilute	
1204372-01	2.0649	0.037	4/24/2012 11:03		
1204372-01ms	52.4003	0.879	4/24/2012 11:03		
1204372-01msd	51.9961	0.873	4/24/2012 11:03		
1204372-02	1.6674	0.030	4/24/2012 11:03		
1204372-03	2.7393	0.050	4/24/2012 11:03		
1204372-04	2.8198	0.051	4/24/2012 11:03		
1204372-05	2.8482	0.052	4/24/2012 11:03		
1204372-06	2.4885	0.045	4/24/2012 11:03		
1204372-07	91.8294	1.395	4/24/2012 11:03		
Cl CCV	39.9151	0.689	4/24/2012 11:10		
Cl CCB	0.5859	0.010	4/24/2012 11:10		
1204334-01	106.6449	0.892	4/24/2012 11:10	1+1.0	
1204334-02	109.6746	0.914	4/24/2012 11:10	1+1.0	
1204383-01	178.1735	0.621	4/24/2012 11:10	1+4.0	
1204383-02	174.0210	0.608	4/24/2012 11:10	1+4.0	
1204383-03	171.3596	0.599	4/24/2012 11:13	1+4.0	
1204414-01	107.1533	0.896	4/24/2012 11:13	1+1.0	
1204423-01	209.5339	0.720	4/24/2012 11:13	1+4.0	
1204316-01ms	101.6768	0.855	4/24/2012 11:13	1+1.0	
1204316-01msd	98.6130	0.833	4/24/2012 11:13	1+1.0	
1204357-01	_____	-	-	Dilute	1+49.0
Cl CCV	40.1944	0.693	4/24/2012 11:20		
Cl CCB	0.7941	0.013	4/24/2012 11:20		
1204357-02	4e+003	1.187	4/24/2012 11:20	1+49.0	

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/24/2012
Time : 14:28

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204357-03	100.0980	0.844	4/24/2012 11:20	1+1.0	
1204357-03ms	145.1998	1.159	4/24/2012 11:20	1+1.0	
1204357-03msd	143.7481	1.149	4/24/2012 11:22	1+1.0	
1204357-04		1.763	-	1+4.0	
1204312-01		0.072	-	1+24.0	
1204359-01		0.497	-	1+49.0	
Cl CCV	40.0148	0.690	4/24/2012 11:23		
Cl CCB	0.4510	0.007	4/24/2012 11:23		
Cl CCV	40.0330	0.691	4/24/2012 11:42		
Cl CCB	0.6650	0.011	4/24/2012 11:42		
cl 20	20.0574	0.361	4/24/2012 11:42		
cl 75	75.3915	1.195	4/24/2012 11:42		
1204357-01 100x	6e+003	0.972	4/24/2012 11:42		1+99.0
1204372-08	0.7691	0.013	4/24/2012 11:42		
1204384-01	1.6094	0.029	4/24/2012 11:42		
1204384-03	19.8702	0.358	4/24/2012 11:42		
1204384-05	28.5038	0.505	4/24/2012 11:42		
1204384-07	2.0431	0.037	4/24/2012 11:42		
1204419-01	2.7513	0.050	4/24/2012 11:42		
1204312-01	106.0145	0.887	4/24/2012 11:44	1+1.0	
Cl CCV	40.5673	0.699	4/24/2012 11:44		
Cl CCB	0.7989	0.014	4/24/2012 11:44		
1204357-04	660.3074	1.071	4/24/2012 11:44	1+9.0	
1204359-01	1e+003	0.898	4/24/2012 11:44	1+24.0	
Cl CCV	40.1723	0.693	4/24/2012 11:45		
Cl CCB	0.4716	0.007	4/24/2012 11:45		
Cl CCV	40.2616	0.694	4/24/2012 12:52		
Cl CCB	0.6107	0.010	4/24/2012 12:52		
blk a	0.6207	0.010	4/24/2012 12:52		
bs a	49.2506	0.832	4/24/2012 12:52		
1204373-01		3.308	-		
1204373-02		9.735	-		
1204373-03		9.737	-		
1204373-04		3.547	-		
1204373-05		5.257	-		
1204373-05ms		5.141	-		
1204373-05msd		5.145	-		
1204382-01		2.538	-		
Cl CCV	40.1611	0.693	4/24/2012 12:55		
Cl CCB	0.5819	0.009	4/24/2012 12:55		
1204382-02		3.509	-		
1204382-03		2.430	-		
1204382-04		3.285	-		
1204382-05	71.1398	1.140	4/24/2012 12:55		
1204382-06		2.103	-		
1204398-01		3.844	-		
1204398-02		3.768	-		
1204398-03		3.808	-		
blk b		0.018	-		
bs b	49.8059	0.840	4/24/2012 12:56		
Cl CCV	40.1391	0.692	4/24/2012 13:03		
Cl CCB	0.6004	0.010	4/24/2012 13:03		
1204394-01	5.0876	0.094	4/24/2012 13:03		

Dilute

Dilute

Dilute

Reanalyze

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/24/2012
Time : 14:28

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204394-01ms	55.7034	0.927	4/24/2012 13:03		
1204394-01msd	54.7380	0.913	4/24/2012 13:03		
1204394-02	1.1878	0.021	4/24/2012 13:03		
1204394-03	1.8953	0.034	4/24/2012 13:03		
1204394-04	3.2156	0.059	4/24/2012 13:03		
1204394-05	1.5301	0.027	4/24/2012 13:03		
1204394-06	2.5131	0.046	4/24/2012 13:03		
1204394-07	2.6640	0.049	4/24/2012 13:03		
1204394-08	1.1520	0.020	4/24/2012 13:03		
Cl CCV	40.4248	0.697	4/24/2012 13:06		
Cl CCB	0.7030	0.012	4/24/2012 13:06		
1204394-09	1.2949	0.023	4/24/2012 13:06		
1204394-10	0.6537	0.011	4/24/2012 13:06		
1204409-01	2.5543	0.046	4/24/2012 13:06		
1204409-02	11.0388	0.202	4/24/2012 13:06		
1204409-03	_____	1.668	- Dilute		
1204409-04	_____	4.073	- ↓		
1204409-05	14.7426	0.268	4/24/2012 13:06		
1204409-06	56.0061	0.931	4/24/2012 13:06		
1204409-07	_____	2.674	- Dilute		
1204409-07ms	_____	2.939	- d		
Cl CCV	40.0782	0.691	4/24/2012 13:11		
Cl CCB	0.8062	0.014	4/24/2012 13:11		
1204409-07msd	_____	2.971	- Dilute		
1204409-08	_____	1.614	- d		
Cl CCV	39.9714	0.690	4/24/2012 13:12		
Cl CCB	0.5546	0.009	4/24/2012 13:12		
blk b	0.1669	0.002	4/24/2012 13:16		
1204373-01	384.4255	1.214	4/24/2012 13:20	1+4.0	
1204373-02	2e+003	1.430	4/24/2012 13:20	1+24.0	
1204373-03	2e+003	1.105	4/24/2012 13:20	1+24.0	
1204373-05	868.0908	1.336	4/24/2012 13:20	1+9.0	
1204373-05ms	907.1392	1.382	4/24/2012 13:20	1+9.0	
1204373-05msd	890.3546	1.363	4/24/2012 13:20	1+9.0	
1204373-04	433.7652	1.336	4/24/2012 13:23	1+4.0	
1204382-02	416.7462	1.295	4/24/2012 13:23	1+4.0	
Cl CCV	40.6243	0.700	4/24/2012 13:23		
Cl CCB	0.7796	0.013	4/24/2012 13:23		
1204382-03	213.3909	0.732	4/24/2012 13:23	1+4.0	
blk #	0.4688	0.007	4/24/2012 13:30		
bs #	50.1450	0.845	4/24/2012 13:30		
1204427-01	1.1774	0.021	4/24/2012 13:30		
1204427-01ms	49.5054	0.836	4/24/2012 13:30		
1204427-01msd	49.9882	0.843	4/24/2012 13:30		
1204427-02	1.0164	0.018	4/24/2012 13:30		
1204427-03	0.8982	0.015	4/24/2012 13:30		
1204427-04	0.9961	0.017	4/24/2012 13:30		
1204427-05	1.1199	0.020	4/24/2012 13:30		
Cl CCV	40.6486	0.700	4/24/2012 13:30		
Cl CCB	0.9121	0.016	4/24/2012 13:30		
1204427-06	0.7887	0.013	4/24/2012 13:30		
1204427-07	0.9310	0.016	4/24/2012 13:32		
1204427-08	1.3318	0.024	4/24/2012 13:32		

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/24/2012
Time : 14:29

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204427-09	1.3827	0.025	4/24/2012 13:32		
1204427-10	0.7698	0.013	4/24/2012 13:32		
1204427-11	0.9873	0.017	4/24/2012 13:32		
1204427-12	1.0088	0.017	4/24/2012 13:32		
1204427-13	1.0258	0.018	4/24/2012 13:32		
1204427-14	1.1331	0.020	4/24/2012 13:32		
1204427-15	0.8027	0.014	4/24/2012 13:32		
Cl CCV	40.0864	0.692	4/24/2012 13:40		
Cl CCB	0.6799	0.011	4/24/2012 13:40		
1204382-04	382.5375	1.209	4/24/2012 13:40	1+4.0	
1204398-01	_____	1.494	- Dilute	1+4.0	
1204398-02	_____	1.443	- ↓	1+4.0	
1204398-03	_____	1.470	-	1+4.0	
1204382-01	238.5895	0.809	4/24/2012 13:43	1+4.0	
1204382-06	170.0489	1.315	4/24/2012 13:43	1+1.0	
1204409-03	117.9170	0.973	4/24/2012 13:43	1+1.0	
1204409-04	_____	1.609	- Dilute	1+4.0	
1204409-07	252.4976	0.850	4/24/2012 13:43	1+4.0	
1204409-07ms	297.2546	0.980	4/24/2012 13:43	1+4.0	
Cl CCV	40.0999	0.692	4/24/2012 13:49		
Cl CCB	0.6951	0.012	4/24/2012 13:49		
1204409-07msd	300.8146	0.990	4/24/2012 13:49	1+4.0	
1204409-08	114.2374	0.947	4/24/2012 13:49	1+1.0	
Cl CCV	40.3351	0.695	4/24/2012 13:50		
Cl CCB	0.4380	0.007	4/24/2012 13:50		
1204398-01	498.2522	0.840	4/24/2012 13:51	1+9.0	
1204398-03	504.6689	0.850	4/24/2012 13:51	1+9.0	
1204398-02	501.8432	0.846	4/24/2012 13:52	1+9.0	
Cl CCV	39.4121	0.681	4/24/2012 13:57		
Cl CCB	0.3627	0.005	4/24/2012 13:57		
1204409-04	583.8461	0.965	4/24/2012 14:03	1+9.0	
Cl CCV	40.0908	0.692	4/24/2012 14:04		
Cl CCB	0.5897	0.010	4/24/2012 14:04		

Inorganic - Wet Chemistry, Water, Apr-27-12

Instrument = 298, Calibration = 2E02013

Sequence Analyses:
Chloride 4500-Cl E

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2E02047-CAL1	QC		2031179		CAL STANDARD	
2E02047-CAL2	QC		2031178		CAL STANDARD	
2E02047-CAL3	QC		2031177		CAL STANDARD	
2E02047-CAL4	QC		2031176		CAL STANDARD	
2E02047-CAL5	QC		2031175		CAL STANDARD	
2E02047-CAL6	QC		2031174		CAL STANDARD	
2E02047-CAL7	QC		2031173		CAL STANDARD	
2E02047-CAL8	QC		2031172		CAL STANDARD	
2E02047-CCV1	QC		2031174		CALIBRATION CHECK	
2E02047-CCB1	QC		2031179		CALIBRATION BLANK	
2E02047-LCV1	QC		2031175		LOW CAL CHECK	
2E02047-HCV1	QC		2031173		HIGH CAL CHECK	
2E02047-CRL1	QC		2031178		INSTRUMENT RL CHECK	
2E02047-SCV1	QC		2040480		SECONDARY CAL CHECK	
2E02047-CCV2	QC		2031174		CALIBRATION CHECK	
2E02047-CCB2	QC		2031179		CALIBRATION BLANK	
1205313-BLK1	QC				BLANK	
1205313-BS1	QC				LCS	
1204454-01	Chloride 4500-Cl E	J			TechLaw	
1205313-MS1	QC				MATRIX SPIKE	
1205313-MSD1	QC				MATRIX SPIKE DUP	
1204454-02	Chloride 4500-Cl E	J			TechLaw	
2E02047-CCV3	QC		2031174		CALIBRATION CHECK	
2E02047-CCB3	QC		2031179		CALIBRATION BLANK	
2E02047-LCV2	QC		2031175		LOW CAL CHECK	
2E02047-HCV2	QC		2031173		HIGH CAL CHECK	
2E02047-CCV4	QC		2031174		CALIBRATION CHECK	
2E02047-CCB4	QC		2031179		CALIBRATION BLANK	

Comments:

Analyst Initials:

due 05/08/12

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1205313** Page 1 of 1

Printed: 4/27/2012 12:39:16PM

NLB 5-7-12

4MD

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

S2393

Standard	Description	Solvent	LotNum
1101251	Chloride 10000 ppm	di h20	E#7090481
2041159	Konelab Chloride Color Reagent	di H2O	varies

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204454	Chloride 4500-Cl E				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1205313-BLK1		Apr-27-12 06:30	LMA	10	10					BLANK	
1205313-BS1		Apr-27-12 06:30	LMA	10	10			1101251	50	LCS	
1205313-MS1		Apr-27-12 06:30	LMA	10	10		1204454-01	1101251	50	MATRIX SPIKE	
1205313-MSD1		Apr-27-12 06:30	LMA	10	10		1204454-01	1101251	50	MATRIX SPIKE DUP	
1204454-01	J	Apr-27-12 06:30	LMA	10	10					TechLaw	
1204454-02	J	Apr-27-12 06:30	LMA	10	10					TechLaw	

Comments:

Analyst Initials:

TriMatrix Laboratories Inst #298
Konelab User

4/27/2012 6:55

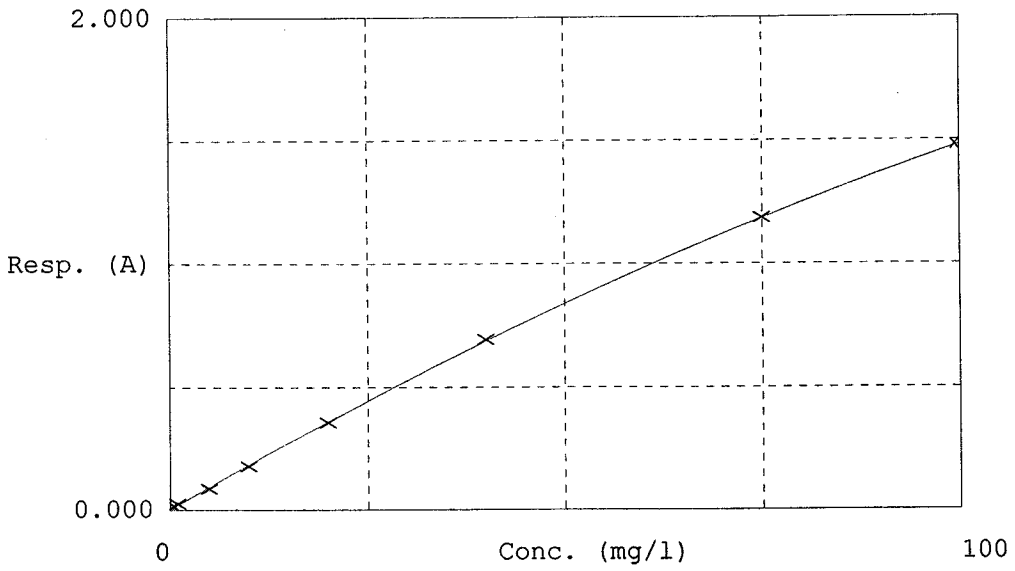
Test Chloride

Accepted 4/27/2012 6:55

Resp. = A * Conc. ^ 2 + B * Conc. + C
A = -0.00004
B = 0.01875
C = 0.00057

Coeff. of det. 0.999871

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	Cl-0	0.00997	0.50176	0.00000	
2	Cl-1	0.02410	1.25866	1.00000	
3	Cl-5	0.08491	4.54260	5.00000	
4	Cl-10	0.17600	9.55071	10.00000	
5	Cl-20	0.35668	19.82520	20.00000	
6	Cl-40	0.69214	40.32091	40.00000	
7	Cl-75	1.18599	75.14957	75.00000	
8	Cl-100	1.47804	99.84729	100.00000	

Result Report Aquakem 7.2AQ1 Page: 1

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/27/2012
Time : 11:11

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
Cl CCV 1	40.1753	0.690	4/27/2012 7:07		
Cl CCB	0.5635	0.011	4/27/2012 7:07		
cl 20	19.8392	0.357	4/27/2012 7:07		
cl 75	74.3585	1.176	4/27/2012 7:07		
cl crl 1.0	1.2646	0.024	4/27/2012 7:07		
cl scv 04/27/12 LLK	49.6048	0.833	4/27/2012 7:07		
blk 1 ~~1205303~~ 1205309	0.5529	0.011	4/27/2012 7:07		
bs 1	48.6118	0.818	4/27/2012 7:07		
cl 100 1+1	97.6022	0.821	4/27/2012 7:10	1+1.0	
cl 250 1+4	250.8654	0.842	4/27/2012 7:10	1+4.0	
cl 500 1+9	511.4830	0.856	4/27/2012 7:10	1+9.0	
cl 1000 1+24/+49	997.5064	0.686	4/27/2012 7:10	1+24.0	
Cl CCV	40.5370	0.696	4/27/2012 7:10		
Cl CCB 2	0.3745	0.008	4/27/2012 7:10		
cl 1000 1+24/+49	953.9722	0.344	4/27/2012 7:11	1+49.0	
Cl CCV	40.4764	0.695	4/27/2012 7:16		
Cl CCB	0.4587	0.009	4/27/2012 7:16		
Cl CCV	40.0393	0.688	4/27/2012 8:16		
Cl CCB	0.5158	0.010	4/27/2012 8:16		
1204435-01	3.1474	0.059	4/27/2012 8:16		
1204435-02	4.2285	0.079	4/27/2012 8:16		
1204435-02ms	55.8715	0.924	4/27/2012 8:16		
1204435-02msd	53.3940	0.889	4/27/2012 8:16		
1204435-03	8.2076	0.152	4/27/2012 8:16		
1204435-04	1.9765	0.037	4/27/2012 8:16		
1204435-05	2.4760	0.047	4/27/2012 8:16		
1204435-06	2.9588	0.056	4/27/2012 8:16		
1204435-07	4.6641	0.087	4/27/2012 8:16		
1204435-08	3.8766	0.073	4/27/2012 8:16		
Cl CCV	40.5562	0.696	4/27/2012 8:19		
Cl CCB	0.6658	0.013	4/27/2012 8:19		
1204435-09	1.2549	0.024	4/27/2012 8:19		
1204435-10	1.3359	0.026	4/27/2012 8:19		
1204435-11	3.3077	0.062	4/27/2012 8:19		
1204435-12	5.2841	0.099	4/27/2012 8:19		
1204435-13	2.3277	0.044	4/27/2012 8:19		
1204435-14	1.7023	0.032	4/27/2012 8:19		
1204435-15	3.4892	0.065	4/27/2012 8:19		
1204435-16	2.6416	0.050	4/27/2012 8:19		
1204463-01	3.5142	0.066	4/27/2012 8:19		
1204463-02	1.4910	0.028	4/27/2012 8:19		
Cl CCV	40.4026	0.693	4/27/2012 8:26		
Cl CCB	0.5984	0.012	4/27/2012 8:26		
1204463-03	9.4561	0.174	4/27/2012 8:26		
1204463-04	19.3349	0.348	4/27/2012 8:26		
blk 2 1205310	0.5942	0.012	4/27/2012 8:26		
bs 2	49.9421	0.838	4/27/2012 8:26		
1204451-01	70.0304	1.119	4/27/2012 8:26		
1204451-02	9.1460	0.169	4/27/2012 8:26		
1204451-03	9.7415	0.179	4/27/2012 8:26		
1204451-04	17.6325	0.319	4/27/2012 8:26		
1204451-05	15.6273	0.284	4/27/2012 8:26		
1204451-06	18.3846	0.332	4/27/2012 8:26		

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/27/2012
Time : 11:11

Test		Chloride			
Unit		mg/l			
Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
Cl CCV	40.2424	0.691	4/27/2012 8:29		
Cl CCB	0.6072	0.012	4/27/2012 8:29		
1204451-07	42.1641	0.721	4/27/2012 8:29		
1204451-08	42.1500	0.720	4/27/2012 8:29		
1204451-09		2.818	- Dilute		
1204451-10	47.2080	0.797	4/27/2012 8:29		
1204451-10ms	94.6723	1.421	4/27/2012 8:29		
1204451-10msd	95.6697	1.432	4/27/2012 8:29		
1204451-11	41.0697	0.704	4/27/2012 8:29		
1204451-12	41.2569	0.707	4/27/2012 8:29		
1204451-13	75.7048	1.193	4/27/2012 8:29		
1204451-14		3.048	- Dilute		
Cl CCV	40.1734	0.690	4/27/2012 8:36		
Cl CCB	0.6810	0.013	4/27/2012 8:36		
1204498-06	11.5851	0.212	4/27/2012 8:36		
1204498-07	24.7333	0.440	4/27/2012 8:36		
blk 3 1205312	0.6995	0.014	4/27/2012 8:36		
bs 3	50.5906	0.848	4/27/2012 8:36		
1204452-01	79.1721	1.237	4/27/2012 8:36		
1204452-01ms		1.772	- Dilute		
1204452-01msd		1.754	- ↓		
1204452-02	57.0555	0.941	4/27/2012 8:36		
1204452-03		1.495	- Dilute		
1204452-04		1.787	- ↓		
Cl CCV	40.4845	0.695	4/27/2012 8:39		
Cl CCB	0.6677	0.013	4/27/2012 8:39		
1204452-05		2.267	- Dilute		
1204452-06		1.772	- ↓		
1204452-07	63.6728	1.034	4/27/2012 8:39		
1204452-08		2.095	- Dilute		
1204452-09	37.5114	0.648	4/27/2012 8:39		
1204452-10	55.7404	0.923	4/27/2012 8:39		
1204452-11	18.6070	0.336	4/27/2012 8:39		
1204452-12		3.206	- Dilute		
1204452-13	83.3744	1.289	4/27/2012 8:40		
1204452-17		2.459	- Dilute		
Cl CCV	40.4613	0.694	4/27/2012 8:46		
Cl CCB	0.6792	0.013	4/27/2012 8:46		
1204452-18		3.800	-		
blk 4 1205313	0.6176	0.012	4/27/2012 8:46		
bs 4	50.8137	0.851	4/27/2012 8:46		
1204454-01	27.5683	0.487	4/27/2012 8:46		
1204454-01ms	77.6381	1.218	4/27/2012 8:46		
1204454-01msd	76.0983	1.198	4/27/2012 8:46		
1204454-02	23.8657	0.425	4/27/2012 8:46		
1204451-16		-	- Dilute	1+49.0	
1204452-14	5e+003	1.409	4/27/2012 8:48	1+49.0	
1204452-15		0.350	- Dilute lower	1+49.0	
Cl CCV	40.2630	0.691	4/27/2012 8:53		
Cl CCB 3	0.4301	0.009	4/27/2012 8:53		
1204451-09		0.905	- Reanalyze	1+4.0	
1204451-14		1.010	- ↓	1+4.0	
1204452-01ms		1.029	- ↓	1+1.0	

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/27/2012
Time : 11:11

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204452-01msd	_____	1.022	-	1+1.0	
1204452-03	_____	0.845	-	1+1.0	
1204452-04	_____	1.033	-	1+1.0	
Cl CCB	_____	0.008	-		
1204452-05	_____	0.638	-	1+4.0	
1204452-06	_____	1.035	-	1+1.0	
1204452-08	_____	1.260	-	1+1.0	
1204452-12	_____	1.099	-	1+4.0	
Cl CCV	_____	0.702	-		
1204452-17	_____	0.747	-	1+4.0	
Cl CCV	40.2602	0.691	4/27/2012 9:05		
Cl CCB	0.4987	0.010	4/27/2012 9:05		
1204452-18	458.2351	1.386	4/27/2012 9:07	1+4.0	
1204452-15	974.8715	0.671	4/27/2012 9:08	1+24.0	
Cl CCV	40.2269	0.691	4/27/2012 9:09		
Cl CCB	0.4555	0.009	4/27/2012 9:09		
cl 20	20.4165	0.367	4/27/2012 9:14		
cl 75 4	76.0042	1.197	4/27/2012 9:14		
1204451-09	274.2044	0.910	4/27/2012 9:17	1+4.0	
1204451-14	312.4796	1.018	4/27/2012 9:17	1+4.0	
1204452-01ms	127.9620	1.038	4/27/2012 9:17	1+1.0	
1204452-01msd	125.8399	1.024	4/27/2012 9:17	1+1.0	
1204452-03	100.3482	0.842	4/27/2012 9:17	1+1.0	
1204452-04	127.6299	1.036	4/27/2012 9:17	1+1.0	
1204452-05	186.8506	0.646	4/27/2012 9:20	1+4.0	
1204452-06	127.3547	1.034	4/27/2012 9:20	1+1.0	
Cl CCV	40.9032	0.701	4/27/2012 9:20		
Cl CCB	0.9066	0.018	4/27/2012 9:20		
1204452-08	161.4538	1.256	4/27/2012 9:20	1+1.0	
1204452-12	335.2820	1.080	4/27/2012 9:20	1+4.0	
1204452-17	216.5512	0.738	4/27/2012 9:25	1+4.0	
Cl CCV	40.3303	0.692	4/27/2012 9:26		
Cl CCB	0.4664	0.009	4/27/2012 9:26		
Cl CCV	40.8868	0.701	4/27/2012 10:07		
Cl CCB	0.7176	0.014	4/27/2012 10:07		
blk 5 1205314	0.7076	0.014	4/27/2012 10:07		
bs 5	49.7273	0.835	4/27/2012 10:07		
1204458-01	3.4680	0.065	4/27/2012 10:07		
1204458-02	1.6368	0.031	4/27/2012 10:07		
1204458-02ms	51.3681	0.859	4/27/2012 10:07		
1204458-02msd	51.9908	0.868	4/27/2012 10:07		
1204458-03	1.2738	0.024	4/27/2012 10:07		
1204458-04	1.3645	0.026	4/27/2012 10:07		
1204458-05	1.7662	0.034	4/27/2012 10:07		
1204458-06	1.3544	0.026	4/27/2012 10:07		
Cl CCV	40.7953	0.700	4/27/2012 10:10		
Cl CCB	0.7269	0.014	4/27/2012 10:10		
1204458-07	0.9834	0.019	4/27/2012 10:10		
1204458-08	1.0674	0.021	4/27/2012 10:10		
1204458-09	0.7790	0.015	4/27/2012 10:10		
1204463-05	19.9998	0.360	4/27/2012 10:10		
1204463-06	1.6756	0.032	4/27/2012 10:10		
1204463-07	1.9275	0.037	4/27/2012 10:10		

Reanalyze

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/27/2012
Time : 11:11

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204463-08	5.7261	0.107	4/27/2012 10:10		
1204463-09	5.5908	0.104	4/27/2012 10:10		
1204463-10	1.9968	0.038	4/27/2012 10:10		
blk 6 1205315	0.7155	0.014	4/27/2012 10:10		
Cl CCV	40.6134	0.697	4/27/2012 10:17		
Cl CCB	0.7167	0.014	4/27/2012 10:17		
bs 6 1205315	50.0981	0.840	4/27/2012 10:17		
1204484-01	5.0980	0.095	4/27/2012 10:17		
1204484-02	4.5041	0.084	4/27/2012 10:17		
1204484-03	24.2226	0.431	4/27/2012 10:17		
1204484-03ms	74.8206	1.182	4/27/2012 10:17		
1204484-03msd	74.0010	1.171	4/27/2012 10:17		
1204484-04	5.8594	0.109	4/27/2012 10:17		
1204484-05	4.9422	0.092	4/27/2012 10:17		
1204484-06	4.9364	0.092	4/27/2012 10:17		
1204484-07	5.2257	0.097	4/27/2012 10:17		
Cl CCV	40.7393	0.699	4/27/2012 10:20		
Cl CCB	0.6049	0.012	4/27/2012 10:20		
1204484-08	12.4082	0.227	4/27/2012 10:20		
1204484-09	8.8038	0.163	4/27/2012 10:20		
1204486-01	49.7294	0.835	4/27/2012 10:20		
1204486-02	71.3102	1.136	4/27/2012 10:20		
1204486-03	56.0722	0.927	4/27/2012 10:20		
blk 7 1205316	0.9043	0.017	4/27/2012 10:20		
bs 7	50.9289	0.853	4/27/2012 10:20		
1204497-01	29.4450	0.518	4/27/2012 10:20		
1204497-02	87.7043	1.340	4/27/2012 10:26		
1204497-03	96.9554	1.446	4/27/2012 10:26		
Cl CCV	40.8307	0.700	4/27/2012 10:26		
Cl CCB	0.7923	0.015	4/27/2012 10:26		
1204497-04	_____	1.488	-		
1204497-04ms	_____	1.960	-		
1204497-04msd	_____	1.963	-		
1204497-06	_____	1.290	-		
1204497-07	_____	1.399	-		
1204497-08	_____	1.409	-		
1204497-09	_____	1.580	-		
1204497-09ms	_____	2.035	-		
1204497-09msd	_____	2.029	-		
1204497-10	_____	3.268	-		
Cl CCV	_____	0.707	-		
Cl CCB	_____	0.020	-		
1204497-11	_____	1.863	-		
1204497-12	_____	1.654	-		
1204497-13	_____	1.507	-		
1204497-14	_____	0.835	-		
1204497-15	_____	0.315	-		
1204497-16	_____	0.929	-		
1204498-01	_____	4.111	-		
1204498-02	_____	3.098	-		
Cl CCV	40.9266	0.702	4/27/2012 10:35		
Cl CCB	0.4488	0.009	4/27/2012 10:35		
1204451-16 100x	9e+003	1.344	4/27/2012 10:36		1+99.0

Reanalyze

TriMatrix Laboratories Inst #298
Konelab User

Date : 4/27/2012
Time : 11:12

Test Chloride
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204498-04	35.4851	0.616	4/27/2012 10:36		
1204498-05	65.1867	1.055	4/27/2012 10:36		
1204490-01 100x		-	- Dilute		1+99.0
1204490-01	3e+003	0.856	4/27/2012 10:37	1+49.0	
Cl CCV	40.6149	0.697	4/27/2012 10:42		
Cl CCB	0.4770	0.010	4/27/2012 10:42		
1204497-04	97.1797	0.818	4/27/2012 10:48	1+1.0	
1204497-04ms	144.4098	1.148	4/27/2012 10:49	1+1.0	
1204497-04msd	146.7846	1.163	4/27/2012 10:49	1+1.0	
1204497-06	83.8429	1.294	4/27/2012 10:49		
1204497-07	93.5203	1.408	4/27/2012 10:49		
1204497-08	93.6087	1.409	4/27/2012 10:49		
1204497-14	49.4636	0.831	4/27/2012 10:50		
1204497-15	17.5757	0.318	4/27/2012 10:50		
1204497-16	56.4123	0.932	4/27/2012 10:50		
1204497-09	107.2580	0.892	4/27/2012 10:54	1+1.0	
Cl CCV	40.8612	0.701	4/27/2012 10:54		
Cl CCB	0.7480	0.015	4/27/2012 10:54		
1204497-09ms	155.2909	1.218	4/27/2012 10:54	1+1.0	
1204497-09msd	154.2866	1.211	4/27/2012 10:54	1+1.0	
1204497-10	348.5740	1.115	4/27/2012 10:54	1+4.0	
1204497-11	133.7740	1.078	4/27/2012 11:00	1+1.0	
1204497-12	114.7352	0.946	4/27/2012 11:00	1+1.0	
1204497-13	101.4300	0.850	4/27/2012 11:00	1+1.0	
1204498-01		1.591	- Dilute	1+4.0	
1204498-02	326.3820	1.056	4/27/2012 11:00	1+4.0	
Cl CCV	40.7772	0.699	4/27/2012 11:01		
Cl CCB	0.4631	0.009	4/27/2012 11:01		
cl 20	20.8624	0.374	4/27/2012 11:09		
cl 75	77.4818	1.216	4/27/2012 11:09		
1204498-01	556.4891	0.921	4/27/2012 11:10	1+9.0	
Cl CCV	40.7956	0.700	4/27/2012 11:11		
Cl CCB	0.5313	0.011	4/27/2012 11:11		

TriMatrix Laboratories, Inc.

TechLaw

Project: KNM

SDG: KNM040512

SM 4500-NH3 G 20th

02400

SAMPLE ID SUMMARY

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

SDG: KNM040512

Project: KNM

Client Sample Id:	Lab Sample Id:
KAFB-003	1204091-01
106042	1204205-01
106089	1204205-02
106058	1204329-01
106053	1204454-01
106054	1204454-02

02401

INORGANIC ANALYSIS DATA SHEET

SM 4500-NH3 G 20th

KAFB-003

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/04/12 13:31
Solids: 0.00
QC Batch: 1204384

SDG: KNM040512
Project: KNM
Laboratory ID: 1204091-01
Prepared: 04/09/12 08:00
Preparation: Method-Specific Preparation
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.050	mg/L	0.0049	0.050	U	04/09/12 14:02

INORGANIC ANALYSIS DATA SHEET

SM 4500-NH3 G 20th

106042

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/10/12 13:48
Solids: 0.00
QC Batch: 1204549

SDG: KNM040512
Project: KNM
Laboratory ID: 1204205-01
Prepared: 04/12/12 09:18
Preparation: Method-Specific Preparation
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.050	mg/L	0.0049	0.050	U	04/12/12 13:44

02403

INORGANIC ANALYSIS DATA SHEET

SM 4500-NH3 G 20th

106089

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/10/12 14:45
Solids: 0.00
QC Batch: 1204549

SDG: KNM040512
Project: KNM
Laboratory ID: 1204205-02
Prepared: 04/12/12 09:18
Preparation: Method-Specific Preparation
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.050	mg/L	0.0049	0.050	U	04/12/12 13:53

02404

INORGANIC ANALYSIS DATA SHEET

SM 4500-NH3 G 20th

106058

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/17/12 12:31
Solids: 0.00
QC Batch: 1204855

SDG: KNM040512
Project: KNM
Laboratory ID: 1204329-01
Prepared: 04/19/12 09:00
Preparation: Method-Specific Preparation
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.050	mg/L	0.0049	0.050	U	04/19/12 14:01

INORGANIC ANALYSIS DATA SHEET

SM 4500-NH3 G 20th

106053

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/24/12 10:20
Solids: 0.00
QC Batch: 1205224

SDG: KNM040512
Project: KNM
Laboratory ID: 1204454-01
Prepared: 04/26/12 09:18
Preparation: Method-Specific Preparation
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.050	mg/L	0.0049	0.050	U	04/26/12 14:34

02406

INORGANIC ANALYSIS DATA SHEET

SM 4500-NH3 G 20th

106054

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/24/12 13:30
Solids: 0.00
QC Batch: 1205224

SDG: KNM040512
Project: KNM
Laboratory ID: 1204454-02
Prepared: 04/26/12 09:18
Preparation: Method-Specific Preparation
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.027	mg/L	0.0049	0.050	J	04/26/12 14:34

02407

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D11027

SDG: KNM040512

Project: KNM

Calibration: 2D11006

Instrument: 303

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2D11027-CAL1	040912nh3m-001	04/09/12 10:19
Cal Standard	2D11027-CAL2	040912nh3m-002	04/09/12 10:19
Cal Standard	2D11027-CAL3	040912nh3m-003	04/09/12 10:19
Cal Standard	2D11027-CAL4	040912nh3m-004	04/09/12 10:19
Cal Standard	2D11027-CAL5	040912nh3m-005	04/09/12 10:19
Cal Standard	2D11027-CAL6	040912nh3m-006	04/09/12 10:19
Cal Standard	2D11027-CAL7	040912nh3m-007	04/09/12 10:19
Calibration Check	2D11027-CCV1	040912nh3m-008	04/09/12 10:45
Calibration Blank	2D11027-CCB1	040912nh3m-009	04/09/12 10:45
Instrument RL Check	2D11027-CRL1	040912nh3m-010	04/09/12 10:45
Secondary Cal Check	2D11027-SCV1	040912nh3m-011	04/09/12 10:45
Blank	1204384-BLK1	040912nh3m-013	04/09/12 10:45
LCS	1204384-BS1	040912nh3m-014	04/09/12 10:45
Calibration Check	2D11027-CCV2	040912nh3m-061	04/09/12 13:53
Calibration Blank	2D11027-CCB2	040912nh3m-062	04/09/12 13:53
KAFB-003	1204091-01	040912nh3m-068	04/09/12 14:02
KAFB-003	1204384-MS1	040912nh3m-069	04/09/12 14:02
KAFB-003	1204384-MSD1	040912nh3m-070	04/09/12 14:02
Calibration Check	2D11027-CCV3	040912nh3m-073	04/09/12 14:02
Calibration Blank	2D11027-CCB3	040912nh3m-074	04/09/12 14:02

02408

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D18052

SDG: KNM040512

Project: KNM

Calibration: 2D18012

Instrument: 303

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2D18052-CAL1	041212nh3m-007	04/12/12 12:08
Cal Standard	2D18052-CAL2	041212nh3m-003	04/12/12 12:08
Cal Standard	2D18052-CAL3	041212nh3m-006	04/12/12 12:08
Cal Standard	2D18052-CAL4	041212nh3m-004	04/12/12 12:08
Cal Standard	2D18052-CAL5	041212nh3m-005	04/12/12 12:08
Cal Standard	2D18052-CAL6	041212nh3m-002	04/12/12 12:08
Cal Standard	2D18052-CAL7	041212nh3m-001	04/12/12 12:08
Calibration Check	2D18052-CCV1	041212nh3m-008	04/12/12 12:27
Calibration Blank	2D18052-CCB1	041212nh3m-009	04/12/12 12:27
Instrument RL Check	2D18052-CRL1	041212nh3m-010	04/12/12 12:27
Secondary Cal Check	2D18052-SCV1	041212nh3m-011	04/12/12 12:27
Blank	1204549-BLK1	041212nh3m-018	04/12/12 12:51
LCS	1204549-BS1	041212nh3m-020	04/12/12 12:51
Calibration Check	2D18052-CCV2	041212nh3m-050	04/12/12 13:44
Calibration Blank	2D18052-CCB2	041212nh3m-051	04/12/12 13:44
106042	1204205-01	041212nh3m-061	04/12/12 13:44
106042	1204549-MS1	041212nh3m-064	04/12/12 13:53
106042	1204549-MSD1	041212nh3m-065	04/12/12 13:53
106089	1204205-02	041212nh3m-066	04/12/12 13:53
Calibration Check	2D18052-CCV3	041212nh3m-074	04/12/12 14:00
Calibration Blank	2D18052-CCB3	041212nh3m-075	04/12/12 14:00

02409

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D26037

SDG: KNM040512
Project: KNM
Calibration: 2D26006
Instrument: 303

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2D26037-CAL1	041912nh3m-006	04/19/12 11:23
Cal Standard	2D26037-CAL2	041912nh3m-007	04/19/12 11:23
Cal Standard	2D26037-CAL3	041912nh3m-005	04/19/12 11:23
Cal Standard	2D26037-CAL4	041912nh3m-004	04/19/12 11:23
Cal Standard	2D26037-CAL5	041912nh3m-003	04/19/12 11:23
Cal Standard	2D26037-CAL6	041912nh3m-001	04/19/12 11:23
Cal Standard	2D26037-CAL7	041912nh3m-002	04/19/12 11:23
Calibration Check	2D26037-CCV1	041912nh3m-008	04/19/12 11:46
Calibration Blank	2D26037-CCB1	041912nh3m-009	04/19/12 11:46
Instrument RL Check	2D26037-CRL1	041912nh3m-010	04/19/12 11:46
Blank	1204855-BLK1	041912nh3m-014	04/19/12 11:46
LCS	1204855-BS1	041912nh3m-016	04/19/12 11:46
Secondary Cal Check	2D26037-SCV1	041912nh3m-027	04/19/12 12:02
Calibration Check	2D26037-CCV2	041912nh3m-028	04/19/12 12:05
Calibration Blank	2D26037-CCB2	041912nh3m-029	04/19/12 12:05
Calibration Check	2D26037-CCV3	041912nh3m-070	04/19/12 14:01
Calibration Blank	2D26037-CCB3	041912nh3m-071	04/19/12 14:01
106058	1204329-01	041912nh3m-072	04/19/12 14:01
106058	1204855-MS1	041912nh3m-073	04/19/12 14:01
106058	1204855-MSD1	041912nh3m-074	04/19/12 14:01
Calibration Check	2D26037-CCV4	041912nh3m-081	04/19/12 14:10
Calibration Blank	2D26037-CCB4	041912nh3m-082	04/19/12 14:10

02410

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2E08053

SDG: KNM040512

Project: KNM

Calibration: 2E08019

Instrument: 303

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2E08053-CAL1	042612nh3am-001	04/26/12 09:23
Cal Standard	2E08053-CAL2	042612nh3am-002	04/26/12 09:23
Cal Standard	2E08053-CAL3	042612nh3am-003	04/26/12 09:23
Cal Standard	2E08053-CAL4	042612nh3am-004	04/26/12 09:23
Cal Standard	2E08053-CAL5	042612nh3am-005	04/26/12 09:23
Cal Standard	2E08053-CAL6	042612nh3am-006	04/26/12 09:23
Cal Standard	2E08053-CAL7	042612nh3am-007	04/26/12 09:23
Calibration Check	2E08053-CCV1	042612nh3am-008	04/26/12 09:51
Calibration Blank	2E08053-CCB1	042612nh3am-009	04/26/12 09:51
Secondary Cal Check	2E08053-SCV1	042612nh3am-010	04/26/12 09:51
Blank	1205224-BLK1	042612nh3am-016	04/26/12 09:51
LCS	1205224-BS1	042612nh3am-022	04/26/12 09:58
Calibration Check	2E08053-CCV2	042612nh3am-073	04/26/12 11:55
Calibration Blank	2E08053-CCB2	042612nh3am-074	04/26/12 11:55
Instrument RL Check	2E08053-CRL1	042612nh3am-075	04/26/12 11:55
Calibration Check	2E08053-CCV3	042612nh3am-138	04/26/12 14:20
Calibration Blank	2E08053-CCB3	042612nh3am-139	04/26/12 14:20
106053	1204454-01	042612nh3am-145	04/26/12 14:34
106054	1204454-02	042612nh3am-146	04/26/12 14:34
106054	1205224-MS1	042612nh3am-147	04/26/12 14:34
106054	1205224-MSD1	042612nh3am-148	04/26/12 14:34
Calibration Check	2E08053-CCV4	042612nh3am-150	04/26/12 14:41
Calibration Blank	2E08053-CCB4	042612nh3am-151	04/26/12 14:41

02411

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D11027
Control Limt: +/- 10.00%

SDG: KNM040512
Project: KNM
Calibration: 2D11006
Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D11027-CCV1	Nitrogen, Ammonia	1.00	0.948	95	mg/L	04/09/12 10:45
2D11027-CCV2	Nitrogen, Ammonia	1.00	1.00	100	mg/L	04/09/12 13:53
2D11027-CCV3	Nitrogen, Ammonia	1.00	0.978	98	mg/L	04/09/12 14:02

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D18052
Control Limt: +/- 10.00%

SDG: KNM040512
Project: KNM
Calibration: 2D18012
Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D18052-CCV1	Nitrogen, Ammonia	1.00	0.996	100	mg/L	04/12/12 12:27
2D18052-CCV2	Nitrogen, Ammonia	1.00	0.949	95	mg/L	04/12/12 13:44
2D18052-CCV3	Nitrogen, Ammonia	1.00	0.973	97	mg/L	04/12/12 14:00

* Values outside of QC limits

02413

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Sequence: 2D26037
Calibration: 2D26006
Control Limt: +/- 10.00%
Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D26037-CCV1	Nitrogen, Ammonia	1.00	0.938	94	mg/L	04/19/12 11:46
2D26037-CCV2	Nitrogen, Ammonia	1.00	0.986	99	mg/L	04/19/12 12:05
2D26037-CCV3	Nitrogen, Ammonia	1.00	0.954	95	mg/L	04/19/12 14:01
2D26037-CCV4	Nitrogen, Ammonia	1.00	0.967	97	mg/L	04/19/12 14:10

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2E08053
Control Limt: +/- 10.00%

SDG: KNM040512
Project: KNM
Calibration: 2E08019
Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2E08053-CCV1	Nitrogen, Ammonia	1.00	0.961	96	mg/L	04/26/12 09:51
2E08053-CCV2	Nitrogen, Ammonia	1.00	0.985	99	mg/L	04/26/12 11:55
2E08053-CCV3	Nitrogen, Ammonia	1.00	1.06	106	mg/L	04/26/12 14:20
2E08053-CCV4	Nitrogen, Ammonia	1.00	1.08	108	mg/L	04/26/12 14:41

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D11027-SCV1
Sequence: 2D11027

SDG: KNM040512
Project: KNM
Instrument: 303
Calibration: 2D11006

Analyte	Expected	Found	% R	QC Limit	Units
Nitrogen, Ammonia	1.00	0.982	98	90-110	mg/L

* Values outside of QC limits

02416

SECOND-SOURCE CALIBRATION VERIFICATION

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Laboratory ID: 2D18052-SCV1

Sequence: 2D18052

SDG: KNM040512

Project: KNM

Instrument: 303

Calibration: 2D18012

Analyte	Expected	Found	% R	QC Limit	Units
Nitrogen, Ammonia	1.00	1.02	102	90-110	mg/L

* Values outside of QC limits

02417

SECOND-SOURCE CALIBRATION VERIFICATION

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Laboratory ID: 2D26037-SCV1
Instrument: 303
Sequence: 2D26037
Calibration: 2D26006

Analyte	Expected	Found	% R	QC Limit	Units
Nitrogen, Ammonia	1.00	1.08	108	90-110	mg/L

* Values outside of QC limits

02418

SECOND-SOURCE CALIBRATION VERIFICATION

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2E08053-SCV1
Sequence: 2E08053

SDG: KNM040512
Project: KNM
Instrument: 303
Calibration: 2E08019

Analyte	Expected	Found	% R	QC Limit	Units
Nitrogen, Ammonia	1.00	1.06	106	90-110	mg/L

* Values outside of QC limits

CRDL STANDARD

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D11027

SDG: KNM040512

Project: KNM

Calibration: 2D11006

Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2D11027-CRL1	Nitrogen, Ammonia	0.0100	0.0144	144	mg/L	50 - 150

* Values outside of QC limits

02420

CRDL STANDARD

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D18052

SDG: KNM040512

Project: KNM

Calibration: 2D18012

Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2D18052-CRL1	Nitrogen, Ammonia	0.0100	0.0115	115	mg/L	50 - 150

* Values outside of QC limits

02421

CRDL STANDARD

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D26037

SDG: KNM040512

Project: KNM

Calibration: 2D26006

Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2D26037-CRL1	Nitrogen, Ammonia	0.0100	0.00650	65	mg/L	50 - 150

* Values outside of QC limits

02422

CRDL STANDARD

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2E08053

SDG: KNM040512

Project: KNM

Calibration: 2E08019

Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2E08053-CRL1	Nitrogen, Ammonia	0.0100	0.0109	109	mg/L	50 - 150

* Values outside of QC limits

02423

BLANKS
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D11027

SDG: KNM040512
Project: KNM
Calibration: 2D11006
Instrument ID: 303

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2D11027-CCB1	Nitrogen, Ammonia	-0.0085	mg/L	0.0049	0.050	J	04/09/12 10:45
2D11027-CCB2	Nitrogen, Ammonia	-0.012	mg/L	0.0049	0.050	J	04/09/12 13:53
2D11027-CCB3	Nitrogen, Ammonia	-0.0088	mg/L	0.0049	0.050	J	04/09/12 14:02

* Values outside of QC limits

BLANKS
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D18052

SDG: KNM040512
Project: KNM
Calibration: 2D18012
Instrument ID: 303

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2D18052-CCB1	Nitrogen, Ammonia	-0.018	mg/L	0.0049	0.050	J	04/12/12 12:27
2D18052-CCB2	Nitrogen, Ammonia	-0.015	mg/L	0.0049	0.050	J	04/12/12 13:44
2D18052-CCB3	Nitrogen, Ammonia	-0.016	mg/L	0.0049	0.050	J	04/12/12 14:00

* Values outside of QC limits

BLANKS
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D26037

SDG: KNM040512
Project: KNM
Calibration: 2D26006
Instrument ID: 303

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2D26037-CCB1	Nitrogen, Ammonia	-0.0055	mg/L	0.0049	0.050	J	04/19/12 11:46
2D26037-CCB2	Nitrogen, Ammonia	-0.0064	mg/L	0.0049	0.050	J	04/19/12 12:05
2D26037-CCB3	Nitrogen, Ammonia	-0.0044	mg/L	0.0049	0.050	U	04/19/12 14:01
2D26037-CCB4	Nitrogen, Ammonia	0.0061	mg/L	0.0049	0.050	J	04/19/12 14:10

* Values outside of QC limits

02426

BLANKS
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2E08053

SDG: KNM040512
Project: KNM
Calibration: 2E08019
Instrument ID: 303

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2E08053-CCB1	Nitrogen, Ammonia	-0.00097	mg/L	0.0049	0.050	U	04/26/12 09:51
2E08053-CCB2	Nitrogen, Ammonia	0.00036	mg/L	0.0049	0.050	U	04/26/12 11:55
2E08053-CCB3	Nitrogen, Ammonia	0.0034	mg/L	0.0049	0.050	U	04/26/12 14:20
2E08053-CCB4	Nitrogen, Ammonia	-0.00091	mg/L	0.0049	0.050	U	04/26/12 14:41

* Values outside of QC limits

QC BATCH SUMMARY

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204384 QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
KAFB-003	1204091-01	04/09/12 08:00	
Blank	1204384-BLK1	04/09/12 08:00	
LCS	1204384-BS1	04/09/12 08:00	
KAFB-003	1204384-MS1	04/09/12 08:00	
KAFB-003	1204384-MSD1	04/09/12 08:00	

02428

QC BATCH SUMMARY

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204549 QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
106042	1204205-01	04/12/12 09:18	
106089	1204205-02	04/12/12 09:18	
Blank	1204549-BLK1	04/12/12 09:18	
LCS	1204549-BS1	04/12/12 09:18	
106042	1204549-MS1	04/12/12 09:18	
106042	1204549-MSD1	04/12/12 09:18	

02429

QC BATCH SUMMARY

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204855

QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
106058	1204329-01	04/19/12 09:00	
Blank	1204855-BLK1	04/19/12 09:00	
LCS	1204855-BS1	04/19/12 09:00	
106058	1204855-MS1	04/19/12 09:00	
106058	1204855-MSD1	04/19/12 09:00	

02430

QC BATCH SUMMARY

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1205224

QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
106053	1204454-01	04/26/12 09:18	
106054	1204454-02	04/26/12 09:18	
Blank	1205224-BLK1	04/26/12 09:18	
LCS	1205224-BS1	04/26/12 09:18	
106054	1205224-MS1	04/26/12 09:18	
106054	1205224-MSD1	04/26/12 09:18	

02431

METHOD BLANK DATA SHEET
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204384-BLK1
File ID: 040912nh3m-013
Prepared: 04/09/12 08:00
Analyzed: 04/09/12 10:45
Preparation: Method-Specific Preparat
Initial/Final: 10 mL / 10 mL
QC Batch: 1204384
Sequence: 2D11027
Calibration: 2D11006
Instrument: 303

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7664-41-7	Nitrogen, Ammonia	0.0059	mg/L	0.0049	0.050	J

METHOD BLANK DATA SHEET
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204549-BLK1
File ID: 041212nh3m-018
Prepared: 04/12/12 09:18
Analyzed: 04/12/12 12:51
Preparation: Method-Specific Preparat
Initial/Final: 10 mL / 10 mL
QC Batch: 1204549
Sequence: 2D18052
Calibration: 2D18012
Instrument: 303

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7664-41-7	Nitrogen, Ammonia	0.050	mg/L	0.0049	0.050	U

METHOD BLANK DATA SHEET
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204855-BLK1
File ID: 041912nh3m-014
Prepared: 04/19/12 09:00
Analyzed: 04/19/12 11:46
Preparation: Method-Specific Preparat
Initial/Final: 10 mL / 10 mL
QC Batch: 1204855
Sequence: 2D26037
Calibration: 2D26006
Instrument: 303

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7664-41-7	Nitrogen, Ammonia	0.050	mg/L	0.0049	0.050	U

02434

METHOD BLANK DATA SHEET
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1205224-BLK1
File ID: 042612nh3am-016
Prepared: 04/26/12 09:18
Analyzed: 04/26/12 09:51
Preparation: Method-Specific Preparat
Initial/Final: 10 mL / 10 mL
QC Batch: 1205224
Sequence: 2E08053
Calibration: 2E08019
Instrument: 303

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7664-41-7	Nitrogen, Ammonia	0.050	mg/L	0.0049	0.050	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

KAFB-003

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204384

SDG: KNM040512

Project: KNM

Laboratory ID: 1204384-MS1

Preparation: Method-Specific Preparation

Initial/Final: 20 mL / 20 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	ND	0.496	99	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02436

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

KAFB-003

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204384

SDG: KNM040512

Project: KNM

Laboratory ID: 1204384-MSD1

Preparation: Method-Specific Preparation

Initial/Final: 20 mL / 20 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.502	100	1	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106042

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204549

SDG: KNM040512

Project: KNM

Laboratory ID: 1204549-MS1

Preparation: Method-Specific Preparation

Initial/Final: 20 mL / 20 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	ND	0.476	95	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02438

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106042

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204549

SDG: KNM040512

Project: KNM

Laboratory ID: 1204549-MSD1

Preparation: Method-Specific Preparation

Initial/Final: 20 mL / 20 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.466	93	2	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02439

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106058

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204855

SDG: KNM040512

Project: KNM

Laboratory ID: 1204855-MS1

Preparation: Method-Specific Preparation

Initial/Final: 20 mL / 20 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	ND	0.492	98	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02440

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106058

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204855

SDG: KNM040512

Project: KNM

Laboratory ID: 1204855-MSD1

Preparation: Method-Specific Preparation

Initial/Final: 20 mL / 20 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.509	102	3	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02441

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106054

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205224

SDG: KNM040512

Project: KNM

Laboratory ID: 1205224-MS1

Preparation: Method-Specific Preparation

Initial/Final: 20 mL / 20 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.0271	0.523	99	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106054

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205224

SDG: KNM040512

Project: KNM

Laboratory ID: 1205224-MSD1

Preparation: Method-Specific Preparation

Initial/Final: 20 mL / 20 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.499	94	5	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204384

SDG: KNM040512

Project: KNM

Laboratory ID: 1204384-BS1

Preparation: Method-Specific Preparation

Initial/Final: 20 mL / 20 mL

Sequence: 2D11027

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.471	94	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204549

SDG: KNM040512

Project: KNM

Laboratory ID: 1204549-BS1

Preparation: Method-Specific Preparation

Initial/Final: 20 mL / 20 mL

Sequence: 2D18052

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.509	102	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204855

SDG: KNM040512

Project: KNM

Laboratory ID: 1204855-BS1

Preparation: Method-Specific Preparation

Initial/Final: 20 mL / 20 mL

Sequence: 2D26037

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.500	100	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205224

SDG: KNM040512

Project: KNM

Laboratory ID: 1205224-BS1

Preparation: Method-Specific Preparation

Initial/Final: 20 mL / 20 mL

Sequence: 2E08053

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.514	103	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

HOLDING TIME SUMMARY

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

Analyte: Nitrogen, Ammonia

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
KAFB-003	04/04/12	04/05/12		04/09/12	5	NA	04/09/12	5	28	
106042	04/10/12	04/11/12		04/12/12	2	NA	04/12/12	2	28	
106089	04/10/12	04/11/12		04/12/12	2	NA	04/12/12	2	28	
106058	04/17/12	04/18/12		04/19/12	2	NA	04/19/12	2	28	
106053	04/24/12	04/25/12		04/26/12	2	NA	04/26/12	2	28	
106054	04/24/12	04/25/12		04/26/12	2	NA	04/26/12	2	28	

Inorganic - Wet Chemistry, Water, Apr-09-12

Instrument = 303, Calibration = 2D11006

Sequence Analyses:
Nitrogen, Ammonia 4500-NH3 G

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D11027-CAL1	QC		2040330		CAL STANDARD	
2D11027-CAL2	QC		2040329		CAL STANDARD	
2D11027-CAL3	QC		2040328		CAL STANDARD	
2D11027-CAL4	QC		2040327		CAL STANDARD	
2D11027-CAL5	QC		2040326		CAL STANDARD	
2D11027-CAL6	QC		2040325		CAL STANDARD	
2D11027-CAL7	QC		2040324		CAL STANDARD	
2D11027-CCV1	QC		2040325		CALIBRATION CHECK	
2D11027-CCB1	QC				CALIBRATION BLANK	
2D11027-CRL1	QC		2040329		INSTRUMENT RL CHECK	
2D11027-SCV1	QC		2040459		SECONDARY CAL CHECK	
1204384-BLK1	QC				BLANK	
1204384-BS1	QC				LCS	
2D11027-CCV2	QC		2040325		CALIBRATION CHECK	
2D11027-CCB2	QC				CALIBRATION BLANK	
1204091-01	Nitrogen, Ammonia 4500-NH3 G	K			TechLaw	
1204384-MS1	QC				MATRIX SPIKE	
1204384-MSD1	QC				MATRIX SPIKE DUP	
2D11027-CCV3	QC		2040325		CALIBRATION CHECK	
2D11027-CCB3	QC		2020381		CALIBRATION BLANK	

Comments:	Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1204384

Printed: 4/11/2012 10:12:20AM

QC'd by LW 4/12/12

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

due 4-18-12 LW

Standard	Description	Solvent	LotNum
2040038	Ammonia-1M NAOH	na	na
2040039	Ammonia-Buffer	na	na
2040317	Ammonia-Bleach Reagent	DI H2O	K38505
2040318	Ammonia-Carrier 0.038M H2SO4	diH2O	116298
2040319	Ammonia-Sodium Nitroprusside	DI H2O	104219
2040320	Ammonia-Sodium Phenolate	DI H2O	na
2040321	Ammonia 100mg/L	2040318	H28604

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204091	Nitrogen, Ammonia 4500-NH3 G				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1204384-BLK1		Apr-09-12 08:00	CLB	10	10					BLANK	
1204384-BS1		Apr-09-12 08:00	CLB	20	20			2040321	100	LCS	
1204384-MS1		Apr-09-12 08:00	CLB	20	20		1204091-01	2040321	100	MATRIX SPIKE	
1204384-MSD1		Apr-09-12 08:00	CLB	20	20		1204091-01	2040321	100	MATRIX SPIKE DUP	
1204091-01	K	Apr-09-12 08:00	CLB	10	10					TechLaw	

Comments:

Analyst Initials:

bch_TriMatrix.rpt

Laboratory inst#303
Konelab User

09.04.2012 14:33

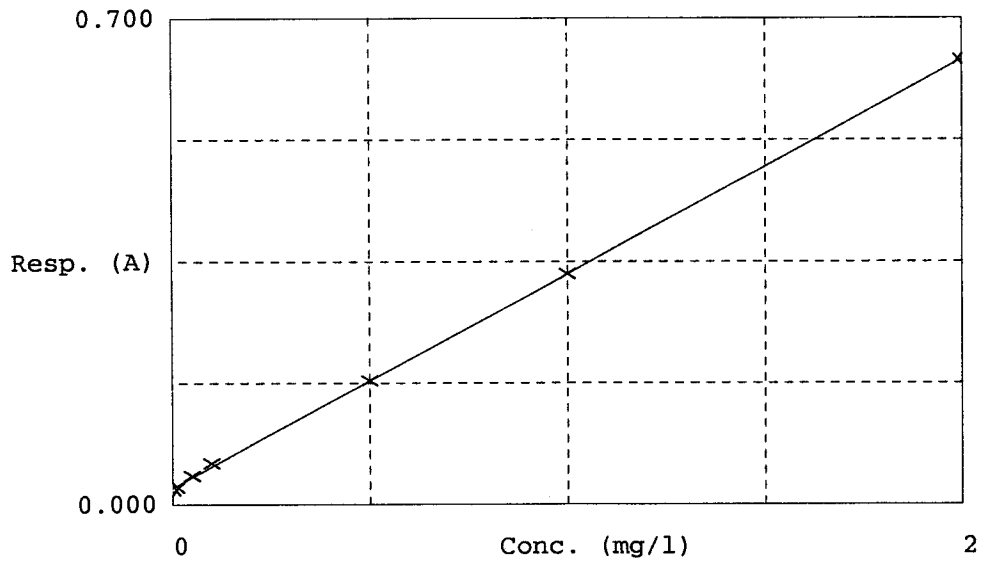
Test Ammonia

Accepted 09.04.2012 10:23

Factor 3.246
Bias 0.025

Coeff. of det. 0.999852

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	NH3- 0	0.021	-0.01208	0.00000	
2	NH3- .01	0.025	0.00098	0.01000	
3	NH3- .05	0.042	0.05681	0.05000	
4	NH3- .1	0.060	0.11477	0.10000	
5	NH3- .5	0.179	0.49989	0.50000	
6	NH3- 1	0.333	1.00094	1.00000	
7	NH3- 2	0.640	1.99869	2.00000	

Laboratory inst#303
Konelab User

Date : 2012-04-09
Time : 15.58

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
NH3 CCV	0.9476	0.317	2012-04-09 10.45		
NH3 CCB	-0.0085	0.022	2012-04-09 10.45		
crdl	0.0144	0.029	2012-04-09 10.45		
scv	0.9816	0.327	2012-04-09 10.45		
blk ww	0.0025	0.025	2012-04-09 10.45		
blk w 1	0.0059	0.026	2012-04-09 10.45		
bs 1	0.4709	0.170	2012-04-09 10.45		
bs 2	0.4899	0.175	2012-04-09 10.45		
sll cert 1	0.9179	0.307	2012-04-09 10.45		
sll cert 2	0.9120	0.306	2012-04-09 10.45		
NH3 CCV	0.9749	0.325	2012-04-09 10.50		
NH3 CCB	-0.0091	0.022	2012-04-09 10.50		
25 ppm 1+49	22.8431	0.165	2012-04-09 10.58	1+49.0	
25 ppm 1+49	23.8466	0.318	2012-04-09 10.58	1+24.0	
10 ppm 1+9	9.4642	0.316	2012-04-09 10.58	1+9.0	
2 ppm 1+4	1.8451	0.138	2012-04-09 10.58	1+4.0	
2 ppm 1+4	1.9120	0.319	2012-04-09 10.58	1+1.0	
NH3 CCV	0.9659	0.322	2012-04-09 10.59		
NH3 CCB	-0.0045	0.023	2012-04-09 10.59		
blk 2	-0.0111	0.021	2012-04-09 11.03		
sll cert 4	0.9505	0.317	2012-04-09 11.09		
NH3 CCV	0.9699	0.323	2012-04-09 11.12		
NH3 CCB	-0.0066	0.022	2012-04-09 11.12		
bs ww	0.9994	0.332	2012-04-09 11.19		
sll cert 3	0.9385	0.314	2012-04-09 11.30		
NH3 CCV	0.9700	0.323	2012-04-09 11.33		
NH3 CCB	-0.0075	0.022	2012-04-09 11.33		
NH3 CCV	0.9443	0.315	2012-04-09 13.01		
NH3 CCB	-0.0143	0.020	2012-04-09 13.01		
NH3 CCV	0.9460	0.316	2012-04-09 13.20		
NH3 CCB	-0.0131	0.020	2012-04-09 13.20		
1204119-11	-0.0069	0.022	2012-04-09 13.20		
1204119-12	1.1463	0.378	2012-04-09 13.20		
1204119-13	-0.0096	0.022	2012-04-09 13.20		
1204122-02	0.7644	0.260	2012-04-09 13.20		
1204122-03	0.2954	0.116	2012-04-09 13.20		
1204122-04	0.1303	0.065	2012-04-09 13.20		
1204122-05	0.4336	0.158	2012-04-09 13.20		
NH3 CCV	0.9433	0.315	2012-04-09 13.29		
NH3 CCB	-0.0108	0.021	2012-04-09 13.29		
1204064-01	0.0502	0.040	2012-04-09 13.29		
1204064-01 ms	0.9598	0.320	2012-04-09 13.29		
1204064-01 msd	0.9355	0.313	2012-04-09 13.29		
1204068-02	0.5006	0.179	2012-04-09 13.29		
1204122-06	0.3726	0.139	2012-04-09 13.29		
1204122-07	0.7718	0.262	2012-04-09 13.29		
1204122-08	0.3987	0.147	2012-04-09 13.29		
1204122-09	0.3098	0.120	2012-04-09 13.29		
1204122-10	0.3643	0.137	2012-04-09 13.29		
1204140-01	-0.0078	0.022	2012-04-09 13.29		
NH3 CCV	0.9921	0.330	2012-04-09 13.36		
NH3 CCB	-0.0112	0.021	2012-04-09 13.36		
1204074-01	14.6123	0.475	2012-04-09 13.50	1+9.0	

Laboratory inst#303
Konelab User

Date : 2012-04-09
Time : 15.58

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
NH3 CCV 2	1.0011	0.333	2012-04-09 13.53		
NH3 CCB 2	-0.0122	0.021	2012-04-09 13.53		
1204086-01	0.1057	0.057	2012-04-09 14.02		
1204097-01	0.0708	0.046	2012-04-09 14.02		
1204097-02	0.3194	0.123	2012-04-09 14.02		
1204097-03	0.0563	0.042	2012-04-09 14.02		
1204099-02	0.2385	0.098	2012-04-09 14.02		
1204091-01	-0.0019	0.024	2012-04-09 14.02		
1204091-01 ms	0.4957	0.177	2012-04-09 14.02		
1204091-01 msd	0.5021	0.179	2012-04-09 14.02		
1204119-01	-0.0075	0.022	2012-04-09 14.02		
1204119-03	-0.0071	0.022	2012-04-09 14.02		
NH3 CCV 3	0.9780	0.326	2012-04-09 14.02		
NH3 CCB 3	-0.0089	0.022	2012-04-09 14.02		
1204119-04	-0.0034	0.023	2012-04-09 14.11		
1204119-04 ms	0.4693	0.169	2012-04-09 14.11		
1204119-04 msd	0.4672	0.168	2012-04-09 14.11		
1204119-05	0.0048	0.026	2012-04-09 14.11		
1204119-06	-0.0031	0.024	2012-04-09 14.11		
1204119-07	0.0271	0.033	2012-04-09 14.11		
1204119-08	0.0401	0.037	2012-04-09 14.11		
1204119-09	0.0103	0.028	2012-04-09 14.11		
1204119-10	0.0716	0.047	2012-04-09 14.11		
1204122-01	0.3661	0.137	2012-04-09 14.11		
NH3 CCV	1.0085	0.335	2012-04-09 14.11		
NH3 CCB	-0.0092	0.022	2012-04-09 14.11		
1204122-01 ms	0.8565	0.288	2012-04-09 14.18		
1204122-01 msd	0.8654	0.291	2012-04-09 14.18		
1204140-03	-0.0039	0.023	2012-04-09 14.18		
1204140-04	0.1345	0.066	2012-04-09 14.18		
1204140-05	0.1315	0.065	2012-04-09 14.18		
1204140-06	1.9338	0.620	2012-04-09 14.18		
1204140-07	-0.0058	0.023	2012-04-09 14.18		
1204054-01	2.2883	0.377	2012-04-09 14.27	1+1.0	
1204072-01	2.0441	0.339	2012-04-09 14.27	1+1.0	
NH3 CCV	1.0040	0.334	2012-04-09 14.27		
NH3 CCB	-0.0066	0.023	2012-04-09 14.27		
1204098-01	15.1850	0.492	2012-04-09 14.27	1+9.0	
1204140-02	2.0858	0.346	2012-04-09 14.27	1+1.0	
1204074-02	18.0907	0.248	2012-04-09 14.32	1+24.0	
1204076-01	38.6077	0.500	2012-04-09 14.32	1+24.0	
NH3 CCV	0.9948	0.331	2012-04-09 14.35		
NH3 CCB	0.0083	0.027	2012-04-09 14.35		
1204085-01 100x	312.7018	0.217	2012-04-09 14.37	1+4.0	1+99.0
NH3 CCV	1.0738	0.355	2012-04-09 14.41		
NH3 CCB	-0.0114	0.021	2012-04-09 14.41		
NH3 CCV	0.9581	0.320	2012-04-09 15.14		
NH3 CCB	-0.0112	0.021	2012-04-09 15.14		
blk s	0.0128	0.028	2012-04-09 15.14		
sll soil cert 1	0.9394	0.314	2012-04-09 15.14		
sll soil cert 2	0.9194	0.308	2012-04-09 15.14		
bsd soil	0.9115	0.305	2012-04-09 15.14		
1204144-01	0.5467	0.193	2012-04-09 15.14		

Laboratory inst#303
Konelab User

Date : 2012-04-09
Time : 15.58

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204144-02	0.5124	0.182	2012-04-09 15.14		
1204144-03	0.5984	0.209	2012-04-09 15.14		
NH3 CCV	0.9896	0.329	2012-04-09 15.21		
NH3 CCB	0.0066	0.027	2012-04-09 15.21		
1204144-08	0.7327	0.250	2012-04-09 15.21		
1204144-04	0.5870	0.205	2012-04-09 15.21		
1204144-05	0.7460	0.254	2012-04-09 15.21		
1204144-06	0.9294	0.311	2012-04-09 15.21		
1204144-07	0.6332	0.220	2012-04-09 15.21		
NH3 CCV	1.0095	0.336	2012-04-09 15.24		
NH3 CCB	-0.0095	0.022	2012-04-09 15.24		
sll soil cert 3	0.9239	0.309	2012-04-09 15.34		
sll soil cert 4	0.9691	0.323	2012-04-09 15.34		
NH3 CCV	1.0073	0.335	2012-04-09 15.39		
NH3 CCB	-0.0136	0.020	2012-04-09 15.39		
bs s	1.0059	0.334	2012-04-09 15.49		
bs s	0.9580	0.320	2012-04-09 15.53		
NH3 CCV	1.0414	0.345	2012-04-09 15.57		
NH3 CCB	-0.0112	0.021	2012-04-09 15.57		

Inorganic - Wet Chemistry, Water, Apr-12-12

Instrument = 303, Calibration = 2D18012

Sequence Analyses:
Nitrogen, Ammonia 4500-NH3 G

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D18052-CAL1	QC		2040330		CAL STANDARD	
2D18052-CAL2	QC		2040329		CAL STANDARD	
2D18052-CAL3	QC		2040328		CAL STANDARD	
2D18052-CAL4	QC		2040327		CAL STANDARD	
2D18052-CAL5	QC		2040326		CAL STANDARD	
2D18052-CAL6	QC		2040325		CAL STANDARD	
2D18052-CAL7	QC		2040324		CAL STANDARD	
2D18052-CCV1	QC		2040325		CALIBRATION CHECK	
2D18052-CCB1	QC				CALIBRATION BLANK	
2D18052-CRL1	QC		2040329		INSTRUMENT RL CHECK	
2D18052-SCV1	QC		2040709		SECONDARY CAL CHECK	
1204549-BLK1	QC				BLANK	
1204549-BS1	QC				LCS	
2D18052-CCV2	QC		2040325		CALIBRATION CHECK	
2D18052-CCB2	QC				CALIBRATION BLANK	
1204205-01	Nitrogen, Ammonia 4500-NH3 G	K			TechLaw	
1204549-MS1	QC				MATRIX SPIKE	
1204549-MSD1	QC				MATRIX SPIKE DUP	
1204205-02	Nitrogen, Ammonia 4500-NH3 G	K			TechLaw	
2D18052-CCV3	QC		2040325		CALIBRATION CHECK	
2D18052-CCB3	QC		2020381		CALIBRATION BLANK	

Comments:

Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1204549

Printed: 4/12/2012 9:19:56AM

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

NB 4-23-12

02456

due 4-24-12 LV4

Standard	Description	Solvent	LotNum
2040038	Ammonia-1M NAOH	na	na
2040039	Ammonia-Buffer	na	na
2040318	Ammonia-Carrier 0.038M H2SO4	diH2O	116298
2040319	Ammonia-Sodium Nitroprusside	DI H2O	104219
2040320	Ammonia-Sodium Phenolate	DI H2O	na
2040321	Ammonia 100mg/L	2040318	H28604
2040550	Ammonia-Bleach Reagent	DI H2O	K38505

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204205	Nitrogen, Ammonia 4500-NH3 G				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client/QC Type	Extraction Comments
1204549-BLK1		Apr-12-12 09:18	CLB	10	10					BLANK	
1204549-BS1		Apr-12-12 09:18	CLB	20	20			2040321	100	LCS	
1204549-MS1		Apr-12-12 09:18	CLB	20	20		1204205-01	2040321	100	MATRIX SPIKE	
1204549-MSD1		Apr-12-12 09:18	CLB	20	20		1204205-01	2040321	100	MATRIX SPIKE DUP	
1204205-01	K	Apr-12-12 09:18	CLB	10	10					TechLaw	
1204205-02	K	Apr-12-12 09:18	CLB	10	10					TechLaw	

Comments:

Analyst Initials:

Laboratory inst#303
Konelab User

12.04.2012 12:33

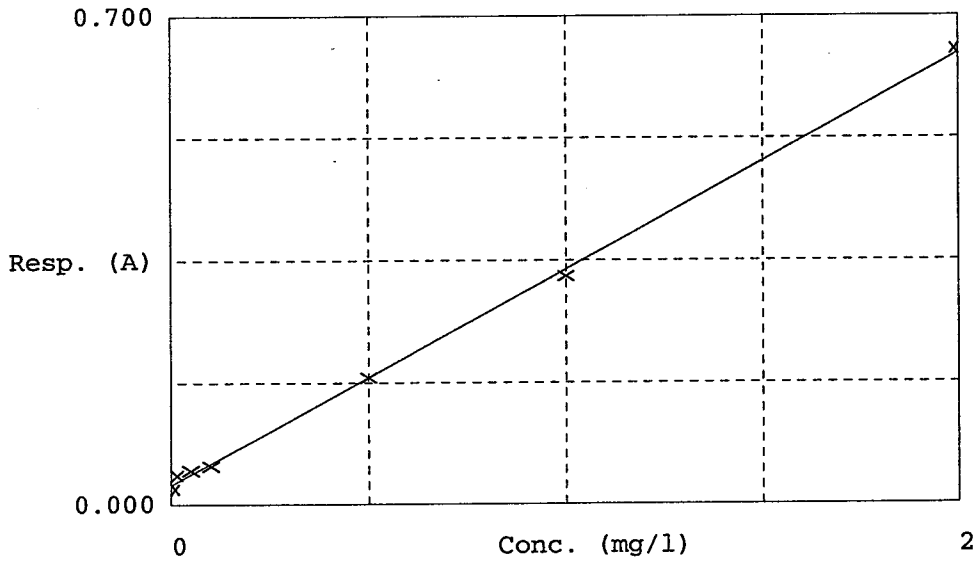
Test Ammonia

Accepted 12.04.2012 12:09

Factor 3.237
Bias 0.029

Coeff. of det. 0.998996

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	NH3- 0	0.023	-0.01930	0.00000	
2	NH3- .01	0.042	0.04391	0.01000	
3	NH3- .05	0.049	0.06654	0.05000	
4	NH3- .1	0.055	0.08709	0.10000	
5	NH3- .5	0.182	0.49772	0.50000	
6	NH3- 1	0.327	0.96682	1.00000	
7	NH3- 2	0.652	2.01723	2.00000	

Result Report AquaKem 6.5 Page: 1

Laboratory inst#303
Konelab User

Date : 2012-04-12
Time : 16.03

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
NH3 CCV	0.9964	0.336	2012-04-12 12.27		
NH3 CCB	-0.0179	0.023	2012-04-12 12.27		
crdl	0.0115	0.032	2012-04-12 12.27		
scv	1.0172	0.343	2012-04-12 12.27		
blk ww0410	0.0073	0.031	2012-04-12 12.27		
bs ww 0410	0.9438	0.320	2012-04-12 12.27		
NH3 CCV	0.9841	0.333	2012-04-12 12.30		
NH3 CCB	-0.0149	0.024	2012-04-12 12.30		
NH3 CCV	0.9699	0.328	2012-04-12 12.51		
NH3 CCB	-0.0167	0.023	2012-04-12 12.51		
blk 1 w	-0.0138	0.024	2012-04-12 12.51		
blk 2 w	-0.0121	0.025	2012-04-12 12.51		
bs w 1	0.5089	0.186	2012-04-12 12.51		
bs w 2	0.4868	0.179	2012-04-12 12.51		
25 ppm 1+49	23.1170	0.171	2012-04-12 12.58	1+49.0	
25 ppm 1+49	24.2577	0.328	2012-04-12 12.58	1+24.0	
10 ppm 1+9	9.6921	0.328	2012-04-12 12.58	1+9.0	
2 ppm 1+4	1.9614	0.150	2012-04-12 12.58	1+4.0	
2 ppm 1+4	2.0315	0.342	2012-04-12 12.58	1+1.0	
NH3 CCV	1.0087	0.340	2012-04-12 13.01		
NH3 CCB	-0.0162	0.024	2012-04-12 13.01		
NH3 CCV	0.9645	0.326	2012-04-12 13.26		
NH3 CCB	-0.0157	0.024	2012-04-12 13.26		
1204112-01	0.0692	0.050	2012-04-12 13.26		
1204126-02	0.1101	0.063	2012-04-12 13.26		
1204154-01	0.4702	0.174	2012-04-12 13.26		
1204155-01	0.9791	0.331	2012-04-12 13.26		
1204170-02	0.0238	0.036	2012-04-12 13.26		
1204170-03	-0.0099	0.025	2012-04-12 13.26		
1204170-04	0.1004	0.060	2012-04-12 13.26		
NH3 CCV	0.9494	0.322	2012-04-12 13.35		
NH3 CCB	-0.0171	0.023	2012-04-12 13.35		
1204170-05	0.2367	0.102	2012-04-12 13.35		
1204170-06	0.3328	0.131	2012-04-12 13.35		
1204170-07	0.1646	0.079	2012-04-12 13.35		
1204170-08	0.2561	0.108	2012-04-12 13.35		
1204170-09	0.0200	0.035	2012-04-12 13.35		
1204170-10	0.1528	0.076	2012-04-12 13.35		
1204170-11	0.1448	0.073	2012-04-12 13.35		
1204170-12	0.1184	0.065	2012-04-12 13.35		
1204170-12 ms	0.5864	0.210	2012-04-12 13.35		
1204170-12 msd	0.6114	0.217	2012-04-12 13.35		
NH3 CCV	0.9486	0.322	2012-04-12 13.44		
NH3 CCB	-0.0154	0.024	2012-04-12 13.44		
1204170-14	0.4495	0.167	2012-04-12 13.44		
1204170-15	0.2939	0.119	2012-04-12 13.44		
1204170-16	0.1423	0.072	2012-04-12 13.44		
1204170-17	0.0975	0.059	2012-04-12 13.44		
1204170-18	0.1102	0.063	2012-04-12 13.44		
1204170-19	0.0186	0.034	2012-04-12 13.44		
1204170-20	-0.0120	0.025	2012-04-12 13.44		
1204170-21	-0.0085	0.026	2012-04-12 13.44		
1204170-22	0.1323	0.069	2012-04-12 13.44		

Laboratory inst#303
Konelab User

Date : 2012-04-12
Time : 16.03

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204205-01	-0.0211	0.022	2012-04-12 13.44		
NH3 CCV	0.9464	0.321	2012-04-12 13.53		
NH3 CCB	-0.0147	0.024	2012-04-12 13.53		
1204205-01 ms	0.4762	0.176	2012-04-12 13.53		
1204205-01 msd	0.4661	0.173	2012-04-12 13.53		
1204205-02	-0.0090	0.026	2012-04-12 13.53		
1204190-01	0.1672	0.080	2012-04-12 13.53		
1204190-01 ms	0.7022	0.245	2012-04-12 13.53		
1204190-01 msd	0.6788	0.238	2012-04-12 13.53		
1204190-03	0.1557	0.077	2012-04-12 13.53		
1204190-05	0.1079	0.062	2012-04-12 13.53		
1204197-01	0.1559	0.077	2012-04-12 13.53		
1204197-02	-0.0222	0.022	2012-04-12 13.53		
NH3 CCV	0.9731	0.329	2012-04-12 14.00		
NH3 CCB	-0.0161	0.024	2012-04-12 14.00		
1204197-03	-0.0221	0.022	2012-04-12 14.00		
1204197-04	-0.0207	0.022	2012-04-12 14.00		
1204197-05	0.0337	0.039	2012-04-12 14.00		
1204197-06	0.0139	0.033	2012-04-12 14.00		
NH3 CCV	0.9884	0.334	2012-04-12 14.03		
NH3 CCB	-0.0149	0.024	2012-04-12 14.03		
1204141-01	16.2644	0.229	2012-04-12 14.07	1+24.0	
1204142-01	15.2200	0.217	2012-04-12 14.07	1+24.0	
NH3 CCV	0.9790	0.331	2012-04-12 14.10		
NH3 CCB	-0.0152	0.024	2012-04-12 14.10		
bsd ww 0410	0.9082	0.309	2012-04-12 14.40		
blk 0412ww	-0.0200	0.022	2012-04-12 14.40		
NH3 CCV	0.9586	0.325	2012-04-12 14.49		
NH3 CCB	0.0102	0.032	2012-04-12 14.49		
bsd 0412ww	0.9048	0.308	2012-04-12 14.49		
1204197-06	0.0195	0.035	2012-04-12 14.49		
1204186-01	0.0748	0.052	2012-04-12 14.49		
1204199-01	0.0024	0.029	2012-04-12 14.49		
1204203-01	0.4250	0.160	2012-04-12 14.49		
1204204-02	0.1566	0.077	2012-04-12 14.49		
NH3 CCV	0.9822	0.332	2012-04-12 14.56		
NH3 CCB	-0.0024	0.028	2012-04-12 14.56		
NH3 CCV	0.9906	0.335	2012-04-12 14.59		
NH3 CCB	-0.0101	0.025	2012-04-12 14.59		
NH3 CCV	1.0152	0.342	2012-04-12 15.17		
NH3 CCB	0.0023	0.029	2012-04-12 15.17		
bs 0412 ww	0.8931	0.304	2012-04-12 15.17		
1204177-01	0.0120	0.032	2012-04-12 15.17		
1204177-01 ms	0.8856	0.302	2012-04-12 15.17		
1204177-01 msd	0.9043	0.308	2012-04-12 15.17		
1204211-01	0.0667	0.049	2012-04-12 15.17		
1204173-01	20.3485	0.280	2012-04-12 15.24	1+24.0	
1204184-03 10x	304.4435	0.405	2012-04-12 15.24	1+24.0	1+9.0
NH3 CCV	1.0138	0.342	2012-04-12 15.27		
NH3 CCB	-0.0082	0.026	2012-04-12 15.27		
NH3 CCV	1.0315	0.347	2012-04-12 15.46		
NH3 CCB	-0.0109	0.025	2012-04-12 15.46		
1204184-01 10x	505.6008	0.341	2012-04-12 15.46	1+49.0	1+9.0

Laboratory inst#303
Konelab User

Date : 2012-04-12
Time : 16.03

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204184-02	55.0294	0.368	2012-04-12 15.46	1+49.0	
NH3 CCV	0.9819	0.332	2012-04-12 15.49		
NH3 CCB	-0.0103	0.025	2012-04-12 15.49		
bs 0412 ww	0.9043	0.308	2012-04-12 16.01		
NH3 CCV	1.0008	0.338	2012-04-12 16.03		
NH3 CCB	-0.0128	0.025	2012-04-12 16.03		

Inorganic - Wet Chemistry, Water, Apr-19-12

Instrument = 303, Calibration = 2D26006

Sequence Analyses:
Nitrogen, Ammonia 4500-NH3 G

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D26037-CAL1	QC		2040695		CAL STANDARD	
2D26037-CAL2	QC		2040705		CAL STANDARD	
2D26037-CAL3	QC		2040704		CAL STANDARD	
2D26037-CAL4	QC		2040703		CAL STANDARD	
2D26037-CAL5	QC		2040702		CAL STANDARD	
2D26037-CAL6	QC		2040701		CAL STANDARD	
2D26037-CAL7	QC		2040700		CAL STANDARD	
2D26037-CCV1	QC		2040701		CALIBRATION CHECK	
2D26037-CCB1	QC				CALIBRATION BLANK	
2D26037-CRL1	QC		2040705		INSTRUMENT RL CHECK	
1204855-BLK1	QC				BLANK	
1204855-BS1	QC				LCS	
2D26037-SCV1	QC		2041174		SECONDARY CAL CHECK	
2D26037-CCV2	QC		2040701		CALIBRATION CHECK	
2D26037-CCB2	QC				CALIBRATION BLANK	
2D26037-CCV3	QC		2040701		CALIBRATION CHECK	
2D26037-CCB3	QC				CALIBRATION BLANK	
1204329-01	Nitrogen, Ammonia 4500-NH3 G	K			TechLaw	
1204855-MS1	QC				MATRIX SPIKE	
1204855-MSD1	QC				MATRIX SPIKE DUP	
2D26037-CCV4	QC		2040701		CALIBRATION CHECK	
2D26037-CCB4	QC		2020188		CALIBRATION BLANK	

Comments:	Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1204855** Page 1 of 1

Printed: 4/19/2012 9:01:39AM

NLB 5-1-12

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

92462

due 5-1-12 LV4

Standard	Description	Solvent	LotNum
2040038	Ammonia-1M NAOH	na	na
2040039	Ammonia-Buffer	na	na
2040319	Ammonia-Sodium Nitroprusside	DI H2O	104219
2040693	Ammonia-Sodium Phenolate	DI H2O	na
2040694	Ammonia-Carrier 0.038M H2SO4	diH2O	116298
2040696	Ammonia 100mg/L	2040694	H28604
2040942	Ammonia-Bleach Reagent	DI H2O	K38505

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204329	Nitrogen, Ammonia 4500-NH3 G				

Balance ID: _____ **pH Meter:** _____

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1204855-BLK1		Apr-19-12 09:00	CLB	10	10					BLANK	
1204855-BS1		Apr-19-12 09:00	CLB	20	20			2040696	100	LCS	
1204855-MS1		Apr-19-12 09:00	CLB	20	20		1204329-01	2040696	100	MATRIX SPIKE	
1204855-MSD1		Apr-19-12 09:00	CLB	20	20		1204329-01	2040696	100	MATRIX SPIKE DUP	
1204329-01	K	Apr-19-12 09:00	CLB	10	10					TechLaw	

Comments:

Analyst Initials:

Laboratory inst#303
Konelab User

19.04.2012 11:26

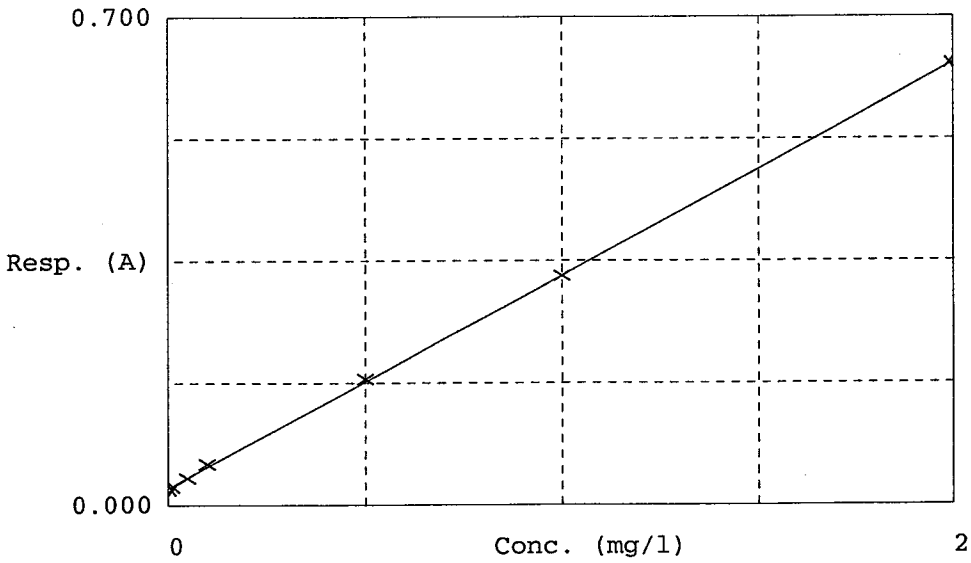
Test Ammonia

Accepted 19.04.2012 11:26

Factor 3.284
Bias 0.025

Coeff. of det. 0.999871

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	NH3- 0	0.022	-0.00988	0.00000	
2	NH3- .01	0.026	0.00366	0.01000	
3	NH3- .05	0.039	0.04735	0.05000	
4	NH3- .1	0.059	0.11162	0.10000	
5	NH3- .5	0.181	0.51194	0.50000	
6	NH3- 1	0.329	0.99756	1.00000	
7	NH3- 2	0.633	1.99775	2.00000	

Result Report AquaKem 6.5 Page: 1

Laboratory inst#303
Konelab User

Date : 2012-04-19
Time : 15.18

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
NH3 CCV 1	0.9384	0.311	2012-04-19 11.46		
NH3 CCB 1	-0.0055	0.023	2012-04-19 11.46		
crdl	0.0065	0.027	2012-04-19 11.46		
blk ww 0417	0.0067	0.027	2012-04-19 11.46		
bs ww 0417	0.9365	0.310	2012-04-19 11.46		
bsd ww 0417	0.9383	0.310	2012-04-19 11.46		
blk w1	-0.0017	0.024	2012-04-19 11.46		
blk w 2	0.0007	0.025	2012-04-19 11.46		
bs w 1	0.4995	0.177	2012-04-19 11.46		
bs w 2	0.4963	0.176	2012-04-19 11.46		
25 ppm 1+49	23.8549	0.170	2012-04-19 11.54	1+49.0	
NH3 CCV	1.0132	0.333	2012-04-19 11.54		
NH3 CCB	-0.0036	0.024	2012-04-19 11.54		
25 ppm 1+49	25.2023	0.332	2012-04-19 11.54	1+24.0	
10 ppm 1+9	9.9966	0.329	2012-04-19 11.54	1+9.0	
2 ppm 1+4	1.9763	0.145	2012-04-19 11.54	1+4.0	
2 ppm 1+4	2.0415	0.336	2012-04-19 11.58	1+1.0	
NH3 CCV	0.9791	0.323	2012-04-19 12.00		
NH3 CCB	-0.0072	0.023	2012-04-19 12.00		
scv	1.0812	0.354	2012-04-19 12.02		
NH3 CCV 2	0.9859	0.325	2012-04-19 12.05		
NH3 CCB 2	-0.0064	0.023	2012-04-19 12.05		
NH3 CCV	0.9473	0.313	2012-04-19 12.28		
NH3 CCB	-0.0056	0.023	2012-04-19 12.28		
1204265-01	0.1460	0.069	2012-04-19 12.28		
1204265-02	0.0829	0.050	2012-04-19 12.28		
1204265-03	0.0946	0.054	2012-04-19 12.28		
1204265-04	0.0733	0.047	2012-04-19 12.28		
1204265-05	0.1198	0.061	2012-04-19 12.28		
1205265-06	0.1785	0.079	2012-04-19 12.28		
1204265-07	0.0168	0.030	2012-04-19 12.28		
1204265-08	0.1417	0.068	2012-04-19 12.28		
1204265-09	0.1877	0.082	2012-04-19 12.28		
1204265-10	0.2369	0.097	2012-04-19 12.28		
NH3 CCV	0.9455	0.313	2012-04-19 12.37		
NH3 CCB	-0.0045	0.023	2012-04-19 12.37		
1204265-11	0.2015	0.086	2012-04-19 12.37		
1204265-12	-0.0003	0.025	2012-04-19 12.37		
1204265-13	0.0027	0.026	2012-04-19 12.37		
1204266-01	0.2255	0.093	2012-04-19 12.37		
1204266-01 ms	0.7227	0.245	2012-04-19 12.37		
1204266-01 msd	0.7386	0.250	2012-04-19 12.37		
1204266-03	0.2321	0.095	2012-04-19 12.37		
1204266-05	0.2973	0.115	2012-04-19 12.37		
1204321-01	0.1875	0.082	2012-04-19 12.38		
1204321-03	0.1858	0.081	2012-04-19 12.38		
NH3 CCV	0.9538	0.315	2012-04-19 12.46		
NH3 CCB	-0.0062	0.023	2012-04-19 12.46		
NH3 CCV	0.9799	0.323	2012-04-19 13.01		
NH3 CCB	-0.0018	0.024	2012-04-19 13.02		
NH3 CCV	0.9832	0.324	2012-04-19 13.52		
NH3 CCB	-0.0035	0.024	2012-04-19 13.52		
1204316-01	-0.0067	0.023	2012-04-19 13.52		

Laboratory inst#303
Konelab User

Date : 2012-04-19
Time : 15.18

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204316-01 ms	0.4836	0.172	2012-04-19 13.52		
1204316-01 msd	0.5004	0.177	2012-04-19 13.52		
1204316-02	-0.0074	0.023	2012-04-19 13.52		
1204316-03	0.4417	0.159	2012-04-19 13.52		
1204316-04	-0.0114	0.021	2012-04-19 13.52		
1204316-05	0.0531	0.041	2012-04-19 13.52		
1204316-06	0.5296	0.186	2012-04-19 13.52		
1204316-07	0.0980	0.055	2012-04-19 13.52		
1204316-08	-0.0026	0.024	2012-04-19 13.52		
NH3 CCV 3	0.9542	0.315	2012-04-19 14.01		
NH3 CCB	-0.0044	0.023	2012-04-19 14.01		
1204329-01	0.0002	0.025	2012-04-19 14.01		
1204329-01 ms	0.4920	0.175	2012-04-19 14.01		
1204329-01 msd	0.5089	0.180	2012-04-19 14.01		
1204268-01	0.1637	0.075	2012-04-19 14.01		
1204269-02	0.2972	0.115	2012-04-19 14.01		
1204280-01	0.4370	0.158	2012-04-19 14.01		
1204281-01	0.4801	0.171	2012-04-19 14.01		
blk ww 0419	-0.0129	0.021	2012-04-19 14.01		
1204289-01	0.0175	0.030	2012-04-19 14.01		
NH3 CCV 4	0.9672	0.319	2012-04-19 14.10		
NH3 CCB	0.0061	0.027	2012-04-19 14.10		
1204289-01 msd	0.9253	0.307	2012-04-19 14.10		
1204311-01	0.0714	0.047	2012-04-19 14.10		
1204320-01	0.1540	0.072	2012-04-19 14.10		
1204325-01	0.5619	0.196	2012-04-19 14.10		
1204334-01	0.5887	0.204	2012-04-19 14.10		
1204334-02	1.3241	0.428	2012-04-19 14.10		
NH3 CCV	1.0215	0.336	2012-04-19 14.17		
NH3 CCB	0.0009	0.025	2012-04-19 14.17		
1204274-01 10x	55.0012	0.360	2012-04-19 14.17	1+4.0	1+9.0
1204274-02 10x	156.2123	0.215	2012-04-19 14.17	1+24.0	1+9.0
NH3 CCV	0.9901	0.326	2012-04-19 14.20		
NH3 CCB	-0.0036	0.024	2012-04-19 14.20		
~~NH3 CCV~~ 3 CCV 4/19/12	1.0019	0.330	2012-04-19 14.25		
~~NH3 CCB~~	-0.0047	0.023	2012-04-19 14.25		
~~1204319-02~~	30.2240	0.393	2012-04-19 14.28	1+24.0	
~~NH3 CCV~~ CCV 4/19/12	0.9970	0.328	2012-04-19 14.31		
~~NH3 CCB~~	-0.0050	0.023	2012-04-19 14.31		
1204289-01 ms	0.8936	0.297	2012-04-19 14.34		
NH3 CCV	0.9911	0.327	2012-04-19 14.37		
NH3 CCB	-0.0041	0.024	2012-04-19 14.37		
NH3 CCV	1.0051	0.331	2012-04-19 14.54		
NH3 CCB	-0.0029	0.024	2012-04-19 14.54		
bs ww 0419	0.9538	0.315	2012-04-19 14.54		
1204264-01 100x	139.9101	0.451	2012-04-19 14.54		1+99.0
1204310-01 10 x	69.9799	0.451	2012-04-19 14.57	1+4.0	1+9.0
NH3 CCV	0.9970	0.328	2012-04-19 15.00		
NH3 CCB	-0.0011	0.024	2012-04-19 15.00		

Laboratory inst#303
Konelab User

Date : 2012-04-19
Time : 15.18

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
NH3 CCV	0.9384	0.311	2012-04-19 11.46		
NH3 CCB	-0.0055	0.023	2012-04-19 11.46		
crdl	0.0065	0.027	2012-04-19 11.46		
scv	ec to High	0.364	-		
blk ww 0417	0.0067	0.027	2012-04-19 11.46		
bs ww 0417	0.9365	0.310	2012-04-19 11.46		
bsd ww 0417	0.9383	0.310	2012-04-19 11.46		
blk w1	-0.0017	0.024	2012-04-19 11.46		
blk w 2	0.0007	0.025	2012-04-19 11.46		
bs w 1	0.4995	0.177	2012-04-19 11.46		
bs w 2	0.4963	0.176	2012-04-19 11.46		
25 ppm 1+49	23.8549	0.170	2012-04-19 11.54	1+49.0	
NH3 CCV	1.0132	0.333	2012-04-19 11.54		
NH3 CCB	-0.0036	0.024	2012-04-19 11.54		
25 ppm 1+49	25.2023	0.332	2012-04-19 11.54	1+24.0	
10 ppm 1+9	9.9966	0.329	2012-04-19 11.54	1+9.0	
2 ppm 1+4	1.9763	0.145	2012-04-19 11.54	1+4.0	
2 ppm 1+4	2.0415	0.336	2012-04-19 11.58	1+1.0	
NH3 CCV	0.9791	0.323	2012-04-19 12.00		
NH3 CCB	-0.0072	0.023	2012-04-19 12.00		
scv	1.0812	0.354	2012-04-19 12.02		
NH3 CCV	0.9859	0.325	2012-04-19 12.05		
NH3 CCB	-0.0064	0.023	2012-04-19 12.05		
NH3 CCV	0.9473	0.313	2012-04-19 12.28		
NH3 CCB	-0.0056	0.023	2012-04-19 12.28		
1204265-01	0.1460	0.069	2012-04-19 12.28		
1204265-02	0.0829	0.050	2012-04-19 12.28		
1204265-03	0.0946	0.054	2012-04-19 12.28		
1204265-04	0.0733	0.047	2012-04-19 12.28		
1204265-05	0.1198	0.061	2012-04-19 12.28		
1205265-06	0.1785	0.079	2012-04-19 12.28		
1204265-07	0.0168	0.030	2012-04-19 12.28		
1204265-08	0.1417	0.068	2012-04-19 12.28		
1204265-09	0.1877	0.082	2012-04-19 12.28		
1204265-10	0.2369	0.097	2012-04-19 12.28		
NH3 CCV	0.9455	0.313	2012-04-19 12.37		
NH3 CCB	-0.0045	0.023	2012-04-19 12.37		
1204265-11	0.2015	0.086	2012-04-19 12.37		
1204265-12	-0.0003	0.025	2012-04-19 12.37		
1204265-13	0.0027	0.026	2012-04-19 12.37		
1204266-01	0.2255	0.093	2012-04-19 12.37		
1204266-01 ms	0.7227	0.245	2012-04-19 12.37		
1204266-01 msd	0.7386	0.250	2012-04-19 12.37		
1204266-03	0.2321	0.095	2012-04-19 12.37		
1204266-05	0.2973	0.115	2012-04-19 12.37		
1204321-01	0.1875	0.082	2012-04-19 12.38		
1204321-03	0.1858	0.081	2012-04-19 12.38		
NH3 CCV	0.9538	0.315	2012-04-19 12.46		
NH3 CCB	-0.0062	0.023	2012-04-19 12.46		
1204316-01	Autodilute	0.024	-		
1204316-01 ms		0.178	-		
1204316-01 msd		0.175	-		
1204316-02		0.024	-		

Laboratory inst#303
Konelab User

Date : 2012-04-19
Time : 15.18

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204316-03		0.156	-		
1204316-04	RR	0.022	-		
1204316-05		0.041	-		
1204316-06	CCB	0.192	-		
1204316-07		0.054	-		
1204316-08	failed	0.027	-		
NH3 CCV		0.328	-		
NH3 CCB		0.030	-		
1204329-01		0.036	-		
1204329-01 ms		0.197	-		
1204329-01 msd		0.253	-		
1204264-01		-	-		
1204268-01		0.175	-		
1204269-02		0.140	-		
1204280-01		0.169	-		
1204281-01		0.177	-		
1204274-01 10x		1.652	-		1+9.0
1204274-02 10x		5.152	-		1+9.0
NH3 CCV	0.9799	0.323	2012-04-19 13.01		
NH3 CCB	-0.0018	0.024	2012-04-19 13.02		
NH3 CCV	0.9832	0.324	2012-04-19 13.52		
NH3 CCB	-0.0035	0.024	2012-04-19 13.52		
1204316-01	-0.0067	0.023	2012-04-19 13.52		
1204316-01 ms	0.4836	0.172	2012-04-19 13.52		
1204316-01 msd	0.5004	0.177	2012-04-19 13.52		
1204316-02	-0.0074	0.023	2012-04-19 13.52		
1204316-03	0.4417	0.159	2012-04-19 13.52		
1204316-04	-0.0114	0.021	2012-04-19 13.52		
1204316-05	0.0531	0.041	2012-04-19 13.52		
1204316-06	0.5296	0.186	2012-04-19 13.52		
1204316-07	0.0980	0.055	2012-04-19 13.52		
1204316-08	-0.0026	0.024	2012-04-19 13.52		
NH3 CCV	0.9542	0.315	2012-04-19 14.01		
NH3 CCB	-0.0044	0.023	2012-04-19 14.01		
1204329-01	0.0002	0.025	2012-04-19 14.01		
1204329-01 ms	0.4920	0.175	2012-04-19 14.01		
1204329-01 msd	0.5089	0.180	2012-04-19 14.01		
1204268-01	0.1637	0.075	2012-04-19 14.01		
1204269-02	0.2972	0.115	2012-04-19 14.01		
1204280-01	0.4370	0.158	2012-04-19 14.01		
1204281-01	0.4801	0.171	2012-04-19 14.01		
blk ww 0419	-0.0129	0.021	2012-04-19 14.01		
bs ww 0419	RR	0.285	-		
1204289-01	0.0175	0.030	2012-04-19 14.01		
NH3 CCV	0.9672	0.319	2012-04-19 14.10		
NH3 CCB	0.0061	0.027	2012-04-19 14.10		
1204289-01 ms	RR to verify	0.296	-		
1204289-01 msd	0.9253	0.307	2012-04-19 14.10		
1204310-01 10 x	Antidilute	-	-		1+9.0
1204311-01	0.0714	0.047	2012-04-19 14.10		
1204319-02	Antidilute	9.999	-		
1204320-01	0.1540	0.072	2012-04-19 14.10		
1204325-01	0.5619	0.196	2012-04-19 14.10		

Laboratory inst#303
Konelab User

Date : 2012-04-19
Time : 15.18

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1204334-01	0.5887	0.204	2012-04-19 14.10		
1204334-02	1.3241	0.428	2012-04-19 14.10		
1204264-01	Dilution	-	-	1+24.0	
NH3 CCV	1.0215	0.336	2012-04-19 14.17		
NH3 CCB	0.0009	0.025	2012-04-19 14.17		
1204274-01 10x	55.0012	0.360	2012-04-19 14.17	1+4.0	1+9.0
1204274-02 10x	156.2123	0.215	2012-04-19 14.17	1+24.0	1+9.0
NH3 CCV	0.9901	0.326	2012-04-19 14.20		
NH3 CCB	-0.0036	0.024	2012-04-19 14.20		
bs ww 0419	Repour/RK	0.286	-		
NH3 CCV	1.0019	0.330	2012-04-19 14.25		
NH3 CCB	-0.0047	0.023	2012-04-19 14.25		
1204319-02	30.2240	0.393	2012-04-19 14.28	1+24.0	
NH3 CCV	0.9970	0.328	2012-04-19 14.31		
NH3 CCB	-0.0050	0.023	2012-04-19 14.31		
1204289-01 ms	0.8930	0.297	2012-04-19 14.34		
1204310-01 10 x	Add dil	2.261	-		1+9.0
NH3 CCV	0.9911	0.327	2012-04-19 14.37		
NH3 CCB	-0.0041	0.024	2012-04-19 14.37		
NH3 CCV	1.0051	0.331	2012-04-19 14.54		
NH3 CCB	-0.0029	0.024	2012-04-19 14.54		
bs ww 0419	0.9538	0.315	2012-04-19 14.54		
1204264-01 100x	139.9101	0.451	2012-04-19 14.54		1+99.0
1204310-01 10 x	69.9799	0.451	2012-04-19 14.57	1+4.0	1+9.0
NH3 CCV	0.9970	0.328	2012-04-19 15.00		
NH3 CCB	-0.0011	0.024	2012-04-19 15.00		

Inorganic - Wet Chemistry, Water, Apr-26-12

Instrument = 303, Calibration = 2E08019

Sequence Analyses:
Nitrogen, Ammonia 4500-NH3 G

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2E08053-CAL1	QC		2041205		CAL STANDARD	
2E08053-CAL2	QC		2041214		CAL STANDARD	
2E08053-CAL3	QC		2041213		CAL STANDARD	
2E08053-CAL4	QC		2041212		CAL STANDARD	
2E08053-CAL5	QC		2041211		CAL STANDARD	
2E08053-CAL6	QC		2041210		CAL STANDARD	
2E08053-CAL7	QC		2041209		CAL STANDARD	
2E08053-CCV1	QC		2041210		CALIBRATION CHECK	
2E08053-CCB1	QC				CALIBRATION BLANK	
2E08053-SCV1	QC		2041260		SECONDARY CAL CHECK	
1205224-BLK1	QC				BLANK	
1205224-BS1	QC				LCS	
2E08053-CCV2	QC		2041210		CALIBRATION CHECK	
2E08053-CCB2	QC				CALIBRATION BLANK	
2E08053-CRL1	QC		2041214		INSTRUMENT RL CHECK	
2E08053-CCV3	QC		2041210		CALIBRATION CHECK	
2E08053-CCB3	QC				CALIBRATION BLANK	
1204454-01	Nitrogen, Ammonia 4500-NH3 G	K			TechLaw	
1204454-02	Nitrogen, Ammonia 4500-NH3 G	K			TechLaw	
1205224-MS1	QC				MATRIX SPIKE	
1205224-MSD1	QC				MATRIX SPIKE DUP	
2E08053-CCV4	QC		2041210		CALIBRATION CHECK	
2E08053-CCB4	QC		2020188		CALIBRATION BLANK	

Comments:

Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1205224

Printed: 5/8/2012 2:41:46PM

NLB 5-9-12

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

92178

due 5-8-12 LVY

Standard	Description	Solvent	LotNum
2041111	Ammonia-Sodium Nitroprusside	DI H2O	104219
2041112	Ammonia-Sodium Phenolate	DI H2O	na
2041183	Ammonia-1M NAOH	na	na
2041184	Ammonia-Buffer	na	na
2041203	Ammonia-Bleach Reagent	DI H2O	K38505
2041204	Ammonia-Carrier 0.038M H2SO4	diH2O	116298
2041206	Ammonia 100mg/L	2041204	K39628

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204454	Nitrogen, Ammonia 4500-NH3 G				

Balance ID: _____ **pH Meter:** _____

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1205224-BLK1		Apr-26-12 09:18	CLB	10	10					BLANK	
1205224-BS1		Apr-26-12 09:18	CLB	20	20			2041206	100	LCS	
1205224-MS1		Apr-26-12 09:18	CLB	20	20		1204454-02	2041206	100	MATRIX SPIKE	
1205224-MSD1		Apr-26-12 09:18	CLB	20	20		1204454-02	2041206	100	MATRIX SPIKE DUP	
1204454-01	K	Apr-26-12 09:18	CLB	10	10					TechLaw	
1204454-02	K	Apr-26-12 09:18	CLB	10	10					TechLaw	

Comments:

Analyst Initials:

Laboratory inst#303
Konelab User

26.04.2012 09:29

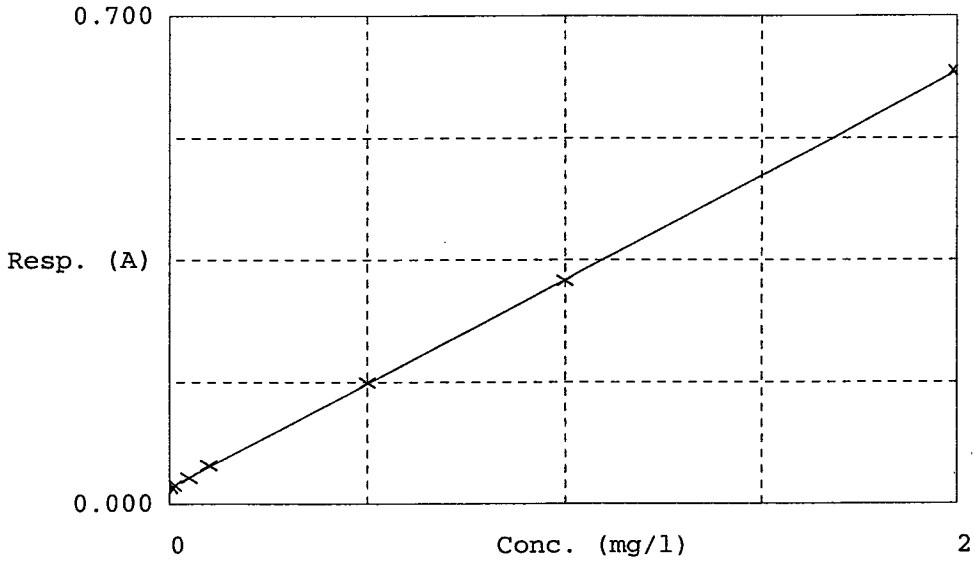
Test Ammonia

Accepted 26.04.2012 09:29

Factor 3.35
Bias 0.023

Coeff. of det. 0.999961

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	NH3- 0	0.022	-0.00375	0.00000	
2	NH3- .01	0.026	0.00983	0.01000	
3	NH3- .05	0.037	0.04667	0.05000	
4	NH3- .1	0.055	0.10648	0.10000	
5	NH3- .5	0.174	0.50519	0.50000	
6	NH3- 1	0.320	0.99424	1.00000	
7	NH3- 2	0.621	2.00134	2.00000	

Laboratory inst#303
Konelab User

Date : 2012-04-26
Time : 14.54

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
NH3 CCV	0.9607	0.310	2012-04-26 09.51		
NH3 CCB	-0.0010	0.023	2012-04-26 09.51		
scv	1.0597	0.340	2012-04-26 09.51		
blk s	-0.0138	0.019	2012-04-26 09.51		
bsd s	0.9013	0.293	2012-04-26 09.51		
blk ww	-0.0103	0.020	2012-04-26 09.51		
bs ww	0.9202	0.298	2012-04-26 09.51		
blk 1	-0.0089	0.021	2012-04-26 09.51		
blk 2	-0.0105	0.020	2012-04-26 09.51		
blk 3	-0.0113	0.020	2012-04-26 09.51		
NH3 CCV	0.9815	0.316	2012-04-26 09.58		
NH3 CCB	-0.0045	0.022	2012-04-26 09.58		
blk 4	-0.0037	0.022	2012-04-26 09.58		
bs 1	0.5136	0.177	2012-04-26 09.58		
bs 2	0.5143	0.177	2012-04-26 09.58		
bs 3	0.5108	0.176	2012-04-26 09.58		
bs 4	0.5106	0.176	2012-04-26 09.58		
25ppm 1+49	24.1333	0.168	2012-04-26 10.06	1+49.0	
25ppm 1+49	25.1395	0.324	2012-04-26 10.06	1+24.0	
10 ppm 1+9	9.9512	0.321	2012-04-26 10.06	1+9.0	
2 ppm 1+4	1.9698	0.141	2012-04-26 10.06	1+4.0	
2 ppm 1+4	2.0209	0.325	2012-04-26 10.06	1+1.0	
NH3 CCV	0.9899	0.319	2012-04-26 10.09		
NH3 CCB	-0.0049	0.022	2012-04-26 10.09		
bs s	0.9199	0.298	2012-04-26 10.11		
NH3 CCV	0.9940	0.320	2012-04-26 10.32		
NH3 CCB	-0.0063	0.022	2012-04-26 10.32		
NH3 CCV	0.9894	0.319	2012-04-26 10.35		
NH3 CCB	-0.0033	0.022	2012-04-26 10.35		
NH3 CCV	0.9936	0.320	2012-04-26 10.51		
NH3 CCB	0.0074	0.026	2012-04-26 10.51		
NH3 CCV	0.9862	0.318	2012-04-26 11.27		
NH3 CCB	-0.0006	0.023	2012-04-26 11.27		
1204439-01 ms	0.9661	0.312	2012-04-26 11.27		
1204419-01	0.2065	0.085	2012-04-26 11.27		
1204419-01 ms	0.6988	0.232	2012-04-26 11.27		
1204419-01 msd	0.6919	0.230	2012-04-26 11.27		
1204435-01	0.6890	0.229	2012-04-26 11.27		
1204435-02	0.0141	0.028	2012-04-26 11.27		
1204435-02 ms	0.5040	0.174	2012-04-26 11.27		
1204435-02 msd	0.4997	0.173	2012-04-26 11.27		
NH3 CCV	0.9936	0.320	2012-04-26 11.36		
NH3 CCB	0.0015	0.024	2012-04-26 11.36		
1204435-03	0.0025	0.024	2012-04-26 11.36		
1204435-04	0.0075	0.026	2012-04-26 11.36		
1204435-05	0.0718	0.045	2012-04-26 11.36		
1204435-06	0.0073	0.026	2012-04-26 11.36		
1204435-07	0.0513	0.039	2012-04-26 11.36		
1204435-08	0.0508	0.039	2012-04-26 11.36		
1204435-09	0.1560	0.070	2012-04-26 11.36		
1204435-10	0.2817	0.108	2012-04-26 11.36		
1204435-11	0.0052	0.025	2012-04-26 11.36		
1204435-12	0.0070	0.026	2012-04-26 11.36		

Laboratory inst#303
Konelab User

Date : 2012-04-26
Time : 14.54

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
NH3 CCV	0.9931	0.320	2012-04-26 11.46		
NH3 CCB	0.0008	0.024	2012-04-26 11.46		
1204435-13	0.0279	0.032	2012-04-26 11.46		
1204435-14	0.3178	0.118	2012-04-26 11.46		
124435-15	0.0062	0.025	2012-04-26 11.46		
1204435-16	0.4160	0.148	2012-04-26 11.46		
1204463-01	1.1285	0.360	2012-04-26 11.46		
1204463-01 ms	1.6461	0.515	2012-04-26 11.46		
1204463-01 msd	1.5964	0.500	2012-04-26 11.46		
1204463-02	0.3321	0.123	2012-04-26 11.46		
1204463-03	0.0317	0.033	2012-04-26 11.46		
1204463-04	0.0637	0.042	2012-04-26 11.46		
NH3 CCV 2	0.9854	0.318	2012-04-26 11.55		
NH3 CCB	0.0004	0.024	2012-04-26 11.55		
crdl	0.0109	0.027	2012-04-26 11.55		
1204446-01	0.4040	0.144	2012-04-26 11.55		
1204446-02	0.3290	0.122	2012-04-26 11.55		
1204414-01	0.6126	0.206	2012-04-26 11.55		
1204418-01	1.2447	0.395	2012-04-26 11.55		
1204423-01	0.3613	0.131	2012-04-26 11.55		
1204424-01	0.4997	0.173	2012-04-26 11.55		
1204439-01	0.0295	0.032	2012-04-26 11.55		
1204463-05	0.0655	0.043	2012-04-26 11.55		
NH3 CCV	1.0060	0.324	2012-04-26 12.02		
NH3 CCB	0.0017	0.024	2012-04-26 12.02		
1204463-06	0.2873	0.109	2012-04-26 12.02		
1204463-07	0.8324	0.272	2012-04-26 12.02		
1204463-08	0.9398	0.304	2012-04-26 12.02		
1204463-09	0.7529	0.248	2012-04-26 12.02		
1204463-10	0.3384	0.124	2012-04-26 12.02		
1204439-01 msd	0.8747	0.285	2012-04-26 12.03		
1204433-01	45.7941	0.570	2012-04-26 12.08	1+24.0	
1204443-01	2.1682	0.347	2012-04-26 12.08	1+1.0	
NH3 CCV	1.0243	0.329	2012-04-26 12.11		
NH3 CCB	-0.0017	0.023	2012-04-26 12.11		
NH3 CCV	1.0497	0.337	2012-04-26 12.45		
NH3 CCB	0.0002	0.024	2012-04-26 12.45		
1204433-01 dup	45.7032	0.569	2012-04-26 12.45	1+24.0	
NH3 CCV	1.0461	0.336	2012-04-26 12.48		
NH3 CCB	0.0029	0.024	2012-04-26 12.48		
NH3 CCV	1.0293	0.331	2012-04-26 13.37		
NH3 CCB	0.0007	0.024	2012-04-26 13.37		
1204451-01	0.0305	0.033	2012-04-26 13.37		
1204451-02	0.0296	0.032	2012-04-26 13.37		
1204451-03	0.1557	0.070	2012-04-26 13.37		
1204451-04	0.7003	0.233	2012-04-26 13.37		
1204451-05	0.0405	0.036	2012-04-26 13.37		
1204451-06	0.0281	0.032	2012-04-26 13.38		
1204451-07	0.5464	0.187	2012-04-26 13.38		
1204451-08	0.0532	0.039	2012-04-26 13.38		
blk 5	0.0000	0.023	2012-04-26 13.38		
bs5	0.5067	0.175	2012-04-26 13.38		
NH3 CCV	1.0440	0.335	2012-04-26 13.47		

Laboratory inst#303
Konelab User

Date : 2012-04-26
Time : 14.54

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
NH3 CCB	0.0035	0.024	2012-04-26 13.47		
1204451-09	0.8698	0.283	2012-04-26 13.47		
1204451-10	0.4460	0.157	2012-04-26 13.47		
1204451-10 ms	0.9539	0.308	2012-04-26 13.47		
1204451-10 msd	0.9328	0.302	2012-04-26 13.47		
1204451-11	0.1476	0.068	2012-04-26 13.47		
1204451-12	0.1504	0.068	2012-04-26 13.47		
1204451-13	0.0018	0.024	2012-04-26 13.47		
1204451-14	0.0161	0.028	2012-04-26 13.47		
1204452-01	0.3921	0.140	2012-04-26 13.47		
NH3 CCV	1.0833	0.347	2012-04-26 13.56		
NH3 CCB	0.0018	0.024	2012-04-26 13.56		
1204452-03	0.2709	0.104	2012-04-26 13.56		
1204452-04	0.3296	0.122	2012-04-26 13.56		
1204452-05	0.2901	0.110	2012-04-26 13.56		
1204452-06	0.2797	0.107	2012-04-26 13.56		
1204452-07	0.1714	0.075	2012-04-26 13.56		
1204452-08	0.5984	0.202	2012-04-26 13.56		
1204452-10	0.2214	0.090	2012-04-26 13.56		
NH3 CCV	1.0505	0.337	2012-04-26 14.05		
NH3 CCB	0.0010	0.024	2012-04-26 14.05		
1204452-09	0.1812	0.078	2012-04-26 14.18		
1204452-09 ms	0.5785	0.196	2012-04-26 14.18		
1204452-09 msd	0.5917	0.200	2012-04-26 14.18		
NH3 CCV 3	1.0627	0.341	2012-04-26 14.20		
NH3 CCB	0.0034	0.024	2012-04-26 14.20		
1204452-11	0.2248	0.091	2012-04-26 14.34		
1204452-12	0.4098	0.146	2012-04-26 14.34		
1204452-13	0.2145	0.087	2012-04-26 14.34		
1204452-17	0.2180	0.089	2012-04-26 14.34		
1204452-18	0.5439	0.186	2012-04-26 14.34		
1204454-01	0.0031	0.024	2012-04-26 14.34		
1204454-02	0.0271	0.032	2012-04-26 14.34		
1204454-02 ms	0.5233	0.180	2012-04-26 14.34		
1204454-02 msd	0.4985	0.172	2012-04-26 14.34		
1204452-02	3.6022	0.239	2012-04-26 14.39	1+4.0	
NH3 CCV 4	1.0784	0.345	2012-04-26 14.41		
NH3 CCB	-0.0009	0.023	2012-04-26 14.41		

TriMatrix Laboratories, Inc.

TechLaw

Project: KNM

SDG: KNM040512

SM 4500-NO3 F 20th

SAMPLE ID SUMMARY

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

SDG: KNM040512

Project: KNM

Client Sample Id:	Lab Sample Id:
KAFB-003	1204091-01
106042	1204205-01
106089	1204205-02
106058	1204329-01
106053	1204454-01
106054	1204454-02

02476

INORGANIC ANALYSIS DATA SHEET

SM 4500-NO3 F 20th

KAFB-003

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/04/12 13:31
Solids: 0.00
QC Batch: 1204539

SDG: KNM040512
Project: KNM
Laboratory ID: 1204091-01
Prepared: 04/11/12 09:59
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
14797-55-8	Nitrogen, Nitrate+Nitrite	1	0.48	mg/L	0.0097	0.050		04/11/12 13:51

02477

INORGANIC ANALYSIS DATA SHEET

SM 4500-NO3 F 20th

106042

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/10/12 13:48
Solids: 0.00
QC Batch: 1204616

SDG: KNM040512
Project: KNM
Laboratory ID: 1204205-01
Prepared: 04/13/12 11:05
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
14797-55-8	Nitrogen, Nitrate+Nitrite	1	0.050	mg/L	0.0097	0.050	U	04/13/12 12:56

02478

INORGANIC ANALYSIS DATA SHEET

SM 4500-NO3 F 20th

106089

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/10/12 14:45
Solids: 0.00
QC Batch: 1204616

SDG: KNM040512
Project: KNM
Laboratory ID: 1204205-02
Prepared: 04/13/12 11:05
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
14797-55-8	Nitrogen, Nitrate+Nitrite	1	0.17	mg/L	0.0097	0.050		04/13/12 12:59

INORGANIC ANALYSIS DATA SHEET

SM 4500-NO3 F 20th

106058

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/17/12 12:31
Solids: 0.00
QC Batch: 1205349

SDG: KNM040512
Project: KNM
Laboratory ID: 1204329-01
Prepared: 04/27/12 10:55
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
14797-55-8	Nitrogen, Nitrate+Nitrite	1	0.10	mg/L	0.0097	0.050		04/27/12 11:39

INORGANIC ANALYSIS DATA SHEET

SM 4500-NO3 F 20th

106053

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/24/12 10:20
Solids: 0.00
QC Batch: 1205349

SDG: KNM040512
Project: KNM
Laboratory ID: 1204454-01
Prepared: 04/27/12 10:55
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
14797-55-8	Nitrogen, Nitrate+Nitrite	1	0.75	mg/L	0.0097	0.050		04/27/12 11:42

INORGANIC ANALYSIS DATA SHEET

SM 4500-NO3 F 20th

106054

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/24/12 13:30
Solids: 0.00
QC Batch: 1205349

SDG: KNM040512
Project: KNM
Laboratory ID: 1204454-02
Prepared: 04/27/12 10:55
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
14797-55-8	Nitrogen, Nitrate+Nitrite	1	0.55	mg/L	0.0097	0.050		04/27/12 11:43

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D13009

SDG: KNM040512
Project: KNM
Calibration: 2D13005
Instrument: 189

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2D13009-CAL1	04111231-001	04/11/12 09:59
Cal Standard	2D13009-CAL2	04111231-002	04/11/12 10:01
Cal Standard	2D13009-CAL3	04111231-003	04/11/12 10:02
Cal Standard	2D13009-CAL4	04111231-004	04/11/12 10:03
Cal Standard	2D13009-CAL5	04111231-005	04/11/12 10:04
Cal Standard	2D13009-CAL6	04111231-006	04/11/12 10:05
Cal Standard	2D13009-CAL7	04111231-007	04/11/12 10:06
Calibration Check	2D13009-CCV1	04111232-001	04/11/12 10:09
Calibration Blank	2D13009-CCB1	04111232-002	04/11/12 10:10
Blank	1204539-BLK1	04111232-003	04/11/12 10:11
LCS	1204539-BS1	04111232-004	04/11/12 10:13
Secondary Cal Check	2D13009-SCV1	04111232-005	04/11/12 10:14
Instrument RL Check	2D13009-CRL1	04111232-006	04/11/12 10:15
Calibration Check	2D13009-CCV2	04111232-013	04/11/12 10:23
Calibration Blank	2D13009-CCB2	04111232-014	04/11/12 10:24
Calibration Check	2D13009-CCV3	04111233-001	04/11/12 13:48
Calibration Blank	2D13009-CCB3	04111233-002	04/11/12 13:50
KAFB-003	1204091-01	04111233-003	04/11/12 13:51
Calibration Check	2D13009-CCV4	04111233-013	04/11/12 14:02
Calibration Blank	2D13009-CCB4	04111233-014	04/11/12 14:03
Calibration Check	2D13009-CCV5	04111233-025	04/11/12 14:16
Calibration Blank	2D13009-CCB5	04111233-026	04/11/12 14:17
KAFB-003	1204539-MS1	04111233-028	04/11/12 14:19
KAFB-003	1204539-MSD1	04111233-029	04/11/12 14:20
Calibration Check	2D13009-CCV6	04111233-030	04/11/12 14:21
Calibration Blank	2D13009-CCB6	04111233-031	04/11/12 14:22

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D16013

SDG: KNM040512

Project: KNM

Calibration: 2D16002

Instrument: 189

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2D16013-CAL1	04131231-001	04/13/12 11:14
Cal Standard	2D16013-CAL2	04131231-002	04/13/12 11:15
Cal Standard	2D16013-CAL3	04131231-003	04/13/12 11:17
Cal Standard	2D16013-CAL4	04131231-004	04/13/12 11:18
Cal Standard	2D16013-CAL5	04131231-005	04/13/12 11:19
Cal Standard	2D16013-CAL6	04131231-006	04/13/12 11:20
Cal Standard	2D16013-CAL7	04131231-007	04/13/12 11:21
Calibration Check	2D16013-CCV1	04131232-001	04/13/12 12:48
Calibration Blank	2D16013-CCB1	04131232-002	04/13/12 12:49
Blank	1204616-BLK1	04131232-003	04/13/12 12:50
LCS	1204616-BS1	04131232-004	04/13/12 12:51
Secondary Cal Check	2D16013-SCV1	04131232-005	04/13/12 12:52
Instrument RL Check	2D16013-CRL1	04131232-006	04/13/12 12:53
106042	1204205-01	04131232-008	04/13/12 12:56
106042	1204616-MS1	04131232-009	04/13/12 12:57
106042	1204616-MSD1	04131232-010	04/13/12 12:58
106089	1204205-02	04131232-011	04/13/12 12:59
Calibration Check	2D16013-CCV2	04131232-013	04/13/12 13:01
Calibration Blank	2D16013-CCB2	04131232-014	04/13/12 13:02

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2E01020

SDG: KNM040512

Project: KNM

Calibration: 2E01004

Instrument: 189

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2E01020-CAL1	04271231-001	04/27/12 10:56
Cal Standard	2E01020-CAL2	04271231-002	04/27/12 10:57
Cal Standard	2E01020-CAL3	04271231-003	04/27/12 10:58
Cal Standard	2E01020-CAL4	04271231-004	04/27/12 10:59
Cal Standard	2E01020-CAL5	04271231-005	04/27/12 11:01
Cal Standard	2E01020-CAL6	04271231-006	04/27/12 11:02
Cal Standard	2E01020-CAL7	04271231-007	04/27/12 11:03
Calibration Check	2E01020-CCV1	04271232-001	04/27/12 11:07
Calibration Blank	2E01020-CCB1	04271232-002	04/27/12 11:08
Blank	1205349-BLK1	04271232-003	04/27/12 11:09
LCS	1205349-BS1	04271232-004	04/27/12 11:10
Secondary Cal Check	2E01020-SCV1	04271232-005	04/27/12 11:11
Instrument RL Check	2E01020-CRL1	04271232-006	04/27/12 11:13
Calibration Check	2E01020-CCV2	04271232-013	04/27/12 11:21
Calibration Blank	2E01020-CCB2	04271232-014	04/27/12 11:22
Calibration Check	2E01020-CCV3	04271232-025	04/27/12 11:34
Calibration Blank	2E01020-CCB3	04271232-026	04/27/12 11:35
106058	1204329-01	04271232-029	04/27/12 11:39
106058	1205349-MS1	04271232-030	04/27/12 11:40
106058	1205349-MSD1	04271232-031	04/27/12 11:41
106053	1204454-01	04271232-032	04/27/12 11:42
106054	1204454-02	04271232-033	04/27/12 11:43
Calibration Check	2E01020-CCV4	04271232-034	04/27/12 11:45
Calibration Blank	2E01020-CCB4	04271232-035	04/27/12 11:46

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D13009
Control Limt: +/- 10.00%

SDG: KNM040512
Project: KNM
Calibration: 2D13005
Instrument ID: 189

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D13009-CCV1	Nitrogen, Nitrate+Nitrite	0.500	0.477	95	mg/L	04/11/12 10:09
2D13009-CCV2	Nitrogen, Nitrate+Nitrite	0.500	0.503	101	mg/L	04/11/12 10:23
2D13009-CCV3	Nitrogen, Nitrate+Nitrite	0.500	0.504	101	mg/L	04/11/12 13:48
2D13009-CCV4	Nitrogen, Nitrate+Nitrite	0.500	0.526	105	mg/L	04/11/12 14:02
2D13009-CCV5	Nitrogen, Nitrate+Nitrite	0.500	0.516	103	mg/L	04/11/12 14:16
2D13009-CCV6	Nitrogen, Nitrate+Nitrite	0.500	0.524	105	mg/L	04/11/12 14:21

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D16013
Control Limt: +/- 10.00%

SDG: KNM040512
Project: KNM
Calibration: 2D16002
Instrument ID: 189

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D16013-CCV1	Nitrogen, Nitrate+Nitrite	0.500	0.491	98	mg/L	04/13/12 12:48
2D16013-CCV2	Nitrogen, Nitrate+Nitrite	0.500	0.499	100	mg/L	04/13/12 13:01

* Values outside of QC limits

02487

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2E01020
Control Limt: +/- 10.00%

SDG: KNM040512
Project: KNM
Calibration: 2E01004
Instrument ID: 189

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2E01020-CCV1	Nitrogen, Nitrate+Nitrite	0.500	0.504	101	mg/L	04/27/12 11:07
2E01020-CCV2	Nitrogen, Nitrate+Nitrite	0.500	0.516	103	mg/L	04/27/12 11:21
2E01020-CCV3	Nitrogen, Nitrate+Nitrite	0.500	0.544	109	mg/L	04/27/12 11:34
2E01020-CCV4	Nitrogen, Nitrate+Nitrite	0.500	0.515	103	mg/L	04/27/12 11:45

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Laboratory ID: 2D13009-SCV1

Sequence: 2D13009

SDG: KNM040512

Project: KNM

Instrument: 189

Calibration: 2D13005

Analyte	Expected	Found	% R	QC Limit	Units
Nitrogen, Nitrate+Nitrite	0.500	0.491	98	90-110	mg/L

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D16013-SCV1
Sequence: 2D16013

SDG: KNM040512
Project: KNM
Instrument: 189
Calibration: 2D16002

Analyte	Expected	Found	% R	QC Limit	Units
Nitrogen, Nitrate+Nitrite	0.500	0.479	96	90-110	mg/L

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2E01020-SCV1
Sequence: 2E01020

SDG: KNM040512
Project: KNM
Instrument: 189
Calibration: 2E01004

Analyte	Expected	Found	% R	QC Limit	Units
Nitrogen, Nitrate+Nitrite	0.500	0.496	99	90-110	mg/L

* Values outside of QC limits

CRDL STANDARD

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D13009

SDG: KNM040512

Project: KNM

Calibration: 2D13005

Instrument ID: 189

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2D13009-CRL1	Nitrogen, Nitrate+Nitrite	0.0100	0.0188	188 *	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D16013

SDG: KNM040512

Project: KNM

Calibration: 2D16002

Instrument ID: 189

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2D16013-CRL1	Nitrogen, Nitrate+Nitrite	0.0100	0.00561	56	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2E01020

SDG: KNM040512

Project: KNM

Calibration: 2E01004

Instrument ID: 189

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2E01020-CRL1	Nitrogen, Nitrate+Nitrite	0.0100	0.0326	326 *	mg/L	50 - 150

* Values outside of QC limits

BLANKS
SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D13009

SDG: KNM040512
Project: KNM
Calibration: 2D13005
Instrument ID: 189

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2D13009-CCB1	Nitrogen, Nitrate+Nitrite	-0.0021	mg/L	0.0097	0.050	U	04/11/12 10:10
2D13009-CCB2	Nitrogen, Nitrate+Nitrite	0.0021	mg/L	0.0097	0.050	U	04/11/12 10:24
2D13009-CCB3	Nitrogen, Nitrate+Nitrite	-0.0075	mg/L	0.0097	0.050	U	04/11/12 13:50
2D13009-CCB4	Nitrogen, Nitrate+Nitrite	0.0065	mg/L	0.0097	0.050	U	04/11/12 14:03
2D13009-CCB5	Nitrogen, Nitrate+Nitrite	-0.00097	mg/L	0.0097	0.050	U	04/11/12 14:17
2D13009-CCB6	Nitrogen, Nitrate+Nitrite	-0.0022	mg/L	0.0097	0.050	U	04/11/12 14:22

* Values outside of QC limits

BLANKS
SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D16013

SDG: KNM040512
Project: KNM
Calibration: 2D16002
Instrument ID: 189

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2D16013-CCB1	Nitrogen, Nitrate+Nitrite	-0.0062	mg/L	0.0097	0.050	U	04/13/12 12:49
2D16013-CCB2	Nitrogen, Nitrate+Nitrite	-0.0074	mg/L	0.0097	0.050	U	04/13/12 13:02

* Values outside of QC limits

BLANKS
SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2E01020

SDG: KNM040512
Project: KNM
Calibration: 2E01004
Instrument ID: 189

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2E01020-CCB1	Nitrogen, Nitrate+Nitrite	0.012	mg/L	0.0097	0.050	J	04/27/12 11:08
2E01020-CCB2	Nitrogen, Nitrate+Nitrite	0.0090	mg/L	0.0097	0.050	U	04/27/12 11:22
2E01020-CCB3	Nitrogen, Nitrate+Nitrite	0.00028	mg/L	0.0097	0.050	U	04/27/12 11:35
2E01020-CCB4	Nitrogen, Nitrate+Nitrite	0.0021	mg/L	0.0097	0.050	U	04/27/12 11:46

* Values outside of QC limits

QC BATCH SUMMARY

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204539 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
KAFB-003	1204091-01	04/11/12 09:59	
Blank	1204539-BLK1	04/11/12 09:59	
LCS	1204539-BS1	04/11/12 09:59	
KAFB-003	1204539-MS1	04/11/12 09:59	[Spk] 5mL->25mL; 10mL->10mL; Spiked 10mL
KAFB-003	1204539-MSD1	04/11/12 09:59	[Spk] 5mL->25mL; 10mL->10mL; Spiked 10mL

QC BATCH SUMMARY

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204616 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
106042	1204205-01	04/13/12 11:05	
106089	1204205-02	04/13/12 11:05	
Blank	1204616-BLK1	04/13/12 11:05	
LCS	1204616-BS1	04/13/12 11:05	
106042	1204616-MS1	04/13/12 11:05	
106042	1204616-MSD1	04/13/12 11:05	

QC BATCH SUMMARY

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1205349 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
106058	1204329-01	04/27/12 10:55	
106053	1204454-01	04/27/12 10:55	
106054	1204454-02	04/27/12 10:55	
Blank	1205349-BLK1	04/27/12 10:55	
LCS	1205349-BS1	04/27/12 10:55	
106058	1205349-MS1	04/27/12 10:55	
106058	1205349-MSD1	04/27/12 10:55	

METHOD BLANK DATA SHEET
SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204539-BLK1
File ID: 04111232-003
Prepared: 04/11/12 09:59
Analyzed: 04/11/12 10:11
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL
QC Batch: 1204539
Sequence: 2D13009
Calibration: 2D13005
Instrument: 189

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
14797-55-8	Nitrogen, Nitrate+Nitrite	0.050	mg/L	0.0097	0.050	U

METHOD BLANK DATA SHEET
SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204616-BLK1
File ID: 04131232-003
Prepared: 04/13/12 11:05
Analyzed: 04/13/12 12:50
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL
QC Batch: 1204616
Sequence: 2D16013
Calibration: 2D16002
Instrument: 189

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
14797-55-8	Nitrogen, Nitrate+Nitrite	0.050	mg/L	0.0097	0.050	U

METHOD BLANK DATA SHEET
SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1205349-BLK1
File ID: 04271232-003
Prepared: 04/27/12 10:55
Analyzed: 04/27/12 11:09
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL
QC Batch: 1205349
Sequence: 2E01020
Calibration: 2E01004
Instrument: 189

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
14797-55-8	Nitrogen, Nitrate+Nitrite	0.050	mg/L	0.0097	0.050	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

KAFB-003

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204539

SDG: KNM040512

Project: KNM

Laboratory ID: 1204539-MS1

Preparation: General Inorganic Prep

Initial/Final: 2 mL / 10 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Nitrogen, Nitrate+Nitrite	2.50	0.479	3.41	117 *	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

KAFB-003

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204539

SDG: KNM040512

Project: KNM

Laboratory ID: 1204539-MSD1

Preparation: General Inorganic Prep

Initial/Final: 2 mL / 10 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Nitrogen, Nitrate+Nitrite	2.50	3.31	113 *	3	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106042

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204616

SDG: KNM040512

Project: KNM

Laboratory ID: 1204616-MS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Nitrogen, Nitrate+Nitrite	0.500	ND	0.545	109	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106042

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204616

SDG: KNM040512

Project: KNM

Laboratory ID: 1204616-MSD1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Nitrogen, Nitrate+Nitrite	0.500	0.513	103	6	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02507

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106058

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205349

SDG: KNM040512

Project: KNM

Laboratory ID: 1205349-MS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Nitrogen, Nitrate+Nitrite	0.500	0.105	0.613	102	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106058

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205349

SDG: KNM040512

Project: KNM

Laboratory ID: 1205349-MSD1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Nitrogen, Nitrate+Nitrite	0.500	0.573	94	7	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204539

SDG: KNM040512

Project: KNM

Laboratory ID: 1204539-BS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Sequence: 2D13009

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Nitrogen, Nitrate+Nitrite	0.500	0.514	103	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204616

SDG: KNM040512

Project: KNM

Laboratory ID: 1204616-BS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Sequence: 2D16013

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Nitrogen, Nitrate+Nitrite	0.500	0.504	101	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205349

SDG: KNM040512

Project: KNM

Laboratory ID: 1205349-BS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Sequence: 2E01020

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Nitrogen, Nitrate+Nitrite	0.500	0.515	103	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

HOLDING TIME SUMMARY

SM 4500-NO3 F 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

Analyte: Nitrogen, Nitrate+Nitrite

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
KAFB-003	04/04/12	04/05/12		04/11/12	7	NA	04/11/12	7	28	
106042	04/10/12	04/11/12		04/13/12	3	NA	04/13/12	3	28	
106089	04/10/12	04/11/12		04/13/12	3	NA	04/13/12	3	28	
106058	04/17/12	04/18/12		04/27/12	10	NA	04/27/12	10	28	
106053	04/24/12	04/25/12		04/27/12	3	NA	04/27/12	3	28	
106054	04/24/12	04/25/12		04/27/12	3	NA	04/27/12	3	28	

Inorganic - Wet Chemistry, Waste Water, Apr-11-12

Instrument = 189, Calibration = 2D13005

Sequence Analyses:
Nitrogen, NO3+NO2 4500-NO3 F

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D13009-CAL1	QC		2040255		CAL STANDARD	
2D13009-CAL2	QC		2040256		CAL STANDARD	
2D13009-CAL3	QC		2040257		CAL STANDARD	
2D13009-CAL4	QC		2040258		CAL STANDARD	
2D13009-CAL5	QC		2040259		CAL STANDARD	
2D13009-CAL6	QC		2040260		CAL STANDARD	
2D13009-CAL7	QC		2040261		CAL STANDARD	
2D13009-CCV1	QC		2040256		CALIBRATION CHECK	
2D13009-CCV2	QC		2040256		CALIBRATION CHECK	
2D13009-CCB1	QC		2040261		CALIBRATION BLANK	
2D13009-CCB2	QC		2040261		CALIBRATION BLANK	
1204539-BLK1	QC				BLANK	
1204539-BS1	QC				LCS	
2D13009-SCV1	QC		2040262		SECONDARY CAL CHECK	
2D13009-CRL1	QC		2040260		INSTRUMENT RL CHECK	
2D13009-CCV3	QC		2040256		CALIBRATION CHECK	
2D13009-CCV4	QC		2040256		CALIBRATION CHECK	
2D13009-CCV5	QC		2040256		CALIBRATION CHECK	
2D13009-CCV6	QC		2040256		CALIBRATION CHECK	
2D13009-CCB3	QC		2040261		CALIBRATION BLANK	
2D13009-CCB4	QC		2040261		CALIBRATION BLANK	
2D13009-CCB5	QC		2040261		CALIBRATION BLANK	
2D13009-CCB6	QC		2040261		CALIBRATION BLANK	
1204091-01	Nitrogen, NO3+NO2 4500-NO3 F	K			TechLaw	
1204539-MS1	QC				MATRIX SPIKE	[Spk] 5mL->25mL; 10mL->10mL; Spiked 10mL
1204539-MSD1	QC				MATRIX SPIKE DUP	[Spk] 5mL->25mL; 10mL->10mL; Spiked 10mL

Comments:	Analyst Initials:

TriMatrix Laboratories, Inc.

Due 4-18-12

PREPARATION BATCH 1204539

Printed: 4/12/2012 7:56:25AM

NB 4-16-12

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

Level 4

02515

Standard	Description	Solvent	LotNum
2030137	NO3 100 mg/L	H2O	066134
2040198	Sulfanilamide Reagent	n/a	n/a
2040199	Ammonium Chloride Buffer	DI H2O	n/a

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204091	Nitrogen, NO3+NO2 4500-NO3 F				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1204539-BLK1		Apr-11-12 09:59	CAC	10	10					BLANK	
1204539-BS1		Apr-11-12 09:59	CAC	10	10			2030137	50	LCS	
1204539-MS1		Apr-11-12 09:59	CAC	2	10		1204091-01	2030137	50	MATRIX SPIKE	[Spk] 5mL->25mL; 10mL->10mL; Spik
1204539-MSD1		Apr-11-12 09:59	CAC	2	10		1204091-01	2030137	50	MATRIX SPIKE DUP	[Spk] 5mL->25mL; 10mL->10mL; Spik
1204091-01	K	Apr-11-12 09:59	CAC	10	10					TechLaw	

Comments:	Analyst Initials:

Creator: cac
Creation Date: Apr 11, 2012 9:59:45
Last Modified: Apr 11, 2012 9:59:45
Description: None

2040198
2040199

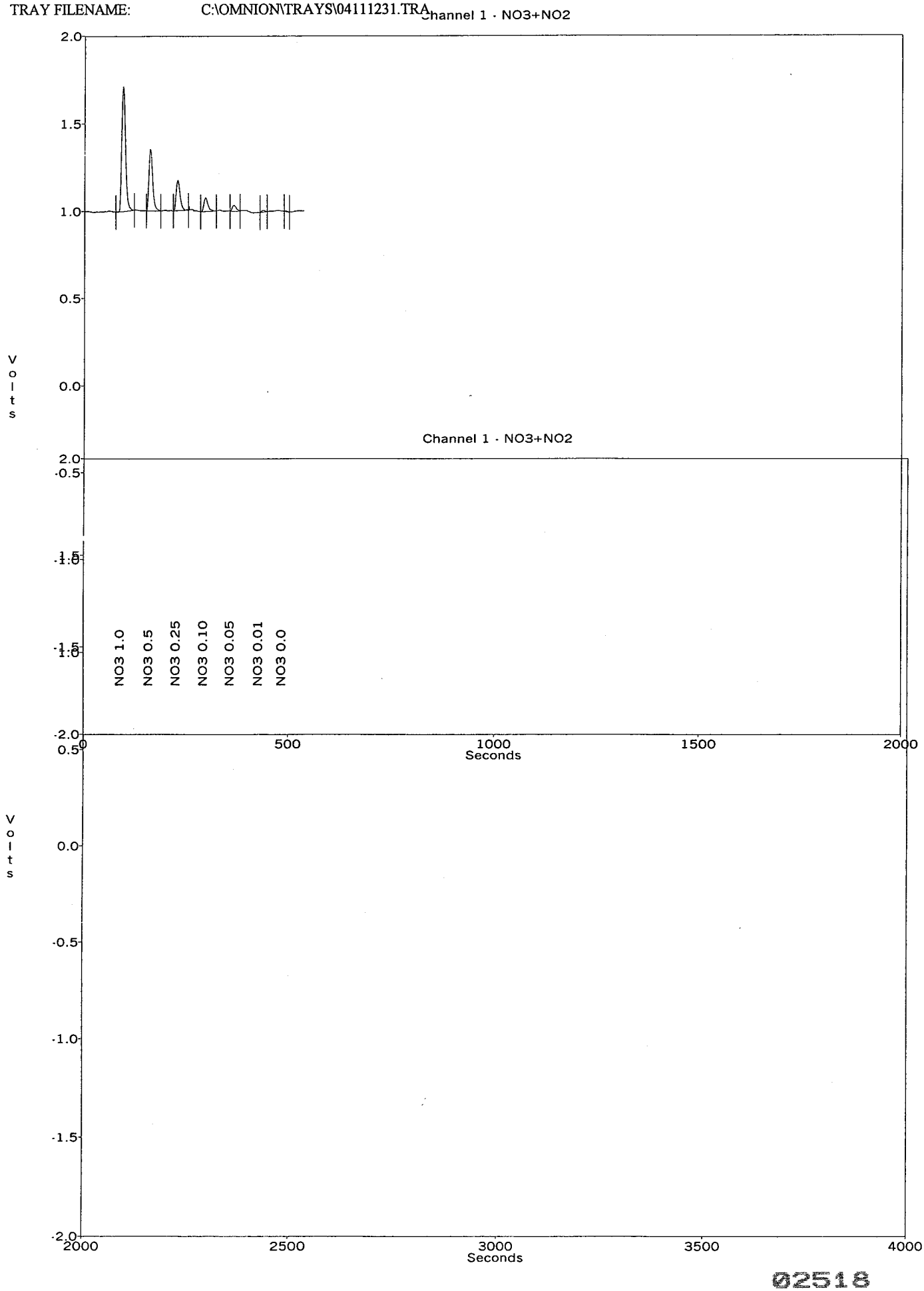
Cup #	Sample ID	Manual Dilution	Sample Type	
1	NO3 1.0	1.0000	CalStd	
2	NO3 0.5	1.0000	CalStd	
3	NO3 0.25	1.0000	CalStd	
4	NO3 0.10	1.0000	CalStd	
5	NO3 0.05	1.0000	CalStd	
6	NO3 0.01	1.0000	CalStd	
7	NO3 0.0	1.0000	CalStd	

OPERATOR: cac
ACQ. TIME: Apr 11, 2012 9:59:57
DATA FILENAME: C:\OMNION\DATA\04111231.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04111231.TRA

Multi-Channel Table
Type: Calibration Standards
Channel Range: 1 to 8 -- Cup Range: 1 to 50

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (uv-s)	Auto Dil Factor
1	NO3 1.0	11 Apr 2012	09:59:59	1	7669696.000	1.00
2	NO3 0.5	11 Apr 2012	10:01:06	1	3883872.000	1.00
3	NO3 0.25	11 Apr 2012	10:02:13	1	1925626.000	1.00
4	NO3 0.10	11 Apr 2012	10:03:22	1	946144.000	1.00
5	NO3 0.05	11 Apr 2012	10:04:30	1	397299.000	1.00
6	NO3 0.01	11 Apr 2012	10:05:39	1	97155.000	1.00
7	NO3 0.0	11 Apr 2012	10:06:48	1	42819.000	1.00

OPERATOR: cac
ACQ. TIME: Apr 11, 2012 9:59:57
DATA FILENAME: C:\OMNION\DATA\04111231.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04111231.TRA



02518

INSTRUMENT: FIA
TRAY: 04111231.TRA METHOD: NO3LOW.MET DATAFILE: 04111231.FDT
DATE/TIME: Wed Apr 11 09:59:57 2012 OPERATOR: cac

*** Begin Calibration ***
Cup# 1 Sample: NO3 1.0 Type: CalStd Level: 1 Rep# 1/1
Ch 1: NO3+NO2 Peak Area = 7669696.0 µv-s
Cup# 2 Sample: NO3 0.5 Type: CalStd Level: 2 Rep# 1/1
Ch 1: NO3+NO2 Peak Area = 3883872.0 µv-s
Cup# 3 Sample: NO3 0.25 Type: CalStd Level: 3 Rep# 1/1
Ch 1: NO3+NO2 Peak Area = 1925626.0 µv-s
Cup# 4 Sample: NO3 0.10 Type: CalStd Level: 4 Rep# 1/1
Ch 1: NO3+NO2 Peak Area = 946144.0 µv-s
Cup# 5 Sample: NO3 0.05 Type: CalStd Level: 5 Rep# 1/1
Ch 1: NO3+NO2 Peak Area = 397299.0 µv-s
Cup# 6 Sample: NO3 0.01 Type: CalStd Level: 6 Rep# 1/1
Ch 1: NO3+NO2 Peak Area = 97155.0 µv-s
Cup# 7 Sample: NO3 0.0 Type: CalStd Level: 7 Rep# 1/1
Ch 1: NO3+NO2 Peak Area = 42819.0 µv-s
*** Updated Calibration ***
Ch 1: NO3+NO2
** 1st Order Poly Calibration **
C[0] = 1.31179e-007
C[1] = -0.00754041
r = 0.9998
*** End Calibration Block ***
*** Calibration Passed ***
******* Tray Run Complete *******

Creator: cac
Creation Date: Apr 11, 2012 10:05:08
Last Modified: Apr 11, 2012 10:05:08
Description: None

Cup #	Sample ID	Manual Dilution	Sample Type	
1	blk	1.0000	Unknown	
2	bs	1.0000	Unknown	
3	scv	1.0000	Unknown	
4	crl	1.0000	Unknown	
5	no2 0.5 check	1.0000	Unknown	
6	1204155-01(5/50)	10.0000	Unknown	
7	1204155-01ms(5/50)	10.0000	Unknown	
8	1204155-01msd(5/50)	10.0000	Unknown	
9	1204173-01	1.0000	Unknown	
10	1204173-01(5/50)	10.0000	Unknown	

OPERATOR: cac
ACQ. TIME: Apr 11, 2012 10:09:31
DATA FILENAME: C:\OMNION\DATA\04111232.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04111232.TRA

Multi-Channel Table
Type: DQM
Channel Range: 1 to 8 -- Cup Range: 1 to 9

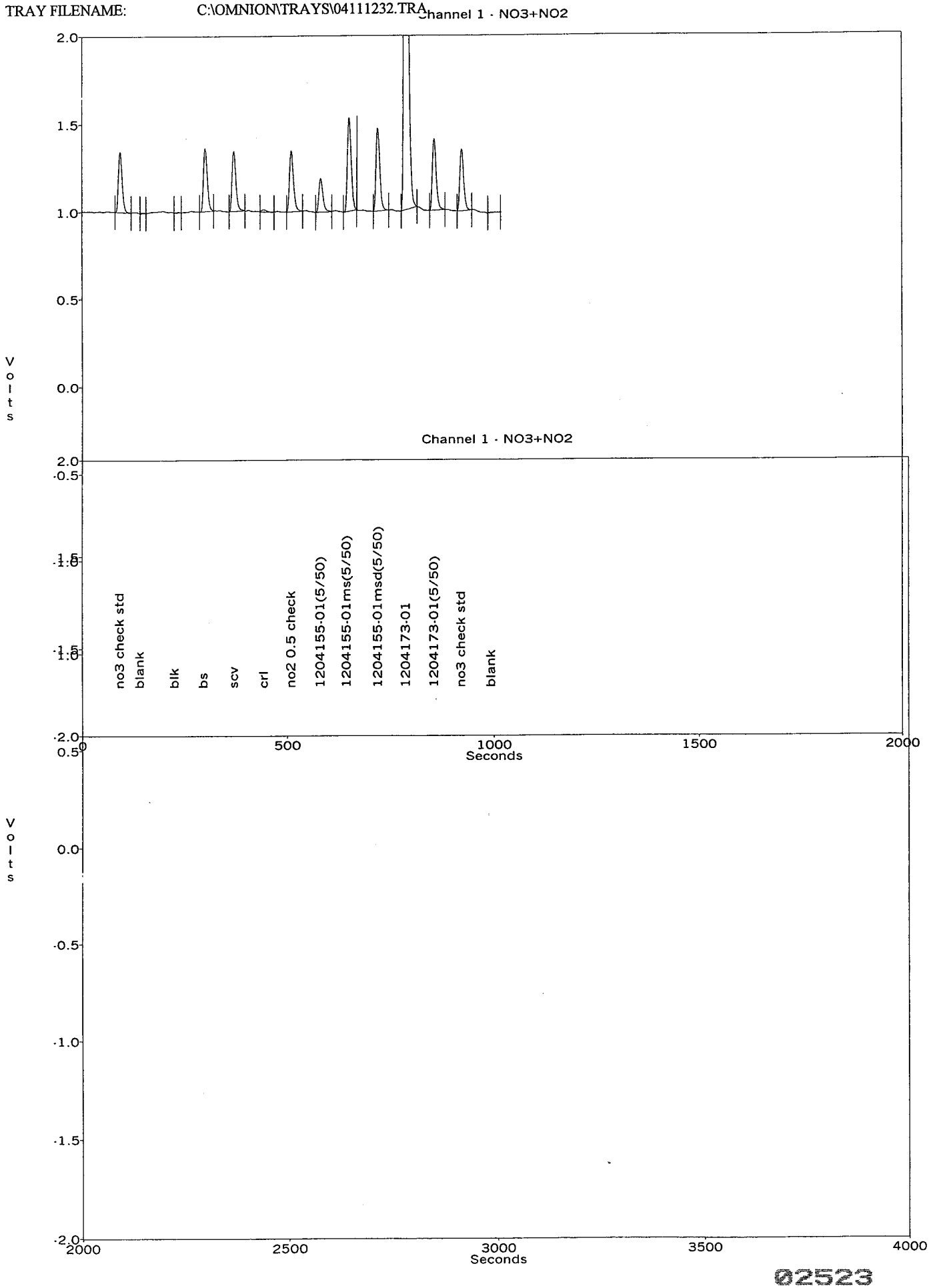
Cup	Sample ID	Sample Type	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (mg/l)	Auto Dil Factor
2	no3 check st	RelChkStd	11 Apr 2012	10:09:33	1	0.477	1.00 CCU1
				Known Concentration:		0.500	
				% Difference:		-4.537	
2	no3 check st	RelChkStd	11 Apr 2012	10:23:20	1	0.503	1.00 CCU2
				Known Concentration:		0.500	
				% Difference:		0.565	
7	blank	Blank	11 Apr 2012	10:10:43	1	-0.002	1.00 CLB1
7	blank	Blank	11 Apr 2012	10:24:29	1	0.002	1.00 CLB2

OPERATOR: cac
ACQ. TIME: Apr 11, 2012 10:09:31
DATA FILENAME: C:\OMNION\DATA\04111232.FDT

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 1 to 25

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (mg/l)	Man Dil Factor
1	blk	11 Apr 2012	10:11:52	1	-0.000	1.0
2	bs	11 Apr 2012	10:13:02	1	0.514	1.0
3	scv	11 Apr 2012	10:14:12	1	0.491	1.0
4	crl	11 Apr 2012	10:15:20	1	0.019	1.0
5	no2 0.5 check	11 Apr 2012	10:16:29	1	0.502	1.0
6	1204155-01(5/50	11 Apr 2012	10:17:38	1	2.818	10.0
7	1204155-01ms(5/	11 Apr 2012	10:18:47	1	7.539	10.0
8	1204155-01msd(5	11 Apr 2012	10:19:56	1	6.732	10.0
9	1204173-01	11 Apr 2012	10:21:05	1	4.842	1.0
10	1204173-01(5/50	11 Apr 2012	10:22:14	1	5.930	10.0

OPERATOR: cac
ACQ. TIME: Apr 11, 2012 10:09:31
DATA FILENAME: C:\OMNION\DATA\04111232.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04111232.TRA



02523

INSTRUMENT: FIA
TRAY: 04111232.TRA METHOD: NO3LOW.MET DATAFILE: 04111232.FDT
DATE/TIME: Wed Apr 11 10:09:32 2012 OPERATOR: cac

***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1
Ch 1: NO3+NO2 = 0.4773 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.4773 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = -4.5366%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1
Ch 1: NO3+NO2 = -0.0021 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = -0.0021 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
Cup# 1 Sample: blk Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = -0.0005 mg/l
Cup# 2 Sample: bs Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5144 mg/l
Cup# 3 Sample: scv Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.4909 mg/l
Cup# 4 Sample: crl Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0188 mg/l
Cup# 5 Sample: no2 0.5 check Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5018 mg/l
Cup# 6 Sample: 1204155-01(5/50) Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.2818 mg/l
Cup# 7 Sample: 1204155-01ms(5/50) Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.7539 mg/l
Cup# 8 Sample: 1204155-01msd(5/50) Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.6732 mg/l
Cup# 9 Sample: 1204173-01 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 4.8424 mg/l
Cup# 10 Sample: 1204173-01(5/50) Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5930 mg/l
***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1 Repeat# 1
Ch 1: NO3+NO2 = 0.5028 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.5028 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = 0.5652%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1 Repeat# 1
Ch 1: NO3+NO2 = 0.0021 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = 0.0021 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
******* Tray Run Complete *******

OPERATOR: cac
ACQ. TIME: Apr 11, 2012 10:09:31
DATA FILENAME: C:\OMNION\DATA\04111232.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04111232.TRA

Multi-Channel Table
Type: DQM
Channel Range: 1 to 8 -- Cup Range: 1 to 9

Cup	Sample ID	Sample Type	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (uv-s)	Auto Dil Factor
2	no3 check st	RelChkStd	11 Apr 2012	10:09:33	1	3696147.000	1.00
					Known Concentration:	0.500	
					% Difference:	-4.537	
2	no3 check st	RelChkStd	11 Apr 2012	10:23:20	1	3890605.000	1.00
					Known Concentration:	0.500	
					% Difference:	0.565	
7	blank	Blank	11 Apr 2012	10:10:43	1	41618.000	1.00
7	blank	Blank	11 Apr 2012	10:24:29	1	73165.000	1.00

OPERATOR: cac
ACQ. TIME: Apr 11, 2012 10:09:31
DATA FILENAME: C:\OMNION\DATA\04111232.FDT

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 1 to 25

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (uv-s)	Man Dil Factor
1	blk	11 Apr 2012	10:11:52	1	53826.000	1.0
2	bs	11 Apr 2012	10:13:02	1	3978864.000	1.0
3	scv	11 Apr 2012	10:14:12	1	3799978.000	1.0
4	crl	11 Apr 2012	10:15:20	1	200922.000	1.0
5	no2 0.5 check	11 Apr 2012	10:16:29	1	3882551.000	1.0
6	1204155-01(5/50	11 Apr 2012	10:17:38	1	2205888.000	10.0
7	1204155-01ms(5/	11 Apr 2012	10:18:47	1	5804868.000	10.0
8	1204155-01msd(5	11 Apr 2012	10:19:56	1	5189344.000	10.0
9	1204173-01	11 Apr 2012	10:21:05	1	36971620.000	1.0
10	1204173-01(5/50	11 Apr 2012	10:22:14	1	4578391.000	10.0

Creator: cac
Creation Date: Apr 11, 2012 13:48:40
Last Modified: Apr 11, 2012 13:57:51
Description: None

Cup #	Sample ID	Manual Dilution	Sample Type	
1	1204091-01	1.0000	Unknown	
2	1204091-01 ms	1.0000	Unknown	
3	1204091-01 msd	1.0000	Unknown	
4	1204075-02	1.0000	Unknown	
5	1204075-02 ms	1.0000	Unknown	
6	1204075-02 msd	1.0000	Unknown	
7	pca	1.0000	Unknown	
8	pca ms	1.0000	Unknown	
9	pca msd	1.0000	Unknown	
10	1204075-01	1.0000	Unknown	
11	1204176-01(5/25)	5.0000	Unknown	
12	1204176-02	1.0000	Unknown	
13	1204176-03	1.0000	Unknown	
14	1204184-01	1.0000	Unknown	
15	1204184-02	1.0000	Unknown	
16	1204184-03	1.0000	Unknown	
17	1204190-01	1.0000	Unknown	
18	1204190-03	1.0000	Unknown	
19	1204190-03 ms	1.0000	Unknown	
20	1204190-03 msd	1.0000	Unknown	
21	1204190-05	1.0000	Unknown	
22	1204091-01ms(5/25)	5.0000	Unknown	
23	1204091-01msd(5/25)	5.0000	Unknown	

OPERATOR: cac
ACQ. TIME: Apr 11, 2012 13:48:55
DATA FILENAME: C:\OMNION\DATA\04111233.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04111233.TRA

Multi-Channel Table
Type: DQM
Channel Range: 1 to 8 -- Cup Range: 1 to 9

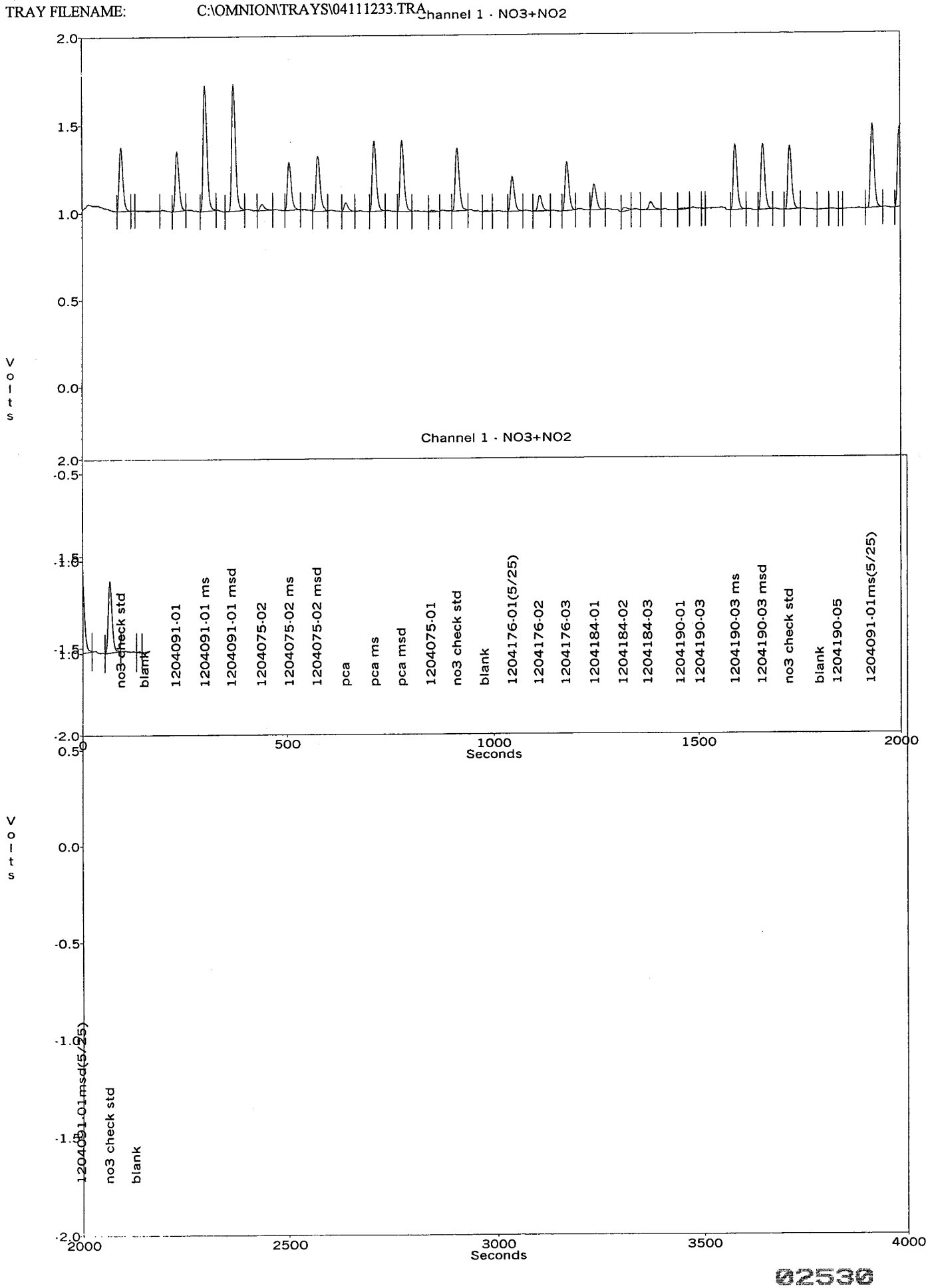
Cup	Sample ID	Sample Type	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (mg/l)	Auto Dil Factor	
2	no3 check st	RelChkStd	11 Apr 2012	13:48:57	1	0.504	1.00	CW3
				Known Concentration:		0.500		
				% Difference:		0.843		
2	no3 check st	RelChkStd	11 Apr 2012	14:02:34	1	0.526	1.00	CW4
				Known Concentration:		0.500		
				% Difference:		5.299		
2	no3 check st	RelChkStd	11 Apr 2012	14:16:07	1	0.516	1.00	CW5
				Known Concentration:		0.500		
				% Difference:		3.187		
2	no3 check st	RelChkStd	11 Apr 2012	14:21:47	1	0.524	1.00	CW6
				Known Concentration:		0.500		
				% Difference:		4.896		
7	blank	Blank	11 Apr 2012	13:50:06	1	-0.008	1.00	CB3
7	blank	Blank	11 Apr 2012	14:03:43	1	0.006	1.00	CB4
7	blank	Blank	11 Apr 2012	14:17:16	1	-0.001	1.00	CB5
7	blank	Blank	11 Apr 2012	14:22:56	1	-0.002	1.00	CB6

OPERATOR: cac
ACQ. TIME: Apr 11, 2012 13:48:55
DATA FILENAME: C:\OMNION\DATA\04111233.FDT

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 1 to 25

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (mg/l)	Man Dil Factor
1	1204091-01	11 Apr 2012	13:51:15	1	0.479	1.0
~~2~~	~~1204091-01 ms~~	~~11 Apr 2012~~	~~13:52:24~~	~~1~~	~~1.017~~	~~1.0~~ CAC
~~3~~	~~1204091-01 msd~~	~~11 Apr 2012~~	~~13:53:33~~	~~1~~	~~1.034~~	~~1.0~~ 4-13-12
4	1204075-02	11 Apr 2012	13:54:41	1	0.054	1.0
5	1204075-02 ms	11 Apr 2012	13:55:48	1	0.391	1.0
6	1204075-02 msd	11 Apr 2012	13:56:56	1	0.473	1.0
7	pca	11 Apr 2012	13:58:04	1	0.067	1.0
8	pca ms	11 Apr 2012	13:59:12	1	0.576	1.0
9	pca msd	11 Apr 2012	14:00:19	1	0.593	1.0
10	1204075-01	11 Apr 2012	14:01:27	1	0.001	1.0
11	1204176-01(5/25	11 Apr 2012	14:04:50	1	1.421	5.0
12	1204176-02	11 Apr 2012	14:05:57	1	0.134	1.0
13	1204176-03	11 Apr 2012	14:07:03	1	0.395	1.0
14	1204184-01	11 Apr 2012	14:08:10	1	0.215	1.0
15	1204184-02	11 Apr 2012	14:09:17	1	0.033	1.0
16	1204184-03	11 Apr 2012	14:10:26	1	0.073	1.0
17	1204190-01	11 Apr 2012	14:11:35	1	0.016	1.0
18	1204190-03	11 Apr 2012	14:12:44	1	-0.003	1.0
19	1204190-03 ms	11 Apr 2012	14:13:52	1	0.530	1.0
20	1204190-03 msd	11 Apr 2012	14:15:00	1	0.529	1.0
21	1204190-05	11 Apr 2012	14:18:24	1	-0.005	1.0
22	1204091-01ms(5/	11 Apr 2012	14:19:32	1	3.408	5.0
23	1204091-01msd(5	11 Apr 2012	14:20:39	1	3.306	5.0

OPERATOR: cac
ACQ. TIME: Apr 11, 2012 13:48:55
DATA FILENAME: C:\OMNION\DATA\04111233.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04111233.TRA



INSTRUMENT: FIA
TRAY: 04111233.TRA METHOD: NO3LOW.MET DATAFILE: 04111233.FDT
DATE/TIME: Wed Apr 11 13:48:55 2012 OPERATOR: cac

***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1
Ch 1: NO3+NO2 = 0.5042 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.5042 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = 0.8434%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1
Ch 1: NO3+NO2 = -0.0075 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = -0.0075 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
Cup# 1 Sample: 1204091-01 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.4793 mg/l
Cup# 2 Sample: 1204091-01 ms Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 1.0169 mg/l
Cup# 3 Sample: 1204091-01 msd Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 1.0343 mg/l
Cup# 4 Sample: 1204075-02 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0541 mg/l
Cup# 5 Sample: 1204075-02 ms Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.3908 mg/l
Cup# 6 Sample: 1204075-02 msd Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.4730 mg/l
Cup# 7 Sample: pca Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0669 mg/l
Cup# 8 Sample: pca ms Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5757 mg/l
Cup# 9 Sample: pca msd Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5926 mg/l
Cup# 10 Sample: 1204075-01 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0005 mg/l
***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1 Repeat# 1
Ch 1: NO3+NO2 = 0.5265 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.5265 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = 5.2989%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1 Repeat# 1
Ch 1: NO3+NO2 = 0.0065 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = 0.0065 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
Cup# 11 Sample: 1204176-01(5/25) Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.2842 mg/l
Cup# 12 Sample: 1204176-02 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.1340 mg/l
Cup# 13 Sample: 1204176-03 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.3945 mg/l
Cup# 14 Sample: 1204184-01 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.2147 mg/l
Cup# 15 Sample: 1204184-02 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0334 mg/l
Cup# 16 Sample: 1204184-03 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0732 mg/l
Cup# 17 Sample: 1204190-01 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0157 mg/l

Cup# 18 Sample: 1204190-03 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = -0.0027 mg/l
Cup# 19 Sample: 1204190-03 ms Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5305 mg/l
Cup# 20 Sample: 1204190-03 msd Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5291 mg/l
***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1 Repeat# 2
Ch 1: NO3+NO2 = 0.5159 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.5159 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = 3.1869%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1 Repeat# 2
Ch 1: NO3+NO2 = -0.0010 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = -0.0010 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
Cup# 21 Sample: 1204190-05 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = -0.0052 mg/l
Cup# 22 Sample: 1204091-01ms(5/25) Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.6815 mg/l
Cup# 23 Sample: 1204091-01msd(5/25) Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.6612 mg/l
***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1 Repeat# 3
Ch 1: NO3+NO2 = 0.5245 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.5245 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = 4.8964%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1 Repeat# 3
Ch 1: NO3+NO2 = -0.0022 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = -0.0022 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
******* Tray Run Complete *******

OPERATOR: cac
ACQ. TIME: Apr 11, 2012 13:48:55
DATA FILENAME: C:\OMNION\DATA\04111233.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04111233.TRA

Multi-Channel Table
Type: DQM
Channel Range: 1 to 8 -- Cup Range: 1 to 9

Cup	Sample ID	Sample Type	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (uv-s)	Auto Dil Factor
2	no3 check st	RelChkStd	11 Apr 2012	13:48:57	1	3901210.000	1.00
				Known Concentration:		0.500	
				% Difference:		0.843	
2	no3 check st	RelChkStd	11 Apr 2012	14:02:34	1	4071034.000	1.00
				Known Concentration:		0.500	
				% Difference:		5.299	
2	no3 check st	RelChkStd	11 Apr 2012	14:16:07	1	3990535.000	1.00
				Known Concentration:		0.500	
				% Difference:		3.187	
2	no3 check st	RelChkStd	11 Apr 2012	14:21:47	1	4055693.000	1.00
				Known Concentration:		0.500	
				% Difference:		4.896	
7	blank	Blank	11 Apr 2012	13:50:06	1	0.000	1.00
7	blank	Blank	11 Apr 2012	14:03:43	1	106898.000	1.00
7	blank	Blank	11 Apr 2012	14:17:16	1	50086.000	1.00
7	blank	Blank	11 Apr 2012	14:22:56	1	40809.000	1.00

OPERATOR: cac
ACQ. TIME: Apr 11, 2012 13:48:55
DATA FILENAME: C:\OMNION\DATA\04111233.FDT

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 1 to 25

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (uv-s)	Man Dil Factor
1	1204091-01	11 Apr 2012	13:51:15	1	3711034.000	1.0
2	1204091-01 ms	11 Apr 2012	13:52:24	1	7809591.000	1.0
3	1204091-01 msd	11 Apr 2012	13:53:33	1	7941895.000	1.0
4	1204075-02	11 Apr 2012	13:54:41	1	469834.000	1.0
5	1204075-02 ms	11 Apr 2012	13:55:48	1	3036743.000	1.0
6	1204075-02 msd	11 Apr 2012	13:56:56	1	3663050.000	1.0
7	pca	11 Apr 2012	13:58:04	1	567702.000	1.0
8	pca ms	11 Apr 2012	13:59:12	1	4445853.000	1.0
9	pca msd	11 Apr 2012	14:00:19	1	4574631.000	1.0
10	1204075-01	11 Apr 2012	14:01:27	1	61526.000	1.0
11	1204176-01(5/25	11 Apr 2012	14:04:50	1	2224058.000	5.0
12	1204176-02	11 Apr 2012	14:05:57	1	1078688.000	1.0
13	1204176-03	11 Apr 2012	14:07:03	1	3064893.000	1.0
14	1204184-01	11 Apr 2012	14:08:10	1	1694195.000	1.0
15	1204184-02	11 Apr 2012	14:09:17	1	312445.000	1.0
16	1204184-03	11 Apr 2012	14:10:26	1	615402.000	1.0
17	1204190-01	11 Apr 2012	14:11:35	1	177357.000	1.0
18	1204190-03	11 Apr 2012	14:12:44	1	36586.000	1.0
19	1204190-03 ms	11 Apr 2012	14:13:52	1	4101322.000	1.0
20	1204190-03 msd	11 Apr 2012	14:15:00	1	4091146.000	1.0
21	1204190-05	11 Apr 2012	14:18:24	1	18122.000	1.0
22	1204091-01ms(5/	11 Apr 2012	14:19:32	1	5252810.000	5.0
23	1204091-01msd(5	11 Apr 2012	14:20:39	1	5098087.000	5.0

Inorganic - Wet Chemistry, Water, Apr-13-12

Instrument = 189, Calibration = 2D16002

Sequence Analyses:
Nitrogen, NO3+NO2 4500-NO3 F

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D16013-CAL1	QC		2040255		CAL STANDARD	
2D16013-CAL2	QC		2040256		CAL STANDARD	
2D16013-CAL3	QC		2040257		CAL STANDARD	
2D16013-CAL4	QC		2040258		CAL STANDARD	
2D16013-CAL5	QC		2040259		CAL STANDARD	
2D16013-CAL6	QC		2040260		CAL STANDARD	
2D16013-CAL7	QC		2040261		CAL STANDARD	
2D16013-CCV1	QC		2040256		CALIBRATION CHECK	
2D16013-CCV2	QC		2040256		CALIBRATION CHECK	
2D16013-CCB1	QC		2040261		CALIBRATION BLANK	
2D16013-CCB2	QC		2040261		CALIBRATION BLANK	
1204616-BLK1	QC				BLANK	
1204616-BS1	QC				LCS	
2D16013-SCV1	QC		2040262		SECONDARY CAL CHECK	
2D16013-CRL1	QC		2040260		INSTRUMENT RL CHECK	
1204205-01	Nitrogen, NO3+NO2 4500-NO3 F	K			TechLaw	
1204616-MS1	QC				MATRIX SPIKE	
1204616-MSD1	QC				MATRIX SPIKE DUP	
1204205-02	Nitrogen, NO3+NO2 4500-NO3 F	K			TechLaw	

Comments:

Analyst Initials:

TriMatrix Laboratories, Inc.

Due 4-24-12

PREPARATION BATCH 1204616

Printed: 4/13/2012 3:58:27PM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

HLB 4-23-12

Level 4 MD

32539

Standard	Description	Solvent	LotNum
2030137	NO3 100 mg/L	H2O	066134
2040198	Sulfanilamide Reagent	n/a	n/a
2040199	Ammonium Chloride Buffer	DI H2O	n/a

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204205	Nitrogen, NO3+NO2 4500-NO3 F				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1204616-BLK1		Apr-13-12 11:05	CAC	10	10					BLANK	
1204616-BS1		Apr-13-12 11:05	CAC	10	10			2030137	50	LCS	
1204616-MS1		Apr-13-12 11:05	CAC	10	10		1204205-01	2030137	50	MATRIX SPIKE	
1204616-MSD1		Apr-13-12 11:05	CAC	10	10		1204205-01	2030137	50	MATRIX SPIKE DUP	
1204205-01	K	Apr-13-12 11:05	CAC	10	10					TechLaw	
1204205-02	K	Apr-13-12 11:05	CAC	10	10					TechLaw	

Comments:

Analyst Initials:

Creator: cac
Creation Date: Apr 13, 2012 11:05:28
Last Modified: Apr 13, 2012 11:05:28
Description: None

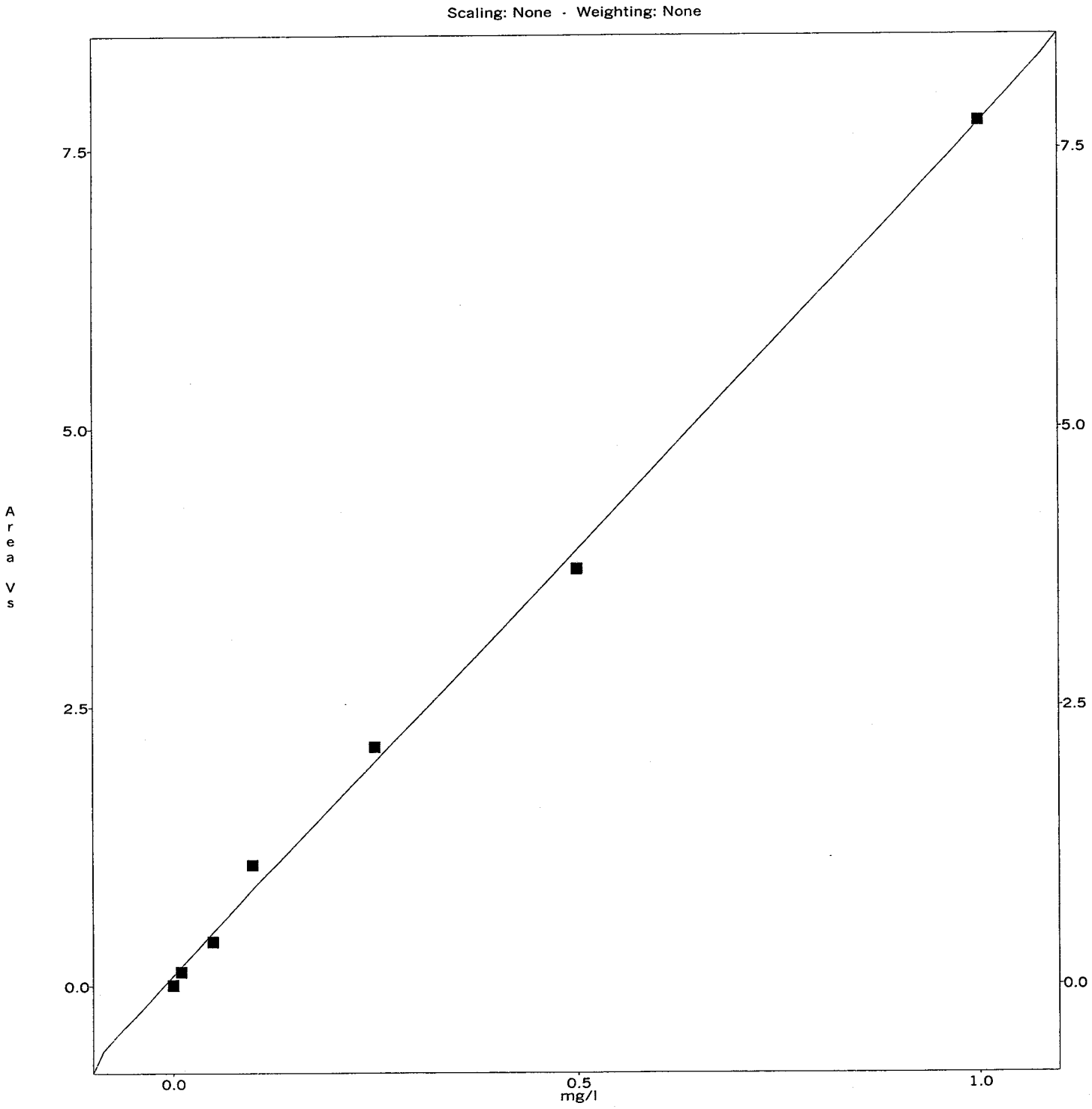
2040198
2040199

Cup #	Sample ID	Manual Dilution	Sample Type	
1	NO3 1.0	1.0000	CalStd	
2	NO3 0.5	1.0000	CalStd	
3	NO3 0.25	1.0000	CalStd	
4	NO3 0.10	1.0000	CalStd	
5	NO3 0.05	1.0000	CalStd	
6	NO3 0.01	1.0000	CalStd	
7	NO3 0.0	1.0000	CalStd	

NO3+NO2

Lvl	Area	mg/l	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Replic STD	Replic % RSD	Residual 1st Poly
1	7745479	1.00	7745479					0.0	0.0	-0.2
2	3741226	0.50	3741226					0.0	0.0	4.4
3	2134733	0.25	2134733					0.0	0.0	-7.1
4	1073523	0.10	1073523					0.0	0.0	-28.8
5	388304	0.05	388304					0.0	0.0	21.7
6	123158	0.01	123158					0.0	0.0	55.9
7	8678	0.00	8678					0.0	0.0	

1st Order Poly
Conc = 1.309e-007 Area - 1.171e-002
r = 0.9988



Printed: Friday, April 13, 2012 - 11:24 AM

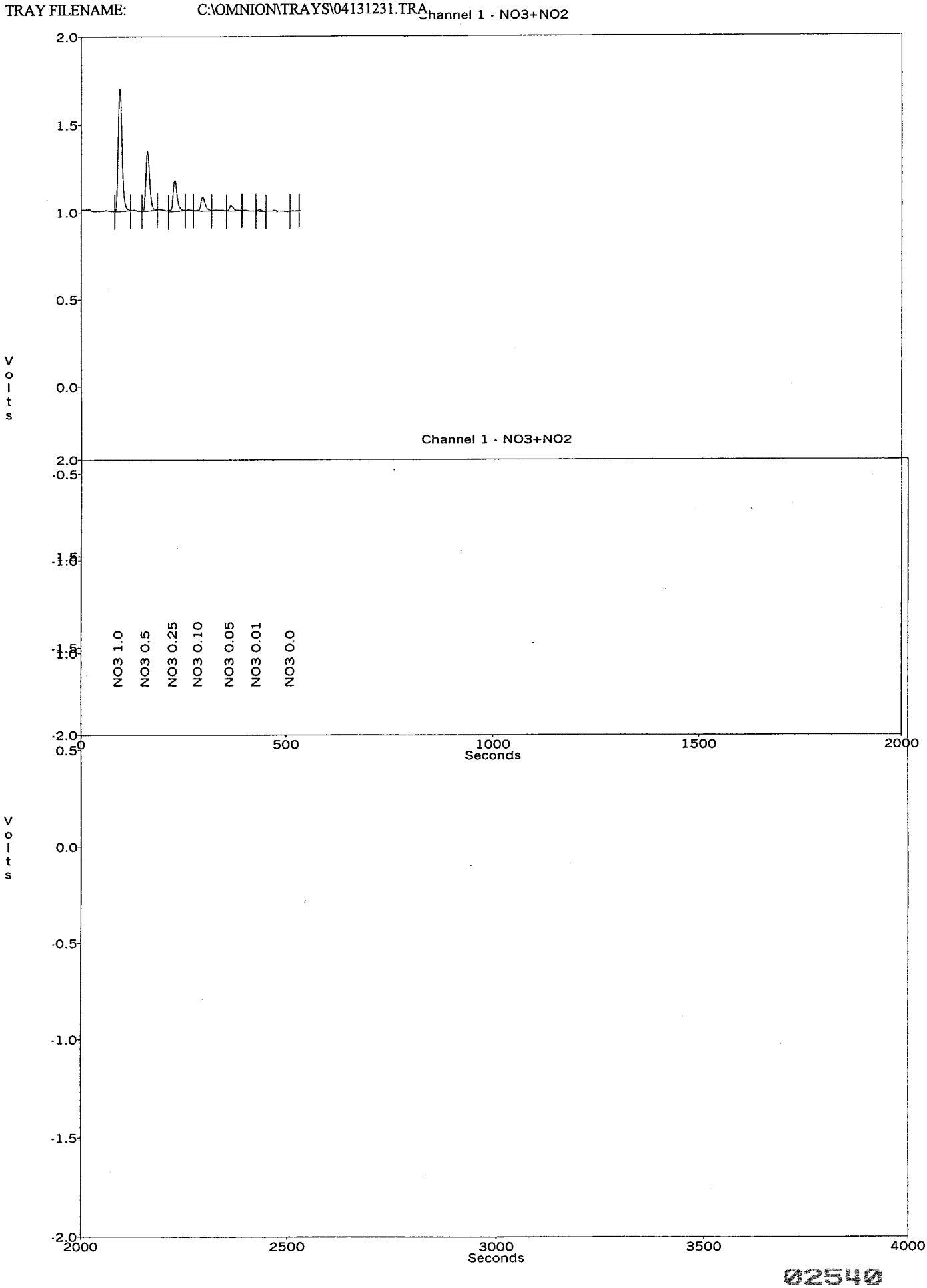
02538

OPERATOR: cac
ACQ. TIME: Apr 13, 2012 11:14:46
DATA FILENAME: C:\OMNION\DATA\04131231.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04131231.TRA

Multi-Channel Table
Type: Calibration Standards
Channel Range: 1 to 8 -- Cup Range: 1 to 50

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (uv-s)	Auto Dil Factor
1	NO3 1.0	13 Apr 2012	11:14:47	1	7745479.000	1.00
2	NO3 0.5	13 Apr 2012	11:15:55	1	3741226.000	1.00
3	NO3 0.25	13 Apr 2012	11:17:02	1	2134733.000	1.00
4	NO3 0.10	13 Apr 2012	11:18:10	1	1073523.000	1.00
5	NO3 0.05	13 Apr 2012	11:19:19	1	388304.000	1.00
6	NO3 0.01	13 Apr 2012	11:20:27	1	123158.000	1.00
7	NO3 0.0	13 Apr 2012	11:21:36	1	8678.000	1.00

OPERATOR: cac
ACQ. TIME: Apr 13, 2012 11:14:46
DATA FILENAME: C:\OMNION\DATA\04131231.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04131231.TRA



INSTRUMENT: FIA
TRAY: 04131231.TRA METHOD: NO3LOW.MET DATAFILE: 04131231.FDT
DATE/TIME: Fri Apr 13 11:14:46 2012 OPERATOR: cac

*** Begin Calibration ***
Cup# 1 Sample: NO3 1.0 Type: CalStd Level: 1 Rep# 1/1
Ch 1: NO3+NO2 Peak Area = 7745479.0 µv-s
Cup# 2 Sample: NO3 0.5 Type: CalStd Level: 2 Rep# 1/1
Ch 1: NO3+NO2 Peak Area = 3741226.0 µv-s
Cup# 3 Sample: NO3 0.25 Type: CalStd Level: 3 Rep# 1/1
Ch 1: NO3+NO2 Peak Area = 2134733.0 µv-s
Cup# 4 Sample: NO3 0.10 Type: CalStd Level: 4 Rep# 1/1
Ch 1: NO3+NO2 Peak Area = 1073523.0 µv-s
Cup# 5 Sample: NO3 0.05 Type: CalStd Level: 5 Rep# 1/1
Ch 1: NO3+NO2 Peak Area = 388304.0 µv-s
Cup# 6 Sample: NO3 0.01 Type: CalStd Level: 6 Rep# 1/1
Ch 1: NO3+NO2 Peak Area = 123158.0 µv-s
Cup# 7 Sample: NO3 0.0 Type: CalStd Level: 7 Rep# 1/1
Ch 1: NO3+NO2 Peak Area = 8678.0 µv-s
*** Updated Calibration ***
Ch 1: NO3+NO2
** 1st Order Poly Calibration **
C[0] = 1.30921e-007
C[1] = -0.01171
r = 0.9988
*** End Calibration Block ***
*** Calibration Passed ***
******* Tray Run Complete *******

Creator: cac
Creation Date: Apr 13, 2012 11:25:45
Last Modified: Apr 13, 2012 13:26:55
Description: None

Cup #	Sample ID	Manual Dilution	Sample Type	
1	blk	1.0000	Unknown	
2	bs	1.0000	Unknown	
3	scv	1.0000	Unknown	
4	crl	1.0000	Unknown	
5	no2 0.5 check	1.0000	Unknown	
6	1204205-01	1.0000	Unknown	
7	1204205-01 ms	1.0000	Unknown	
8	1204205-01 msd	1.0000	Unknown	
9	1204205-02	1.0000	Unknown	
10	sed basin	1.0000	Unknown	
11	east edge	1.0000	Unknown	
12	west edge	1.0000	Unknown	
13	well14	1.0000	Unknown	
14	well14 ms	1.0000	Unknown	
15	well14 msd	1.0000	Unknown	
16	well5	1.0000	Unknown	
17	well7	1.0000	Unknown	
18	well15	1.0000	Unknown	
19	well8	1.0000	Unknown	
20	mw46	1.0000	Unknown	
21	mw46 ms	1.0000	Unknown	
22	mw46 msd	1.0000	Unknown	
23	mw47d	1.0000	Unknown	
24	mw47s	1.0000	Unknown	
25	detention	1.0000	Unknown	
26	ud	1.0000	Unknown	
27	ud ms	1.0000	Unknown	
28	ud msd	1.0000	Unknown	
29	leachate	1.0000	Unknown	
30	east edge(5/25)	5.0000	Unknown	
31	ud ms(5/25)	5.0000	Unknown	
32	ud msd(5/25)	5.0000	Unknown	

OPERATOR: cac
ACQ. TIME: Apr 13, 2012 12:48:00
DATA FILENAME: C:\OMNION\DATA\04131232.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04131232.TRA

Multi-Channel Table
Type: DQM
Channel Range: 1 to 8 -- Cup Range: 1 to 9

Cup	Sample ID	Sample Type	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (mg/l)	Auto Dil Factor
2	no3 check st	RelChkStd	13 Apr 2012	12:48:02	1	0.491	1.00 (CU1)
				Known Concentration:		0.500	
				% Difference:		-1.762	
2	no3 check st	RelChkStd	13 Apr 2012	13:01:38	1	0.499	1.00 (CU2)
				Known Concentration:		0.500	
				% Difference:		-0.252	
2	no3 check st	RelChkStd	13 Apr 2012	13:15:11	1	0.497	1.00
				Known Concentration:		0.500	
				% Difference:		-0.604	
2	no3 check st	RelChkStd	13 Apr 2012	13:28:42	1	0.502	1.00
				Known Concentration:		0.500	
				% Difference:		0.455	
2	no3 check st	RelChkStd	13 Apr 2012	13:33:16	1	0.498	1.00
				Known Concentration:		0.500	
				% Difference:		-0.385	
7	blank	Blank	13 Apr 2012	12:49:11	1	-0.006	1.00 (CUB1)
7	blank	Blank	13 Apr 2012	13:02:47	1	-0.007	1.00 (CUB2)
7	blank	Blank	13 Apr 2012	13:16:20	1	0.013	1.00
7	blank	Blank	13 Apr 2012	13:29:51	1	-0.006	1.00
7	blank	Blank	13 Apr 2012	13:34:25	1	-0.003	1.00

OPERATOR: cac
ACQ. TIME: Apr 13, 2012 12:48:00
DATA FILENAME: C:\OMNION\DATA\04131232.FDT

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 1 to 25

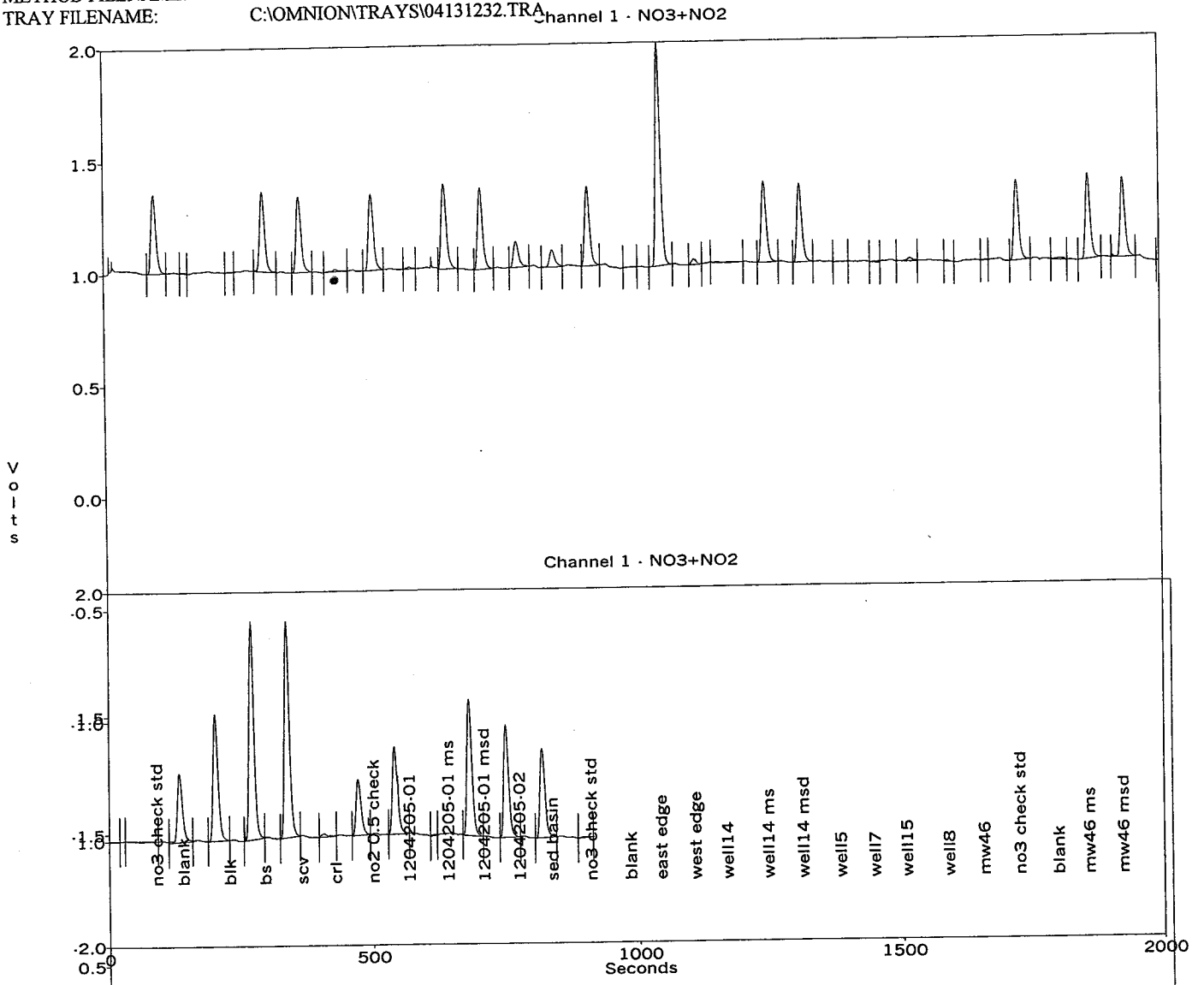
Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (mg/l)	Man Dil Factor
1	blk	13 Apr 2012	12:50:20	1	-0.006	1.0
2	bs	13 Apr 2012	12:51:28	1	0.504	1.0
3	scv	13 Apr 2012	12:52:37	1	0.479	1.0
4	crl	13 Apr 2012	12:53:45	1	0.006	1.0
5	no2 0.5 check	13 Apr 2012	12:54:53	1	0.475	1.0
6	1204205-01	13 Apr 2012	12:56:01	1	0.002	1.0
7	1204205-01 ms	13 Apr 2012	12:57:08	1	0.545	1.0
8	1204205-01 msd	13 Apr 2012	12:58:16	1	0.513	1.0
9	1204205-02	13 Apr 2012	12:59:24	1	0.168	1.0
10	sed basin	13 Apr 2012	13:00:32	1	0.111	1.0
11	east edge	13 Apr 2012	13:03:54	1	1.393	1.0
12	west edge	13 Apr 2012	13:05:01	1	0.024	1.0
13	well14	13 Apr 2012	13:06:08	1	-0.012	1.0
14	well14 ms	13 Apr 2012	13:07:15	1	0.508	1.0
15	well14 msd	13 Apr 2012	13:08:21	1	0.490	1.0
16	well5	13 Apr 2012	13:09:30	1	-0.008	1.0
17	well7	13 Apr 2012	13:10:39	1	0.001	1.0
18	well15	13 Apr 2012	13:11:48	1	0.015	1.0
19	well8	13 Apr 2012	13:12:57	1	-0.003	1.0
20	mw46	13 Apr 2012	13:14:05	1	-0.005	1.0
21	mw46 ms	13 Apr 2012	13:17:28	1	0.539	1.0
22	mw46 msd	13 Apr 2012	13:18:36	1	0.503	1.0
23	mw47d	13 Apr 2012	13:19:44	1	-0.005	1.0
24	mw47s	13 Apr 2012	13:20:52	1	-0.012	1.0
25	detention	13 Apr 2012	13:21:59	1	0.404	1.0

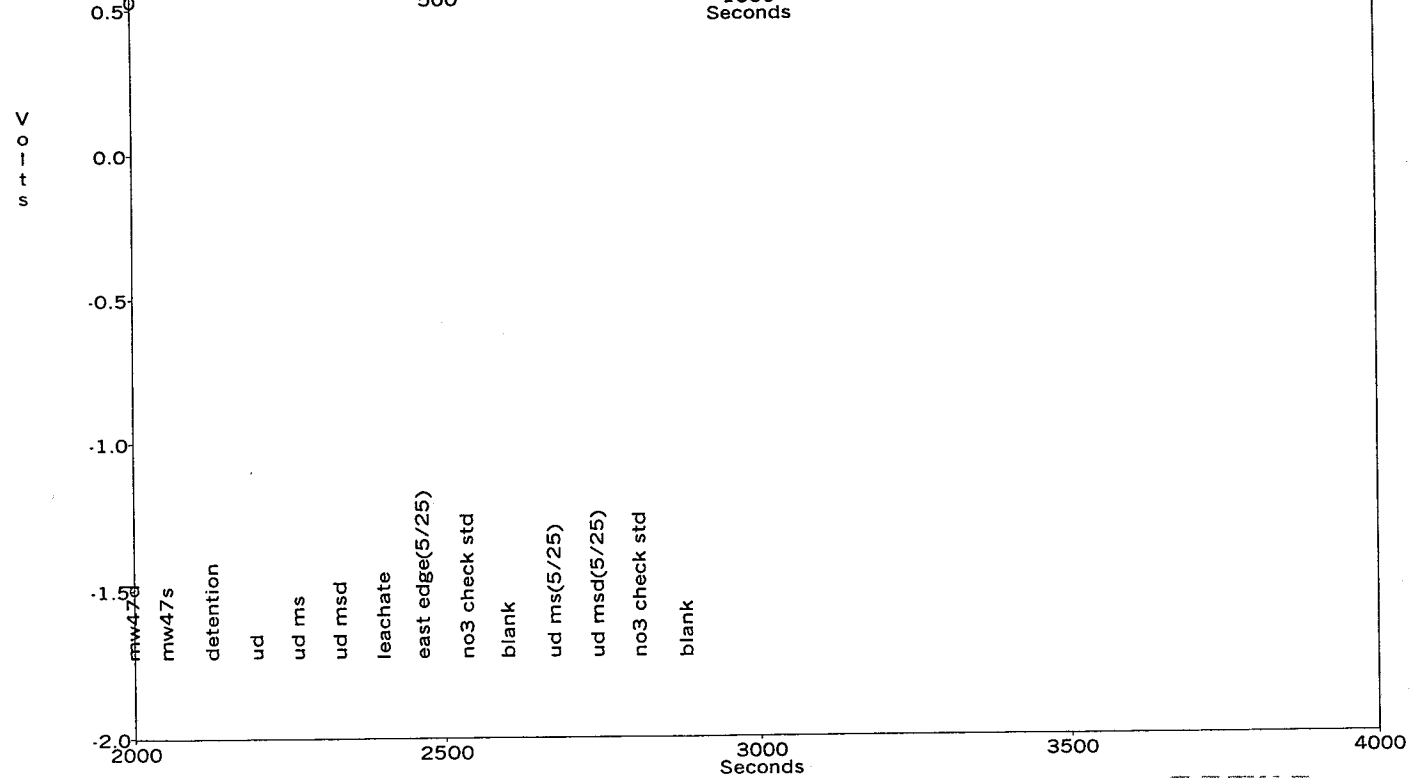
OPERATOR: cac
ACQ. TIME: Apr 13, 2012 12:48:00
DATA FILENAME: C:\OMNION\DATA\04131232.FDT

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 26 to 50

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (mg/l)	Man Dil Factor	Auto Dil Factor
26	ud	13 Apr 2012	13:23:07	1	0.719	1.0	1.00
27	ud ms	13 Apr 2012	13:24:15	1	1.242	1.0	1.00
28	ud msd	13 Apr 2012	13:25:22	1	1.224	1.0	1.00
29	leachate	13 Apr 2012	13:26:28	1	0.006	1.0	1.00
30	east edge(5/25)	13 Apr 2012	13:27:35	1	1.545	5.0	1.00
31	ud ms(5/25)	13 Apr 2012	13:31:00	1	3.779	5.0	1.00
32	ud msd(5/25)	13 Apr 2012	13:32:09	1	3.128	5.0	1.00

OPERATOR: cac
ACQ. TIME: Apr 13, 2012 12:48:00
DATA FILENAME: C:\OMNION\DATA\04131232.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04131232.TRA





INSTRUMENT: FIA
TRAY: 04131232.TRA METHOD: NO3LOW.MET DATAFILE: 04131232.FDT
DATE/TIME: Fri Apr 13 12:48:00 2012 OPERATOR: cac

***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1
Ch 1: NO3+NO2 = 0.4912 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.4912 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = -1.7620%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1
Ch 1: NO3+NO2 = -0.0062 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = -0.0062 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
Cup# 1 Sample: blk Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = -0.0061 mg/l
Cup# 2 Sample: bs Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5042 mg/l
Cup# 3 Sample: scv Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.4786 mg/l
Cup# 4 Sample: crl Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0056 mg/l
Cup# 5 Sample: no2 0.5 check Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.4750 mg/l
Cup# 6 Sample: 1204205-01 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0023 mg/l
Cup# 7 Sample: 1204205-01 ms Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5447 mg/l
Cup# 8 Sample: 1204205-01 msd Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5133 mg/l
Cup# 9 Sample: 1204205-02 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.1680 mg/l
Cup# 10 Sample: sed basin Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.1108 mg/l
***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1 Repeat# 1
Ch 1: NO3+NO2 = 0.4987 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.4987 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = -0.2524%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1 Repeat# 1
Ch 1: NO3+NO2 = -0.0074 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = -0.0074 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
Cup# 11 Sample: east edge Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 1.3925 mg/l
Cup# 12 Sample: west edge Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0238 mg/l
Cup# 13 Sample: well14 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = -0.0117 mg/l
Cup# 14 Sample: well14 ms Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5082 mg/l
Cup# 15 Sample: well14 msd Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.4901 mg/l
Cup# 16 Sample: well5 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = -0.0077 mg/l
Cup# 17 Sample: well7 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0008 mg/l

Cup# 18 Sample: well15 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0146 mg/l
Cup# 19 Sample: well8 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = -0.0030 mg/l
Cup# 20 Sample: mw46 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = -0.0055 mg/l
***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1 Repeat# 2
Ch 1: NO3+NO2 = 0.4970 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.4970 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = -0.6042%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1 Repeat# 2
Ch 1: NO3+NO2 = 0.0128 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = 0.0128 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
Cup# 21 Sample: mw46 ms Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5386 mg/l
Cup# 22 Sample: mw46 msd Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5027 mg/l
Cup# 23 Sample: mw47d Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = -0.0048 mg/l
Cup# 24 Sample: mw47s Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = -0.0117 mg/l
Cup# 25 Sample: detention Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.4037 mg/l
Cup# 26 Sample: ud Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.7195 mg/l
Cup# 27 Sample: ud ms Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 1.2419 mg/l
Cup# 28 Sample: ud msd Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 1.2244 mg/l
Cup# 29 Sample: leachate Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0060 mg/l
Cup# 30 Sample: east edge(5/25) Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.3091 mg/l
***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1 Repeat# 3
Ch 1: NO3+NO2 = 0.5023 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.5023 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = 0.4548%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1 Repeat# 3
Ch 1: NO3+NO2 = -0.0061 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = -0.0061 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
Cup# 31 Sample: ud ms(5/25) Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.7559 mg/l
Cup# 32 Sample: ud msd(5/25) Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.6256 mg/l
***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1 Repeat# 4
Ch 1: NO3+NO2 = 0.4981 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.4981 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = -0.3846%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1 Repeat# 4

Ch 1: NO3+NO2 = -0.0033 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = -0.0033 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
******* Tray Run Complete *******

OPERATOR: cac
ACQ. TIME: Apr 13, 2012 12:48:00
DATA FILENAME: C:\OMNION\DATA\04131232.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04131232.TRA

Multi-Channel Table
Type: DQM
Channel Range: 1 to 8 -- Cup Range: 1 to 9

Cup	Sample ID	Sample Type	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (uv-s)	Auto Dil Factor
2	no3 check st	RelChkStd	13 Apr 2012	12:48:02	1	3841261.000	1.00
				Known Concentration:		0.500	
				% Difference:		-1.762	
2	no3 check st	RelChkStd	13 Apr 2012	13:01:38	1	3898912.000	1.00
				Known Concentration:		0.500	
				% Difference:		-0.252	
2	no3 check st	RelChkStd	13 Apr 2012	13:15:11	1	3885479.000	1.00
				Known Concentration:		0.500	
				% Difference:		-0.604	
2	no3 check st	RelChkStd	13 Apr 2012	13:28:42	1	3925923.000	1.00
				Known Concentration:		0.500	
				% Difference:		0.455	
2	no3 check st	RelChkStd	13 Apr 2012	13:33:16	1	3893866.000	1.00
				Known Concentration:		0.500	
				% Difference:		-0.385	
7	blank	Blank	13 Apr 2012	12:49:11	1	42219.000	1.00
7	blank	Blank	13 Apr 2012	13:02:47	1	32768.000	1.00
7	blank	Blank	13 Apr 2012	13:16:20	1	187331.000	1.00
7	blank	Blank	13 Apr 2012	13:29:51	1	43112.000	1.00
7	blank	Blank	13 Apr 2012	13:34:25	1	63859.000	1.00

OPERATOR: cac
ACQ. TIME: Apr 13, 2012 12:48:00
DATA FILENAME: C:\OMNION\DATA\04131232.FDT

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 1 to 25

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (uv-s)	Man Dil Factor
1	blk	13 Apr 2012	12:50:20	1	42501.000	1.0
2	bs	13 Apr 2012	12:51:28	1	3940343.000	1.0
3	scv	13 Apr 2012	12:52:37	1	3745296.000	1.0
4	crl	13 Apr 2012	12:53:45	1	132291.000	1.0
5	no2 0.5 check	13 Apr 2012	12:54:53	1	3717450.000	1.0
6	1204205-01	13 Apr 2012	12:56:01	1	106707.000	1.0
7	1204205-01 ms	13 Apr 2012	12:57:08	1	4250074.000	1.0
8	1204205-01 msd	13 Apr 2012	12:58:16	1	4009978.000	1.0
9	1204205-02	13 Apr 2012	12:59:24	1	1372557.000	1.0
10	sed basin	13 Apr 2012	13:00:32	1	935437.000	1.0
11	east edge	13 Apr 2012	13:03:54	1	10725962.000	1.0
12	west edge	13 Apr 2012	13:05:01	1	271010.000	1.0
13	well14	13 Apr 2012	13:06:08	1	0.000	1.0
14	well14 ms	13 Apr 2012	13:07:15	1	3970983.000	1.0
15	well14 msd	13 Apr 2012	13:08:21	1	3832611.000	1.0
16	well5	13 Apr 2012	13:09:30	1	30722.000	1.0
17	well7	13 Apr 2012	13:10:39	1	95182.000	1.0
18	well15	13 Apr 2012	13:11:48	1	200602.000	1.0
19	well8	13 Apr 2012	13:12:57	1	66586.000	1.0
20	mw46	13 Apr 2012	13:14:05	1	47562.000	1.0
21	mw46 ms	13 Apr 2012	13:17:28	1	4203498.000	1.0
22	mw46 msd	13 Apr 2012	13:18:36	1	3929511.000	1.0
23	mw47d	13 Apr 2012	13:19:44	1	52688.000	1.0
24	mw47s	13 Apr 2012	13:20:52	1	0.000	1.0
25	detention	13 Apr 2012	13:21:59	1	3172611.000	1.0

OPERATOR: cac
ACQ. TIME: Apr 13, 2012 12:48:00
DATA FILENAME: C:\OMNION\DATA\04131232.FDT

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 26 to 50

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (uv-s)	Man Dil Factor	Auto Dil Factor
26	ud	13 Apr 2012	13:23:07	1	5584823.000	1.0	1.00
27	ud ms	13 Apr 2012	13:24:15	1	9575123.000	1.0	1.00
28	ud msd	13 Apr 2012	13:25:22	1	9441594.000	1.0	1.00
29	leachate	13 Apr 2012	13:26:28	1	135317.000	1.0	1.00
30	east edge(5/25)	13 Apr 2012	13:27:35	1	2450221.000	5.0	1.00
31	ud ms(5/25)	13 Apr 2012	13:31:00	1	5863149.000	5.0	1.00
32	ud msd(5/25)	13 Apr 2012	13:32:09	1	4867536.000	5.0	1.00

Inorganic - Wet Chemistry, Water, Apr-27-12

Instrument = 189, Calibration = 2E01004

Sequence Analyses:
Nitrogen, NO3+NO2 4500-NO3 F

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2E01020-CAL1	QC		2041040		CAL STANDARD	
2E01020-CAL2	QC		2041041		CAL STANDARD	
2E01020-CAL3	QC		2041042		CAL STANDARD	
2E01020-CAL4	QC		2041043		CAL STANDARD	
2E01020-CAL5	QC		2041044		CAL STANDARD	
2E01020-CAL6	QC		2041045		CAL STANDARD	
2E01020-CAL7	QC		2041046		CAL STANDARD	
2E01020-CCV1	QC		2041041		CALIBRATION CHECK	
2E01020-CCV2	QC		2041041		CALIBRATION CHECK	
2E01020-CCV3	QC		2041041		CALIBRATION CHECK	
2E01020-CCV4	QC		2041041		CALIBRATION CHECK	
2E01020-CCB1	QC		2041046		CALIBRATION BLANK	
2E01020-CCB2	QC		2041046		CALIBRATION BLANK	
2E01020-CCB3	QC		2041046		CALIBRATION BLANK	
2E01020-CCB4	QC		2041046		CALIBRATION BLANK	
1205349-BLK1	QC				BLANK	
1205349-BS1	QC				LCS	
2E01020-SCV1	QC		2041047		SECONDARY CAL CHECK	
2E01020-CRL1	QC		2041045		INSTRUMENT RL CHECK	
1204329-01	Nitrogen, NO3+NO2 4500-NO3 F	K			TechLaw	
1205349-MS1	QC				MATRIX SPIKE	
1205349-MSD1	QC				MATRIX SPIKE DUP	
1204454-01	Nitrogen, NO3+NO2 4500-NO3 F	K			TechLaw	
1204454-02	Nitrogen, NO3+NO2 4500-NO3 F	K			TechLaw	

Comments:

Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1205349

Due: 5-1-12

Printed: 4/30/2012 7:55:12AM

NLB 5-2-12

Level 4

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

Standard	Description	Solvent	LotNum
2030137	NO3 100 mg/L	H2O	066134
2040198	Sulfanilamide Reagent	n/a	n/a
2040199	Ammonium Chloride Buffer	DI H2O	n/a

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204329	Nitrogen, NO3+NO2 4500-NO3 F	1204454	Nitrogen, NO3+NO2 4500-NO3 F		

Balance ID: _____ **pH Meter:** _____

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1205349-BLK1		Apr-27-12 10:55	CAC	10	10					BLANK	
1205349-BS1		Apr-27-12 10:55	CAC	10	10			2030137	50	LCS	
1205349-MS1		Apr-27-12 10:55	CAC	10	10		1204329-01	2030137	50	MATRIX SPIKE	
1205349-MSD1		Apr-27-12 10:55	CAC	10	10		1204329-01	2030137	50	MATRIX SPIKE DUP	
1204329-01	K	Apr-27-12 10:55	CAC	10	10					TechLaw	
1204454-01	K	Apr-27-12 10:55	CAC	10	10					TechLaw	
1204454-02	K	Apr-27-12 10:55	CAC	10	10					TechLaw	

Comments:	Analyst Initials:

92519

Creator: cac
Creation Date: Apr 27, 2012 10:55:58
Last Modified: Apr 27, 2012 10:55:58
Description: None

2040198
2040199

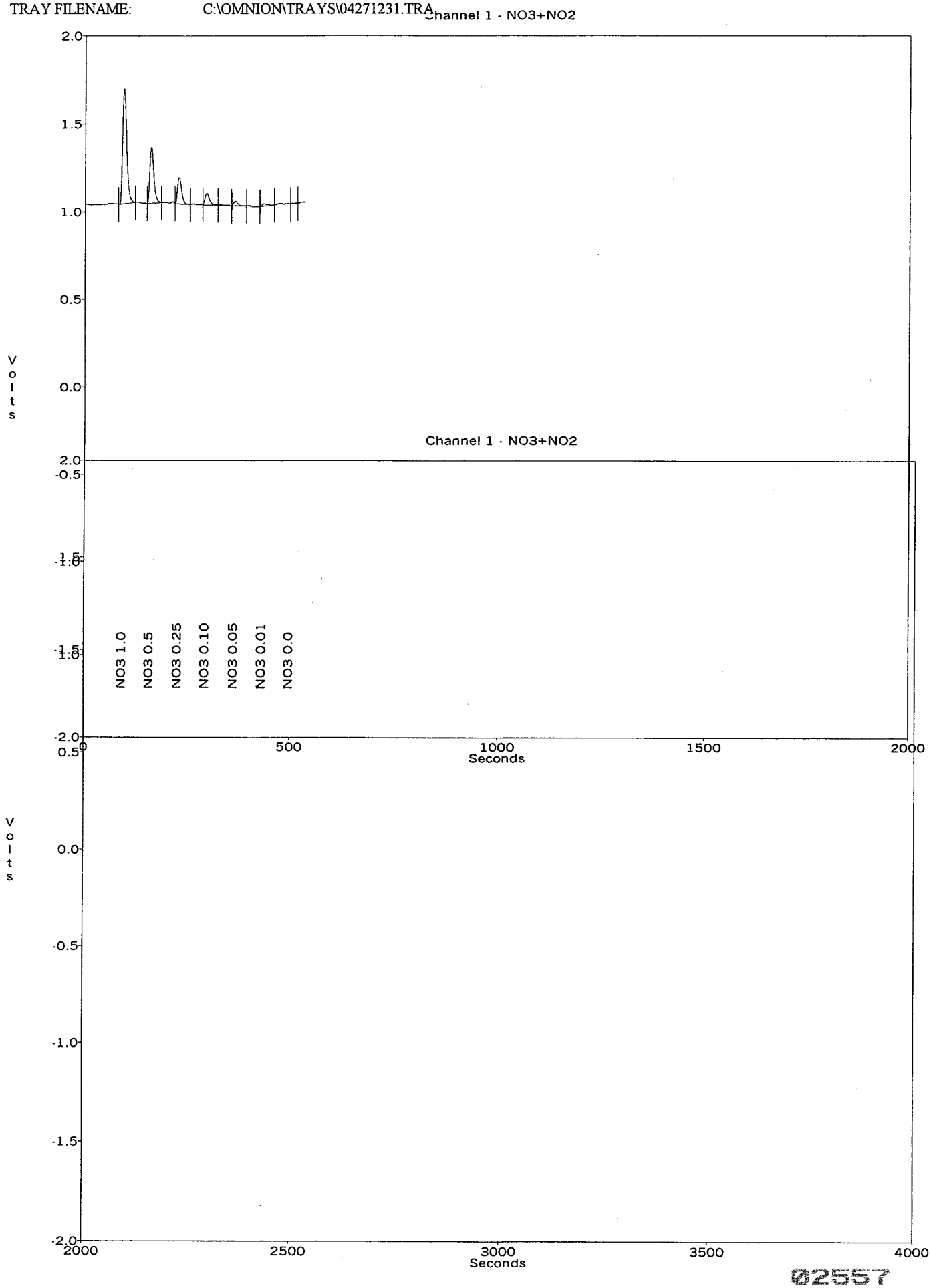
Cup #	Sample ID	Manual Dilution	Sample Type	
1	NO3 1.0	1.0000	CalStd	
2	NO3 0.5	1.0000	CalStd	
3	NO3 0.25	1.0000	CalStd	
4	NO3 0.10	1.0000	CalStd	
5	NO3 0.05	1.0000	CalStd	
6	NO3 0.01	1.0000	CalStd	
7	NO3 0.0	1.0000	CalStd	

OPERATOR: cac
ACQ. TIME: Apr 27, 2012 10:56:28
DATA FILENAME: C:\OMNION\DATA\04271231.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04271231.TRA

Multi-Channel Table
Type: Calibration Standards
Channel Range: 1 to 8 -- Cup Range: 1 to 50

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (uv-s)	Auto Dil Factor
1	NO3 1.0	27 Apr 2012	10:56:30	1	7531639.000	1.00
2	NO3 0.5	27 Apr 2012	10:57:37	1	3716288.000	1.00
3	NO3 0.25	27 Apr 2012	10:58:44	1	1742762.000	1.00
4	NO3 0.10	27 Apr 2012	10:59:52	1	793811.000	1.00
5	NO3 0.05	27 Apr 2012	11:01:01	1	325456.000	1.00
6	NO3 0.01	27 Apr 2012	11:02:09	1	220618.000	1.00
7	NO3 0.0	27 Apr 2012	11:03:19	1	70254.000	1.00

OPERATOR: cac
ACQ. TIME: Apr 27, 2012 10:56:28
DATA FILENAME: C:\OMNION\DATA\04271231.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04271231.TRA



02557

INSTRUMENT: FIA
TRAY: 04271231.TRA METHOD: NO3LOW.MET DATAFILE: 04271231.FDT
DATE/TIME: Fri Apr 27 10:56:28 2012 OPERATOR: cac

*** Begin Calibration ***
Cup# 1 Sample: NO3 1.0 Type: CalStd Level: 1 Rep# 1/1
 Ch 1: NO3+NO2 Peak Area = 7531639.0 µv-s
Cup# 2 Sample: NO3 0.5 Type: CalStd Level: 2 Rep# 1/1
 Ch 1: NO3+NO2 Peak Area = 3716288.0 µv-s
Cup# 3 Sample: NO3 0.25 Type: CalStd Level: 3 Rep# 1/1
 Ch 1: NO3+NO2 Peak Area = 1742762.0 µv-s
Cup# 4 Sample: NO3 0.10 Type: CalStd Level: 4 Rep# 1/1
 Ch 1: NO3+NO2 Peak Area = 793811.0 µv-s
Cup# 5 Sample: NO3 0.05 Type: CalStd Level: 5 Rep# 1/1
 Ch 1: NO3+NO2 Peak Area = 325456.0 µv-s
Cup# 6 Sample: NO3 0.01 Type: CalStd Level: 6 Rep# 1/1
 Ch 1: NO3+NO2 Peak Area = 220618.0 µv-s
Cup# 7 Sample: NO3 0.0 Type: CalStd Level: 7 Rep# 1/1
 Ch 1: NO3+NO2 Peak Area = 70254.0 µv-s
*** Updated Calibration ***
 Ch 1: NO3+NO2
  ** 1st Order Poly Calibration **
  C[0] = 1.33982e-007
  C[1] = -0.00277935
  r = 0.9995
*** End Calibration Block ***
*** Calibration Passed ***
******* Tray Run Complete *******

Creator: cac
Creation Date: Apr 27, 2012 11:07:05
Last Modified: Apr 27, 2012 11:07:05
Description: None

Cup #	Sample ID	Manual Dilution	Sample Type	
1	blk	1.0000	Unknown	
2	bs	1.0000	Unknown	
3	scv	1.0000	Unknown	
4	crl	1.0000	Unknown	
5	no2 0.5 check	1.0000	Unknown	
6	mw1	1.0000	Unknown	
7	mw2	1.0000	Unknown	
8	mw2 ms	1.0000	Unknown	
9	mw2 msd	1.0000	Unknown	
10	mw4	1.0000	Unknown	
11	mw5	1.0000	Unknown	
12	mw6	1.0000	Unknown	
13	mw7	1.0000	Unknown	
14	mw8	1.0000	Unknown	
15	1204335-01	1.0000	Unknown	
16	1204359-01	1.0000	Unknown	
17	1204419-01	1.0000	Unknown	
18	1204419-01 ms	1.0000	Unknown	
19	1204419-01 msd	1.0000	Unknown	
20	1204335-02	1.0000	Unknown	
21	1204335-02 ms	1.0000	Unknown	
22	1204335-02 msd	1.0000	Unknown	
23	1204329-01	1.0000	Unknown	
24	1204329-01 ms	1.0000	Unknown	
25	1204329-01 msd	1.0000	Unknown	
26	1204454-01	1.0000	Unknown	
27	1204454-02	1.0000	Unknown	

OPERATOR: cac
ACQ. TIME: Apr 27, 2012 11:07:18
DATA FILENAME: C:\OMNION\DATA\04271232.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04271232.TRA

Multi-Channel Table
Type: DQM
Channel Range: 1 to 8 -- Cup Range: 1 to 9

Cup	Sample ID	Sample Type	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (mg/l)	Auto Dil Factor	
2	no3 check st	RelChkStd	27 Apr 2012	11:07:20	1	0.504	1.00	CCV1
				Known Concentration:		0.500		
				% Difference:		0.784		
2	no3 check st	RelChkStd	27 Apr 2012	11:21:06	1	0.516	1.00	CCV2
				Known Concentration:		0.500		
				% Difference:		3.222		
2	no3 check st	RelChkStd	27 Apr 2012	11:34:50	1	0.544	1.00	CCV3
				Known Concentration:		0.500		
				% Difference:		8.879		
2	no3 check st	RelChkStd	27 Apr 2012	11:45:06	1	0.515	1.00	CCV4
				Known Concentration:		0.500		
				% Difference:		2.952		
7	blank	Blank	27 Apr 2012	11:08:29	1	0.012	1.00	CCB1
7	blank	Blank	27 Apr 2012	11:22:15	1	0.009	1.00	CCB2
7	blank	Blank	27 Apr 2012	11:35:59	1	0.000	1.00	CCB3
7	blank	Blank	27 Apr 2012	11:46:15	1	0.002	1.00	CCB4

OPERATOR: cac
ACQ. TIME: Apr 27, 2012 11:07:18
DATA FILENAME: C:\OMNION\DATA\04271232.FDT

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 1 to 25

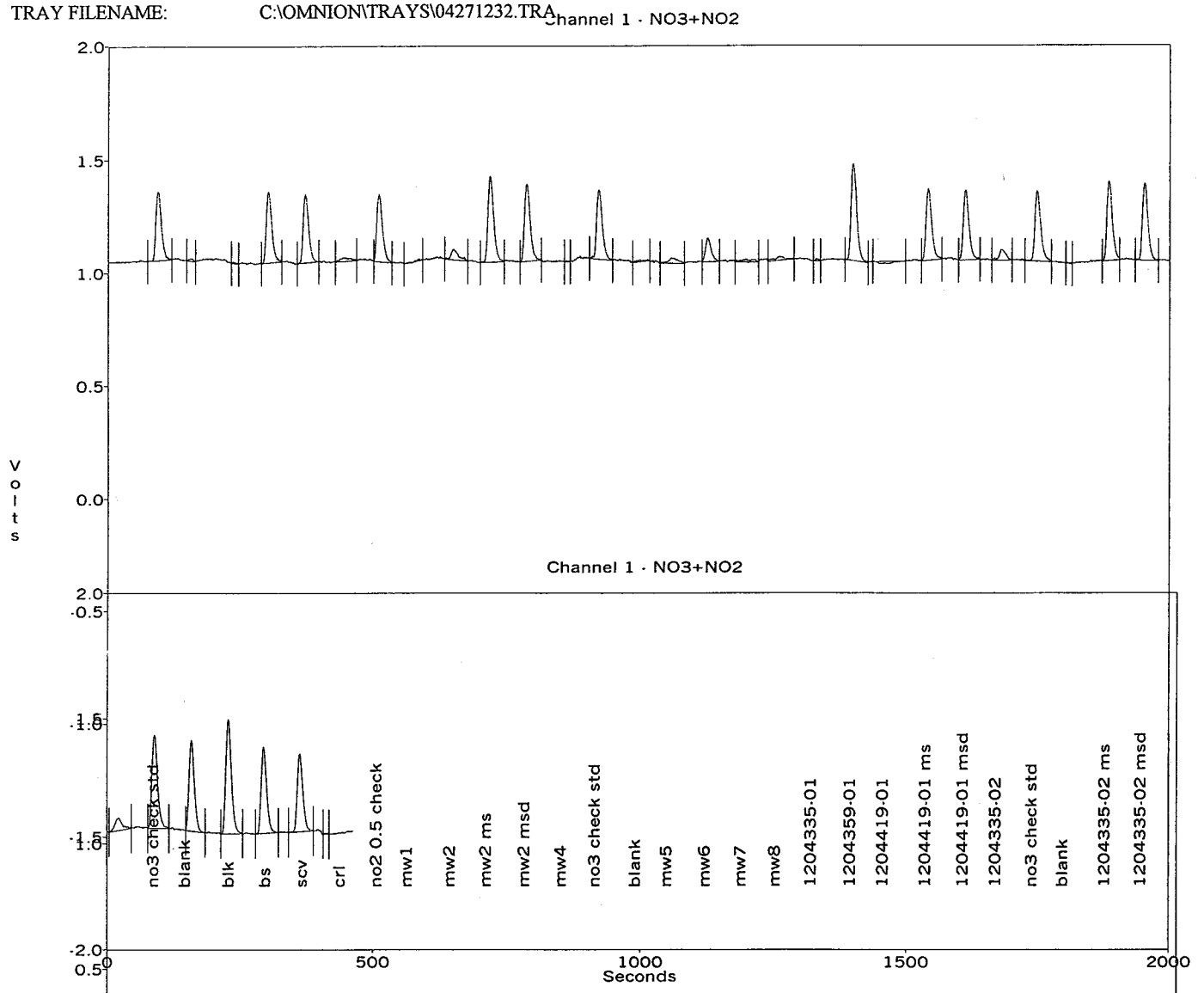
Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (mg/l)	Man Dil Factor
1	blk	27 Apr 2012	11:09:39	1	0.005	1.0
2	bs	27 Apr 2012	11:10:49	1	0.515	1.0
3	scv	27 Apr 2012	11:11:58	1	0.496	1.0
4	crl	27 Apr 2012	11:13:07	1	0.033	1.0
5	no2 0.5 check	27 Apr 2012	11:14:15	1	0.487	1.0
6	mw1	27 Apr 2012	11:15:24	1	0.012	1.0
7	mw2	27 Apr 2012	11:16:33	1	0.094	1.0
8	mw2 ms	27 Apr 2012	11:17:42	1	0.635	1.0
9	mw2 msd	27 Apr 2012	11:18:51	1	0.572	1.0
10	mw4	27 Apr 2012	11:20:00	1	0.001	1.0
11	mw5	27 Apr 2012	11:23:23	1	0.063	1.0
12	mw6	27 Apr 2012	11:24:31	1	0.174	1.0
13	mw7	27 Apr 2012	11:25:39	1	0.022	1.0
14	mw8	27 Apr 2012	11:26:47	1	0.028	1.0
15	1204335-01	27 Apr 2012	11:27:54	1	0.006	1.0
16	1204359-01	27 Apr 2012	11:29:04	1	0.704	1.0
17	1204419-01	27 Apr 2012	11:30:14	1	-0.003	1.0
18	1204419-01 ms	27 Apr 2012	11:31:24	1	0.529	1.0
19	1204419-01 msd	27 Apr 2012	11:32:34	1	0.528	1.0
20	1204335-02	27 Apr 2012	11:33:43	1	0.086	1.0
21	1204335-02 ms	27 Apr 2012	11:37:08	1	0.587	1.0
22	1204335-02 msd	27 Apr 2012	11:38:16	1	0.576	1.0
23	1204329-01	27 Apr 2012	11:39:25	1	0.105	1.0
24	1204329-01 ms	27 Apr 2012	11:40:34	1	0.613	1.0
25	1204329-01 msd	27 Apr 2012	11:41:43	1	0.573	1.0

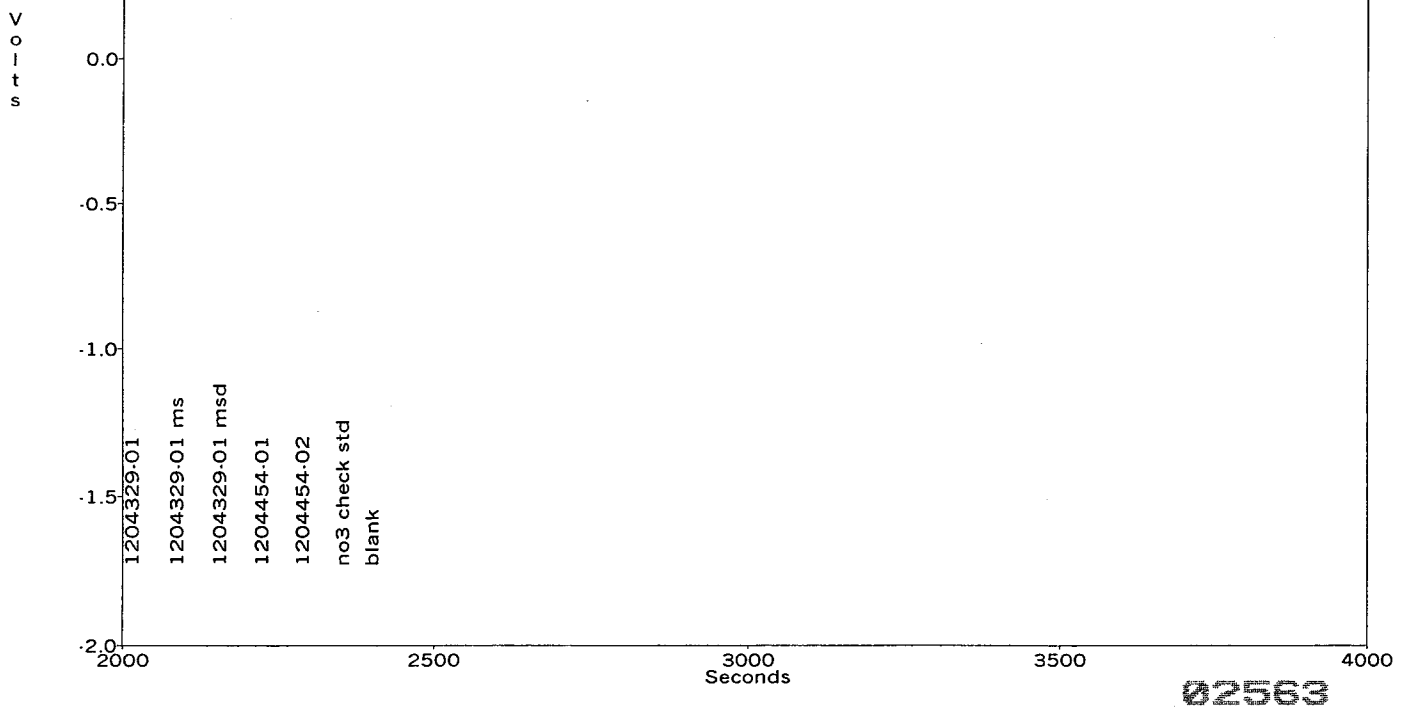
OPERATOR: cac
ACQ. TIME: Apr 27, 2012 11:07:18
DATA FILENAME: C:\OMNION\DATA\04271232.FDT

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 26 to 50

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (mg/l)	Man Dil Factor	Auto Dil Factor
26	1204454-01	27 Apr 2012	11:42:52	1	0.750	1.0	1.00
27	1204454-02	27 Apr 2012	11:43:59	1	0.555	1.0	1.00

OPERATOR: cac
ACQ. TIME: Apr 27, 2012 11:07:18
DATA FILENAME: C:\OMNION\DATA\04271232.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04271232.TRA





02563

INSTRUMENT: FIA
TRAY: 04271232.TRA METHOD: NO3LOW.MET DATAFILE: 04271232.FDT
DATE/TIME: Fri Apr 27 11:07:18 2012 OPERATOR: cac

***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1
Ch 1: NO3+NO2 = 0.5039 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.5039 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = 0.7837%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1
Ch 1: NO3+NO2 = 0.0116 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = 0.0116 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
Cup# 1 Sample: blk Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0047 mg/l
Cup# 2 Sample: bs Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5152 mg/l
Cup# 3 Sample: scv Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.4963 mg/l
Cup# 4 Sample: crl Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0326 mg/l
Cup# 5 Sample: no2 0.5 check Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.4868 mg/l
Cup# 6 Sample: mw1 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0119 mg/l
Cup# 7 Sample: mw2 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0937 mg/l
Cup# 8 Sample: mw2 ms Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.6347 mg/l
Cup# 9 Sample: mw2 msd Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5718 mg/l
Cup# 10 Sample: mw4 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0012 mg/l
***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1 Repeat# 1
Ch 1: NO3+NO2 = 0.5161 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.5161 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = 3.2216%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1 Repeat# 1
Ch 1: NO3+NO2 = 0.0090 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = 0.0090 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
Cup# 11 Sample: mw5 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0634 mg/l
Cup# 12 Sample: mw6 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.1736 mg/l
Cup# 13 Sample: mw7 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0221 mg/l
Cup# 14 Sample: mw8 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0284 mg/l
Cup# 15 Sample: 1204335-01 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0064 mg/l
Cup# 16 Sample: 1204359-01 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.7039 mg/l
Cup# 17 Sample: 1204419-01 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = -0.0028 mg/l

Cup# 18 Sample: 1204419-01 ms Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5289 mg/l
Cup# 19 Sample: 1204419-01 msd Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5283 mg/l
Cup# 20 Sample: 1204335-02 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.0864 mg/l
***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1 Repeat# 2
Ch 1: NO3+NO2 = 0.5444 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.5444 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = 8.8786%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1 Repeat# 2
Ch 1: NO3+NO2 = 0.0003 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = 0.0003 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
Cup# 21 Sample: 1204335-02 ms Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5875 mg/l
Cup# 22 Sample: 1204335-02 msd Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5759 mg/l
Cup# 23 Sample: 1204329-01 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.1049 mg/l
Cup# 24 Sample: 1204329-01 ms Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.6134 mg/l
Cup# 25 Sample: 1204329-01 msd Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5733 mg/l
Cup# 26 Sample: 1204454-01 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.7498 mg/l
Cup# 27 Sample: 1204454-02 Type: Unknown Rep# 1/1
Ch 1: NO3+NO2 = 0.5548 mg/l
***** Auto DQM Begin *****
*** Starting DQM Set Check Std ***
Cup# 2 Sample: no3 check std Type: RelChkStd Rep# 1/1 Repeat# 3
Ch 1: NO3+NO2 = 0.5148 mg/l
DQM Sample Results: no3 check std
Ch 1: NO3+NO2 = 0.5148 mg/l
Known Conc = 0.5000 mg/L - %Diff from Known = 2.9517%
Test 1: Passed
Cup# 7 Sample: blank Type: Blank Rep# 1/1 Repeat# 3
Ch 1: NO3+NO2 = 0.0021 mg/l
DQM Sample Results: blank
Ch 1: NO3+NO2
Determined Conc = 0.0021 mg/l
Test 1: Passed
*** End of DQM Set Check Std - Set Passed ***
******* Tray Run Complete *******

OPERATOR: cac
ACQ. TIME: Apr 27, 2012 11:07:18
DATA FILENAME: C:\OMNION\DATA\04271232.FDT
METHOD FILENAME: C:\OMNION\METHODS\NO3LOW.MET
TRAY FILENAME: C:\OMNION\TRAYS\04271232.TRA

Multi-Channel Table
Type: DQM
Channel Range: 1 to 8 -- Cup Range: 1 to 9

Cup	Sample ID	Sample Type	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (uv-s)	Auto Dil Factor
2	no3 check st	RelChkStd	27 Apr 2012	11:07:20	1	3781827.000	1.00
				Known Concentration:		0.500	
				% Difference:		0.784	
2	no3 check st	RelChkStd	27 Apr 2012	11:21:06	1	3872807.000	1.00
				Known Concentration:		0.500	
				% Difference:		3.222	
2	no3 check st	RelChkStd	27 Apr 2012	11:34:50	1	4083917.000	1.00
				Known Concentration:		0.500	
				% Difference:		8.879	
2	no3 check st	RelChkStd	27 Apr 2012	11:45:06	1	3862733.000	1.00
				Known Concentration:		0.500	
				% Difference:		2.952	
7	blank	Blank	27 Apr 2012	11:08:29	1	107522.000	1.00
7	blank	Blank	27 Apr 2012	11:22:15	1	88214.000	1.00
7	blank	Blank	27 Apr 2012	11:35:59	1	22798.000	1.00
7	blank	Blank	27 Apr 2012	11:46:15	1	36661.000	1.00

OPERATOR: cac
ACQ. TIME: Apr 27, 2012 11:07:18
DATA FILENAME: C:\OMNION\DATA\04271232.FDT

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 1 to 25

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (uv-s)	Man Dil Factor
1	blk	27 Apr 2012	11:09:39	1	56157.000	1.0
2	bs	27 Apr 2012	11:10:49	1	3866263.000	1.0
3	scv	27 Apr 2012	11:11:58	1	3724672.000	1.0
4	crl	27 Apr 2012	11:13:07	1	264312.000	1.0
5	no2 0.5 check	27 Apr 2012	11:14:15	1	3653856.000	1.0
6	mw1	27 Apr 2012	11:15:24	1	109578.000	1.0
7	mw2	27 Apr 2012	11:16:33	1	720426.000	1.0
8	mw2 ms	27 Apr 2012	11:17:42	1	4757645.000	1.0
9	mw2 msd	27 Apr 2012	11:18:51	1	4288666.000	1.0
10	mw4	27 Apr 2012	11:20:00	1	29932.000	1.0
11	mw5	27 Apr 2012	11:23:23	1	493978.000	1.0
12	mw6	27 Apr 2012	11:24:31	1	1316205.000	1.0
13	mw7	27 Apr 2012	11:25:39	1	185504.000	1.0
14	mw8	27 Apr 2012	11:26:47	1	232874.000	1.0
15	1204335-01	27 Apr 2012	11:27:54	1	68813.000	1.0
16	1204359-01	27 Apr 2012	11:29:04	1	5274180.000	1.0
17	1204419-01	27 Apr 2012	11:30:14	1	0.000	1.0
18	1204419-01 ms	27 Apr 2012	11:31:24	1	3968384.000	1.0
19	1204419-01 msd	27 Apr 2012	11:32:34	1	3963610.000	1.0
20	1204335-02	27 Apr 2012	11:33:43	1	665632.000	1.0
21	1204335-02 ms	27 Apr 2012	11:37:08	1	4405434.000	1.0
22	1204335-02 msd	27 Apr 2012	11:38:16	1	4319367.000	1.0
23	1204329-01	27 Apr 2012	11:39:25	1	803674.000	1.0
24	1204329-01 ms	27 Apr 2012	11:40:34	1	4599312.000	1.0
25	1204329-01 msd	27 Apr 2012	11:41:43	1	4299668.000	1.0

OPERATOR: cac
ACQ. TIME: Apr 27, 2012 11:07:18
DATA FILENAME: C:\OMNION\DATA\04271232.FDT

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 26 to 50

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	NO3+NO2 (uv-s)	Man Dil Factor	Auto Dil Factor
26	1204454-01	27 Apr 2012	11:42:52	1	5616906.000	1.0	1.00
27	1204454-02	27 Apr 2012	11:43:59	1	4161962.000	1.0	1.00

TriMatrix Laboratories, Inc.

TechLaw

Project: KNM

SDG: KNM040512

SM 4500-S2 D 20th

SAMPLE ID SUMMARY

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

SDG: KNM040512

Project: KNM

Client Sample Id:	Lab Sample Id:
KAFB-003	1204091-01
106042	1204205-01
106089	1204205-02
106053	1204454-01
106054	1204454-02

INORGANIC ANALYSIS DATA SHEET

SM 4500-S2 D 20th

KAFB-003

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/04/12 13:31
Solids: 0.00
QC Batch: 1204504

SDG: KNM040512
Project: KNM
Laboratory ID: 1204091-01
Prepared: 04/11/12 11:00
Preparation: Method-Specific Preparation
Initial/Final: 7.5 mL / 7.5 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
18496-25-8	Sulfide, Total	1	0.020	mg/L	0.0052	0.020	U	04/11/12 11:37

INORGANIC ANALYSIS DATA SHEET

SM 4500-S2 D 20th

106042

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/10/12 13:48
Solids: 0.00
QC Batch: 1204635

SDG: KNM040512
Project: KNM
Laboratory ID: 1204205-01
Prepared: 04/13/12 08:30
Preparation: Method-Specific Preparation
Initial/Final: 7.5 mL / 7.5 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
18496-25-8	Sulfide, Total	1	0.020	mg/L	0.0052	0.020	U	04/13/12 09:05

INORGANIC ANALYSIS DATA SHEET

SM 4500-S2 D 20th

106089

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/10/12 14:45
Solids: 0.00
QC Batch: 1204635

SDG: KNM040512
Project: KNM
Laboratory ID: 1204205-02
Prepared: 04/13/12 08:30
Preparation: Method-Specific Preparation
Initial/Final: 7.5 mL / 7.5 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
18496-25-8	Sulfide, Total	1	0.020	mg/L	0.0052	0.020	U	04/13/12 09:07

INORGANIC ANALYSIS DATA SHEET

SM 4500-S2 D 20th

106053

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/24/12 10:20
Solids: 0.00
QC Batch: 1205299

SDG: KNM040512
Project: KNM
Laboratory ID: 1204454-01
Prepared: 04/26/12 15:00
Preparation: Method-Specific Preparation
Initial/Final: 7.5 mL / 7.5 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
18496-25-8	Sulfide, Total	1	0.020	mg/L	0.0052	0.020	U	04/26/12 15:56

INORGANIC ANALYSIS DATA SHEET

SM 4500-S2 D 20th

106054

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Matrix: Water
Sampled: 04/24/12 13:30
Solids: 0.00
QC Batch: 1205299

SDG: KNM040512
Project: KNM
Laboratory ID: 1204454-02
Prepared: 04/26/12 15:00
Preparation: Method-Specific Preparation
Initial/Final: 7.5 mL / 7.5 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
18496-25-8	Sulfide, Total	1	0.020	mg/L	0.0052	0.020	U	04/26/12 15:58

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D11051

SDG: KNM040512
Project: KNM
Calibration: 2D11012
Instrument: 330

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2D11051-CAL1		04/11/12 11:29
Cal Standard	2D11051-CAL2		04/11/12 11:29
Cal Standard	2D11051-CAL3		04/11/12 11:30
Cal Standard	2D11051-CAL4		04/11/12 11:31
Cal Standard	2D11051-CAL5		04/11/12 11:31
Cal Standard	2D11051-CAL6		04/11/12 11:32
Calibration Check	2D11051-CCV1		04/11/12 11:33
Calibration Blank	2D11051-CCB1		04/11/12 11:34
Blank	1204504-BLK1		04/11/12 11:34
LCS	1204504-BS1		04/11/12 11:34
Secondary Cal Check	2D11051-SCV1		04/11/12 11:35
Instrument RL Check	2D11051-CRL1		04/11/12 11:36
KAFB-003	1204091-01		04/11/12 11:37
KAFB-003	1204504-MS1		04/11/12 11:38
KAFB-003	1204504-MSD1		04/11/12 11:38
Calibration Check	2D11051-CCV2		04/11/12 11:40
Calibration Blank	2D11051-CCB2		04/11/12 11:41

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D15002

SDG: KNM040512
Project: KNM
Calibration: 2D15001
Instrument: 330

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2D15002-CAL1		04/13/12 08:54
Cal Standard	2D15002-CAL2		04/13/12 08:54
Cal Standard	2D15002-CAL3		04/13/12 08:55
Cal Standard	2D15002-CAL4		04/13/12 08:56
Cal Standard	2D15002-CAL5		04/13/12 08:57
Cal Standard	2D15002-CAL6		04/13/12 08:57
Calibration Check	2D15002-CCV1		04/13/12 08:59
Calibration Blank	2D15002-CCB1		04/13/12 09:02
Blank	1204635-BLK1		04/13/12 09:02
LCS	1204635-BS1		04/13/12 09:02
Secondary Cal Check	2D15002-SCV1		04/13/12 09:03
Instrument RL Check	2D15002-CRL1		04/13/12 09:04
106042	1204205-01		04/13/12 09:05
106042	1204635-MS1		04/13/12 09:06
106042	1204635-MSD1		04/13/12 09:06
106089	1204205-02		04/13/12 09:07
Calibration Check	2D15002-CCV2		04/13/12 09:09
Calibration Blank	2D15002-CCB2		04/13/12 09:09

ANALYSIS BATCH (SEQUENCE) SUMMARY

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D27048

SDG: KNM040512

Project: KNM

Calibration: 2D27011

Instrument: 330

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2D27048-CAL1		04/26/12 15:40
Cal Standard	2D27048-CAL2		04/26/12 15:41
Cal Standard	2D27048-CAL3		04/26/12 15:42
Cal Standard	2D27048-CAL4		04/26/12 15:43
Cal Standard	2D27048-CAL5		04/26/12 15:43
Cal Standard	2D27048-CAL6		04/26/12 15:44
Calibration Check	2D27048-CCV1		04/26/12 15:45
Calibration Blank	2D27048-CCB1		04/26/12 15:45
Blank	1205299-BLK1		04/26/12 15:45
LCS	1205299-BS1		04/26/12 15:46
Secondary Cal Check	2D27048-SCV1		04/26/12 15:47
Instrument RL Check	2D27048-CRL1		04/26/12 15:48
Calibration Check	2D27048-CCV2		04/26/12 15:54
Calibration Blank	2D27048-CCB2		04/26/12 15:55
106053	1204454-01		04/26/12 15:56
106053	1205299-MS1		04/26/12 15:56
106053	1205299-MSD1		04/26/12 15:57
106054	1204454-02		04/26/12 15:58
Calibration Check	2D27048-CCV3		04/26/12 16:00
Calibration Blank	2D27048-CCB3		04/26/12 16:00

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D11051
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: 2D11012
Instrument ID: 330

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D11051-CCV1	Sulfide, Total	0.224	0.228	102	mg/L	04/11/12 11:33
2D11051-CCV2	Sulfide, Total	0.224	0.227	101	mg/L	04/11/12 11:40

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D15002
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: 2D15001
Instrument ID: 330

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D15002-CCV1	Sulfide, Total	0.242	0.241	100	mg/L	04/13/12 08:59
2D15002-CCV2	Sulfide, Total	0.242	0.241	99	mg/L	04/13/12 09:09

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D27048
Control Limt: +/- 15.00%

SDG: KNM040512
Project: KNM
Calibration: 2D27011
Instrument ID: 330

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
2D27048-CCV1	Sulfide, Total	0.248	0.255	103	mg/L	04/26/12 15:45
2D27048-CCV2	Sulfide, Total	0.248	0.255	103	mg/L	04/26/12 15:54
2D27048-CCV3	Sulfide, Total	0.248	0.254	103	mg/L	04/26/12 16:00

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D11051-SCV1
Sequence: 2D11051

SDG: KNM040512
Project: KNM
Instrument: 330
Calibration: 2D11012

Analyte	Expected	Found	% R	QC Limit	Units
Sulfide, Total	0.228	0.236	104	80-120	mg/L

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D15002-SCV1
Sequence: 2D15002

SDG: KNM040512
Project: KNM
Instrument: 330
Calibration: 2D15001

Analyte	Expected	Found	% R	QC Limit	Units
Sulfide, Total	0.242	0.252	104	80-120	mg/L

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Laboratory ID: 2D27048-SCV1
Sequence: 2D27048

SDG: KNM040512
Project: KNM
Instrument: 330
Calibration: 2D27011

Analyte	Expected	Found	% R	QC Limit	Units
Sulfide, Total	0.244	0.262	107	80-120	mg/L

* Values outside of QC limits

CRDL STANDARD

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D11051

SDG: KNM040512

Project: KNM

Calibration: 2D11012

Instrument ID: 330

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2D11051-CRL1	Sulfide, Total	0.0224	0.0205	92	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D15002

SDG: KNM040512

Project: KNM

Calibration: 2D15001

Instrument ID: 330

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2D15002-CRL1	Sulfide, Total	0.0242	0.0233	96	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D27048

SDG: KNM040512

Project: KNM

Calibration: 2D27011

Instrument ID: 330

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2D27048-CRL1	Sulfide, Total	0.0248	0.0200	81	mg/L	50 - 150

* Values outside of QC limits

BLANKS
SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Sequence: 2D11051
Calibration: 2D11012
Instrument ID: 330

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2D11051-CCB1	Sulfide, Total	-0.0036	mg/L	0.0052	0.020	U	04/11/12 11:34
2D11051-CCB2	Sulfide, Total	-0.0037	mg/L	0.0052	0.020	U	04/11/12 11:41

* Values outside of QC limits

BLANKS
SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D15002

SDG: KNM040512
Project: KNM
Calibration: 2D15001
Instrument ID: 330

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2D15002-CCB1	Sulfide, Total	0.00034	mg/L	0.0052	0.020	U	04/13/12 09:02
2D15002-CCB2	Sulfide, Total	0.00074	mg/L	0.0052	0.020	U	04/13/12 09:09

* Values outside of QC limits

BLANKS
SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TechLaw
Sequence: 2D27048

SDG: KNM040512
Project: KNM
Calibration: 2D27011
Instrument ID: 330

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
2D27048-CCB1	Sulfide, Total	-0.0077	mg/L	0.0052	0.020	J	04/26/12 15:45
2D27048-CCB2	Sulfide, Total	-0.0074	mg/L	0.0052	0.020	J	04/26/12 15:55
2D27048-CCB3	Sulfide, Total	-0.0072	mg/L	0.0052	0.020	J	04/26/12 16:00

* Values outside of QC limits

QC BATCH SUMMARY

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204504 QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
KAFB-003	1204091-01	04/11/12 11:00	
Blank	1204504-BLK1	04/11/12 11:00	
LCS	1204504-BS1	04/11/12 11:00	
KAFB-003	1204504-MS1	04/11/12 11:00	
KAFB-003	1204504-MSD1	04/11/12 11:00	

QC BATCH SUMMARY

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1204635

QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
106042	1204205-01	04/13/12 08:30	
106089	1204205-02	04/13/12 08:30	
Blank	1204635-BLK1	04/13/12 08:30	
LCS	1204635-BS1	04/13/12 08:30	
106042	1204635-MS1	04/13/12 08:30	
106042	1204635-MSD1	04/13/12 08:30	

QC BATCH SUMMARY

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

QC Batch: 1205299

QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
106053	1204454-01	04/26/12 15:00	
106054	1204454-02	04/26/12 15:00	
Blank	1205299-BLK1	04/26/12 15:00	
LCS	1205299-BS1	04/26/12 15:00	
106053	1205299-MS1	04/26/12 15:00	
106053	1205299-MSD1	04/26/12 15:00	

METHOD BLANK DATA SHEET
SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204504-BLK1
File ID:
Prepared: 04/11/12 11:00
Analyzed: 04/11/12 11:34
Preparation: Method-Specific Preparat
Initial/Final: 7.5 mL / 7.5 mL
QC Batch: 1204504
Sequence: 2D11051
Calibration: 2D11012
Instrument: 330

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
18496-25-8	Sulfide, Total	0.020	mg/L	0.0052	0.020	U

METHOD BLANK DATA SHEET
SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1204635-BLK1
File ID:
Prepared: 04/13/12 08:30
Analyzed: 04/13/12 09:02
Preparation: Method-Specific Preparat
Initial/Final: 7.5 mL / 7.5 mL
QC Batch: 1204635
Sequence: 2D15002
Calibration: 2D15001
Instrument: 330

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
18496-25-8	Sulfide, Total	0.020	mg/L	0.0052	0.020	U

METHOD BLANK DATA SHEET
SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM040512
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1205299-BLK1
File ID:
Prepared: 04/26/12 15:00
Analyzed: 04/26/12 15:45
Preparation: Method-Specific Preparat
Initial/Final: 7.5 mL / 7.5 mL
QC Batch: 1205299
Sequence: 2D27048
Calibration: 2D27011
Instrument: 330

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
18496-25-8	Sulfide, Total	0.020	mg/L	0.0052	0.020	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SM 4500-S2 D 20th

KAFB-003

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204504

SDG: KNM040512

Project: KNM

Laboratory ID: 1204504-MS1

Preparation: Method-Specific Preparation

Initial/Final: 7.5 mL / 7.5 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Sulfide, Total	0.299	ND	0.327	109	55 - 119	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

KAFB-003

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204504

SDG: KNM040512

Project: KNM

Laboratory ID: 1204504-MSD1

Preparation: Method-Specific Preparation

Initial/Final: 7.5 mL / 7.5 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Sulfide, Total	0.299	0.325	109	0.5	20	55 - 119	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106042

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204635

SDG: KNM040512

Project: KNM

Laboratory ID: 1204635-MS1

Preparation: Method-Specific Preparation

Initial/Final: 7.5 mL / 7.5 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Sulfide, Total	0.323	ND	0.347	107	55 - 119	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106042

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204635

SDG: KNM040512

Project: KNM

Laboratory ID: 1204635-MSD1

Preparation: Method-Specific Preparation

Initial/Final: 7.5 mL / 7.5 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Sulfide, Total	0.323	0.327	101	6	20	55 - 119	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

02600

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106053

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205299

SDG: KNM040512

Project: KNM

Laboratory ID: 1205299-MS1

Preparation: Method-Specific Preparation

Initial/Final: 7.5 mL / 7.5 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Sulfide, Total	0.331	ND	0.385	116	55 - 119	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SM 4500-S2 D 20th

106053

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205299

SDG: KNM040512

Project: KNM

Laboratory ID: 1205299-MSD1

Preparation: Method-Specific Preparation

Initial/Final: 7.5 mL / 7.5 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Sulfide, Total	0.331	0.383	116	0.4	20	55 - 119	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204504

SDG: KNM040512

Project: KNM

Laboratory ID: 1204504-BS1

Preparation: Method-Specific Preparation

Initial/Final: 7.5 mL / 7.5 mL

Sequence: 2D11051

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Sulfide, Total	0.299	0.306	102	80 - 120	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1204635

SDG: KNM040512

Project: KNM

Laboratory ID: 1204635-BS1

Preparation: Method-Specific Preparation

Initial/Final: 7.5 mL / 7.5 mL

Sequence: 2D15002

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Sulfide, Total	0.323	0.343	106	80 - 120	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205299

SDG: KNM040512

Project: KNM

Laboratory ID: 1205299-BS1

Preparation: Method-Specific Preparation

Initial/Final: 7.5 mL / 7.5 mL

Sequence: 2D27048

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Sulfide, Total	0.331	0.378	114	80 - 120	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

HOLDING TIME SUMMARY

SM 4500-S2 D 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM040512

Client: TechLaw

Project: KNM

Analyte: Sulfide, Total

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
KAFB-003	04/04/12	04/05/12		04/11/12	7	NA	04/11/12	7	7	
106042	04/10/12	04/11/12		04/13/12	3	NA	04/13/12	3	7	
106089	04/10/12	04/11/12		04/13/12	3	NA	04/13/12	3	7	
106053	04/24/12	04/25/12		04/26/12	2	NA	04/26/12	2	7	
106054	04/24/12	04/25/12		04/26/12	2	NA	04/26/12	2	7	

Inorganic - Wet Chemistry, Water, Apr-11-12

Instrument = 330, Calibration = 2D11012

Sequence Analyses:
Sulfide, Total 4500-S2 D

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D11051-CAL1	QC		2040522		CAL STANDARD	
2D11051-CAL2	QC		2040521		CAL STANDARD	
2D11051-CAL3	QC		2040520		CAL STANDARD	
2D11051-CAL4	QC		2040519		CAL STANDARD	
2D11051-CAL5	QC		2040518		CAL STANDARD	
2D11051-CAL6	QC		2040517		CAL STANDARD	
2D11051-CCV1	QC		2040518		CALIBRATION CHECK	
2D11051-CCB1	QC		2040522		CALIBRATION BLANK	
1204504-BLK1	QC				BLANK	
1204504-BS1	QC				LCS	
2D11051-SCV1	QC		2040513		SECONDARY CAL CHECK	
2D11051-CRL1	QC		2040521		INSTRUMENT RL CHECK	
1204091-01	Sulfide, Total 4500-S2 D	M			TechLaw	
1204504-MS1	QC				MATRIX SPIKE	
1204504-MSD1	QC				MATRIX SPIKE DUP	
2D11051-CCV2	QC		2040518		CALIBRATION CHECK	
2D11051-CCB2	QC		2040522		CALIBRATION BLANK	

Comments:	Analyst Initials:

Due 4.18.12

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1204504** Page 1 of 1

Printed: 4/11/2012 1:23:48PM

LV 4MD

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

2368

Standard	Description	Solvent	LotNum
2010277	Ferric Chloride(sulfides)	Di H2O	NA
2020076	STARCH INDICATOR	Di H2O	NA
2020077	1+1 Sulfuric Acid (sulfide)	Di H2O	113789
2020572	Phenylarsine Oxide solution - 0.02	Water	2010612
2020978	IODINE TITRANT REAGENT	Di H2O	NA
2030234	1+1 HCl (Sulide)	Di H2O	110306
2030981	AminoSulfuric Acid	Di H2O	NA
2040232	Diammonium Hydrogen Phosphat	Di H2O	NA
2040516	SULFIDE 4.48ppm	DI WATER	K17597

VBy CAE 4-13-12

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204091	Sulfide, Total 4500-S2 D				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client/ QC Type	Extraction Comments
1204504-BLK1		Apr-11-12 11:00	KAR	7.5	7.5					BLANK	
1204504-BS1		Apr-11-12 11:00	KAR	7.5	7.5			2040516	500	LCS	
1204504-MS1		Apr-11-12 11:00	KAR	7.5	7.5		1204091-01	2040516	500	MATRIX SPIKE	
1204504-MSD1		Apr-11-12 11:00	KAR	7.5	7.5		1204091-01	2040516	500	MATRIX SPIKE DUP	
1204091-01	M	Apr-11-12 11:00	KAR	7.5	7.5					TechLaw	

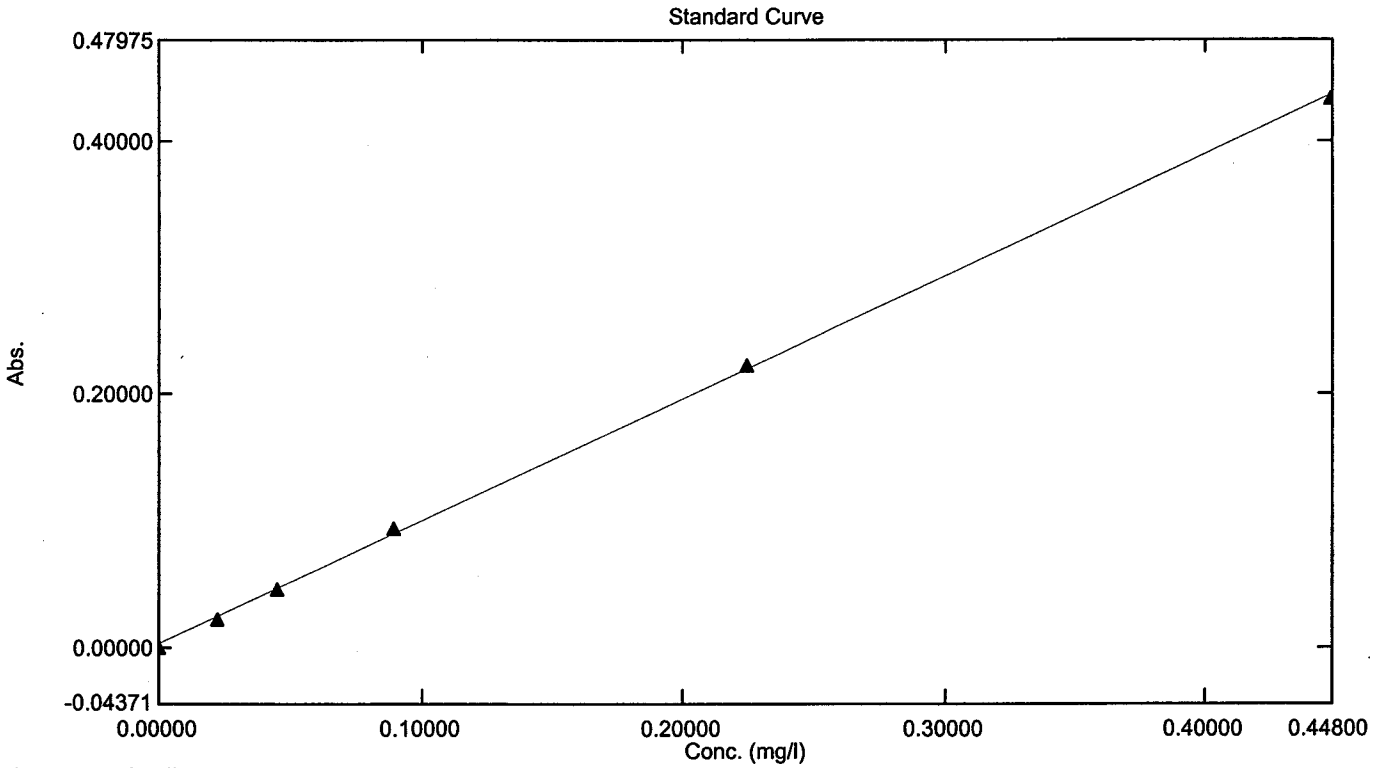
Comments:

Analyst Initials:

Standard Table Report

04/11/2012 11:42:23 AM

File Name: C:\Program Files\Shimadzu\UVProbe\Data\Old Data\Ver1 Data\Sulfide\041112.pho



Correlation Coefficient r2 = 0.99961

Standard Table

	Sample ID	Type	Ex	Date	Time	Conc	WL664.0	Wgt.Factor	Co
1	STD 1	Standard		04/11/2012	11:29:03 AM	0.00000	-0.00009	1.00000	
2	STD 2	Standard		04/11/2012	11:29:41 AM	0.02240	0.02211	1.00000	
3	STD 3	Standard		04/11/2012	11:30:30 AM	0.04480	0.04620	1.00000	
4	STD 4	Standard		04/11/2012	11:31:18 AM	0.08960	0.09409	1.00000	
5	STD 5	Standard		04/11/2012	11:31:56 AM	0.22400	0.22321	1.00000	
6	STD 6	Standard		04/11/2012	11:32:40 AM	0.44800	0.43405	1.00000	
7									

02609

Sample Table Report

04/11/2012 11:42:25 AM

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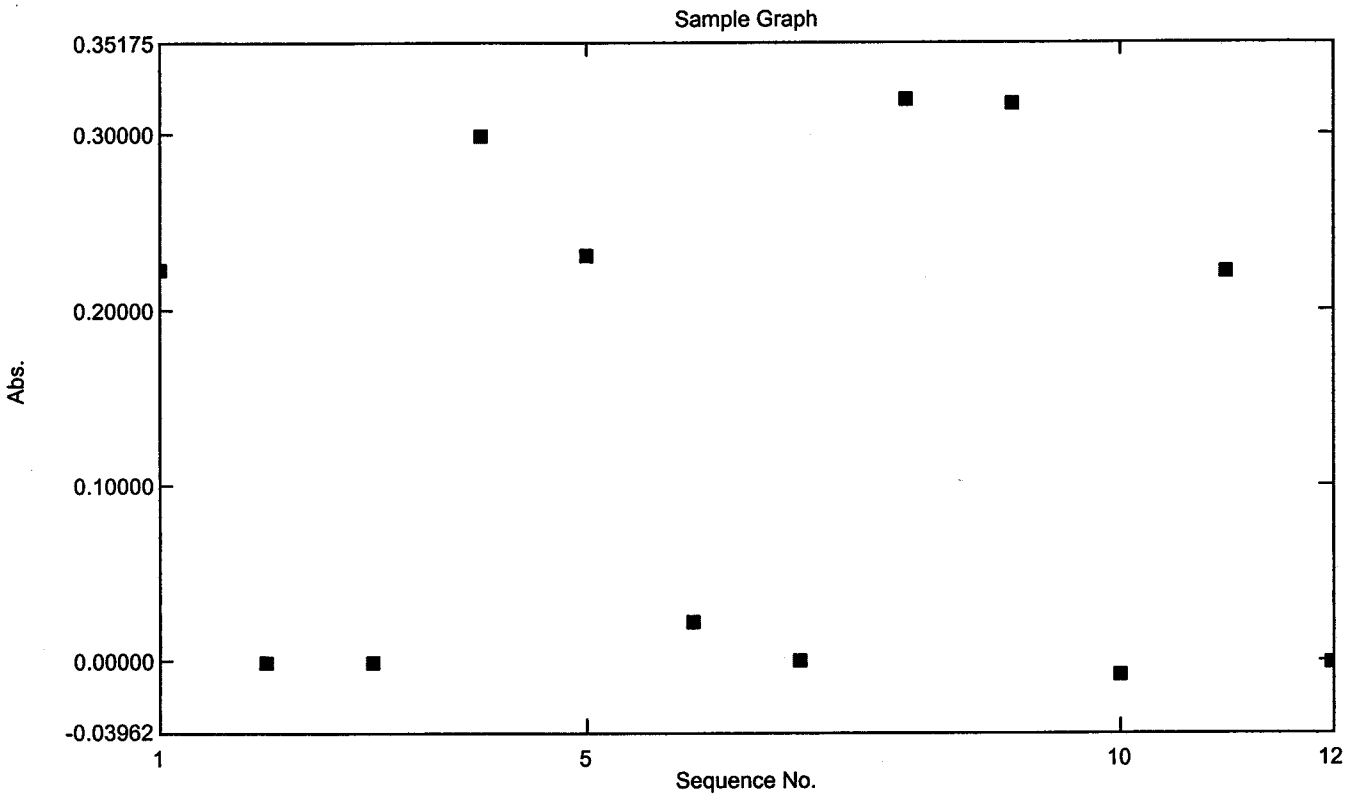


Sample Table

	Sample ID	Type	Ex	Date	Time	Conc	WL664.0	Comments
1	CCV1	Unknown		04/11/2012	11:33:24 AM	0.22803	✓ 0.22362	
2	CCB1	Unknown		04/11/2012	11:34:11 AM	-0.00361	✓ -0.00063	
3	BLK	Unknown		04/11/2012	11:34:13 AM	-0.00366	✓ -0.00067	
4	BS	Unknown		04/11/2012	11:34:51 AM	0.30564	✓ 0.29875	
5	SCV	Unknown		04/11/2012	11:35:51 AM	0.23643	✓ 0.23175	
6	CRDL	Unknown		04/11/2012	11:36:41 AM	0.02052	✓ 0.02274	
7	4091.01	Unknown		04/11/2012	11:37:27 AM	-0.00202	✓ 0.00092	
8	4091.01 MS	Unknown		04/11/2012	11:38:04 AM	0.32670	✓ 0.31914	
9	4091.01 MSD	Unknown		04/11/2012	11:38:45 AM	0.32511	✓ 0.31760	
10	~~CCV2~~ BKG	Unknown		04/11/2012	11:39:56 AM	-0.01020	-0.00700	4091.01 BKG
11	~~CCB2~~ CCV2	Unknown		04/11/2012	11:40:36 AM	0.22675	✓ 0.22238	CCV2
12	CCB2A CCB2	Unknown		04/11/2012	11:41:51 AM	-0.00366	✓ -0.00067	CCB2
13								

02610

TRIMATRIX LABORATORIES

General Information

ethod Reference:	4500-S2 D	SOP Reference:	GR-05-102 - total sulfides (colorimetric)	Matrix:	Water
Date:	04/11/12	Time:		Analyst:	KAR

Normality Checks

Normality of the I_2 solution

Added I_2, in mL:	10.00
PAO volume titrated, in mL:	9.90
PAO Normality:	0.025
I2 Normality:	0.02475

LCS (SCV) Spiking Solution Calculation

Added I_2, in mL:	10.00
PAO volume titrated, in mL:	4.20
PAO Normality:	0.025
Volume Titrated, in mL:	2.00
LCS (SCV) Concentration, in mg/L:	1140.0

2040511

LFB (BS/MS) Spiking Solution Concentration

Added I_2, in mL:	10.00
PAO volume titrated, in mL:	4.30
PAO Normality:	0.025
Volume Titrated, in mL:	2.00
LFB (BS) Concentration, in mg/L:	1120.0

2040514

Concentrations of the LCS and LFB based on volume spiked into 100 mL Laboratory Reagent Water or Sample, in mg/L

Volume of Spiking Solution used:	2.00	Volume of Spiking Solution used:	2.00
LCS (SCV) Concentration, in mg/L:	22.80 2040512	LFB (BS) Concentration, in mg/L:	22.40 2040515

SAMPLE	Sample Volume Used (mL)	Initial I_2 Buret Volume (mL)	Final I_2 Buret Volume (mL)	Total Added I2 (mL)	Initial PAO Buret Volume (mL)	Final PAO Buret Volume (mL)	Total PAO titrated (mL)	0.10 RESULT (mg/L)	COMMENTS
0.228ppm SCV =		1mL of		22.8ppm		SCV	/100mL		2040513
4.48 ppm =		20mL of		22.4ppm		/100mL			2040516
0.448ppm =		10mL of		4.48ppm		/100mL			2040517
0.224ppm =		5mL of		"		"			2040518
0.0896ppm =		2mL		"		"			2040519
0.0448ppm =		10mL of		0.448 ppm		/100mL			2040520
0.0224ppm =		10mL of		0.224ppm		/100mL			2040521
0ppm									2040522

K-iodate/iodide ID:	2020978	Zinc Acetate:	
stock LCS(SCV):	2040205	Formaldehyde Lot:	
stock LFB/BS/MS Solution:	2040206	PAO Lot:	2010612
1:1 HCl:	2030234	conc. H_2SO_4 Lot:	
Starch Indicator:	2020076		

Aminosulfuric Acid:	2030981
1:1 H_2SO_4:	2020077
Ferric Chloride:	2010277
H_2SO_4(0.01N):	
NaOH(0.25N):	
Diammonium Hydrogen Phosphate:	2040232

TRIMATRIX LABORATORIES

General Information

ethod Reference: 4500-S2 D | SOP Reference: GR-05-102 - total sulfides (colorimetric) | Matrix: Water

Date: 04/11/12 | Time: _____ | Analyst: KAR

Normality Checks

Normality of the I_2 solution

Added I_2, in mL: 10.00
PAO volume titrated, in mL: 9.9
PAO Normality: 0.025
I2 Normality: 0.00000

I 10.0
F 9.9

LCS (SCV) Spiking Solution Calculation

Added I_2, in mL: 10.00
PAO volume titrated, in mL: 4.2
PAO Normality: 0.025
Volume Titrated, in mL: 2.00
LCS (SCV) Concentration, in mg/L: 0.0

I 14.3
F 18.5

LFB (BS/MS) Spiking Solution Concentration

Added I_2, in mL: 10.00
PAO volume titrated, in mL: 4.3
PAO Normality: 0.025
Volume Titrated, in mL: 2.00
LFB (BS) Concentration, in mg/L: 0.0

I 10.0
F 14.3

Concentrations of the LCS and LFB based on volume spiked into 100 mL Laboratory Reagent Water or Sample, in mg/L

Volume of Spiking Solution used: 2.00
LCS (SCV) Concentration, in mg/L: 0.00

Volume of Spiking Solution used: 2.00
LFB (BS) Concentration, in mg/L: 0.00

0.10

SAMPLE	Sample Volume Used (mL)	Initial I_2 Buret Volume (mL)	Final I_2 Buret Volume (mL)	Total Added I2 (mL)	Initial PAO Buret Volume (mL)	Final PAO Buret Volume (mL)	Total PAO titrated (mL)	RESULT (mg/L)	COMMENTS

K-iodate/iodide ID: 2020978
LCS(SCV): _____
LFB/BS/MS Solution: _____
1:1 HCl: 2030234
Starch Indicator: 2020076

Zinc Acetate: _____
Formaldehyde Lot: _____
PAO Lot: 2010612
conc. H_2SO_4 Lot: _____

Aminosulfuric Acid: 2030981
1:1 H_2SO_4: 2020077
Ferric Chloride: 2010277
H_2SO_4(0.01N): _____
NaOH(0.25N): _____
Diammonium Hydrogen Phosphate: 2040232

Inorganic - Wet Chemistry, Water, Apr-13-12

Instrument = 330, Calibration = 2D15001

Sequence Analyses:
Sulfide, Total 4500-S2 D

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D15002-CAL1	QC		2040567		CAL STANDARD	
2D15002-CAL2	QC		2040566		CAL STANDARD	
2D15002-CAL3	QC		2040565		CAL STANDARD	
2D15002-CAL4	QC		2040564		CAL STANDARD	
2D15002-CAL5	QC		2040563		CAL STANDARD	
2D15002-CAL6	QC		2040562		CAL STANDARD	
2D15002-CCV1	QC		2040563		CALIBRATION CHECK	
2D15002-CCB1	QC		2040567		CALIBRATION BLANK	
1204635-BLK1	QC				BLANK	
1204635-BS1	QC				LCS	
2D15002-SCV1	QC		2040558		SECONDARY CAL CHECK	
2D15002-CRL1	QC		2040566		INSTRUMENT RL CHECK	
1204205-01	Sulfide, Total 4500-S2 D	M			TechLaw	
1204635-MS1	QC				MATRIX SPIKE	
1204635-MSD1	QC				MATRIX SPIKE DUP	
1204205-02	Sulfide, Total 4500-S2 D	M			TechLaw	
2D15002-CCV2	QC		2040563		CALIBRATION CHECK	
2D15002-CCB2	QC		2040567		CALIBRATION BLANK	

Comments:

Analyst Initials:

Due 4.24.12

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1204635** Page 1 of 1

Printed: 4/15/2012 11:03:49AM

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

LV 4mD

(No Surrogate)

Batch Comments: (none)

62514

Standard	Description	Solvent	LotNum
2010277	Ferric Chloride(sulfides)	Di H2O	NA
2020076	STARCH INDICATOR	Di H2O	NA
2020077	1+1 Sulfuric Acid (sulfide)	Di H2O	113789
2020572	Phenylarsine Oxide solution - 0.02	Water	2010612
2020978	IODINE TITRANT REAGENT	Di H2O	NA
2030234	1+1 HCl (Sulide)	Di H2O	110306
2030981	AminoSulfuric Acid	Di H2O	NA
2040232	Diammonium Hydrogen Phosphat	Di H2O	NA
2040561	SULFIDE 4.84ppm	DI WATER	K17597

May CAC 4-16-12

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204205	Sulfide, Total 4500-S2 D				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1204635-BLK1		Apr-13-12 08:30	KAR	7.5	7.5					BLANK	
1204635-BS1		Apr-13-12 08:30	KAR	7.5	7.5			2040561	500	LCS	
1204635-MS1		Apr-13-12 08:30	KAR	7.5	7.5		1204205-01	2040561	500	MATRIX SPIKE	
1204635-MSD1		Apr-13-12 08:30	KAR	7.5	7.5		1204205-01	2040561	500	MATRIX SPIKE DUP	
1204205-01	M	Apr-13-12 08:30	KAR	7.5	7.5					TechLaw	
1204205-02	M	Apr-13-12 08:30	KAR	7.5	7.5					TechLaw	

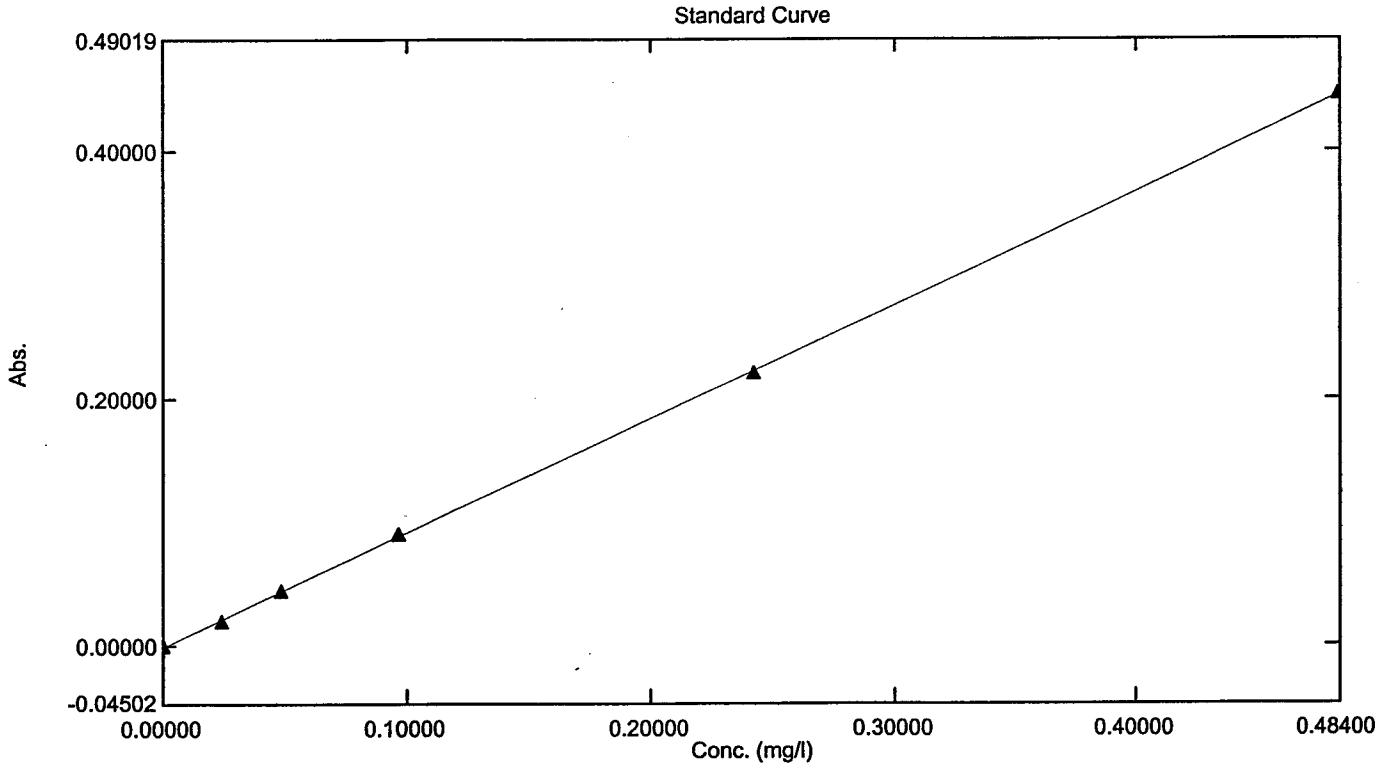
Comments:

Analyst Initials:

Standard Table Report

04/13/2012 09:16:07 AM

File Name: C:\Program Files\Shimadzu\UVProbe\Data\Old Data\Ver1 Data\Sulfide\041312.pho



Correlation Coefficient r2 = 0.99995

Standard Table

	Sample ID	Type	Ex	Date	Time	Conc	WL664.0	Wgt.Factor	Co
1	STD 1	Standard		04/13/2012	08:54:14 AM	0.00000	-0.00006	1.00000	
2	STD 2	Standard		04/13/2012	08:54:54 AM	0.02420	0.02055	1.00000	
3	STD 3	Standard		04/13/2012	08:55:31 AM	0.04840	0.04498	1.00000	
4	STD 4	Standard		04/13/2012	08:56:06 AM	0.09680	0.08980	1.00000	
5	STD 5	Standard		04/13/2012	08:57:01 AM	0.24200	0.22070	1.00000	
6	STD 6	Standard		04/13/2012	08:57:52 AM	0.48400	0.44559	1.00000	
7									

02615

Sample Table Report

04/13/2012 09:16:11 AM

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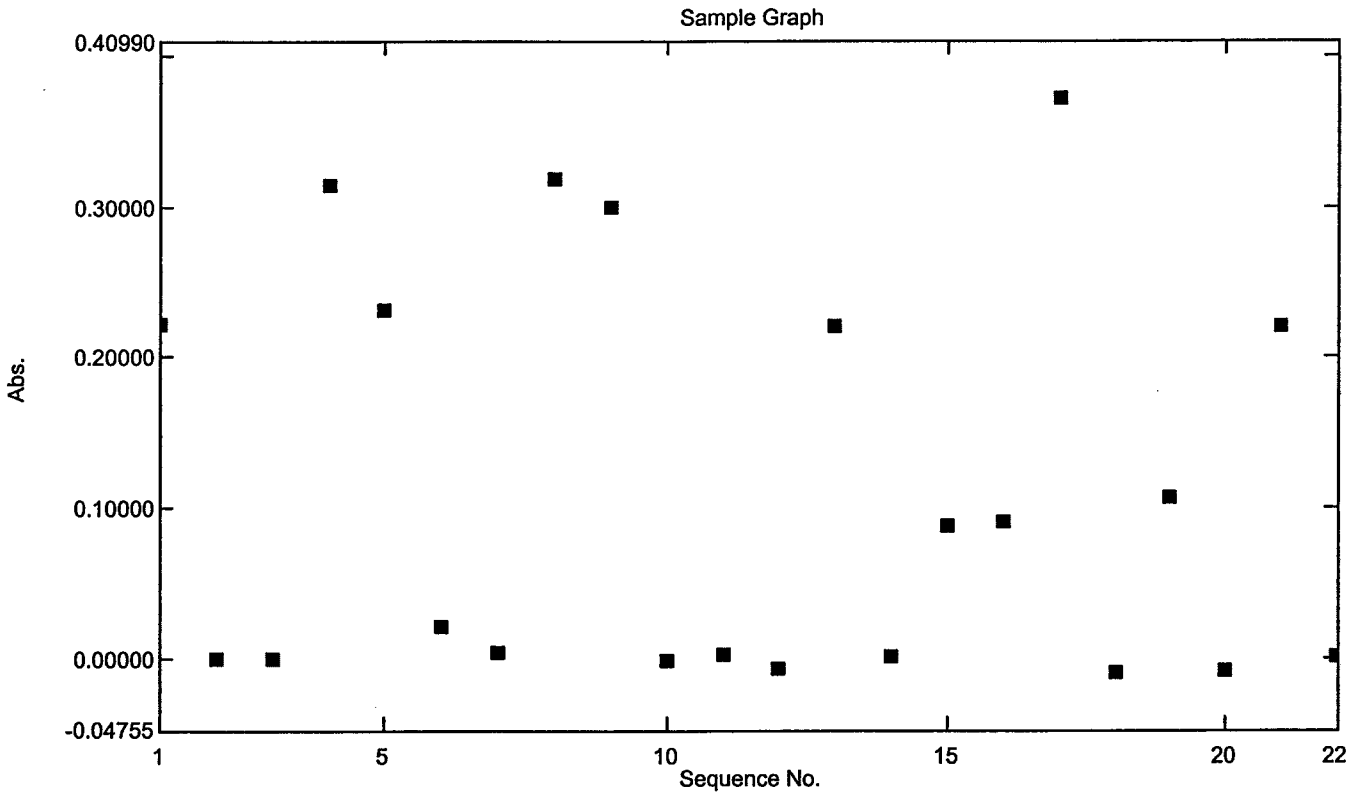

Sample Table

	Sample ID	Type	Ex	Date	Time	Conc	WL664.0	Comments
1	CCV1	Unknown		04/13/2012	08:59:59 AM	0.24145	0.22180	
2	CCB1	Unknown		04/13/2012	09:02:06 AM	0.00034	-0.00011	
3	BLK	Unknown		04/13/2012	09:02:08 AM	0.00037	-0.00008	
4	BS	Unknown		04/13/2012	09:02:52 AM	0.34265	0.31494	
5	SCV	Unknown		04/13/2012	09:03:42 AM	0.25206	0.23157	
6	CRDL	Unknown		04/13/2012	09:04:39 AM	0.02332	0.02104	
7	4205.01	Unknown		04/13/2012	09:05:35 AM	0.00354	0.00284	
8	4205.01 MS	Unknown		04/13/2012	09:06:09 AM	0.34673	0.31870	
9	4205.01 MSD	Unknown		04/13/2012	09:06:41 AM	0.32664	0.30020	
10	4205.01 BKG	Unknown		04/13/2012	09:07:14 AM	-0.00117	-0.00150	
11	4205.02	Unknown		04/13/2012	09:07:47 AM	0.00338	0.00269	
12	4205.02 BKG	Unknown		04/13/2012	09:08:25 AM	-0.00787	-0.00766	
13	CCV2	Unknown		04/13/2012	09:09:09 AM	0.24076	0.22116	
14	CCB2	Unknown		04/13/2012	09:09:46 AM	0.00074	0.00026	
15	4187.01 C	Unknown		04/13/2012	09:11:21 AM	0.09650	0.08839	
16	4187.01 DUP	Unknown		04/13/2012	09:11:53 AM	0.09844	0.09018	
17	4187.01 MS	Unknown		04/13/2012	09:12:32 AM	0.40441	0.37178	
18	4187.01 BKG	Unknown		04/13/2012	09:13:13 AM	-0.00979	-0.00943	

02616

Sample Table Report

04/13/2012 09:16:11 AM

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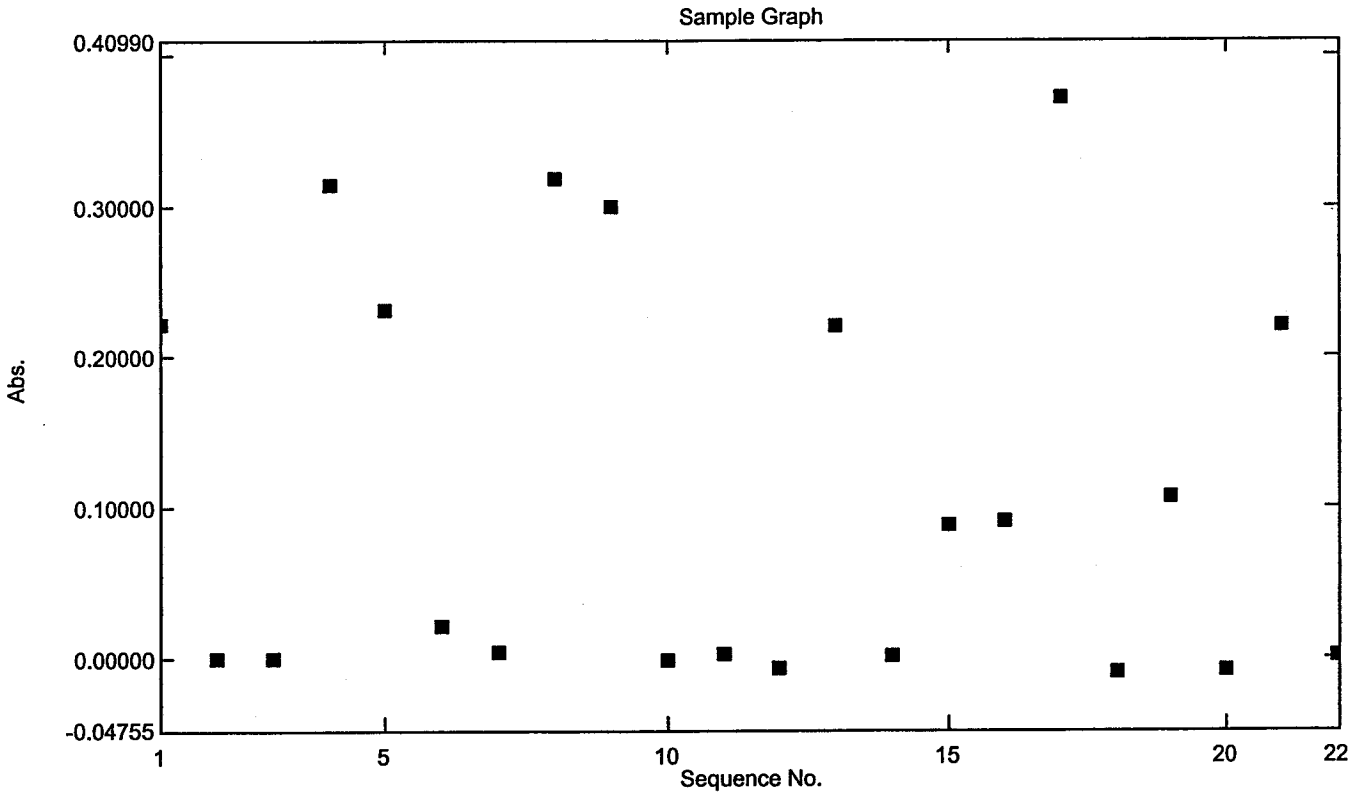


Sample Table

	Sample ID	Type	Ex	Date	Time	Conc	WL664.0	Comments
19	4187.01 E	Unknown		04/13/2012	09:13:45 AM	0.11578	0.10614	
20	4187.01 E BKG	Unknown		04/13/2012	09:14:21 AM	-0.00926	-0.00894	
21	CCV3	Unknown		04/13/2012	09:15:03 AM	0.24046	0.22089	
22	CCB3	Unknown		04/13/2012	09:15:44 AM	0.00079	0.00031	
23								

02617

TRIMATRIX LABORATORIES

General Information

ethod Reference:	4500-S2 D	SOP Reference:	GR-05-102 - total sulfides (colorimetric)	Matrix:	Water
Date:	04/12/12	Time:		Analyst:	KAR

Normality Checks

Normality of the I_2 solution

Added I_2, in mL:	10.00
PAO volume titrated, in mL:	9.95
PAO Normality:	0.025
I2 Normality:	0.02488

LCS (SCV) Spiking Solution Calculation

Added I_2, in mL:	10.00
PAO volume titrated, in mL:	3.90
PAO Normality:	0.025
Volume Titrated, in mL:	2.00
LCS (SCV) Concentration, in mg/L:	1210.0

2040556

LFB (BS/MS) Spiking Solution Concentration

Added I_2, in mL:	10.00
PAO volume titrated, in mL:	3.90
PAO Normality:	0.025
Volume Titrated, in mL:	2.00
LFB (BS) Concentration, in mg/L:	1210.0

2040559

Concentrations of the LCS and LFB based on volume spiked into 100 mL Laboratory Reagent Water or Sample, in mg/L

Volume of Spiking Solution used:	2.00	Volume of Spiking Solution used:	2.00
LCS (SCV) Concentration, in mg/L:	24.20 2040557	LFB (BS) Concentration, in mg/L:	24.20 2040560

SAMPLE	Sample Volume Used (mL)	Initial I_2 Buret Volume (mL)	Final I_2 Buret Volume (mL)	Total Added I2 (mL)	Initial PAO Buret Volume (mL)	Final PAO Buret Volume (mL)	Total PAO titrated (mL)	0.10 RESULT (mg/L)	COMMENTS
0.242ppm SCV =		1mL	of	24.2ppm SCV			/100mL		2040558
4.84ppm =		20mL	of	24.2ppm			/100mL		2040561
0.484ppm =		10mL	of	4.84ppm			/100mL		2040562
0.242ppm =		5mL	of	"		"			2040563
0.0968ppm =		2mL	of	"		"			2040564
0.0484ppm =		10mL	of	0.484ppm			/100mL		2040565
0.0242ppm =		10mL	of	0.242ppm			/100mL		2040566
0ppm									~~2040522~~ KR 4/13/12
									2040567

K-iodate/iodide ID:	2020978	Zinc Acetate:	
stock LCS(SCV):	2040554	Formaldehyde Lot:	
stock LFB/BS/MS Solution:	2040555	PAO Lot:	2010612
1:1 HCl:	2030234	conc. H_2SO_4 Lot:	
Starch Indicator:	2020076		

Aminosulfuric Acid:	2030981
1:1 H_2SO_4:	2020077
Ferric Chloride:	2010277
H_2SO_4(0.01N):	
NaOH(0.25N):	
Diammonium Hydrogen Phosphate:	2040232

TRIMATRIX LABORATORIES

General Information

ethod Reference: 4500-S2 D | SOP Reference: GR-05-102 - total sulfides (colorimetric) | Matrix: Water

Date: 04/12/12 | Time: | Analyst: KAR

Normality Checks

Normality of the I_2 solution		LCS (SCV) Spiking Solution Calculation		LFB (BS/MS) Spiking Solution Concentration	
Added I_2, in mL:	10.00	Added I_2, in mL:	10.00	Added I_2, in mL:	10.00
PAO volume titrated, in mL:	9.95	PAO volume titrated, in mL:	3.9	PAO volume titrated, in mL:	3.9
PAO Normality:	0.025	PAO Normality:	0.025	PAO Normality:	0.025
I2 Normality:	0.00000	Volume Titrated, in mL:	2.00	Volume Titrated, in mL:	2.00
		LCS (SCV) Concentration, in mg/L:	0.0	LFB (BS) Concentration, in mg/L:	0.0

I 10.0 F 9.95

I 13.9 F 17.8

I 10.0 F 13.9

Concentrations of the LCS and LFB based on volume spiked into 100 mL Laboratory Reagent Water or Sample, in mg/L

Volume of Spiking Solution used:	2.00	Volume of Spiking Solution used:	2.00
LCS (SCV) Concentration, in mg/L:	0.00	LFB (BS) Concentration, in mg/L:	0.00

0.10

SAMPLE	Sample Volume Used (mL)	Initial I_2 Buret Volume (mL)	Final I_2 Buret Volume (mL)	Total Added I2 (mL)	Initial PAO Buret Volume (mL)	Final PAO Buret Volume (mL)	Total PAO titrated (mL)	RESULT (mg/L)	COMMENTS

K-iodate/iodide ID: 2020978

LCS(SCV):

LFB/BS/MS Solution:

1:1 HCl: 2030234

Starch Indicator: 2020076

Zinc Acetate:

Formaldehyde Lot:

PAO Lot: 2010612

conc. H_2SO_4 Lot:

Aminosulfuric Acid: 2030981

1:1 H_2SO_4: 2020077

Ferric Chloride: 2010277

H_2SO_4(0.01N):

NaOH(0.25N):

Diammonium Hydrogen Phosphate: 2040232

Inorganic - Wet Chemistry, Water, Apr-26-12

Instrument = 330, Calibration = 2D27011

Sequence Analyses:
Sulfide, Total 4500-S2 D

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2D27048-CAL1	QC		2041232		CAL STANDARD	
2D27048-CAL2	QC		2041231		CAL STANDARD	
2D27048-CAL3	QC		2041230		CAL STANDARD	
2D27048-CAL4	QC		2041229		CAL STANDARD	
2D27048-CAL5	QC		2041228		CAL STANDARD	
2D27048-CAL6	QC		2041227		CAL STANDARD	
2D27048-CCV1	QC		2041228		CALIBRATION CHECK	
2D27048-CCB1	QC		2041232		CALIBRATION BLANK	
1205299-BLK1	QC				BLANK	
1205299-BS1	QC				LCS	
2D27048-SCV1	QC		2041223		SECONDARY CAL CHECK	
2D27048-CRL1	QC		2041231		INSTRUMENT RL CHECK	
2D27048-CCV2	QC		2041228		CALIBRATION CHECK	
2D27048-CCB2	QC		2041232		CALIBRATION BLANK	
1204454-01	Sulfide, Total 4500-S2 D	M			TechLaw	
1205299-MS1	QC				MATRIX SPIKE	
1205299-MSD1	QC				MATRIX SPIKE DUP	
1204454-02	Sulfide, Total 4500-S2 D	M			TechLaw	
2D27048-CCV3	QC		2041228		CALIBRATION CHECK	
2D27048-CCB3	QC		2041232		CALIBRATION BLANK	

Comments:	Analyst Initials:

Due 5.8.12

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1205299

Printed: 4/27/2012 11:54:01AM

NLB 5-1-12

Lu 4 MD

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

S2621

Standard	Description	Solvent	LotNum
2010277	Ferric Chloride(sulfides)	Di H2O	NA
2020077	1+1 Sulfuric Acid (sulfide)	Di H2O	113789
2020572	Phenylarsine Oxide solution - 0.02	Water	2010612
2030234	1+1 HCl (Sulide)	Di H2O	110306
2040667	IODINE TITRANT REAGENT	Di H2O	NA
2040708	Diammonium Hydrogen Phosphat	Di H2O	NA
2041202	STARCH INDICATOR	Di H2O	NA
2041216	AminoSulfuric Acid	Di H2O	NA
2041226	SULFIDE 4.96ppm	DI WATER	K17597

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204454	Sulfide, Total 4500-S2 D				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1205299-BLK1		Apr-26-12 15:00	KAR	7.5	7.5					BLANK	
1205299-BS1		Apr-26-12 15:00	KAR	7.5	7.5			2041226	500	LCS	
1205299-MS1		Apr-26-12 15:00	KAR	7.5	7.5		1204454-01	2041226	500	MATRIX SPIKE	
1205299-MSD1		Apr-26-12 15:00	KAR	7.5	7.5		1204454-01	2041226	500	MATRIX SPIKE DUP	
1204454-01	M	Apr-26-12 15:00	KAR	7.5	7.5					TechLaw	
1204454-02	M	Apr-26-12 15:00	KAR	7.5	7.5					TechLaw	

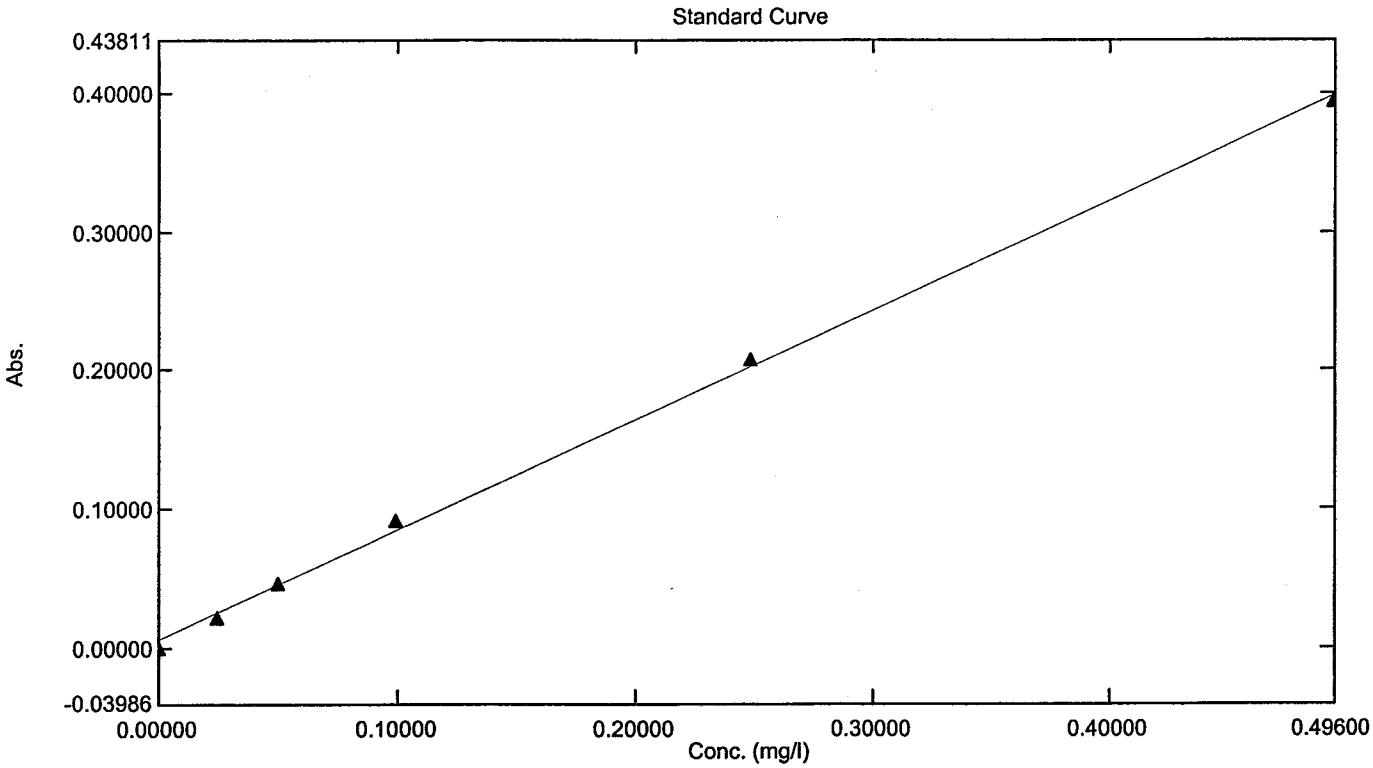
Comments:

Analyst Initials:

Standard Table Report

04/26/2012 04:33:50 PM

File Name: C:\Program Files\Shimadzu\UVProbe\Data\Old Data\Ver1 Data\Sulfide\042612.pho



Correlation Coefficient r2 = 0.99873

Standard Table

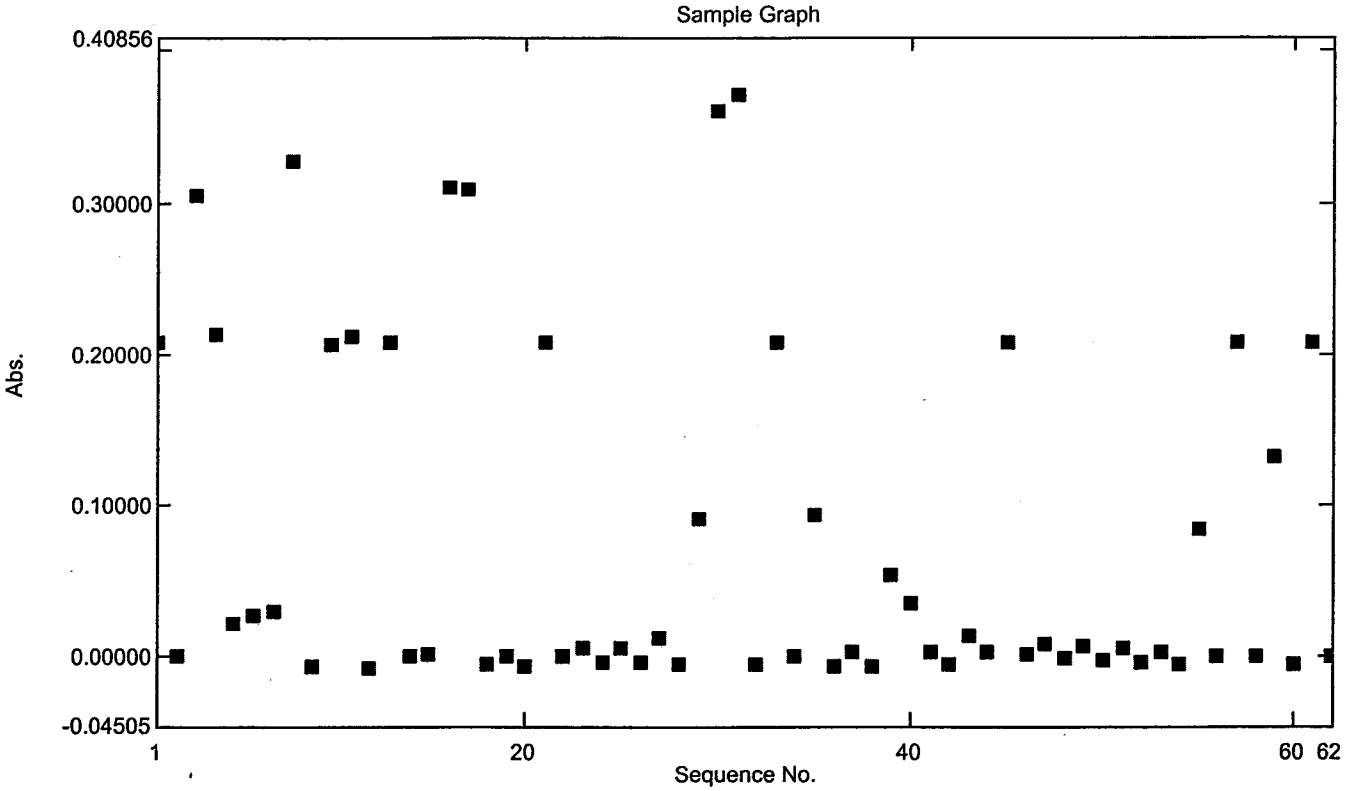
	Sample ID	Type	Ex	Date	Time	Conc	WL664.0	Wgt.Factor	Comments
1	STD 1	Standar		04/26/2012	03:40:58 PM	0.00000	-0.00003	1.00000	
2	STD 2	Standar		04/26/2012	03:41:44 PM	0.02480	0.02155	1.00000	
3	STD 3	Standar		04/26/2012	03:42:26 PM	0.04960	0.04596	1.00000	
4	STD 4	Standar		04/26/2012	03:43:00 PM	0.09920	0.09166	1.00000	
5	STD 5	Standar		04/26/2012	03:43:42 PM	0.24800	0.20726	1.00000	
6	STD 6	Standar		04/26/2012	03:44:18 PM	0.49600	0.39474	1.00000	
7									

02622

Sample Table Report

04/26/2012 04:33:54 PM

File Name: C:\Program Files\Shimadzu\UVProbe\Data\Old Data\Ver1 Data\Sulfide\042612.pho



Sample Table

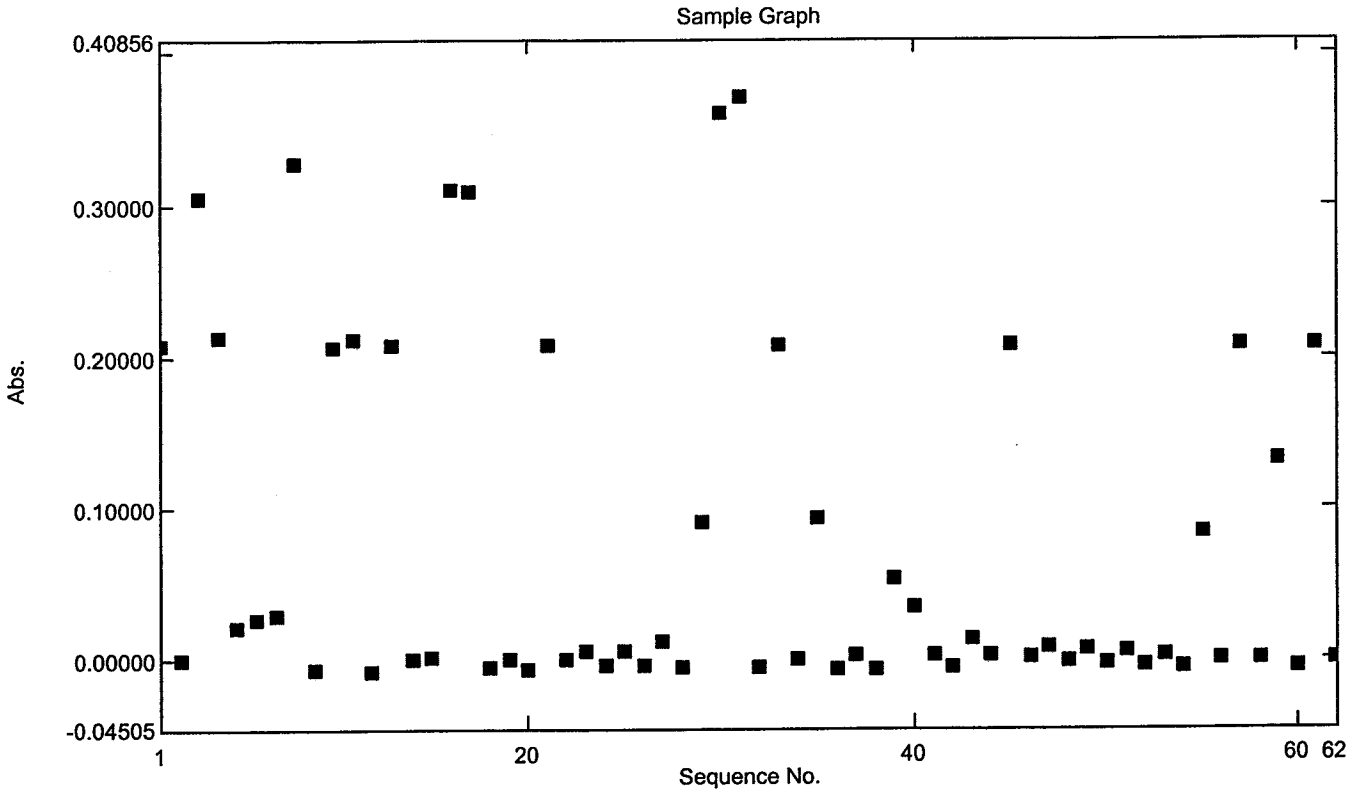
	Sample ID	Type	Ex	Date	Time	Conc	WL664.0	Comments
1	CCV1	Unknown		04/26/2012	03:45:02 PM	0.25463	0.20743	
2	CCB1/BLK	Unknown		04/26/2012	03:45:42 PM	-0.00772	-0.00043	
3	BS	Unknown		04/26/2012	03:46:26 PM	0.37823	0.30536	
4	SCV	Unknown		04/26/2012	03:47:24 PM	0.26237	0.21356	
5	CRDL	Unknown		04/26/2012	03:48:50 PM	0.02003	0.02156	
6	4461.01 F	Unknown		04/26/2012	03:49:41 PM	0.02624	0.02647	
7	4461.01 DUP	Unknown		04/26/2012	03:50:16 PM	0.02939	0.02898	
8	4461.01 MS	Unknown		04/26/2012	03:50:55 PM	0.40602	0.32738	
9	4461.01 BKG	Unknown		04/26/2012	03:51:46 PM	-0.01452	-0.00581	
10	4360.19	Unknown		04/26/2012	03:52:26 PM	0.25312	0.20624	
11	4360.19 DUP	Unknown		04/26/2012	03:53:07 PM	0.26011	0.21178	
12	4360.19 BKG	Unknown		04/26/2012	03:53:57 PM	-0.01633	-0.00725	
13	CCV2	Unknown		04/26/2012	03:54:30 PM	0.25480	0.20757	
14	CCB2	Unknown		04/26/2012	03:55:18 PM	-0.00735	-0.00014	
15	4454.01	Unknown		04/26/2012	03:56:09 PM	-0.00527	0.00151	
16	4454.01 MS	Unknown		04/26/2012	03:56:44 PM	0.38472	0.31050	
17	4454.01 MSD	Unknown		04/26/2012	03:57:30 PM	0.38326	0.30934	
18	4454.01 BKG	Unknown		04/26/2012	03:58:06 PM	-0.01319	-0.00476	

02623

Sample Table Report

04/26/2012 04:33:54 PM

File Name: C:\Program Files\Shimadzu\UVProbe\Data\Old Data\Ver1 Data\Sulfide\042612.pho



Sample Table

	Sample ID	Type	Ex	Date	Time	Conc	WL664.0	Comments
19	4454.02	Unknown		04/26/2012	03:58:56 PM	-0.00702	0.00012	
20	4454.02 BKG	Unknown		04/26/2012	03:59:36 PM	-0.01581	-0.00684	
21	CCV3	Unknown		04/26/2012	04:00:15 PM	0.25434	0.20720	
22	CCB3	Unknown		04/26/2012	04:00:47 PM	-0.00718	0.00000	
23	4453.02	Unknown		04/26/2012	04:03:34 PM	-0.00067	0.00516	
24	4453.02 BKG	Unknown		04/26/2012	04:04:08 PM	-0.01230	-0.00406	
25	4453.03	Unknown		04/26/2012	04:04:41 PM	-0.00015	0.00557	
26	4453.03 BKG	Unknown		04/26/2012	04:05:12 PM	-0.01251	-0.00423	
27	4453.04	Unknown		04/26/2012	04:05:54 PM	0.00804	0.01205	
28	4453.04 BKG	Unknown		04/26/2012	04:06:31 PM	-0.01309	-0.00468	
29	4453.05	Unknown		04/26/2012	04:07:04 PM	0.10689	0.09038	
30	4453.05 MS	Unknown		04/26/2012	04:07:36 PM	0.44875	0.36124	
31	4453.05 MSD	Unknown		04/26/2012	04:08:14 PM	0.46077	0.37076	
32	4453.05 BKG	Unknown		04/26/2012	04:08:47 PM	-0.01384	-0.00528	
33	CCV4	Unknown		04/26/2012	04:09:22 PM	0.25530	0.20796	
34	CCB4	Unknown		04/26/2012	04:09:59 PM	-0.00712	0.00005	
35	4453.06	Unknown		04/26/2012	04:11:42 PM	0.11092	0.09357	
36	4453.06 BKG	Unknown		04/26/2012	04:12:15 PM	-0.01467	-0.00594	

02624

TRIMATRIX LABORATORIES

General Information

ethod Reference:	4500-S2 D	SOP Reference:	GR-05-102 - total sulfides (colorimetric)	Matrix:	Water
Date:	04/26/12	Time:		Analyst:	KAR

Normality Checks

Normality of the I_2 solution

Added I_2, in mL:	10.00
PAO volume titrated, in mL:	9.90
PAO Normality:	0.025
I2 Normality:	0.02475

LCS (SCV) Spiking Solution Calculation

Added I_2, in mL:	10.00
PAO volume titrated, in mL:	3.80
PAO Normality:	0.025
Volume Titrated, in mL:	2.00
LCS (SCV) Concentration, in mg/L:	1220.0

2041221

LFB (BS/MS) Spiking Solution Concentration

Added I_2, in mL:	10.00
PAO volume titrated, in mL:	3.70
PAO Normality:	0.025
Volume Titrated, in mL:	2.00
LFB (BS) Concentration, in mg/L:	1240.0

2041224

Concentrations of the LCS and LFB based on volume spiked into 100 mL Laboratory Reagent Water or Sample, in mg/L

Volume of Spiking Solution used:	2.00	Volume of Spiking Solution used:	2.00
LCS (SCV) Concentration, in mg/L:	24.40	LFB (BS) Concentration, in mg/L:	24.80

2041222 2041225

SAMPLE	Sample Volume Used (mL)	Initial I_2 Buret Volume (mL)	Final I_2 Buret Volume (mL)	Total Added I2 (mL)	Initial PAO Buret Volume (mL)	Final PAO Buret Volume (mL)	Total PAO titrated (mL)	0.10 RESULT (mg/L)	COMMENTS
0.244ppm SCV =		1mL of		24.4ppm	SCV /	100mL			2041223
~~4.96ppm~~ HR 4-26-12									
~~4.96ppm~~ =		20mL of		24.8ppm	/	100mL			2041226
0.496ppm =		10mL of		4.96ppm	/	100mL			2041227
0.248ppm =		5mL		"		"			2041228
0.0992ppm =		2mL		"		"			2041229
0.0496ppm =		10mL of		0.496ppm	/	100mL			2041230
0.0248ppm =		10mL of		0.248ppm	/	100mL			2041231
0ppm									2041232

K-iodate/iodide ID:	2040667	Zinc Acetate:	
Stock LCS(SCV):	2041219	Formaldehyde Lot:	
Stock LFB/BS/MS Solution:	2041220	PAO Lot:	2010612
1:1 HCl:	2030234	conc. H_2SO_4 Lot:	
Starch Indicator:	2041202		

Aminosulfuric Acid:	2041216
1:1 H_2SO_4:	2020077
Ferric Chloride:	2010277
H_2SO_4(0.01N):	
NaOH(0.25N):	
Diammonium Hydrogen Phosphate:	2040708

TRIMATRIX LABORATORIES

General Information

ethod Reference:	4500-S2 D	SOP Reference:	GR-05-102 - total sulfides (colorimetric)	Matrix:	Water
Date:		Time:		Analyst:	

Normality Checks

Normality of the I_2 solution

Added I_2, in mL: 10.00
PAO volume titrated, in mL: 9.9
PAO Normality: 0.025
I2 Normality: 0.00000

I 10.0
F 9.9

LCS (SCV) Spiking Solution Calculation

Added I_2, in mL: 10.00
PAO volume titrated, in mL: 3.8
PAO Normality: 0.025
Volume Titrated, in mL: 2.00
LCS (SCV) Concentration, in mg/L: 0.0

I 13.7
F 17.5

LFB (BS/MS) Spiking Solution Concentration

Added I_2, in mL: 10.00
PAO volume titrated, in mL: 3.7
PAO Normality: 0.025
Volume Titrated, in mL: 2.00
LFB (BS) Concentration, in mg/L: 0.0

I 10.0
F 13.7

Concentrations of the LCS and LFB based on volume spiked into 100 mL Laboratory Reagent Water or Sample, in mg/L

Volume of Spiking Solution used: 2.00
LCS (SCV) Concentration, in mg/L: 0.00

Volume of Spiking Solution used: 2.00
LFB (BS) Concentration, in mg/L: 0.00

								0.10	
SAMPLE	Sample Volume Used (mL)	Initial I_2 Buret Volume (mL)	Final I_2 Buret Volume (mL)	Total Added I2 (mL)	Initial PAO Buret Volume (mL)	Final PAO Buret Volume (mL)	Total PAO titrated (mL)	RESULT (mg/L)	COMMENTS

K-iodate/iodide ID: 2040667
LCS(SCV): _____
LFB/BS/MS Solution: _____
1:1 HCl: 2030234
Starch Indicator: 2041202

Zinc Acetate: _____
Formaldehyde Lot: _____
PAO Lot: 2010612
conc. H_2SO_4 Lot: _____

Aminosulfuric Acid: 2041216
1:1 H_2SO_4: 2020077
Ferric Chloride: 2016277
H_2SO_4(0.01N): _____
NaOH(0.25N): _____
Diammonium Hydrogen Phosphate: 2040708

TRIMATRIX
LABORATORIES

TechLaw
KNM

END OF REPORT

SDG: KNM040512

May 22, 2012

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Individual sample results relate only to the sample tested.
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