Inorganics

Case Narrative

NMED Hazardous Waste Bureau

KAFB - BFF

Work Order Number: 1104396

1. This report consists of 6 water samples.

2. The samples were received cool and intact by ALS on 04/27/11.

3. The samples had been correctly preserved for the requested analyses.

4. The samples were prepared for analysis based on Methods for the Chemical Analysis of Waters and Wastes (MCAWW), May 1994 procedures and Environmental Monitoring Systems Laboratory (EMSL) Rev 2.1 procedures.

5. The samples were analyzed following MCAWW and EMSL procedures for the following methods:

Analyte	Method	SOP #
Alkalinity	310.1	1106 Rev9
Bicarbonate	310.1	1106 Rev 9
Carbonate	310.1	1106 Rev 9
Ammonia as N	350.1	1129 Rev 7
Nitrate/nitrite as N	353.2 Revision 2.0	1127 Rev 8
Sulfide	376.1	1120 Rev 6
Bromide	300.0 Revision 2.1	1113 Rev 11
Chloride	300.0 Revision 2.1	1113 Rev 11
Fluoride	300.0 Revision 2.1	1113 Rev 11
Sulfate	300.0 Revision 2.1	1113 Rev 11

6. All standards and solutions were used within their recommended shelf life.

7. The samples were prepared and analyzed within the established hold time for each analysis.

All in house quality control procedures were followed, as described below.

8. General quality control procedures.

   - A preparation (method) blank and laboratory control sample (LCS) were prepared and analyzed with the samples in each preparation batch. There were not more than 20 samples in each preparation batch.
   - The method blank associated with each batch was below the reporting limit for the requested analytes. This indicates that no contaminants were introduced to the samples during preparation and analysis.
   - The LCS was within the acceptance limits for each analysis.
   - All initial and continuing calibration blanks (ICB/CCB) associated with each analytical batch were below the reporting limit for the requested analytes.
   - All initial and continuing calibration verifications (ICV/CCV) associated with each analytical batch were within the acceptance criteria for the requested analytes. This indicates a valid calibration and stable instrument conditions.

9. Matrix specific quality control procedures.

   Per method requirements, matrix QC was performed for each analysis. Since a sample from this order number was not the selected quality control (QC) sample, matrix specific QC results are not included in this report.

10. It was necessary to dilute samples 1104396-6 and -16 in order to bring the chloride concentrations into the analytical range of the ion chromatograph (IC).

    Reduced aliquots were taken of samples 1104396-6 and -16 for the alkalinity, bicarbonate, and carbonate analysis. Reporting limits were elevated accordingly.

11. Manual integrations are performed when needed to provide consistent and defensible data following the guidelines in SOP 939 Revision 4.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Megan Johnson — 5/11/11
Megan Johnson — Date
Inorganics Primary Data Reviewer

Inorganics Final Data Reviewer — 5/10/11
Date

Inorganic Data Reporting Qualifiers

The following qualifiers are used by the laboratory when reporting results of inorganic analyses.

- Concentration qualifier -- If the analyte was analyzed for but not detected a “U” is entered.
- QC qualifier -- Specified entries and their meanings are as follows:

  N - Spiked sample recovery not within control limits.

  * - Duplicate analysis (relative percent difference) not within control limits.

  Z - Calibration spike recovery not within control limits.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1104396
Client Name: NMED Hazardous Waste Bureau
Client Project Name: KAFB - BFF
Client Project Number:
Client PO Number: 10-667-00-13453

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
10620-A	1104396-1		WATER	26-Apr-11	11:24
10620-B	1104396-2		WATER	26-Apr-11	11:31
10620-C	1104396-3		WATER	26-Apr-11	11:34
10620-D	1104396-4		WATER	26-Apr-11	11:39
10620-E	1104396-5		WATER	26-Apr-11	11:41
10620-F	1104396-6		WATER	26-Apr-11	11:45
10620-G	1104396-7		WATER	26-Apr-11	11:46
10620-H	1104396-8		WATER	26-Apr-11	11:48
10620-I	1104396-9		WATER	26-Apr-11	11:49
10620-J	1104396-10		WATER	26-Apr-11	11:51
10621-A	1104396-11		WATER	26-Apr-11	14:58
10621-B	1104396-12		WATER	26-Apr-11	15:01
10621-C	1104396-13		WATER	26-Apr-11	15:10
10621-D	1104396-14		WATER	26-Apr-11	15:17
10621-E	1104396-15		WATER	26-Apr-11	15:22
10621-F	1104396-16		WATER	26-Apr-11	15:26
10621-G	1104396-17		WATER	26-Apr-11	15:28
10621-H	1104396-18		WATER	26-Apr-11	15:30
10621-I	1104396-19		WATER	26-Apr-11	15:31
10621-J	1104396-20		WATER	26-Apr-11	15:33

ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Form 202r8

WORKORDER #	1104396		
PAGE	1 of 2		
DISPOSAL	By Lab or Return to Client		

PROJECT NAME	KAFB-BFF	SAMPLER	SSB / BS
PROJECT No.		SITE ID	KAFB-10620
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	NMED / HWB	BILL TO COMPANY	NMED / HWB
SEND REPORT TO	SID BRANDWEIN	INVOICE ATTN TO	DAVE COBRAIN
ADDRESS	5500 SAN ANTONIO DR.	ADDRESS	2905 RODEO PARK DR.
CITY / STATE / ZIP	ALBQ, NM 87109	CITY / STATE / ZIP	SANTA FE, NM 87505
PHONE	505 ~~992-9104~~	PHONE	505-476-6055
FAX	222-9504	FAX	
E-MAIL	sid.brandwein@state.nm.us	E-MAIL	

DATE: 4/26/11
TURNAROUND: NORMAL

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	VOCs 8260	EDB 504/504.1	GRO 8015	DRO 8015	PAH-SVOCs 8270 SIMS	TOTAL METALS TAL 6010	ALKALINITY + ANIONS 310.1 + 300	NH3 + NITRATE + NITRITE 350.3 + 353.3	SULFIDE 376.1	DISS. Fe + Mn 6010
1	10620-A	W	4/26/11	11:24	3	HCl		X									
2	10620-B	W	4/26/11	11:31	3	HCl				X							
3	10620-C	W	4/26/11	11:34	3	HCl			X								
4	10620-D	W	4/26/11	11:39	1	—						X					
5	10620-E	W	4/26/11	11:41	1	—					X						
6	10620-F	W	4/26/11	11:45	1	—								X			
7	10620-G	W	4/26/11	11:46	1	H_2SO_4									X		
8	10620-H	W	4/26/11	11:48	1	ZnOAc										X	
9	10620-I	W	4/26/11	11:49	1	HNO_3							X				
10	10620-J	W	4/26/11	11:51	1	HNO_3											X

Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:

TOT MET - TAL

DISSOLVED MET - Fe, Mn only

QC PACKAGE (check below)	
	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw data)

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	S. Brandwein	S. BRANDWEIN	4/26/11	4:30
RECEIVED BY	Lauren Schmitz	Lauren Schmitz	4/27/11	1035
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
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Chain-of-Custody

Form 202r8

WORKORDER # 1104396

PAGE 2 of 2

DISPOSAL By Lab or Return to Client

PROJECT NAME		SAMPLER	SSB/BS
		SITE ID	10621
PROJECT No.		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	NMED	BILL TO COMPANY	NMED/HWB
SEND REPORT TO	SID BRANDWEIN	INVOICE ATTN TO	DAVE COBRAIN
ADDRESS	5500 SAN ANTONIO DR. NE	ADDRESS	2905 RODEO PARK DR
CITY / STATE / ZIP	ALBQ NM 87109	CITY / STATE / ZIP	SANTA FE, NM 87505
PHONE	505-222-9504	PHONE	505-476-6055
FAX		FAX	
E-MAIL	sidbrandwein@state.nm.us	E-MAIL	

DATE

TURNAROUND NORMAL

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	VOCs 8260	EDB 8011/504.1	GRO 8015	DRO 8015	PAH-SVOCs 8270 SIM	TOTAL METALS 6010	ALK + ANIONS 310.1 300.0	NH3 + NITRATE + NITRITE 350.3 353.3	SULFIDE 376.1	DISS. Fe, Mn 6010
11	10621 - A	W	4/26/11	2:56	3	HCl		X									
12	10621 - B	W	4/26/11	3:01	3	HCl				X							
13	10621 - C	W	4/26/11	3:10	3	HCl			X								
14	10621 - D	W	4/26/11	3:17	1	—						X					
15	10621 - E	W	4/26/11	3:22	1	—					X						
16	10621 - F	W	4/26/11	3:26	1	—								X			
17	10621 - G	W	4/26/11	3:27	1	H_2SO_4									X		
18	10621 - H	W	4/26/11	3:30	1	ZnAc										X	
19	10621 - I	W	4/26/11	3:31	1	HNO_3							X				
20	10621 - J	W	4/26/11	3:33	1	HNO_3											X

Time Zone (Circle): EST CST (MST) PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:

QC PACKAGE (check below)	
	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw data)

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	[signature]	S. BRANDWEIN	4/26/11	4:30
RECEIVED BY	[signature]	Lauren Schmitz	4/27/11	1035
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Laboratory Group - Fort Collins

CONDITION OF SAMPLE UPON RECEIPT FORM

Client: NMED Workorder No: 1104396

Project Manager: LRS Initials: LAS Date: 4/27/11

1. Does this project require any **special handling** in addition to standard Paragon procedures?			YES	(NO)
2. Are custody **seals** on **shipping containers** intact?	NONE	(YES)	NO	
3. Are Custody seals on **sample containers** intact?	(NONE)		YES	NO
4. Is there a **COC (Chain-of-Custody) present** or other representative documents?			(YES)	NO
5. Are the **COC and bottle labels complete and legible**?			(YES)	NO
6. Is the **COC in agreement** with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)			(YES)	NO
7. Were **airbills / shipping documents** present and/or removable?	DROP OFF		(YES)	NO
8. Are all **aqueous samples requiring preservation preserved correctly? (excluding volatiles)**	N/A		YES	(NO) *
9. Are all aqueous **non-preserved samples pH 4-9**?	N/A		(YES)	NO
10. Is there **sufficient sample** for the requested analyses?			(YES)	NO
11. Were all samples placed in the **proper containers** for the requested analyses?			(YES)	NO
12. Are all samples within **holding times** for the requested analyses?			(YES)	NO
13. Were all sample containers received **intact**? (not broken or leaking, etc.)			(YES)	NO
14. Are all samples requiring **no** headspace (**VOC, GRO, RSK/MEE, Rx CN/S, radon**) headspace free? **Size of bubble**: ____ < green pea ____ > green pea	N/A		(YES)	NO
15. Do perchlorate LCMS-MS samples **have** headspace? (at least 1/3 of container required)	(N/A)		YES	NO
16. Were samples checked for and free from the presence of **residual chlorine?** (Applicable when PM has indicated samples are from a chlorinated water source; note if field preservation with sodium thiosulfate was not observed.)	(N/A)		YES	NO
17. Were the samples **shipped on ice**?			(YES)	NO
18. Were cooler temperatures measured at 0.1-6.0°C? **IR gun used*:** (#2) #4	RAD ONLY		(YES)	NO

Cooler #:	1							
Temperature (°C):	4.4							
No. of custody seals on cooler:	2							
DOT Survey/ Acceptance Information — External µR/hr reading:	15							
Background µR/hr reading:	13							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES / NO / NA** (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

Please see page 2

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: 4/28/11

*IR Gun #2: Oakton, SN 29922500201-0066 *IR Gun #4: Oakton, SN 2372220101-0002

Form 201r22.xls (6/1/09)

4/27/11

CONDITION OF SAMPLE UPON RECEIPT FORM

Client: NMED Workorder No: 1104396

Project Manager: LRS Initials: LAS Date: 4/27/11

Additional Information:

Was the laboratory directed to proceed with the analysis of any samples yielding the presence of residual chlorine? **YES / NO / NA**

NOTE:

No pH adjustments shall be made without prior consent of Project Manager. After pH adjustments, hold metals and radchem samples ≥ 24 hrs. before analysis.

Was the pH of any sample adjusted by the laboratory? **YES** (See Table below) / **NO**

pH Excursion:

Laboratory Sample ID	Client Sample ID	Initial pH	Final pH	Reagent Used	Volume Added (mL)	Lot No. of Reagent	Requested Analysis	Initials / Date / Time
1104396-5-1	10620-E	7	<2	H_2SO_4	0.5	49245	DRO	LAS 4/27/11 @1130
1104396-15-1	10621-E	↓	↓	↓	↓	↓	↓	↓

If applicable, was the client contacted? **YES / NO / NA** Contact: S.&B Date/Time:

Project Manager Signature / Date: 4/4

Form 201r22.xls (6/1/09)

fedex.com 1.800.GoFedEx 1.800.463.3339

RECIPIENT: PEEL HERE

FedEx Express *US Airbill*

FedEx Tracking Number 8576 7724 4780

25 13 15 110439 6

Form ID No. 0215

Recipient's Copy

1 From This portion can be removed for Recipient's records.

Date 4/26/11 FedEx Tracking Number 857677244780

Sender's Name SID BRANDWEIN Phone 505 222 9504

Company NMED

Address 5500 SAN ANTONIO DR NE

Dept./Floor/Suite/Room

City ALBQ State NM ZIP 87114

2 Your Internal Billing Reference

3 To

Recipient's Name LARCE STEERE Phone 970 490-1511

Company ALS LAB

Recipient's Address [illegible] COMMERCE DR

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City [illegible]INS State CO ZIP 80524-2762

0340198528

8576 7724 4780

4a Express Package Service — *Packages up to 150 lbs.*

- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service — *Packages over 150 lbs.*

- [ ] FedEx 1Day Freight* — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation:

** To most locations.

5 Packaging

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

* Declared value limit $500.

6 Special Handling — Include FedEx address in Section 3.

- [ ] **SATURDAY Delivery** — Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- [ ] **HOLD Weekday** at FedEx Location — Not available for FedEx First Overnight.
- [ ] **HOLD Saturday** at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN1845 ____ x ____ kg
- [ ] Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below. Obtain Recip Acct. No. [ ]

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [x] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

Total Packages	Total Weight	Total Charges
1	17	Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 *NEW* Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Anyone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature — If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. *Fee applies.*

519

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BICARBONATE AS CaCO3

Method EPA310.1

Sample Results

Lab Name: **ALS Environmental -- FC**
Client Name: NMED Hazardous Waste Bureau
Client Project ID: KAFB - BFF
Work Order Number: 1104396
Reporting Basis: As Received
Prep Method: NONE
Final Volume: 100 ml
Matrix: WATER
Result Units: MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
10620-F	1104396-6	04/26/2011	04/28/2011	04/28/2011	N/A	1	120	10		50 ml
10621-F	1104396-16	04/26/2011	04/28/2011	04/28/2011	N/A	1	110	10		50 ml

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *ak1104396-1*

CARBONATE AS CaCO3

Method EPA310.1

Sample Results

Lab Name: **ALS Environmental -- FC**
Client Name: NMED Hazardous Waste Bureau
Client Project ID: KAFB - BFF
Work Order Number: 1104396 **Final Volume:** 100 ml
Reporting Basis: As Received **Matrix:** WATER
Prep Method: NONE **Result Units:** MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
10620-F	1104396-6	04/26/2011	04/28/2011	04/28/2011	N/A	1	10	10	U	50 ml
10621-F	1104396-16	04/26/2011	04/28/2011	04/28/2011	N/A	1	10	10	U	50 ml

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *ak1104396-1*

TOTAL ALKALINITY AS CaCO3

Method EPA310.1

Sample Results

Lab Name: **ALS Environmental -- FC**
Client Name: NMED Hazardous Waste Bureau
Client Project ID: KAFB - BFF
Work Order Number: 1104396 **Final Volume:** 100 ml
Reporting Basis: As Received **Matrix:** WATER
Prep Method: NONE **Result Units:** MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
10620-F	1104396-6	04/26/2011	04/28/2011	04/28/2011	N/A	1	120	10		50 ml
10621-F	1104396-16	04/26/2011	04/28/2011	04/28/2011	N/A	1	110	10		50 ml

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *ak1104396-1*

AMMONIA AS N

Method EPA350.1

Sample Results

Lab Name: **ALS Environmental -- FC**
Client Name: NMED Hazardous Waste Bureau
Client Project ID: KAFB - BFF
Work Order Number: 1104396
Reporting Basis: As Received
Prep Method: NONE
Final Volume: 5 ml
Matrix: WATER
Result Units: MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
10620-G	1104396-7	04/26/2011	05/02/2011	05/02/2011	N/A	1	0.1	0.1	U	5 ml
10621-G	1104396-17	04/26/2011	05/02/2011	05/02/2011	N/A	1	0.1	0.1	U	5 ml

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *nh1104396-1*

NITRATE/NITRITE AS N

Method EPA353.2 Revision 2.0

Sample Results

Lab Name: **ALS Environmental -- FC**
Client Name: NMED Hazardous Waste Bureau
Client Project ID: KAFB - BFF
Work Order Number: 1104396 **Final Volume:** 5 ml
Reporting Basis: As Received **Matrix:** WATER
Prep Method: NONE **Result Units:** MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
10620-G	1104396-7	04/26/2011	04/27/2011	04/27/2011	N/A	1	0.34	0.01		5 ml
10621-G	1104396-17	04/26/2011	04/27/2011	04/27/2011	N/A	1	0.64	0.01		5 ml

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *nn1104396-1*

SULFIDE

Method EPA376.1

Sample Results

Lab Name: **ALS Environmental -- FC**
Client Name: NMED Hazardous Waste Bureau
Client Project ID: KAFB - BFF
Work Order Number: 1104396
Reporting Basis: As Received
Prep Method: NONE
Final Volume: 200 ml
Matrix: WATER
Result Units: MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
10620-H	1104396-8	04/26/2011	04/27/2011	04/27/2011	N/A	1	2	2	U	200 ml
10621-H	1104396-18	04/26/2011	04/27/2011	04/27/2011	N/A	1	2	2	U	200 ml

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *s1104396-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1104396
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Field ID: 10620-F
Lab ID: 1104396-6

Analysis ReqCode: **524**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-Apr-11
Date Extracted: 28-Apr-11
Date Analyzed: 28-Apr-11
Prep Method: NONE

Prep Batch: IC110428-1
QCBatchID: IC110428-1-1
Run ID: IC110428-1A
Cleanup: NONE
Basis: As Received
File Name: 10428_051.DXD

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 14:28	1	0.33	0.1		
16887-00-6	CHLORIDE AnalysisTime: 21:43	5	22	1		
24959-67-9	BROMIDE AnalysisTime: 14:28	1	0.23	0.2		
14808-79-8	SULFATE AnalysisTime: 14:28	1	50	1		

Data Package ID: *ic1104396-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1104396
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Field ID: 10621-F
Lab ID: 1104396-16

Analysis ReqCode: **524**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-Apr-11
Date Extracted: 28-Apr-11
Date Analyzed: 28-Apr-11
Prep Method: NONE

Prep Batch: IC110428-1
QCBatchID: IC110428-1-1
Run ID: IC110428-1A
Cleanup: NONE
Basis: As Received
File Name: 10428_052.DXD

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 14:40	1	0.28	0.1		
16887-00-6	CHLORIDE AnalysisTime: 21:55	5	71	1		
24959-67-9	BROMIDE AnalysisTime: 14:40	1	0.86	0.2		
14808-79-8	SULFATE AnalysisTime: 14:40	1	57	1		

Data Package ID: *ic1104396-1*

BICARBONATE AS CaCO3

Method EPA310.1

Method Blank

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1104396
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: AK110428-1MB

Sample Matrix: WATER
% Moisture: N/A

Prep Batch: AK110428-1
QCBatchID: AK110428-1-1
Run ID: ak110428-1a
Cleanup: NONE
Basis: N/A

Sample Aliquot: 100 ml
Final Volume: 100 ml
Result Units: MG/L

Lab ID	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag
AK110428-1MB	4/28/2011	04/28/2011	N/A	1	5	5	U

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *ak1104396-1*

CARBONATE AS CaCO3

Method EPA310.1

Method Blank

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1104396
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: AK110428-1MB

Sample Matrix: WATER
% Moisture: N/A

Prep Batch: AK110428-1
QCBatchID: AK110428-1-1
Run ID: ak110428-1a
Cleanup: NONE
Basis: N/A

Sample Aliquot: 100 ml
Final Volume: 100 ml
Result Units: MG/L

Lab ID	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag
AK110428-1MB	4/28/2011	04/28/2011	N/A	1	5	5	U

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *ak1104396-1*

TOTAL ALKALINITY AS CaCO3

Method EPA310.1

Method Blank

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1104396
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: AK110428-1MB

Sample Matrix: WATER
% Moisture: N/A

Prep Batch: AK110428-1
QCBatchID: AK110428-1-1
Run ID: ak110428-1a
Cleanup: NONE
Basis: N/A

Sample Aliquot: 100 ml
Final Volume: 100 ml
Result Units: MG/L

Lab ID	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag
AK110428-1MB	4/28/2011	04/28/2011	N/A	1	5	5	U

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *ak1104396-1*

TOTAL ALKALINITY AS CaCO3

Method EPA310.1

Laboratory Control Sample

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1104396
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: AK110428-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 04/28/2011
Date Analyzed: 04/28/2011

Prep Batch: AK110428-1
QCBatchID: AK110428-1-1
Run ID: ak110428-1a
Cleanup: NONE
Basis: N/A

Sample Aliquot: 100 ml
Final Volume: 100 ml
Result Units: MG/L

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
	TOTAL ALKALINITY AS CaCO3	100	100	5		100	85 - 115

Data Package ID: *ak1104396-1*

AMMONIA AS N

Method EPA350.1

Method Blank

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1104396
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: NH110502-1MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 02-May-11
Date Analyzed: 02-May-11
Prep Method: NONE

Prep Batch: NH110502-1
QCBatchID: NH110502-1-1
Run ID: NH110502-1A
Cleanup: NONE
Basis: N/A
File Name: 0502NH.FDT

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7664-41-7	AMMONIA AS N	1	0.1	0.1	U	

Data Package ID: *nh1104396-1*

AMMONIA AS N

Method EPA350.1

Laboratory Control Sample

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1104396
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: NH110502-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 05/02/2011
Date Analyzed: 05/02/2011
Prep Method: NONE

Prep Batch: NH110502-1
QCBatchID: NH110502-1-1
Run ID: NH110502-1A
Cleanup: NONE
Basis: N/A
File Name: 0502NH.FDT

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7664-41-7	AMMONIA AS N	1	1.06	0.1		106	90 - 110%

Data Package ID: *nh1104396-1*

Nitrate/Nitrite as N

Method EPA353.2 Revision 2.0

Method Blank

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1104396
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: NN110427-1MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 27-Apr-11
Date Analyzed: 27-Apr-11
Prep Method: NONE

Prep Batch: NN110427-1
QCBatchID: NN110427-1-1
Run ID: NN110427-1A
Cleanup: NONE
Basis: N/A
File Name: 0427NOX.FDT

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
1-005	NITRATE/NITRITE AS N	1	0.01	0.01	U	

Data Package ID: *nn1104396-1*

Nitrate/Nitrite as N

Method EPA353.2 Revision 2.0

Laboratory Control Sample

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1104396
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: NN110427-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 04/27/2011
Date Analyzed: 04/27/2011
Prep Method: NONE

Prep Batch: NN110427-1
QCBatchID: NN110427-1-1
Run ID: NN110427-1A
Cleanup: NONE
Basis: N/A
File Name: 0427NOX.FDT

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
1-005	NITRATE/NITRITE AS N	1	1.04	0.01		104	90 - 110%

Data Package ID: *nn1104396-1*

Sulfide

Method EPA376.1

Method Blank

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1104396
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: S110427-1MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 27-Apr-11
Date Analyzed: 27-Apr-11
Prep Method: NONE

Prep Batch: S110427-1
QCBatchID: S110427-1-1
Run ID: s110427-1a
Cleanup: NONE
Basis: N/A
File Name:

Sample Aliquot: 200 ml
Final Volume: 200 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
18496-25-8	SULFIDE	1	2	2	U	

Data Package ID: *s1104396-1*

Sulfide

Method EPA376.1

Laboratory Control Sample

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1104396
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: S110427-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 04/27/2011
Date Analyzed: 04/27/2011
Prep Method: NONE

Prep Batch: S110427-1
QCBatchID: S110427-1-1
Run ID: s110427-1a
Cleanup: NONE
Basis: N/A
File Name:

Sample Aliquot: 200 ml
Final Volume: 200 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
18496-25-8	SULFIDE	11.1	11.4	2		104	80 - 120%

Data Package ID: *s1104396-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Method Blank

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1104396
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: IC110428-1MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 28-Apr-11
Date Analyzed: 28-Apr-11
Prep Method: NONE

Prep Batch: IC110428-1
QCBatchID: IC110428-1-1
Run ID: IC110428-1A
Cleanup: NONE
Basis: N/A
File Name: 10428_012.DXD

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE	1	0.1	0.1	U	
16887-00-6	CHLORIDE	1	0.2	0.2	U	
24959-67-9	BROMIDE	1	0.2	0.2	U	
14808-79-8	SULFATE	1	1	1	U	

Data Package ID: *ic1104396-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Laboratory Control Sample

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1104396
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: IC110428-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 04/28/2011
Date Analyzed: 04/28/2011
Prep Method: NONE

Prep Batch: IC110428-1
QCBatchID: IC110428-1-1
Run ID: IC110428-1A
Cleanup: NONE
Basis: N/A
File Name: 10428_013.DXD

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
16984-48-8	FLUORIDE	2.5	2.35	0.1		94	90 - 110%
16887-00-6	CHLORIDE	5	4.88	0.2		98	90 - 110%
24959-67-9	BROMIDE	5	4.9	0.2		98	90 - 110%
14808-79-8	SULFATE	25	23.8	1		95	90 - 110%

Data Package ID: *ic1104396-1*