GC/MS Volatiles

Case Narrative

NMED Hazardous Waste Bureau

KAFB - BFF 4Q12

Work Order Number: 1211190

1. This report consists of 2 water samples. The samples were received cool and intact by ALS on 11/14/12. All water samples were free of headspace prior to analysis. All samples had a pH < 2 at the time of analysis.

2. These samples were prepared according to SW-846, 3rd Edition procedures. Specifically, the water samples were prepared using purge and trap procedures based on Method 5030C.

3. The samples were analyzed using GC/MS with an RTX-624, RTX-VMS, or equivalent capillary column according to the current revision of SOP 525 based on SW-846 Method 8260. All positive results were quantitated against the initial calibration standards using the internal standard technique. The identification of positive results was achieved by a comparison of the retention time and mass spectrum of the sample versus the daily calibration standard.

4. All initial calibration criteria were met.

5. All initial calibrations are verified by comparing a second source standard calibration verification (ICV) against the calibration curve. All criteria for initial calibration verification were met.

6. All compounds in the continuing calibration verification had a %D of less than 20%.

7. Methylene chloride, acetone and 2-butanone are common laboratory contaminants. In order to minimize the levels of these compounds detected in the gc/ms analysis, ALS has designated its volatile laboratory as a restricted access area. In addition, the laboratory has been equipped with a dedicated, air intake and exhaust system that operates under positive pressure in order to minimize cross contamination of these compounds. Due to fluctuations in ambient laboratory conditions, reported sample values for common laboratory contaminants may be due to lab contamination even if the compound in question is not detected in the associated method blank.

   All method blank criteria were met.

8. All laboratory control sample and laboratory control sample duplicate recoveries and RPDs were within the acceptance criteria.

9. A matrix spike and matrix spike duplicate were not performed because of insufficient sample. A laboratory control sample and laboratory control sample duplicate were performed instead.

10. The samples were analyzed within the established holding time.

11. All surrogate recoveries were within acceptance criteria.

12. All internal standard recoveries were within acceptance criteria.

13. Manual integrations are performed when needed to provide consistent and defensible data following the guidelines in the current revision of SOP 939.

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.

Emily Lyons — 11-17-12
Emily Lyons
Organics Primary Data Reviewer
Date

Eric Bayless — 11/18/12
Organics Final Data Reviewer
Date

ALS
Data Qualifier Flags
Chromatography and Mass Spectrometry

U or ND:	**This flag indicates that the compound was analyzed for but not detected.**
J:	**This flag indicates an estimated value. This flag is used as follows : (1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; (2) when the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the reporting limit (RL) but greater than the method detection limit (MDL); (3) when the retention time data indicate the presence of a compound that meets the GC identification criteria, and the result is less than the RL but greater than the MDL; and (4) the reported value is estimated.**
B:	**This flag is used when the analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user. This flag shall be used for a tentatively identified compound (TIC) as well as for a positively identified target compound.**
E:	**This flag identifies compounds whose concentration exceeds the upper level of the calibration range.**
A:	**This flag indicates that a tentatively identified compound is a suspected aldol-condensation product.**
X:	**This flag indicates that the analyte was diluted below an accurate quantitation level.**
***:**	**This flag indicates that a spike recovery is equal to or outside the control criteria used.**
+:	**This flag indicates that the relative percent difference (RPD) equals or exceeds the control criteria.**

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1211190
Client Name: NMED Hazardous Waste Bureau
Client Project Name: KAFB - BFF 4Q12
Client Project Number:
Client PO Number: 20-667-00-16004

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
106203A	1211190-1		WATER	13-Nov-12	12:23
106204A	1211190-2		WATER	13-Nov-12	15:04

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 # 1211190

PAGE 1 of 1

DISPOSAL: By Lab or Return to Client

PROJECT NAME	KAFB BFF Q4	SAMPLER	Salon
PROJECT No.		SITE ID	KAFB- BFF
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	NMED / HWB	BILL TO COMPANY	NMED / HWB
SEND REPORT TO	Brian Salon	INVOICE ATTN TO	Dave Cobrain
ADDRESS	5500 San Antonio NE	ADDRESS	2905 Rodeo Park Dr.
CITY / STATE / ZIP	Alb, NM 87109	CITY / STATE / ZIP	Santa Fe, NM 87505
PHONE	505-222-9576	PHONE	505-476-6055
FAX		FAX	
E-MAIL		E-MAIL	

DATE: 11-13-12

TURNAROUND: 48 Hour

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	8260 VOC	8011 EDB
1	106203A	W	11/13/12	12:23	3	1		X	
~~B~~	~~106203B~~		~~11/13/12~~	~~12:23~~	~~3~~	~~1~~			
2	106204A	W	11/13/12	~~[illegible]~~ 15:04	3	1		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. Brandsie	11/13/12	16:00
RECEIVED BY	[signature]	Lauren Schmitz	11/14/12	0945
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: NMED Workorder No: 1211190

Project Manager: LRS Initials: LAS Date: 11/14/12

1. Does this project require any special handling in addition to standard ALS 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 any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A		YES	(NO)
16. Were the samples shipped on ice?			(YES)	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: (#2) #4	RAD ONLY		(YES)	NO

Cooler #:	1							
Temperature (°C):	1.4							
No. of custody seals on cooler:	2							
DOT Survey/ Acceptance Information — External µR/hr reading:	11							
Background µR/hr reading:	11							

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.

(*14) 1211190-1-1 (106203A)
↓ 1-2 ↓
1-3
} all arrived with headspace ≤ pea-size

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

Project Manager Signature / Date: 11/14/12

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

Form 201r24.xls (06/04/2012)

FedEx Express **NEW Package US Airbill**

FedEx Tracking Number 8768 4050 1550

0200 Form ID No.

12/4/90

FedEx Retrieval Copy

1 From

Date 11/13/12 Sender's FedEx Account Number

Sender's Name SID BRAUNLEIN Phone 505 222-9524

Company NMED/HWB

Address 5500 SAN ANTONIO AR NE Dept./Floor/Suite/Room

City ALBUQUERQUE State NM ZIP 87109

2 Your Internal Billing Reference

3 To

Recipient's Name LANCE STEERE Phone 970 492-5111

Company ALS LAB

Address 225 COMMERCE Dept./Floor/Suite/Room

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

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City FT COLLINS State CO ZIP 80524-2762

01 ☐ HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

31 ☐ HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

14

8768 4050 1550

4 Express Package Service *To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

06 ☐ FedEx First Overnight Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

01 ☒ FedEx Priority Overnight Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

05 ☐ FedEx Standard Overnight Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

49 ☐ NEW FedEx 2Day A.M. Second business morning.* Saturday Delivery NOT available.

03 ☐ FedEx 2Day Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 ☐ FedEx Express Saver Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit $.

06 ☐ FedEx Envelope* 02 ☐ FedEx Pak* 03 ☐ FedEx Box 04 ☐ FedEx Tube 01 ☒ Other

6 Special Handling and Delivery Signature Options

03 ☐ **SATURDAY DELIVERY**

☐ No Signature Required Package may be left without obtaining a signature for delivery.

10 ☐ Direct Signature Someone at recipient's address may sign for delivery. Fee applies.

34 ☐ Indirect Signature If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

One box must be checked.

☒ No 04 ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. 06 ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

1 ☐ Sender Acct. No. in Section 1 will be billed. 2 ☒ Recipient 3 ☐ Third Party 4 ☐ Credit Card 5 ☐ Cash/Check

[redacted] 3 [redacted]

Total Packages Total Weight [redacted] Credit Card Auth.

lbs.

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

612

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1800 463.3339

GC/MS Volatiles

Method SW8260_25C

Method Blank

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1211190
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF 4Q12

Lab ID: VL121114-3MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 14-Nov-12
Date Analyzed: 14-Nov-12

Prep Batch: VL121114-3
QCBatchID: VL121114-3-4
Run ID: VL121114-3A
Cleanup: NONE
Basis: N/A
File Name: C41682

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
75-71-8	DICHLORODIFLUOROMETHANE	1	1	1	0.3	U	
74-87-3	CHLOROMETHANE	1	1	1	0.3	U	
75-01-4	VINYL CHLORIDE	1	1	1	0.3	U	
74-83-9	BROMOMETHANE	1	1	1	0.3	U	
75-00-3	CHLOROETHANE	1	1	1	0.3	U	
75-69-4	TRICHLOROFLUOROMETHANE	1	1	1	0.3	U	
75-35-4	1,1-DICHLOROETHENE	1	1	1	0.3	U	
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROET	1	1	1	0.3	U	
67-64-1	ACETONE	1	10	10	3	U	
74-88-4	IODOMETHANE	1	1	1	0.3	U	
75-15-0	CARBON DISULFIDE	1	1	1	0.3	U	
75-09-2	METHYLENE CHLORIDE	1	1	1	0.3	U	
156-60-5	TRANS-1,2-DICHLOROETHENE	1	1	1	0.3	U	
1634-04-4	METHYL TERTIARY BUTYL ETHER	1	1	1	0.3	U	
75-34-3	1,1-DICHLOROETHANE	1	1	1	0.3	U	
108-05-4	VINYL ACETATE	1	2	2	0.96	U	
156-59-2	CIS-1,2-DICHLOROETHENE	1	1	1	0.3	U	
78-93-3	2-BUTANONE	1	10	10	3	U	
74-97-5	BROMOCHLOROMETHANE	1	1	1	0.3	U	
67-66-3	CHLOROFORM	1	1	1	0.3	U	
71-55-6	1,1,1-TRICHLOROETHANE	1	1	1	0.3	U	
594-20-7	2,2-DICHLOROPROPANE	1	1	1	0.3	U	
56-23-5	CARBON TETRACHLORIDE	1	1	1	0.3	U	
563-58-6	1,1-DICHLOROPROPENE	1	1	1	0.3	U	
107-06-2	1,2-DICHLOROETHANE	1	1	1	0.3	U	
71-43-2	BENZENE	1	1	1	0.3	U	
79-01-6	TRICHLOROETHENE	1	1	1	0.3	U	
78-87-5	1,2-DICHLOROPROPANE	1	1	1	0.3	U	

Data Package ID: *VL1211190-1*

GC/MS Volatiles

Method SW8260_25C

Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1211190
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF 4Q12

Lab ID: VL121114-3MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 14-Nov-12
Date Analyzed: 14-Nov-12

Prep Batch: VL121114-3
QCBatchID: VL121114-3-4
Run ID: VL121114-3A
Cleanup: NONE
Basis: N/A
File Name: C41682

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
74-95-3	DIBROMOMETHANE	1	1	1	0.3	U	
75-27-4	BROMODICHLOROMETHANE	1	1	1	0.3	U	
10061-01-5	CIS-1,3-DICHLOROPROPENE	1	1	1	0.3	U	
108-10-1	4-METHYL-2-PENTANONE	1	10	10	3.4	U	
108-88-3	TOLUENE	1	1	1	0.3	U	
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	1	1	0.3	U	
79-00-5	1,1,2-TRICHLOROETHANE	1	1	1	0.3	U	
591-78-6	2-HEXANONE	1	10	10	3.4	U	
127-18-4	TETRACHLOROETHENE	1	1	1	0.18	U	
142-28-9	1,3-DICHLOROPROPANE	1	1	1	0.3	U	
124-48-1	DIBROMOCHLOROMETHANE	1	1	1	0.3	U	
106-93-4	1,2-DIBROMOETHANE	1	1	1	0.3	U	
544-10-5	1-CHLOROHEXANE	1	1	1	0.3	U	
108-90-7	CHLOROBENZENE	1	1	1	0.3	U	
630-20-6	1,1,1,2-TETRACHLOROETHANE	1	1	1	0.3	U	
100-41-4	ETHYLBENZENE	1	1	1	0.3	U	
136777-61-2	M+P-XYLENE	1	1	1	0.3	U	
95-47-6	O-XYLENE	1	1	1	0.3	U	
100-42-5	STYRENE	1	1	1	0.3	U	
75-25-2	BROMOFORM	1	1	1	0.34	U	
98-82-8	ISOPROPYLBENZENE	1	1	1	0.3	U	
96-18-4	1,2,3-TRICHLOROPROPANE	1	1	1	0.3	U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	1	1	1	0.3	U	
108-86-1	BROMOBENZENE	1	1	1	0.3	U	
103-65-1	N-PROPYLBENZENE	1	1	1	0.3	U	
95-49-8	2-CHLOROTOLUENE	1	1	1	0.3	U	
108-67-8	1,3,5-TRIMETHYLBENZENE	1	1	1	0.3	U	
106-43-4	4-CHLOROTOLUENE	1	1	1	0.3	U	

Data Package ID: *VL1211190-1*

GC/MS Volatiles

Method SW8260_25C

Method Blank

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1211190
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF 4Q12

Lab ID: VL121114-3MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 14-Nov-12
Date Analyzed: 14-Nov-12

Prep Batch: VL121114-3
QCBatchID: VL121114-3-4
Run ID: VL121114-3A
Cleanup: NONE
Basis: N/A
File Name: C41682

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
98-06-6	TERT-BUTYLBENZENE	1	1	1	0.3	U	
95-63-6	1,2,4-TRIMETHYLBENZENE	1	1	1	0.3	U	
135-98-8	SEC-BUTYLBENZENE	1	1	1	0.3	U	
541-73-1	1,3-DICHLOROBENZENE	1	1	1	0.3	U	
99-87-6	P-ISOPROPYLTOLUENE	1	1	1	0.3	U	
106-46-7	1,4-DICHLOROBENZENE	1	1	1	0.3	U	
104-51-8	N-BUTYLBENZENE	1	1	1	0.3	U	
95-50-1	1,2-DICHLOROBENZENE	1	1	1	0.3	U	
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	1	2	2	0.44	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	1	1	0.3	U	
87-68-3	HEXACHLOROBUTADIENE	1	1	1	0.3	U	
91-20-3	NAPHTHALENE	1	1	1	0.3	U	
87-61-6	1,2,3-TRICHLOROBENZENE	1	1	1	0.3	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
460-00-4	4-BROMOFLUOROBENZENE	27.8		25	111	85 - 115
1868-53-7	DIBROMOFLUOROMETHANE	24.5		25	98	84 - 118
2037-26-5	TOLUENE-D8	24.1		25	96	85 - 115

Data Package ID: *VL1211190-1*

GC/MS Volatiles

Method SW8260_25C

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1211190
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF 4Q12
COC Number: **1211432**

Field ID: 106203A
Lab ID: 1211190-1

Analysis ReqCode: **101**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 13-Nov-12
Date Extracted: 14-Nov-12
Date Analyzed: 14-Nov-12
Prep Method: SW5030 Rev C

Prep Batch: VL121114-3
QCBatchID: VL121114-3-4
Run ID: VL121114-3A
Cleanup: NONE
Basis: As Received
File Name: C41685

Analyst: Tyler Knaebel
Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
75-71-8	DICHLORODIFLUOROMETHANE	1	1	1	0.3	U	
74-87-3	CHLOROMETHANE	1	1	1	0.3	U	
75-01-4	VINYL CHLORIDE	1	1	1	0.3	U	
74-83-9	BROMOMETHANE	1	1	1	0.3	U	
75-00-3	CHLOROETHANE	1	1	1	0.3	U	
75-69-4	TRICHLOROFLUOROMETHANE	1	1	1	0.3	U	
75-35-4	1,1-DICHLOROETHENE	1	1	1	0.3	U	
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETH	1	1	1	0.3	U	
67-64-1	ACETONE	1	10	10	3	U	
74-88-4	IODOMETHANE	1	1	1	0.3	U	
75-15-0	CARBON DISULFIDE	1	1	1	0.3	U	
75-09-2	METHYLENE CHLORIDE	1	1	1	0.3	U	
156-60-5	TRANS-1,2-DICHLOROETHENE	1	1	1	0.3	U	
1634-04-4	METHYL TERTIARY BUTYL ETHER	1	1	1	0.3	U	
75-34-3	1,1-DICHLOROETHANE	1	1	1	0.3	U	
108-05-4	VINYL ACETATE	1	2	2	0.96	U	
156-59-2	CIS-1,2-DICHLOROETHENE	1	1	1	0.3	U	
78-93-3	2-BUTANONE	1	10	10	3	U	
74-97-5	BROMOCHLOROMETHANE	1	1	1	0.3	U	
67-66-3	CHLOROFORM	1	1	1	0.3	U	
71-55-6	1,1,1-TRICHLOROETHANE	1	1	1	0.3	U	
594-20-7	2,2-DICHLOROPROPANE	1	1	1	0.3	U	
56-23-5	CARBON TETRACHLORIDE	1	1	1	0.3	U	
563-58-6	1,1-DICHLOROPROPENE	1	1	1	0.3	U	
107-06-2	1,2-DICHLOROETHANE	1	1	1	0.3	U	
71-43-2	BENZENE	1	1	1	0.3	U	

Data Package ID: *VL1211190-1*

GC/MS Volatiles

Method SW8260_25C

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1211190
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF 4Q12
COC Number: **1211432**

Field ID: 106203A
Lab ID: 1211190-1

Analysis ReqCode: **101**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 13-Nov-12
Date Extracted: 14-Nov-12
Date Analyzed: 14-Nov-12
Prep Method: SW5030 Rev C

Prep Batch: VL121114-3
QCBatchID: VL121114-3-4
Run ID: VL121114-3A
Cleanup: NONE
Basis: As Received
File Name: C41685

Analyst: Tyler Knaebel
Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
79-01-6	TRICHLOROETHENE	1	1	1	0.3	U	
78-87-5	1,2-DICHLOROPROPANE	1	1	1	0.3	U	
74-95-3	DIBROMOMETHANE	1	1	1	0.3	U	
75-27-4	BROMODICHLOROMETHANE	1	1	1	0.3	U	
10061-01-5	CIS-1,3-DICHLOROPROPENE	1	1	1	0.3	U	
108-10-1	4-METHYL-2-PENTANONE	1	10	10	3.4	U	
108-88-3	TOLUENE	1	1	1	0.3	U	
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	1	1	0.3	U	
79-00-5	1,1,2-TRICHLOROETHANE	1	1	1	0.3	U	
591-78-6	2-HEXANONE	1	10	10	3.4	U	
127-18-4	TETRACHLOROETHENE	1	1	1	0.18	U	
142-28-9	1,3-DICHLOROPROPANE	1	1	1	0.3	U	
124-48-1	DIBROMOCHLOROMETHANE	1	1	1	0.3	U	
106-93-4	1,2-DIBROMOETHANE	1	1	1	0.3	U	
544-10-5	1-CHLOROHEXANE	1	1	1	0.3	U	
108-90-7	CHLOROBENZENE	1	1	1	0.3	U	
630-20-6	1,1,1,2-TETRACHLOROETHANE	1	1	1	0.3	U	
100-41-4	ETHYLBENZENE	1	1	1	0.3	U	
136777-61-2	M+P-XYLENE	1	1	1	0.3	U	
95-47-6	O-XYLENE	1	1	1	0.3	U	
100-42-5	STYRENE	1	1	1	0.3	U	
75-25-2	BROMOFORM	1	1	1	0.34	U	
98-82-8	ISOPROPYLBENZENE	1	1	1	0.3	U	
96-18-4	1,2,3-TRICHLOROPROPANE	1	1	1	0.3	U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	1	1	1	0.3	U	
108-86-1	BROMOBENZENE	1	1	1	0.3	U	

Data Package ID: *VL1211190-1*

GC/MS Volatiles

Method SW8260_25C

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1211190
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF 4Q12
COC Number: **1211432**

Field ID: 106203A
Lab ID: 1211190-1

Analysis ReqCode: **101**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 13-Nov-12
Date Extracted: 14-Nov-12
Date Analyzed: 14-Nov-12
Prep Method: SW5030 Rev C

Prep Batch: VL121114-3
QCBatchID: VL121114-3-4
Run ID: VL121114-3A
Cleanup: NONE
Basis: As Received
File Name: C41685

Analyst: Tyler Knaebel
Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
103-65-1	N-PROPYLBENZENE	1	1	1	0.3	U	
95-49-8	2-CHLOROTOLUENE	1	1	1	0.3	U	
108-67-8	1,3,5-TRIMETHYLBENZENE	1	1	1	0.3	U	
106-43-4	4-CHLOROTOLUENE	1	1	1	0.3	U	
98-06-6	TERT-BUTYLBENZENE	1	1	1	0.3	U	
95-63-6	1,2,4-TRIMETHYLBENZENE	1	1	1	0.3	U	
135-98-8	SEC-BUTYLBENZENE	1	1	1	0.3	U	
541-73-1	1,3-DICHLOROBENZENE	1	1	1	0.3	U	
99-87-6	P-ISOPROPYLTOLUENE	1	1	1	0.3	U	
106-46-7	1,4-DICHLOROBENZENE	1	1	1	0.3	U	
104-51-8	N-BUTYLBENZENE	1	1	1	0.3	U	
95-50-1	1,2-DICHLOROBENZENE	1	1	1	0.3	U	
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	1	2	2	0.44	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	1	1	0.3	U	
87-68-3	HEXACHLOROBUTADIENE	1	1	1	0.3	U	
91-20-3	NAPHTHALENE	1	1	1	0.3	U	
87-61-6	1,2,3-TRICHLOROBENZENE	1	1	1	0.3	U	

Data Package ID: *VL1211190-1*

GC/MS Volatiles

Method SW8260_25C

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1211190
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF 4Q12
COC Number: **1211432**

Field ID: 106203A
Lab ID: 1211190-1

Analysis ReqCode: **101**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 13-Nov-12
Date Extracted: 14-Nov-12
Date Analyzed: 14-Nov-12
Prep Method: SW5030 Rev C

Prep Batch: VL121114-3
QCBatchID: VL121114-3-4
Run ID: VL121114-3A
Cleanup: NONE
Basis: As Received
File Name: C41685

Analyst: Tyler Knaebel
Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
460-00-4	4-BROMOFLUOROBENZENE	27.8		25	111	85 - 115
1868-53-7	DIBROMOFLUOROMETHANE	23.7		25	95	84 - 118
2037-26-5	TOLUENE-D8	23.5		25	94	85 - 115

Data Package ID: *VL1211190-1*

GC/MS Volatiles

Method SW8260_25C

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1211190
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF 4Q12
COC Number: **1211432**

Field ID: 106204A
Lab ID: 1211190-2

Analysis ReqCode: **101**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 13-Nov-12
Date Extracted: 14-Nov-12
Date Analyzed: 14-Nov-12
Prep Method: SW5030 Rev C

Prep Batch: VL121114-3
QCBatchID: VL121114-3-4
Run ID: VL121114-3A
Cleanup: NONE
Basis: As Received
File Name: C41686

Analyst: Tyler Knaebel
Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
75-71-8	DICHLORODIFLUOROMETHANE	1	1	1	0.3	U	
74-87-3	CHLOROMETHANE	1	1	1	0.3	U	
75-01-4	VINYL CHLORIDE	1	1	1	0.3	U	
74-83-9	BROMOMETHANE	1	1	1	0.3	U	
75-00-3	CHLOROETHANE	1	1	1	0.3	U	
75-69-4	TRICHLOROFLUOROMETHANE	1	1	1	0.3	U	
75-35-4	1,1-DICHLOROETHENE	1	1	1	0.3	U	
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETH	1	1	1	0.3	U	
67-64-1	ACETONE	1	10	10	3	U	
74-88-4	IODOMETHANE	1	1	1	0.3	U	
75-15-0	CARBON DISULFIDE	1	1	1	0.3	U	
75-09-2	METHYLENE CHLORIDE	1	1	1	0.3	U	
156-60-5	TRANS-1,2-DICHLOROETHENE	1	1	1	0.3	U	
1634-04-4	METHYL TERTIARY BUTYL ETHER	1	1	1	0.3	U	
75-34-3	1,1-DICHLOROETHANE	1	1	1	0.3	U	
108-05-4	VINYL ACETATE	1	2	2	0.96	U	
156-59-2	CIS-1,2-DICHLOROETHENE	1	1	1	0.3	U	
78-93-3	2-BUTANONE	1	10	10	3	U	
74-97-5	BROMOCHLOROMETHANE	1	1	1	0.3	U	
67-66-3	CHLOROFORM	1	1	1	0.3	U	
71-55-6	1,1,1-TRICHLOROETHANE	1	1	1	0.3	U	
594-20-7	2,2-DICHLOROPROPANE	1	1	1	0.3	U	
56-23-5	CARBON TETRACHLORIDE	1	1	1	0.3	U	
563-58-6	1,1-DICHLOROPROPENE	1	1	1	0.3	U	
107-06-2	1,2-DICHLOROETHANE	1	1	1	0.3	U	
71-43-2	BENZENE	1	1	1	0.3	U	

Data Package ID: *VL1211190-1*

GC/MS Volatiles

Method SW8260_25C

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1211190
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF 4Q12
COC Number: **1211432**

Field ID: 106204A
Lab ID: 1211190-2

Analysis ReqCode: **101**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 13-Nov-12
Date Extracted: 14-Nov-12
Date Analyzed: 14-Nov-12
Prep Method: SW5030 Rev C

Prep Batch: VL121114-3
QCBatchID: VL121114-3-4
Run ID: VL121114-3A
Cleanup: NONE
Basis: As Received
File Name: C41686

Analyst: Tyler Knaebel
Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
79-01-6	TRICHLOROETHENE	1	1	1	0.3	U	
78-87-5	1,2-DICHLOROPROPANE	1	1	1	0.3	U	
74-95-3	DIBROMOMETHANE	1	1	1	0.3	U	
75-27-4	BROMODICHLOROMETHANE	1	1	1	0.3	U	
10061-01-5	CIS-1,3-DICHLOROPROPENE	1	1	1	0.3	U	
108-10-1	4-METHYL-2-PENTANONE	1	10	10	3.4	U	
108-88-3	TOLUENE	1	1	1	0.3	U	
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	1	1	0.3	U	
79-00-5	1,1,2-TRICHLOROETHANE	1	1	1	0.3	U	
591-78-6	2-HEXANONE	1	10	10	3.4	U	
127-18-4	TETRACHLOROETHENE	1	1	1	0.18	U	
142-28-9	1,3-DICHLOROPROPANE	1	1	1	0.3	U	
124-48-1	DIBROMOCHLOROMETHANE	1	1	1	0.3	U	
106-93-4	1,2-DIBROMOETHANE	1	1	1	0.3	U	
544-10-5	1-CHLOROHEXANE	1	1	1	0.3	U	
108-90-7	CHLOROBENZENE	1	1	1	0.3	U	
630-20-6	1,1,1,2-TETRACHLOROETHANE	1	1	1	0.3	U	
100-41-4	ETHYLBENZENE	1	1	1	0.3	U	
136777-61-2	M+P-XYLENE	1	1	1	0.3	U	
95-47-6	O-XYLENE	1	1	1	0.3	U	
100-42-5	STYRENE	1	1	1	0.3	U	
75-25-2	BROMOFORM	1	1	1	0.34	U	
98-82-8	ISOPROPYLBENZENE	1	1	1	0.3	U	
96-18-4	1,2,3-TRICHLOROPROPANE	1	1	1	0.3	U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	1	1	1	0.3	U	
108-86-1	BROMOBENZENE	1	1	1	0.3	U	

Data Package ID: *VL1211190-1*

GC/MS Volatiles

Method SW8260_25C

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1211190
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF 4Q12
COC Number: **1211432**

Field ID: 106204A
Lab ID: 1211190-2

Analysis ReqCode: **101**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 13-Nov-12
Date Extracted: 14-Nov-12
Date Analyzed: 14-Nov-12
Prep Method: SW5030 Rev C

Prep Batch: VL121114-3
QCBatchID: VL121114-3-4
Run ID: VL121114-3A
Cleanup: NONE
Basis: As Received
File Name: C41686

Analyst: Tyler Knaebel
Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
103-65-1	N-PROPYLBENZENE	1	1	1	0.3	U	
95-49-8	2-CHLOROTOLUENE	1	1	1	0.3	U	
108-67-8	1,3,5-TRIMETHYLBENZENE	1	1	1	0.3	U	
106-43-4	4-CHLOROTOLUENE	1	1	1	0.3	U	
98-06-6	TERT-BUTYLBENZENE	1	1	1	0.3	U	
95-63-6	1,2,4-TRIMETHYLBENZENE	1	1	1	0.3	U	
135-98-8	SEC-BUTYLBENZENE	1	1	1	0.3	U	
541-73-1	1,3-DICHLOROBENZENE	1	1	1	0.3	U	
99-87-6	P-ISOPROPYLTOLUENE	1	1	1	0.3	U	
106-46-7	1,4-DICHLOROBENZENE	1	1	1	0.3	U	
104-51-8	N-BUTYLBENZENE	1	1	1	0.3	U	
95-50-1	1,2-DICHLOROBENZENE	1	1	1	0.3	U	
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	1	2	2	0.44	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	1	1	0.3	U	
87-68-3	HEXACHLOROBUTADIENE	1	1	1	0.3	U	
91-20-3	NAPHTHALENE	1	1	1	0.3	U	
87-61-6	1,2,3-TRICHLOROBENZENE	1	1	1	0.3	U	

Data Package ID: *VL1211190-1*

GC/MS Volatiles

Method SW8260_25C

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1211190
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF 4Q12
COC Number: **1211432**

Field ID: 106204A
Lab ID: 1211190-2

Analysis ReqCode: **101**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 13-Nov-12
Date Extracted: 14-Nov-12
Date Analyzed: 14-Nov-12
Prep Method: SW5030 Rev C

Prep Batch: VL121114-3
QCBatchID: VL121114-3-4
Run ID: VL121114-3A
Cleanup: NONE
Basis: As Received
File Name: C41686

Analyst: Tyler Knaebel
Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
460-00-4	4-BROMOFLUOROBENZENE	27.8		25	111	85 - 115
1868-53-7	DIBROMOFLUOROMETHANE	24.2		25	97	84 - 118
2037-26-5	TOLUENE-D8	23.8		25	95	85 - 115

Data Package ID: *VL1211190-1*

GC/MS Volatiles

Method SW8260_25C

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1211190
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF 4Q12

Lab ID: VL121114-3LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 11/14/2012
Date Analyzed: 11/14/2012
Prep Method: SW5030C

Prep Batch: VL121114-3
QCBatchID: VL121114-3-4
Run ID: VL121114-3A
Cleanup: NONE
Basis: N/A
File Name: C41680

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
75-35-4	1,1-DICHLOROETHENE	10	10.3	1		103	77 - 119%
71-43-2	BENZENE	10	10.7	1		107	83 - 117%
79-01-6	TRICHLOROETHENE	10	9.54	1		95	83 - 117%
108-88-3	TOLUENE	10	10.4	1		104	82 - 113%
108-90-7	CHLOROBENZENE	10	9.36	1		94	81 - 113%

Lab ID: VL121114-3LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 11/14/2012
Date Analyzed: 11/14/2012
Prep Method: SW5030C

Prep Batch: VL121114-3
QCBatchID: VL121114-3-4
Run ID: VL121114-3A
Cleanup: NONE
Basis: N/A
File Name: C41681

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
75-35-4	1,1-DICHLOROETHENE	10	10	1		100	20	3
71-43-2	BENZENE	10	10.3	1		103	20	3
79-01-6	TRICHLOROETHENE	10	9.14	1		91	20	4
108-88-3	TOLUENE	10	10.1	1		101	20	3
108-90-7	CHLOROBENZENE	10	9.22	1		92	20	2

Data Package ID: *VL1211190-1*

GC/MS Volatiles

Method SW8260_25C

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1211190
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF 4Q12

Surrogate Recovery LCS/LCSD

CASNO	Target Analyte	Spike Added	LCS % Rec.	LCS Flag	LCSD % Rec.	LCSD Flag	Control Limits
460-00-4	4-BROMOFLUOROBENZENE	25	109		109		85 - 115
1868-53-7	DIBROMOFLUOROMETHANE	25	98		97		84 - 118
2037-26-5	TOLUENE-D8	25	96		96		85 - 115

Data Package ID: *VL1211190-1*