GC/MS Semivolatiles

Case Narrative

NMED Hazardous Waste Bureau

KAFB - BFF

Work Order Number: 1105419

1. This report consists of 2 water samples. These samples were received cool and intact by ALS on 05/27/2011.

2. These samples were prepared and analyzed according to SW-846, 3rd Edition procedures. Specifically, the water samples were extracted using continuous liquid-liquid extractors, according to SW-846 Method 3520C utilizing SOP 617 Revision 14.

3. The extracts were analyzed using GC/MS with a DB-5MS capillary column according to SOP 506 Revision 19 based on SW-846 Method 8270D. The samples were analyzed using selective ion monitoring (SIM), in order to achieve lower reporting limits. 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 a limited number of major ions from the mass spectrum of the sample versus the daily calibration standard.

4. All initial calibration criteria were met. If average response factors were used in the initial calibration, %RSD was ≤20%. If linear or higher order regression calibrations were used in the initial calibration, the coefficient of determination (r^2) ≥0.99.

5. All initial calibration standards are verified by comparing a second source standard initial calibration verification (ICV) against the calibration curve. All target compounds in the second source verification had a %D ≤30%.

6. All compounds in each of the daily (continuing) calibration verifications were within 20%D.

7. 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. Matrix spikes and matrix spike duplicates could not be performed because of insufficient sample. A laboratory control sample and laboratory control sample duplicate were performed instead.

10. The samples were extracted and analyzed within the established holding times.

11. All surrogate recoveries were within acceptance limits with the following exceptions:

Surrogate	Sample	Direction
Nitrobenzene-D_5	4, 4RR1, 14, 14RR1	High

The re-analysis of these samples confirmed the original surrogate analysis. No further action was taken.

12. All internal standard recoveries were within acceptance criteria.

13. Samples 1105419-4RR1 and -14RR1 were analyzed at dilution to bring target analytes in to calibration range. The reporting limits have been adjusted accordingly.

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.

Sharon L. Jobes
Organics Primary Data Reviewer

6-14-11
Date

Joe Kurtenbach
Organics Final Data Reviewer

June 14, 2011
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: 1105419
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
10628-A	1105419-1		WATER	26-May-11	10:08
10628-B	1105419-2		WATER	26-May-11	10:20
10628-C	1105419-3		WATER	26-May-11	10:25
10628-D	1105419-4		WATER	26-May-11	10:35
10628-E	1105419-5		WATER	26-May-11	10:37
10628-F	1105419-6		WATER	26-May-11	10:40
10628-G	1105419-7		WATER	26-May-11	10:42
10628-H	1105419-8		WATER	26-May-11	10:43
10628-I	1105419-9		WATER	26-May-11	10:46
10628-J	1105419-10		WATER	26-May-11	10:50
11628-A	1105419-11		WATER	26-May-11	11:09
11628-B	1105419-12		WATER	26-May-11	11:21
11628-C	1105419-13		WATER	26-May-11	11:26
11628-D	1105419-14		WATER	26-May-11	11:37
11628-E	1105419-15		WATER	26-May-11	11:39
11628-F	1105419-16		WATER	26-May-11	11:43
11628-G	1105419-17		WATER	26-May-11	11:44
11628-H	1105419-18		WATER	26-May-11	11:46
11628-I	1105419-19		WATER	26-May-11	11:49
11628-J	1105419-20		WATER	26-May-11	11:52

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 #	1105419		
PAGE	1 of 2		
DISPOSAL	By Lab or Return to Client		

PROJECT NAME	KAFB-BFF	SAMPLER	SSB
PROJECT No.		SITE ID	KAFB-10628
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	NMED	BILL TO COMPANY	NMED / HLB
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	sid.brandwein@state.nm.us	E-MAIL	

DATE: 5/26/11
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 SIMS	TOT. MET TAL 6010	ALKALINITY 310.1 300	NITRATE/NITRITE 353.3 353.2	SULFIDE 376.1	DISS MET Fe, Mn only
1	10628-A	W	5/26/11	10:08	3	HCl		X									
2	10628-B	W	5/26/11	10:20	3	HCl				X							
3	10628-C	W	5/26/11	10:25	3	HCl			X								
4	10628-D	W	5/26/11	10:35	1	—						X					
5	10628-E	W	5/26/11	10:37	1	—					X						
6	10628-F	W	5/26/11	10:40	1	—								X			
7	10628-G	W	5/26/11	10:42	1	H_2SO_4									X		
8	10628-H	W	5/26/11	10:43	1	ZnOAc										X	
9	10628-I	W	5/26/11	10:46	1	HNO_3							X				
10	10628-J	W	5/26/11	10:50	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:

DIT MET = TAL
DISS MET - Fe, Mn only
SHOULD BE "HOT"
5-27-11

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	5/26/11	13:30
RECEIVED BY	James Cornet	James Cornet	5/27/11	9:55
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 # 1105419

PAGE 2 of 2

DISPOSAL: By Lab or Return to Client

PROJECT NAME	KAFB - BFF	SAMPLER	SSB
PROJECT No.		SITE ID	KAFB - 11628
		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	sid.brandwein@state.nm.us	E-MAIL	

DATE: 5/26/11
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 SIMS	TOT. HG	ACE+ANIONS 310.1 300	NH3+NITRATE+NITRITE 350.3 353.3	SULFIDE 376.1	DISS. HG Fe, Mn only
11	11628 - A	W	5/26/11	11:09	3	HCl		X									
12	11628 - B	W		11:21	3	HCl				X							
13	11628 - C	W		11:26	3	HCl			X								
14	11628 - D	W		11:37	1	—						X					
15	11628 - E	W		11:39	1	—					X						
16	11628 - F	W		11:43	1	—								X			
17	11628 - G	W		11:44	1	H_2SO_4									X		
18	11628 - H	W		11:46	1	NaOH										X	
19	11628 - I	W		11:49	1	HNO_3							X				
20	11628 - J	W	5/26/11	11:52	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 METALS - TAL
DISS MET. - Fe, Mn only

SHOULD BE "HOT"

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	5/26/11	13:30
RECEIVED BY	James Cainet	James Cainet	5/27/11	9:55
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Laboratory Group - Fort Collins

CONDITION OF SAMPLE UPON RECEIPT FORM

Client: NMED Workorder No: 1105419

Project Manager: LRS Initials: JAC Date: 5/27/11

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) 5/27/11	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):	2.4							
No. of custody seals on cooler:	2							
DOT Survey/ Acceptance Information — External µR/hr reading:	12							
Background µR/hr reading:	12							

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.

*8 please see page 2

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

Project Manager Signature / Date: 5/29/11

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

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

CONDITION OF SAMPLE UPON RECEIPT FORM

Client: NMED Workorder No: 1105419

Project Manager: LRS Initials: JAC Date: 2/27/11

Additional Information:

↓ DRO bottles arrived without H_2SO_4, so added at lab

ok

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
1105419-5-1	10628-6	7	<2	H_2SO_4	0.5	49245	~~GRO~~ DRO	JAC 2/27/11 1130
↓ -15-1	11628-6	↓	↓	↓	0.5	↓	DRO	↓

ok

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

Project Manager Signature / Date: 5/29/11

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

FedEx Express **NEW** Package US Airbill

FedEx Tracking Number 8762 4637 7264

Recipient's Copy

1 From

Date 5/26/11 [redacted]

Sender's Name S. BRANDWEIN Phone 505-222-9504

Company NMED

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

City ALBQ State NM ZIP 87109

2 Your Internal Billing Reference

3 To

Recipient's Name L. STEERE Phone 770 421-1511

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

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

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

8762 4637 7264

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

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

2 or 3 Business Days

- ☐ NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

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

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

☐ 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 ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. ☐ 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. ☐

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

[redacted]

Total Packages	Total Weight	Total Declared Value†	Credit Card Auth.
	lbs.	$ .00	

†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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2.4

12

-2

55%

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1105419
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: EX110602-8MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 02-Jun-11
Date Analyzed: 06-Jun-11

Prep Batch: EX110602-8
QCBatchID: EX110602-8-1
Run ID: SV110606-2
Cleanup: NONE
Basis: N/A
File Name: P12707

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
91-20-3	NAPHTHALENE	1	0.1	0.1	0.033	U	
91-57-6	2-METHYLNAPHTHALENE	1	0.1	0.1	0.033	U	
90-12-0	1-METHYLNAPHTHALENE	1	0.1	0.1	0.033	U	
208-96-8	ACENAPHTHYLENE	1	0.1	0.1	0.033	U	
83-32-9	ACENAPHTHENE	1	0.1	0.1	0.033	U	
86-73-7	FLUORENE	1	0.1	0.1	0.033	U	
85-01-8	PHENANTHRENE	1	0.1	0.1	0.033	U	
120-12-7	ANTHRACENE	1	0.1	0.1	0.033	U	
206-44-0	FLUORANTHENE	1	0.1	0.1	0.033	U	
129-00-0	PYRENE	1	0.1	0.1	0.033	U	
56-55-3	BENZO(A)ANTHRACENE	1	0.1	0.1	0.033	U	
218-01-9	CHRYSENE	1	0.1	0.1	0.033	U	
205-99-2	BENZO(B)FLUORANTHENE	1	0.1	0.1	0.033	U	
207-08-9	BENZO(K)FLUORANTHENE	1	0.1	0.1	0.033	U	
50-32-8	BENZO(A)PYRENE	1	0.1	0.1	0.033	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	0.1	0.1	0.033	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	0.1	0.1	0.033	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	0.1	0.1	0.033	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
321-60-8	2-FLUOROBIPHENYL	1.5		2	75	21 - 106
4165-60-0	NITROBENZENE-D5	1.53		2	77	34 - 111
1718-51-0	TERPHENYL-D14	1.67		2	83	33 - 111

Data Package ID: *SV1105419-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1105419
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Field ID: 10628-D
Lab ID: 1105419-4

Analysis ReqCode: **156**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-May-11
Date Extracted: 02-Jun-11
Date Analyzed: 06-Jun-11
Prep Method: SW3520BN Rev C

Prep Batch: EX110602-8
QCBatchID: EX110602-8-1
Run ID: SV110606-2
Cleanup: NONE
Basis: As Received
File Name: P12710

Sample Aliquot: 1055 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
91-20-3	NAPHTHALENE	1	35	0.095	0.032	E	
91-57-6	2-METHYLNAPHTHALENE	1	24	0.095	0.032	E	
90-12-0	1-METHYLNAPHTHALENE	1	29	0.095	0.032	E	
208-96-8	ACENAPHTHYLENE	1	0.095	0.095	0.032	U	
83-32-9	ACENAPHTHENE	1	0.095	0.095	0.032	U	
86-73-7	FLUORENE	1	0.095	0.095	0.032	U	
85-01-8	PHENANTHRENE	1	0.095	0.095	0.032	U	
120-12-7	ANTHRACENE	1	0.095	0.095	0.032	U	
206-44-0	FLUORANTHENE	1	0.095	0.095	0.032	U	
129-00-0	PYRENE	1	0.095	0.095	0.032	U	
56-55-3	BENZO(A)ANTHRACENE	1	0.095	0.095	0.032	U	
218-01-9	CHRYSENE	1	0.095	0.095	0.032	U	
205-99-2	BENZO(B)FLUORANTHENE	1	0.095	0.095	0.032	U	
207-08-9	BENZO(K)FLUORANTHENE	1	0.095	0.095	0.032	U	
50-32-8	BENZO(A)PYRENE	1	0.095	0.095	0.032	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	0.095	0.095	0.032	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	0.095	0.095	0.032	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	0.095	0.095	0.032	U	

Data Package ID: *SV1105419-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1105419
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Field ID:	10628-D
Lab ID:	1105419-4

Analysis ReqCode: **156**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-May-11
Date Extracted: 02-Jun-11
Date Analyzed: 06-Jun-11
Prep Method: SW3520BN Rev C

Prep Batch: EX110602-8
QCBatchID: EX110602-8-1
Run ID: SV110606-2
Cleanup: NONE
Basis: As Received
File Name: P12710

Sample Aliquot: 1055 ml
Final Volume: 1 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
321-60-8	2-FLUOROBIPHENYL	1.29		1.9	68	21 - 106
4165-60-0	NITROBENZENE-D5	2.55	*	1.9	135	34 - 111
1718-51-0	TERPHENYL-D14	1.28		1.9	67	33 - 111

Data Package ID: *SV1105419-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1105419
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Field ID: 10628-D
Lab ID: 1105419-4RR1

Analysis ReqCode: **156**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-May-11
Date Extracted: 02-Jun-11
Date Analyzed: 07-Jun-11
Prep Method: SW3520BN Rev C

Prep Batch: EX110602-8
QCBatchID: EX110602-8-1
Run ID: SV110607-2
Cleanup: NONE
Basis: As Received
File Name: P12721

Sample Aliquot: 1055 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
91-20-3	NAPHTHALENE	10	31	0.95	0.32		
91-57-6	2-METHYLNAPHTHALENE	10	21	0.95	0.32		
90-12-0	1-METHYLNAPHTHALENE	10	23	0.95	0.32		
208-96-8	ACENAPHTHYLENE	10	0.95	0.95	0.32	U	
83-32-9	ACENAPHTHENE	10	0.95	0.95	0.32	U	
86-73-7	FLUORENE	10	0.95	0.95	0.32	U	
85-01-8	PHENANTHRENE	10	0.95	0.95	0.32	U	
120-12-7	ANTHRACENE	10	0.95	0.95	0.32	U	
206-44-0	FLUORANTHENE	10	0.95	0.95	0.32	U	
129-00-0	PYRENE	10	0.95	0.95	0.32	U	
56-55-3	BENZO(A)ANTHRACENE	10	0.95	0.95	0.32	U	
218-01-9	CHRYSENE	10	0.95	0.95	0.32	U	
205-99-2	BENZO(B)FLUORANTHENE	10	0.95	0.95	0.32	U	
207-08-9	BENZO(K)FLUORANTHENE	10	0.95	0.95	0.32	U	
50-32-8	BENZO(A)PYRENE	10	0.95	0.95	0.32	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	10	0.95	0.95	0.32	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	10	0.95	0.95	0.32	U	
191-24-2	BENZO(G,H,I)PERYLENE	10	0.95	0.95	0.32	U	

Data Package ID: *SV1105419-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1105419
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Field ID:	10628-D
Lab ID:	1105419-4RR1

Analysis ReqCode: **156**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-May-11
Date Extracted: 02-Jun-11
Date Analyzed: 07-Jun-11
Prep Method: SW3520BN Rev C

Prep Batch: EX110602-8
QCBatchID: EX110602-8-1
Run ID: SV110607-2
Cleanup: NONE
Basis: As Received
File Name: P12721

Sample Aliquot: 1055 ml
Final Volume: 1 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
321-60-8	2-FLUOROBIPHENYL	1.56		1.9	82	21 - 106
4165-60-0	NITROBENZENE-D5	3.28	*	1.9	173	34 - 111
1718-51-0	TERPHENYL-D14	1.48		1.9	78	33 - 111

Data Package ID: *SV1105419-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1105419
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Field ID: 11628-D
Lab ID: 1105419-14

Analysis ReqCode: **156**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-May-11
Date Extracted: 02-Jun-11
Date Analyzed: 06-Jun-11
Prep Method: SW3520BN Rev C

Prep Batch: EX110602-8
QCBatchID: EX110602-8-1
Run ID: SV110606-2
Cleanup: NONE
Basis: As Received
File Name: P12711

Sample Aliquot: 1060 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
91-20-3	NAPHTHALENE	1	37	0.094	0.031	E	
91-57-6	2-METHYLNAPHTHALENE	1	26	0.094	0.031	E	
90-12-0	1-METHYLNAPHTHALENE	1	31	0.094	0.031	E	
208-96-8	ACENAPHTHYLENE	1	0.094	0.094	0.031	U	
83-32-9	ACENAPHTHENE	1	0.094	0.094	0.031	U	
86-73-7	FLUORENE	1	0.094	0.094	0.031	U	
85-01-8	PHENANTHRENE	1	0.094	0.094	0.031	U	
120-12-7	ANTHRACENE	1	0.094	0.094	0.031	U	
206-44-0	FLUORANTHENE	1	0.094	0.094	0.031	U	
129-00-0	PYRENE	1	0.094	0.094	0.031	U	
56-55-3	BENZO(A)ANTHRACENE	1	0.094	0.094	0.031	U	
218-01-9	CHRYSENE	1	0.094	0.094	0.031	U	
205-99-2	BENZO(B)FLUORANTHENE	1	0.094	0.094	0.031	U	
207-08-9	BENZO(K)FLUORANTHENE	1	0.094	0.094	0.031	U	
50-32-8	BENZO(A)PYRENE	1	0.094	0.094	0.031	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	0.094	0.094	0.031	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	0.094	0.094	0.031	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	0.094	0.094	0.031	U	

Data Package ID: *SV1105419-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1105419
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Field ID: 11628-D
Lab ID: 1105419-14

Analysis ReqCode: **156**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-May-11
Date Extracted: 02-Jun-11
Date Analyzed: 06-Jun-11
Prep Method: SW3520BN Rev C

Prep Batch: EX110602-8
QCBatchID: EX110602-8-1
Run ID: SV110606-2
Cleanup: NONE
Basis: As Received
File Name: P12711

Sample Aliquot: 1060 ml
Final Volume: 1 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
321-60-8	2-FLUOROBIPHENYL	1.2		1.89	64	21 - 106
4165-60-0	NITROBENZENE-D5	2.67	*	1.89	142	34 - 111
1718-51-0	TERPHENYL-D14	1.18		1.89	62	33 - 111

Data Package ID: *SV1105419-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1105419
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Field ID: 11628-D
Lab ID: 1105419-14RR1

Analysis ReqCode: **156**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-May-11
Date Extracted: 02-Jun-11
Date Analyzed: 07-Jun-11
Prep Method: SW3520BN Rev C

Prep Batch: EX110602-8
QCBatchID: EX110602-8-1
Run ID: SV110607-2
Cleanup: NONE
Basis: As Received
File Name: P12722

Sample Aliquot: 1060 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
91-20-3	NAPHTHALENE	10	31	0.94	0.31		
91-57-6	2-METHYLNAPHTHALENE	10	21	0.94	0.31		
90-12-0	1-METHYLNAPHTHALENE	10	23	0.94	0.31		
208-96-8	ACENAPHTHYLENE	10	0.94	0.94	0.31	U	
83-32-9	ACENAPHTHENE	10	0.94	0.94	0.31	U	
86-73-7	FLUORENE	10	0.94	0.94	0.31	U	
85-01-8	PHENANTHRENE	10	0.94	0.94	0.31	U	
120-12-7	ANTHRACENE	10	0.94	0.94	0.31	U	
206-44-0	FLUORANTHENE	10	0.94	0.94	0.31	U	
129-00-0	PYRENE	10	0.94	0.94	0.31	U	
56-55-3	BENZO(A)ANTHRACENE	10	0.94	0.94	0.31	U	
218-01-9	CHRYSENE	10	0.94	0.94	0.31	U	
205-99-2	BENZO(B)FLUORANTHENE	10	0.94	0.94	0.31	U	
207-08-9	BENZO(K)FLUORANTHENE	10	0.94	0.94	0.31	U	
50-32-8	BENZO(A)PYRENE	10	0.94	0.94	0.31	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	10	0.94	0.94	0.31	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	10	0.94	0.94	0.31	U	
191-24-2	BENZO(G,H,I)PERYLENE	10	0.94	0.94	0.31	U	

Data Package ID: *SV1105419-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1105419
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Field ID: 11628-D
Lab ID: 1105419-14RR1

Analysis ReqCode: **156**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-May-11
Date Extracted: 02-Jun-11
Date Analyzed: 07-Jun-11
Prep Method: SW3520BN Rev C

Prep Batch: EX110602-8
QCBatchID: EX110602-8-1
Run ID: SV110607-2
Cleanup: NONE
Basis: As Received
File Name: P12722

Sample Aliquot: 1060 ml
Final Volume: 1 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
321-60-8	2-FLUOROBIPHENYL	1.48		1.89	78	21 - 106
4165-60-0	NITROBENZENE-D5	2.97	*	1.89	158	34 - 111
1718-51-0	TERPHENYL-D14	1.39		1.89	74	33 - 111

Data Package ID: *SV1105419-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1105419
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: EX110602-8LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06/02/2011
Date Analyzed: 06/06/2011
Prep Method: SW3520BNC

Prep Batch: EX110602-8
QCBatchID: EX110602-8-1
Run ID: SV110606-2
Cleanup: NONE
Basis: N/A
File Name: P12708

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
91-20-3	NAPHTHALENE	2	1.42	0.1		71	39 - 102%
91-57-6	2-METHYLNAPHTHALENE	2	1.31	0.1		66	46 - 104%
208-96-8	ACENAPHTHYLENE	2	1.56	0.1		78	50 - 107%
83-32-9	ACENAPHTHENE	2	1.5	0.1		75	47 - 108%
86-73-7	FLUORENE	2	1.56	0.1		78	50 - 112%
85-01-8	PHENANTHRENE	2	1.52	0.1		76	51 - 117%
120-12-7	ANTHRACENE	2	1.65	0.1		82	54 - 112%
206-44-0	FLUORANTHENE	2	1.74	0.1		87	54 - 116%
129-00-0	PYRENE	2	1.53	0.1		76	49 - 128%
56-55-3	BENZO(A)ANTHRACENE	2	1.5	0.1		75	56 - 109%
218-01-9	CHRYSENE	2	1.59	0.1		79	55 - 109%
205-99-2	BENZO(B)FLUORANTHENE	2	1.55	0.1		78	46 - 118%
207-08-9	BENZO(K)FLUORANTHENE	2	1.67	0.1		84	45 - 124%
50-32-8	BENZO(A)PYRENE	2	1.52	0.1		76	53 - 110%
193-39-5	INDENO(1,2,3-CD)PYRENE	2	1.68	0.1		84	43 - 125%
53-70-3	DIBENZO(A,H)ANTHRACENE	2	1.7	0.1		85	42 - 127%
191-24-2	BENZO(G,H,I)PERYLENE	2	1.62	0.1		81	38 - 123%

Data Package ID: *SV1105419-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1105419
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: EX110602-8LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06/02/2011
Date Analyzed: 06/06/2011
Prep Method: SW3520BNC

Prep Batch: EX110602-8
QCBatchID: EX110602-8-1
Run ID: SV110606-2
Cleanup: NONE
Basis: N/A
File Name: P12709

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
91-20-3	NAPHTHALENE	2	1.38	0.1		69	20	2
91-57-6	2-METHYLNAPHTHALENE	2	1.3	0.1		65	20	1
208-96-8	ACENAPHTHYLENE	2	1.53	0.1		77	20	2
83-32-9	ACENAPHTHENE	2	1.47	0.1		74	20	2
86-73-7	FLUORENE	2	1.56	0.1		78	20	0
85-01-8	PHENANTHRENE	2	1.49	0.1		75	20	2
120-12-7	ANTHRACENE	2	1.66	0.1		83	20	1
206-44-0	FLUORANTHENE	2	1.73	0.1		86	20	1
129-00-0	PYRENE	2	1.48	0.1		74	20	3
56-55-3	BENZO(A)ANTHRACENE	2	1.52	0.1		76	20	1
218-01-9	CHRYSENE	2	1.52	0.1		76	20	5
205-99-2	BENZO(B)FLUORANTHENE	2	1.52	0.1		76	20	2
207-08-9	BENZO(K)FLUORANTHENE	2	1.69	0.1		85	20	1
50-32-8	BENZO(A)PYRENE	2	1.5	0.1		75	20	1
193-39-5	INDENO(1,2,3-CD)PYRENE	2	1.55	0.1		78	20	8
53-70-3	DIBENZO(A,H)ANTHRACENE	2	1.55	0.1		78	20	9
191-24-2	BENZO(G,H,I)PERYLENE	2	1.48	0.1		74	20	9

Surrogate Recovery LCS/LCSD

CASNO	Target Analyte	Spike Added	LCS % Rec.	LCS Flag	LCSD % Rec.	LCSD Flag	Control Limits
321-60-8	2-FLUOROBIPHENYL	2	75		73		21 - 106
4165-60-0	NITROBENZENE-D5	2	79		74		34 - 111
1718-51-0	TERPHENYL-D14	2	79		77		33 - 111

Data Package ID: *SV1105419-1*