GC/MS Semivolatiles

Case Narrative

NMED Hazardous Waste Bureau

KAFB - BFF

Work Order Number: 1105167

1. This report consists of 2 water samples. The samples were received cool and intact by ALS on 05/12/2011.

2. The samples were prepared and analyzed according to SW-846, 3rd Edition procedures. Specifically, the water sample was extracted using continuous liquid-liquid extractors, according to SW-846 Method 3520C utilizing SOP 617 Revision 13.

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 time.

11. All surrogate recoveries were within acceptance criteria.

12. All internal standard recoveries were within acceptance criteria.

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	5-19-11 Date
Joe [illegible] Organics Final Data Reviewer	May 19, 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: 1105167
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
106064-A	1105167-1		WATER	11-May-11	10:03
106064-B	1105167-2		WATER	11-May-11	10:05
106064-C	1105167-3		WATER	11-May-11	10:10
106064-D	1105167-4		WATER	11-May-11	10:14
106064-E	1105167-5		WATER	11-May-11	10:16
106064-F	1105167-6		WATER	11-May-11	10:18
106064-G	1105167-7		WATER	11-May-11	10:19
106064-H	1105167-8		WATER	11-May-11	10:21
106064-I	1105167-9		WATER	11-May-11	10:23
106064-J	1105167-10		WATER	11-May-11	10:24
10677-A	1105167-11		WATER	11-May-11	15:00
10677-B	1105167-12		WATER	11-May-11	15:02
10677-C	1105167-13		WATER	11-May-11	15:04
10677-D	1105167-14		WATER	11-May-11	15:06
10677-E	1105167-15		WATER	11-May-11	15:07
10677-F	1105167-16		WATER	11-May-11	15:08
10677-G	1105167-17		WATER	11-May-11	15:10
10677-H	1105167-18		WATER	11-May-11	15:11
10677-I	1105167-19		WATER	11-May-11	15:14
10677-J	1105167-20		WATER	11-May-11	15:17

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 # 1105167

PAGE 1 of 2

DISPOSAL: By Lab or Return to Client

PROJECT NAME	KAFB-BFF	SAMPLER	SSB
PROJECT No.		SITE ID	KAFB-106064
		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: 5/11/11
TURNAROUND: NORMAL

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	VOC, 8260	EDB 8011/504.1	GRO 8015	DRO 8015	PAH SVOCs 8270 SIM	TOTAL METAL 6010 TAL	ALK, Anions 310.1 300	NH3 + Nitrate/Nitrite 350.3 353.3	SULFIDE 376.1	DISS MET 6010 Fe, Mn only
1	106064 -A	W	5/11/11	10:03	3	HCl		X									
2	106064 -B	W	5/11/11	10:05	3	HCl				X							
3	106064 -C	W	5/11/11	10:10	3	HCl			X								
4	106064 -D	W	5/11/11	10:14	1	—						X					
5	106064 -E	W	5/11/11	10:16	1	—					X						
6	106064 -F	W	5/11/11	10:18	1	—								X			
7	106064 -G	W	5/11/11	10:19	1	H_2SO_4									X		
8	106064 -H	W	5/11/11	10:21	1	NaOH										X	
9	106064 -I	W	5/11/11	10:23	1	HNO_3							X				
10	106064 -J	W	5/11/11	10:24	1	HNO_3										X	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: mean area of LNAPL on groundwater but more measured in the well.
TOTAL METALS - TAL
DISS MET. Fe, Mn only
some other

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-Na2SO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	S Brandwein	S. BRANDWEIN	5/11/11	15:45
RECEIVED BY	C Trimble	C Trimble	5-12-11	1010
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

5/12/11

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 #	1105167				
PAGE	2 of 2				
DISPOSAL	By Lab or Return to Client				

PROJECT NAME	KAFB- BFF	SAMPLER	SGB	DATE	5/11/11
PROJECT No.		SITE ID	KAFB -10677	TURNAROUND	NORMAL
		EDD FORMAT			
		PURCHASE ORDER			
COMPANY NAME	NM ED	BILL TO COMPANY	NMED/HWB		
SEND REPORT TO	GID BRANDWEIN	INVOICE ATTN TO	DAVE COMRAIN		
ADDRESS	5500 SAN ANTONIO DR NE	ADDRESS	2905 RODEO PARK DR NE		
CITY / STATE / ZIP	ALBQ, NM 87109	CITY / STATE / ZIP	ALBQ, NM 87505		
PHONE	505-222-9504	PHONE	505-476-6055		
FAX		FAX			
E-MAIL	gid.brandwein@state.nm.us	E-MAIL			

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	VOCs 8260	GDA 8011/8021	GRO 8015	DRO 8015	PAH SIMS 8270-SIMS	TOT MET 6010 TAL	ALK, ANIONS 310.1 300	NO3, NITRATE, NITRITE 350.3 353.3	SULFIDE 376.1	DISSOLVED MET 6010 Fe+Mn only
11	10677 -A	W	5/11/11	15:00	3	HCl		X									
12	10677 -B	W	5/11/11	15:02	3	HCl				X							
13	10677 -C	W	5/11/11	15:04	3	HCl			X								
14	10677 -D	W	5/11/11	15:06	1	—						X					
15	10677 -E	W	5/11/11	15:07	1	—					X						
16	10677 -F	W	5/11/11	15:08	1	—								X			
17	10677 -G	W	5/11/11	15:10	1	H_2SO_4									X		
18	10677 -H	W	5/11/11	15:11	1	NaOH										X	
19	10677 -I	W	5/11/11	15:14	1	HNO_3							X				
20	10677 -J	W	5/11/11	15:17	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

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	5/11/11	15:45
RECEIVED BY	C Trimble	C Trimble	5-12-11	1010
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Laboratory Group - Fort Collins

CONDITION OF SAMPLE UPON RECEIPT FORM

Client: NMED Workorder No: 1105167

Project Manager: LS Initials: CDT Date: 5-12-11

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	2						
Temperature (°C):	2.4	3.2						
No. of custody seals on cooler:	1	2						
DOT Survey/ Acceptance Information — External µR/hr reading:	14	13						
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.

Sample on COC 10677-J, on label 10677-I Time: 1517
TYPO... it is "J" 5/12 Analysis: Diss. met.
DRO bottles received unpreserved - Added .5ml H_2SO_4 @ 1110
5-12-11 final pH < 2 Lot no. 49245

If applicable, was the client contacted? (YES) / NO / NA Contact: Sid B. Date/Time: 5/12

Project Manager Signature / Date: 5/12/11

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

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

FedEx Express **NEW** Package US Airbill

FedEx Tracking Number 8758 3192 5801

0200 Form ID No.

1105161

FedEx Retrieval Copy

1 From

Date

Sender's FedEx Account Number

Sender's Name

Phone

Company

Address

Dept./Floor/Suite/Room

City

State

ZIP

2 Your Internal Billing Reference

3 To

Recipient's Name

Phone

Company

Address

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

Dept./Floor/Suite/Room

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

Address

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

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

City

State

ZIP

8758 3192 5801

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 afternoon.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

06 ☐ FedEx Envelope* 02 ☐ FedEx Pak* 03 ☐ FedEx Box 04 ☐ FedEx Tube 07 ☒ 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

Total Packages

Total Weight lbs.

Credit Card Auth.

*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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FedEx 3 of 3 1105167

MPS# 0681 7955 3819 8156

Mstr# 8758 2750 5780

0200

THU - 12 MAY AA

PRIORITY OVERNIGHT

XH FTCA

80554

CO-US DEN

2-4-14

#420057 05/11 50DG1/1577/7EFB

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1105167
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: EX110512-8MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 12-May-11
Date Analyzed: 17-May-11

Prep Batch: EX110512-8
QCBatchID: EX110512-8-1
Run ID: SV110517-1
Cleanup: NONE
Basis: N/A
File Name: N1959

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	1.49		2	74	21 - 106
4165-60-0	NITROBENZENE-D5	1.79		2	90	34 - 111
1718-51-0	TERPHENYL-D14	1.66		2	83	33 - 111

Data Package ID: *SV1105167-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1105167
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Field ID: 106064-D
Lab ID: 1105167-4

Analysis ReqCode: **156**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 11-May-11
Date Extracted: 12-May-11
Date Analyzed: 17-May-11
Prep Method: SW3520BN Rev C

Prep Batch: EX110512-8
QCBatchID: EX110512-8-1
Run ID: SV110517-1
Cleanup: NONE
Basis: As Received
File Name: N1963

Sample Aliquot: 1015 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	2.4	0.099	0.033		
91-57-6	2-METHYLNAPHTHALENE	1	3.4	0.099	0.033		
90-12-0	1-METHYLNAPHTHALENE	1	3.3	0.099	0.033		
208-96-8	ACENAPHTHYLENE	1	0.099	0.099	0.033	U	
83-32-9	ACENAPHTHENE	1	0.099	0.099	0.033	U	
86-73-7	FLUORENE	1	0.099	0.099	0.033	U	
85-01-8	PHENANTHRENE	1	0.099	0.099	0.033	U	
120-12-7	ANTHRACENE	1	0.099	0.099	0.033	U	
206-44-0	FLUORANTHENE	1	0.099	0.099	0.033	U	
129-00-0	PYRENE	1	0.099	0.099	0.033	U	
56-55-3	BENZO(A)ANTHRACENE	1	0.099	0.099	0.033	U	
218-01-9	CHRYSENE	1	0.099	0.099	0.033	U	
205-99-2	BENZO(B)FLUORANTHENE	1	0.099	0.099	0.033	U	
207-08-9	BENZO(K)FLUORANTHENE	1	0.099	0.099	0.033	U	
50-32-8	BENZO(A)PYRENE	1	0.099	0.099	0.033	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	0.099	0.099	0.033	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	0.099	0.099	0.033	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	0.099	0.099	0.033	U	

Data Package ID: *SV1105167-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1105167
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Field ID:	106064-D
Lab ID:	1105167-4

Analysis ReqCode: **156**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 11-May-11
Date Extracted: 12-May-11
Date Analyzed: 17-May-11
Prep Method: SW3520BN Rev C

Prep Batch: EX110512-8
QCBatchID: EX110512-8-1
Run ID: SV110517-1
Cleanup: NONE
Basis: As Received
File Name: N1963

Sample Aliquot: 1015 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		1.97	79	21 - 106
4165-60-0	NITROBENZENE-D5	1.82		1.97	92	34 - 111
1718-51-0	TERPHENYL-D14	1.67		1.97	85	33 - 111

Data Package ID: *SV1105167-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1105167
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Field ID: 10677-D
Lab ID: 1105167-14

Analysis ReqCode: **156**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 11-May-11
Date Extracted: 12-May-11
Date Analyzed: 17-May-11
Prep Method: SW3520BN Rev C

Prep Batch: EX110512-8
QCBatchID: EX110512-8-1
Run ID: SV110517-1
Cleanup: NONE
Basis: As Received
File Name: N1964

Sample Aliquot: 1040 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	0.096	0.096	0.032	U	
91-57-6	2-METHYLNAPHTHALENE	1	0.096	0.096	0.032	U	
90-12-0	1-METHYLNAPHTHALENE	1	0.096	0.096	0.032	U	
208-96-8	ACENAPHTHYLENE	1	0.096	0.096	0.032	U	
83-32-9	ACENAPHTHENE	1	0.096	0.096	0.032	U	
86-73-7	FLUORENE	1	0.096	0.096	0.032	U	
85-01-8	PHENANTHRENE	1	0.096	0.096	0.032	U	
120-12-7	ANTHRACENE	1	0.096	0.096	0.032	U	
206-44-0	FLUORANTHENE	1	0.096	0.096	0.032	U	
129-00-0	PYRENE	1	0.096	0.096	0.032	U	
56-55-3	BENZO(A)ANTHRACENE	1	0.096	0.096	0.032	U	
218-01-9	CHRYSENE	1	0.096	0.096	0.032	U	
205-99-2	BENZO(B)FLUORANTHENE	1	0.096	0.096	0.032	U	
207-08-9	BENZO(K)FLUORANTHENE	1	0.096	0.096	0.032	U	
50-32-8	BENZO(A)PYRENE	1	0.096	0.096	0.032	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	0.096	0.096	0.032	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	0.096	0.096	0.032	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	0.096	0.096	0.032	U	

Data Package ID: *SV1105167-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1105167
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Field ID: 10677-D
Lab ID: 1105167-14

Analysis ReqCode: **156**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 11-May-11
Date Extracted: 12-May-11
Date Analyzed: 17-May-11
Prep Method: SW3520BN Rev C

Prep Batch: EX110512-8
QCBatchID: EX110512-8-1
Run ID: SV110517-1
Cleanup: NONE
Basis: As Received
File Name: N1964

Sample Aliquot: 1040 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	1.53		1.92	79	21 - 106
4165-60-0	NITROBENZENE-D5	1.73		1.92	90	34 - 111
1718-51-0	TERPHENYL-D14	1.7		1.92	89	33 - 111

Data Package ID: *SV1105167-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1105167
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: EX110512-8LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 05/12/2011
Date Analyzed: 05/17/2011
Prep Method: SW3520BNC

Prep Batch: EX110512-8
QCBatchID: EX110512-8-1
Run ID: SV110517-1
Cleanup: NONE
Basis: N/A
File Name: N1960

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	1.37	0.1		69	46 - 104%
208-96-8	ACENAPHTHYLENE	2	1.72	0.1		86	50 - 107%
83-32-9	ACENAPHTHENE	2	1.49	0.1		74	47 - 108%
86-73-7	FLUORENE	2	1.58	0.1		79	50 - 112%
85-01-8	PHENANTHRENE	2	1.56	0.1		78	51 - 117%
120-12-7	ANTHRACENE	2	1.81	0.1		91	54 - 112%
206-44-0	FLUORANTHENE	2	1.78	0.1		89	54 - 116%
129-00-0	PYRENE	2	1.64	0.1		82	49 - 128%
56-55-3	BENZO(A)ANTHRACENE	2	1.82	0.1		91	56 - 109%
218-01-9	CHRYSENE	2	1.59	0.1		80	55 - 109%
205-99-2	BENZO(B)FLUORANTHENE	2	1.75	0.1		87	46 - 118%
207-08-9	BENZO(K)FLUORANTHENE	2	1.57	0.1		79	45 - 124%
50-32-8	BENZO(A)PYRENE	2	1.8	0.1		90	53 - 110%
193-39-5	INDENO(1,2,3-CD)PYRENE	2	1.72	0.1		86	43 - 125%
53-70-3	DIBENZO(A,H)ANTHRACENE	2	1.62	0.1		81	42 - 127%
191-24-2	BENZO(G,H,I)PERYLENE	2	1.69	0.1		84	38 - 123%

Data Package ID: *SV1105167-1*

GC/MS Semi-volatiles

Method SW8270SIMPAHD

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1105167
Client Name: NMED Hazardous Waste Bureau
ClientProject ID: KAFB - BFF

Lab ID: EX110512-8LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 05/12/2011
Date Analyzed: 05/17/2011
Prep Method: SW3520BNC

Prep Batch: EX110512-8
QCBatchID: EX110512-8-1
Run ID: SV110517-1
Cleanup: NONE
Basis: N/A
File Name: N1961

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	1.47	0.1		74	20	4
91-57-6	2-METHYLNAPHTHALENE	2	1.47	0.1		74	20	7
208-96-8	ACENAPHTHYLENE	2	1.77	0.1		88	20	3
83-32-9	ACENAPHTHENE	2	1.54	0.1		77	20	4
86-73-7	FLUORENE	2	1.6	0.1		80	20	1
85-01-8	PHENANTHRENE	2	1.6	0.1		80	20	2
120-12-7	ANTHRACENE	2	1.87	0.1		94	20	3
206-44-0	FLUORANTHENE	2	1.75	0.1		87	20	2
129-00-0	PYRENE	2	1.85	0.1		92	20	12
56-55-3	BENZO(A)ANTHRACENE	2	1.87	0.1		93	20	3
218-01-9	CHRYSENE	2	1.68	0.1		84	20	5
205-99-2	BENZO(B)FLUORANTHENE	2	1.85	0.1		93	20	6
207-08-9	BENZO(K)FLUORANTHENE	2	1.77	0.1		88	20	12
50-32-8	BENZO(A)PYRENE	2	1.92	0.1		96	20	7
193-39-5	INDENO(1,2,3-CD)PYRENE	2	1.77	0.1		89	20	3
53-70-3	DIBENZO(A,H)ANTHRACENE	2	1.67	0.1		84	20	3
191-24-2	BENZO(G,H,I)PERYLENE	2	1.78	0.1		89	20	5

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	77		81		21 - 106
4165-60-0	NITROBENZENE-D5	2	92		91		34 - 111
1718-51-0	TERPHENYL-D14	2	85		93		33 - 111

Data Package ID: *SV1105167-1*