LAB Order ID # 7111615



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

6002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
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1 (888) 588-3443

8608 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: NDUA

Phone #: 432-520-7120

Address: (Street, City, Zip) 2057 Commerce

Fax #: 432-520-7701

Contact Person: Curt Stanley

E-mail:

Invoice to: (If different from above) Phoenix

Project #: TNM-LF-2000-7

Project Name: Bob Dorhman

Project Location (including state): New Mexico

Sampler Signature: [signature]

ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING DATE | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 013 | MW-11 | 2 | Vba | X | | | | X | | | | X | | 11/14/2007 | | | X | | | | | | | | | | | | | | | | | |
| 014 | MW-20 | | | | | | | | | | | | | | 1005 | | | | | | | | | | | | | | | | | | | |
| 015 | MW-21 | | | | | | | | | | | | | | 1020 | | | | | | | | | | | | | | | | | | | |
| 016 | MW-23 | | | | | | | | | | | | | | 1045 | | | | | | | | | | | | | | | | | | | |
| 017 | MW-24 | | | | | | | | | | | | | | 1100 | | | | | | | | | | | | | | | | | | | |
| 018 | MW-25 | | | | | | | | | | | | | | 1120 | | | | | | | | | | | | | | | | | | | |
| 019 | MW-26 | | | | | | | | | | | | | | 1145 | | | | | | | | | | | | | | | | | | | |
| 020 | MW-27 | | | | | | | | | | | | | | 1200 | | | | | | | | | | | | | | | | | | | |
| 021 | MW-28 | | | | | | | | | | | | | | 1215 | | | | | | | | | | | | | | | | | | | |
| 022 | MW-29 | | | | | | | | | | | | | | 1230 | | | | | | | | | | | | | | | | | | | |
| 023 | MW-30 | | | | | | | | | | | | | | 1245 | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | 1300 | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| [signature] | Ndua | 11/16/07 | 8:47 | | | | | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| | | | | | | | | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| | | | | [signature] | TRACE | 11/16/07 | 0847 | 3.4° |

LAB USE ONLY
Log In Review

REMARKS: all - Midland

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

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Carrier # Carry on

LAB Order ID # 7111615



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Fax (817) 560-4336

Company Name: Nova
Address: (Street, City, Zip) 2057 Commerce
Phone #: 432-570-7720
Fax #: 432-570-7701
Contact Person: Curt Stanley
E-mail:
Invoice to: (If different from above) Phaus
Project #: TWM - LF - 2000 - 7
Project Name: Bob Durham
Project Location (including state): New Mexico
Sampler Signature:

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | MATRIX: SOIL | MATRIX: AIR | MATRIX: SLUDGE | PRESERVATIVE METHOD: HCl | PRESERVATIVE METHOD: $HNO_3$ | PRESERVATIVE METHOD: $H_2SO_4$ | PRESERVATIVE METHOD: NaOH | PRESERVATIVE METHOD: ICE | PRESERVATIVE METHOD: NONE | SAMPLING DATE (2007) | SAMPLING TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 030 | MW-31 | 2 | Nova | X | | | | X | | | | X | | 11/14 | 1320 | | X | | | | | | | | | | | | | | | | | |
| 031 | MW-33 | | | | | | | | | | | | | | 1340 | | | | | | | | | | | | | | | | | | | |
| 032 | MW-9 | | | | | | | | | | | | | | 1400 | | | | | | | | | | | | | | | | | | | |
| 033 | MW-15 | | | | | | | | | | | | | | 1415 | | | | | | | | | | | | | | | | | | | |
| 034 | MW-13 | | | | | | | | | | | | | | 1430 | | | | | | | | | | | | | | | | | | | |
| 035 | MW-10 | | | | | | | | | | | | | | 1450 | | | | | | | | | | | | | | | | | | | |
| 036 | MW-7 | | | | | | | | | | | | | | 1510 | | | | | | | | | | | | | | | | | | | |
| 037 | MW-32 | | | | | | | | | | | | | | 1525 | | | | | | | | | | | | | | | | | | | |
| 038 | MW-3 | | | | | | | | | | | | | | 1545 | | | | | | | | | | | | | | | | | | | |
| 039 | MW-37 | | | | | | | | | | | | | | 1600 | | | | | | | | | | | | | | | | | | | |
| 040 | MW-16 | | | | | | | | | | | | | | 1615 | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 11/16/07 | 8:47 | | | | | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| | | | | | | | | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| | | | | Helen Kelton | NOVA | 11/16/07 | 0847 | 3.4° |

LAB USE ONLY
Headspace Y / N / NA
Pollution Free

REMARKS: all tests - Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Cooler # [signature]

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email: lab@traceanalysis.com

LAB Order ID # 7111615

Page 3 of 3


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Fax (817) 560-4336


Company Name: Nova

Address: (Street, City, Zip) 2057 Commerce

Phone #: 432-520-7720

Fax #: 432-520-7701

Contact Person: Curt Stanley

E-mail:

Invoice to: (if different from above) Phillips

Project #: TWM-LF-2000-7

Project Name: Bob Dickman

Project Location (including state): New Mexico

Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING DATE 2007 | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 042 | MW-14 | 2 | Vol | X | | | | X | | | | X | | 11/14 | 1630 | | X | | | | | | | | | | | | | | | | | | |
| 043 | MW-8 | | | | | | | | | | | | | | 1645 | | | | | | | | | | | | | | | | | | | | |
| 044 | MW-6 | | | | | | | | | | | | | | 1700 | | | | | | | | | | | | | | | | | | | | |
| 045 | MW-7 | | | | | | | | | | | | | 11/15 | 1030 | | | | | | | | | | | | | | | | | | | | |
| 046 | MW-3B | | | | | | | | | | | | | | 1100 | | | | | | | | | | | | | | | | | | | | |
| 047 | MW-1 | | | | | | | | | | | | | | 1130 | | | | | | | | | | | | | | | | | | | | |
| 048 | MW-4 | | | | | | | | | | | | | | 1200 | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 11/16/07 | 8:47 | | | | | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| | | | | | | | | |
| Relinquished by: | Company: | Date: | Time: | Received by: [signature] | Company: TRACE | Date: 11/16/07 | Time: 0847 | Temp°c: 3.4° |

LAB USE ONLY

REMARKS: all tests - Midland

☐ Dry Weight Basis Required

☐ TRRP Report Required

☐ Check if Special Reporting Limits Are Needed

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LAB Order ID # 1111615



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Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #: 432-520-7701
Contact Person: Curt Stanley
E-mail:
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Name: Bob Dorham
Project Location (including state): New Mexico
Sampler Signature: Dustin Lee

ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE 2007 | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | Turn Around Time if different from standard |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 143018 | MW-11 | 2 | Voa | X | | | | | | | | X | | 11/14 | 1005 | | X | | | | | | | | | | | | | | | | |
| 019 | MW-20 | | | | | | | | | | | | | | 1020 | | | | | | | | | | | | | | | | | | |
| 020 | MW-21 | | | | | | | | | | | | | | 1045 | | | | | | | | | | | | | | | | | | |
| 021 | MW-23 | | | | | | | | | | | | | | 1100 | | | | | | | | | | | | | | | | | | |
| 022 | MW-24 | | | | | | | | | | | | | | 1120 | | | | | | | | | | | | | | | | | | |
| 023 | MW-25 | | | | | | | | | | | | | | 1145 | | | | | | | | | | | | | | | | | | |
| 024 | MW-26 | | | | | | | | | | | | | | 1200 | | | | | | | | | | | | | | | | | | |
| 025 | MW-27 | | | | | | | | | | | | | | 1215 | | | | | | | | | | | | | | | | | | |
| 026 | MW-28 | | | | | | | | | | | | | | 1230 | | | | | | | | | | | | | | | | | | |
| 027 | MW-29 | | | | | | | | | | | | | | 1245 | | | | | | | | | | | | | | | | | | |
| 028 | MW-30 | | | | | | | | | | | | | | 1300 | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| Dustin Lee | Nova | 11/16/07 | 8:47 | | | | | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| | | | | | | | | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| | | | | Helen Shelton | TRACE | 11/16/07 | 0847 | 3.4° |

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
3.4° C
Log-in-Review

REMARKS:
all - Midland

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

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Carrier # Cary Jr

11/29
EP

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Contact Person: Curt Stanley
E-mail:
Invoice to: (If different from above) Phaws
Project #: TNM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): New Mexico
Sampler Signature:

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING DATE 2007 | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | Turn Around Time if different from standard |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 43029 | MW-31 | 2 | NOA | X | | | | X | | | | X | | 11/14 | 1330 | | X | | | | | | | | | | | | | | | | |
| 030 | MW-33 | | | | | | | | | | | | | | 1340 | | | | | | | | | | | | | | | | | | |
| 031 | MW-9 | | | | | | | | | | | | | | 1400 | | | | | | | | | | | | | | | | | | |
| 032 | MW-15 | | | | | | | | | | | | | | 1415 | | | | | | | | | | | | | | | | | | |
| 033 | MW-13 | | | | | | | | | | | | | | 1430 | | | | | | | | | | | | | | | | | | |
| 034 | MW-10 | | | | | | | | | | | | | | 1450 | | | | | | | | | | | | | | | | | | |
| 035 | MW-7 | | | | | | | | | | | | | | 1510 | | | | | | | | | | | | | | | | | | |
| 036 | MW-32 | | | | | | | | | | | | | | 1525 | | | | | | | | | | | | | | | | | | |
| 037 | MW-3 | | | | | | | | | | | | | | 1545 | | | | | | | | | | | | | | | | | | |
| 038 | MW-37 | | | | | | | | | | | | | | 1600 | | | | | | | | | | | | | | | | | | |
| 039 | MW-16 | | | | | | | | | | | | | | 1615 | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| [signature] | NOA | 11/16/07 | 8:47 | | | | | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| Relinquished by: | Company: | Date: | Time: | Received by: [signature] | Company: NOA | Date: 11/16/07 | Time: 0847 | Temp°c: 3.4° |

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
3.4°
Log-in-Review

REMARKS: all tests - Midland

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

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Contact Person: Curt Stanley
E-mail:
Invoice to: (If different from above) Phoenix
Project #: TWM-LF-2000-7
Project Name: Bob Dickman
Project Location (including state): New Mexico
Sampler Signature:

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 43040 | MW-14 | 2 | Voa | X | | | | X | | | | X | | 11/14 | 1630 | | X | | | | | | | | | | | | | | | | |
| 041 | MW-8 | ↓ | ↓ | ↓ | | | | ↓ | | | | ↓ | | ↓ | 1645 | | ↓ | | | | | | | | | | | | | | | | |
| 042 | MW-6 | ↓ | ↓ | ↓ | | | | ↓ | | | | ↓ | | ↓ | 1700 | | ↓ | | | | | | | | | | | | | | | | |
| 043 | MW-7 | ↓ | ↓ | ↓ | | | | ↓ | | | | ↓ | | 11/15 | 1030 | | ↓ | | | | | | | | | | | | | | | | |
| 044 | MW-38 | ↓ | ↓ | ↓ | | | | ↓ | | | | ↓ | | ↓ | 1100 | | ↓ | | | | | | | | | | | | | | | | |
| 045 | MW-1 | ↓ | ↓ | ↓ | | | | ↓ | | | | ↓ | | ↓ | 1130 | | ↓ | | | | | | | | | | | | | | | | |
| 046 | MW-4 | ↓ | ↓ | ↓ | | | | ↓ | | | | ↓ | | ↓ | 1200 | | ↓ | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 11/16/07 | 8:47 | | | | | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| | | | | | | | | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| | | | | Helen Shelton | TRACE | 11/16/07 | 0847 | 3.4° |

LAB USE ONLY
Intact (Y) / N
Headspace Y / N / NA
Log-In-Review

REMARKS: all tests - Medium

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Carrier # Chris

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1296
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

# Analytical and Quality Control Report

Curt Stanley
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: February 26, 2008

Work Order: 8022108

Project Location: West of Monument, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 151233 | MW 23 | water | 2008-02-20 | 09:45 | 2008-02-21 |
| 151234 | MW 26 | water | 2008-02-20 | 10:30 | 2008-02-21 |
| 151235 | MW 28 | water | 2008-02-20 | 11:00 | 2008-02-21 |
| 151236 | MW 31 | water | 2008-02-20 | 11:45 | 2008-02-21 |
| 151237 | MW 33 | water | 2008-02-20 | 12:00 | 2008-02-21 |
| 151238 | MW 9 | water | 2008-02-20 | 12:15 | 2008-02-21 |
| 151239 | MW 15 | water | 2008-02-20 | 12:30 | 2008-02-21 |
| 151240 | MW 10 | water | 2008-02-20 | 12:45 | 2008-02-21 |
| 151241 | MW 7 | water | 2008-02-20 | 13:00 | 2008-02-21 |
| 151242 | MW 32 | water | 2008-02-20 | 13:15 | 2008-02-21 |
| 151243 | MW 3 | water | 2008-02-20 | 13:30 | 2008-02-21 |
| 151244 | MW 37 | water | 2008-02-20 | 13:45 | 2008-02-21 |
| 151245 | MW 8 | water | 2008-02-20 | 14:15 | 2008-02-21 |
| 151246 | MW 1 | water | 2008-02-20 | 14:30 | 2008-02-21 |
| 151247 | MW 13 | water | 2008-02-20 | 14:45 | 2008-02-21 |
| 151248 | MW 4 | water | 2008-02-20 | 15:00 | 2008-02-21 |
| 151249 | MW 16 | water | 2008-02-20 | 15:30 | 2008-02-21 |
| 151250 | MW 6 | water | 2008-02-20 | 15:45 | 2008-02-21 |
| 151251 | MW 2 | water | 2008-02-20 | 16:15 | 2008-02-21 |
| 151252 | MW 38 | water | 2008-02-20 | 16:45 | 2008-02-21 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 14 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Analytical Report

**Sample: 151233 - MW 23**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70 - 130 |

**Sample: 151234 - MW 26**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70 - 130 |

**Sample: 151235 - MW 28**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.103 | mg/L | 1 | 0.100 | 103 | 70 - 130 |

**Sample: 151236 - MW 31**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70 - 130 |

**Sample: 151237 - MW 33**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70 - 130 |

**Sample: 151238 - MW 9**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |

*continued ...*

*sample 151238 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.107 | mg/L | 1 | 0.100 | 107 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.107 | mg/L | 1 | 0.100 | 107 | 70 - 130 |

**Sample: 151239 - MW 15**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.108 | mg/L | 1 | 0.100 | 108 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 70 - 130 |

**Sample: 151240 - MW 10**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | **0.00110** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.110 | mg/L | 1 | 0.100 | 110 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.111 | mg/L | 1 | 0.100 | 111 | 70 - 130 |

**Sample: 151241 - MW 7**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | **0.00170** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.107 | mg/L | 1 | 0.100 | 107 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.114 | mg/L | 1 | 0.100 | 114 | 70 - 130 |

**Sample: 151242 - MW 32**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | **0.00250** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.109 | mg/L | 1 | 0.100 | 109 | 70 - 130 |

**Sample: 151243 - MW 3**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00160** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.103 | mg/L | 1 | 0.100 | 103 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 70 - 130 |

**Sample: 151244 - MW 37**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilntion | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 70 - 130 |

**Sample: 151245 - MW 8**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.109 | mg/L | 1 | 0.100 | 109 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.107 | mg/L | 1 | 0.100 | 107 | 70 - 130 |

**Sample: 151246 - MW 1**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0310** | mg/L | 1 | 0.00100 |

*continued . . .*

*sample 151246 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.108** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0727** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.108 | mg/L | 1 | 0.100 | 108 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | [1] | 0.134 | mg/L | 1 | 0.100 | 134 | 70 - 130 |

**Sample: 151247 - MW 13**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00240** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00180** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00130** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | [2] | 0.131 | mg/L | 1 | 0.100 | 131 | 70 - 130 |

**Sample: 151248 - MW 4**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00360** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.0203** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0344** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.116 | mg/L | 1 | 0.100 | 116 | 70 - 130 |

[1] High surrogate recovery due to peak interference.
[2] High surrogate recovery due to peak interference.

**Sample: 151249 - MW 16**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00290** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00480** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00330** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.121 | mg/L | 1 | 0.100 | 121 | 70 - 130 |

**Sample: 151250 - MW 6**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | Sample Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00500 | mg/L | 5 | 0.00100 |
| Toluene | | <0.00500 | mg/L | 5 | 0.00100 |
| Ethylbenzene | | <0.00500 | mg/L | 5 | 0.00100 |
| Xylene | | <0.00500 | mg/L | 5 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.519 | mg/L | 5 | 0.500 | 104 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.542 | mg/L | 5 | 0.500 | 108 | 70 - 130 |

**Sample: 151251 - MW 2**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45941 | Date Analyzed: | 2008-02-25 | Analyzed By: | DC |
| Prep Batch: | 39552 | Sample Preparation: | 2008-02-25 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0219** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00200** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00120** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.101 | mg/L | 1 | 0.100 | 101 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | [3] | 0.131 | mg/L | 1 | 0.100 | 131 | 70 - 130 |

**Sample: 151252 - MW 38**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 45941 | Date Analyzed: | 2008-02-25 | Analyzed By: | DC |
| Prep Batch: | 39552 | Sample Preparation: | 2008-02-25 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0242** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.125** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00740** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.101 | mg/L | 1 | 0.100 | 101 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.125 | mg/L | 1 | 0.100 | 125 | 70 - 130 |

**Method Blank (1)** QC Batch: 45872

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 45872 | Date Analyzed: | 2008-02-22 | Analyzed By: | DC |
| Prep Batch: | 39433 | QC Preparation: | 2008-02-21 | Prepared By: | DC |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000500 | mg/L | 0.001 |
| Xylene | | <0.000400 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.105 | mg/L | 1 | 0.100 | 105 | 70 - 130 |

**Method Blank (1)** QC Batch: 45941

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 45941 | Date Analyzed: | 2008-02-25 | Analyzed By: | DC |
| Prep Batch: | 39552 | QC Preparation: | 2008-02-25 | Prepared By: | DC |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |

*continued ...*

[3]High surrogate recovery due to peak interference.

*method blank continued ...*

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000500 | mg/L | 0.001 |
| Xylene | | <0.000400 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0997 | mg/L | 1 | 0.100 | 100 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.114 | mg/L | 1 | 0.100 | 114 | 70 - 130 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 45872 | Date Analyzed: 2008-02-22 | Analyzed By: DC
Prep Batch: 39433 | QC Preparation: 2008-02-21 | Prepared By: DC

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.104 | mg/L | 1 | 0.100 | <0.000300 | 104 | 70 - 130 |
| Toluene | 0.104 | mg/L | 1 | 0.100 | <0.000200 | 104 | 70 - 130 |
| Ethylbenzene | 0.105 | mg/L | 1 | 0.100 | <0.000500 | 105 | 70 - 130 |
| Xylene | 0.314 | mg/L | 1 | 0.300 | <0.000400 | 105 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.103 | mg/L | 1 | 0.100 | <0.000300 | 103 | 70 - 130 | 1 | 20 |
| Toluene | 0.104 | mg/L | 1 | 0.100 | <0.000200 | 104 | 70 - 130 | 0 | 20 |
| Ethylbenzene | 0.105 | mg/L | 1 | 0.100 | <0.000500 | 105 | 70 - 130 | 0 | 20 |
| Xylene | 0.312 | mg/L | 1 | 0.300 | <0.000400 | 104 | 70 - 130 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.105 | 0.105 | mg/L | 1 | 0.100 | 105 | 105 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 0.106 | 0.107 | mg/L | 1 | 0.100 | 106 | 107 | 70 - 130 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 45941 | Date Analyzed: 2008-02-25 | Analyzed By: DC
Prep Batch: 39552 | QC Preparation: 2008-02-25 | Prepared By: DC

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.110 | mg/L | 1 | 0.100 | <0.000300 | 110 | 70 - 130 |
| Toluene | 0.111 | mg/L | 1 | 0.100 | <0.000200 | 111 | 70 - 130 |
| Ethylbenzene | 0.112 | mg/L | 1 | 0.100 | <0.000500 | 112 | 70 - 130 |
| Xylene | 0.334 | mg/L | 1 | 0.300 | <0.000400 | 111 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.109 | mg/L | 1 | 0.100 | <0.000300 | 109 | 70 - 130 | 1 | 20 |
| Toluene | 0.110 | mg/L | 1 | 0.100 | <0.000200 | 110 | 70 - 130 | 1 | 20 |
| Ethylbenzene | 0.112 | mg/L | 1 | 0.100 | <0.000500 | 112 | 70 - 130 | 0 | 20 |
| Xylene | 0.333 | mg/L | 1 | 0.300 | <0.000400 | 111 | 70 - 130 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.101 | 0.100 | mg/L | 1 | 0.100 | 101 | 100 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 0.115 | 0.116 | mg/L | 1 | 0.100 | 115 | 116 | 70 - 130 |

**Matrix Spike (MS-1)** Spiked Sample: 151250

QC Batch: 45872
Prep Batch: 39433

Date Analyzed: 2008-02-22
QC Preparation: 2008-02-21

Analyzed By: DC
Prepared By: DC

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Resnlt | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.484 | mg/L | 5 | 0.500 | <0.00150 | 97 | 70 - 130 |
| Toluene | 0.481 | mg/L | 5 | 0.500 | <0.00100 | 96 | 70 - 130 |
| Ethylbenzene | 0.489 | mg/L | 5 | 0.500 | 0.0036 | 97 | 70 - 130 |
| Xylene | 1.45 | mg/L | 5 | 1.50 | 0.0048 | 96 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.492 | mg/L | 5 | 0.500 | <0.00150 | 98 | 70 - 130 | 2 | 20 |
| Toluene | 0.496 | mg/L | 5 | 0.500 | <0.00100 | 99 | 70 - 130 | 3 | 20 |
| Ethylbenzene | 0.499 | mg/L | 5 | 0.500 | 0.0036 | 99 | 70 - 130 | 2 | 20 |
| Xylene | 1.48 | mg/L | 5 | 1.50 | 0.0048 | 98 | 70 - 130 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.516 | 0.526 | mg/L | 5 | 0.5 | 103 | 105 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 0.544 | 0.545 | mg/L | 5 | 0.5 | 109 | 109 | 70 - 130 |

**Matrix Spike (MS-1)** Spiked Sample: 151571

QC Batch: 45941
Prep Batch: 39552

Date Analyzed: 2008-02-25
QC Preparation: 2008-02-25

Analyzed By: DC
Prepared By: DC

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.490 | mg/L | 5 | 0.500 | <0.00150 | 98 | 70 - 130 |
| Toluene | 0.494 | mg/L | 5 | 0.500 | <0.00100 | 99 | 70 - 130 |
| Ethylbenzene | 0.501 | mg/L | 5 | 0.500 | <0.00250 | 100 | 70 - 130 |
| Xylene | 1.49 | mg/L | 5 | 1.50 | <0.00200 | 99 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.505 | mg/L | 5 | 0.500 | <0.00150 | 101 | 70 - 130 | 3 | 20 |
| Toluene | 0.510 | mg/L | 5 | 0.500 | <0.00100 | 102 | 70 - 130 | 3 | 20 |
| Ethylbenzene | 0.518 | mg/L | 5 | 0.500 | <0.00250 | 104 | 70 - 130 | 3 | 20 |
| Xylene | 1.55 | mg/L | 5 | 1.50 | <0.00200 | 103 | 70 - 130 | 4 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.556 | 0.553 | mg/L | 5 | 0.5 | 111 | 111 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 0.564 | 0.564 | mg/L | 5 | 0.5 | 113 | 113 | 70 - 130 |

**Standard (ICV-1)**

QC Batch: 45872 Date Analyzed: 2008-02-22 Analyzed By: DC

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.104 | 104 | 85 - 115 | 2008-02-22 |
| Toluene | | mg/L | 0.100 | 0.105 | 105 | 85 - 115 | 2008-02-22 |
| Ethylbenzene | | mg/L | 0.100 | 0.106 | 106 | 85 - 115 | 2008-02-22 |
| Xylene | | mg/L | 0.300 | 0.315 | 105 | 85 - 115 | 2008-02-22 |

**Standard (CCV-1)**

QC Batch: 45872 Date Analyzed: 2008-02-22 Analyzed By: DC

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.108 | 108 | 85 - 115 | 2008-02-22 |
| Toluene | | mg/L | 0.100 | 0.109 | 109 | 85 - 115 | 2008-02-22 |
| Ethylbenzene | | mg/L | 0.100 | 0.110 | 110 | 85 - 115 | 2008-02-22 |
| Xylene | | mg/L | 0.300 | 0.329 | 110 | 85 - 115 | 2008-02-22 |

**Standard (ICV-1)**

QC Batch: 45941 Date Analyzed: 2008-02-25 Analyzed By: DC

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.108 | 108 | 85 - 115 | 2008-02-25 |
| Toluene | | mg/L | 0.100 | 0.111 | 111 | 85 - 115 | 2008-02-25 |
| Ethylbenzene | | mg/L | 0.100 | 0.114 | 114 | 85 - 115 | 2008-02-25 |
| Xylene | | mg/L | 0.300 | 0.342 | 114 | 85 - 115 | 2008-02-25 |

**Standard (CCV-1)**

QC Batch: 45941 Date Analyzed: 2008-02-25 Analyzed By: DC

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.110 | 110 | 85 - 115 | 2008-02-25 |
| Toluene | | mg/L | 0.100 | 0.112 | 112 | 85 - 115 | 2008-02-25 |
| Ethylbenzene | [4] | mg/L | 0.100 | 0.116 | 116 | 85 - 115 | 2008-02-25 |
| Xylene | [5] | mg/L | 0.300 | 0.348 | 116 | 85 - 115 | 2008-02-25 |

[4]Ethylbenzene outside of control limits on CCV. CCV component average is .1129 which is within acceptable range. This is acceptable by Method 8000.

[5]Xylene outside of control limits on CCV. CCV component average is .1129 which is within acceptable range. This is acceptable by Method 8000.

LAB Order ID # 8022108



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: Nova
Phone #: 432 520 7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Curt Stanley
E-mail:
Invoice to: (if different from above) Plains
Project #: TNM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): NM
Sampler Signature: JI

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 233 | mw 23 | 3 | Voa | X | | | | X | | | | X | | 2-20-8 | 945 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 234 | mw 26 | | | | | | | | | | | | | | 1030 | | | | | | | | | | | | | | | | | | | | | | | | |
| 235 | mw 28 | | | | | | | | | | | | | | 1100 | | | | | | | | | | | | | | | | | | | | | | | | |
| 236 | mw 31 | | | | | | | | | | | | | | 1145 | | | | | | | | | | | | | | | | | | | | | | | | |
| 237 | mw 33 | | | | | | | | | | | | | | 1200 | | | | | | | | | | | | | | | | | | | | | | | | |
| 238 | mw 9 | | | | | | | | | | | | | | 1215 | | | | | | | | | | | | | | | | | | | | | | | | |
| 239 | mw 15 | | | | | | | | | | | | | | 1230 | | | | | | | | | | | | | | | | | | | | | | | | |
| 240 | mw 10 | | | | | | | | | | | | | | 1245 | | | | | | | | | | | | | | | | | | | | | | | | |
| 241 | mw 7 | | | | | | | | | | | | | | 1300 | | | | | | | | | | | | | | | | | | | | | | | | |
| 242 | mw 32 | | | | | | | | | | | | | | 1315 | | | | | | | | | | | | | | | | | | | | | | | | |
| 243 | mw 3 | | | | | | | | | | | | | | 1330 | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 2-21-8 | 838 | [signature] | TRACE | 2/21/08 | 8:38 | 3.0°C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |

**LAB USE ONLY**
Intact (Y) N
Headspace Y (N) NA
3.0
Log-in-Review

**REMARKS:** all tests - Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # carry in

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LAB Order ID # 8022108



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: Nova
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Curt Stanley
E-mail:
Invoice to: (if different from above) Plains
Project #: TNM-LF-2000-7
Project Name: Bob Dunham
Project Location (including state): NM
Sampler Signature: JT

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 51244 | mw 37 | 3 | voa | X | | | | X | | | | X | | 2-20-8 | 1345 | | X | | | | | | | | | | | | | | | | | | | | | |
| 245 | mw 8 | | | | | | | | | | | | | | 1415 | | | | | | | | | | | | | | | | | | | | | | | |
| 246 | mw 1 | | | | | | | | | | | | | | 1430 | | | | | | | | | | | | | | | | | | | | | | | |
| 247 | mw 13 | | | | | | | | | | | | | | 1445 | | | | | | | | | | | | | | | | | | | | | | | |
| 248 | mw 4 | | | | | | | | | | | | | | 1500 | | | | | | | | | | | | | | | | | | | | | | | |
| 249 | mw 16 | | | | | | | | | | | | | | 1530 | | | | | | | | | | | | | | | | | | | | | | | |
| 250 | mw 6 | | | | | | | | | | | | | | 1545 | | | | | | | | | | | | | | | | | | | | | | | |
| 251 | mw 2 | | | | | | | | | | | | | | 1615 | | | | | | | | | | | | | | | | | | | | | | | |
| 252 | mw 38 | | | | | | | | | | | | | | 1645 | | | | | | | | | | | | | | | | | | | | | | | |
| | ~~mw 5~~ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 2-21-8 | 838 | [signature] | TRACE | 2/21/00 | 8:30 | 3.0 |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| | | | | | | | | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| | | | | | | | | |

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
3.0
Log-in-Review

REMARKS: all tests - Midland

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # carry in

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TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: May 28, 2008

Work Order: 8052201

Project Location: West of Monument, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 160749 | MW 7 | water | 2008-05-20 | 12:00 | 2008-05-22 |
| 160750 | MW 8 | water | 2008-05-20 | 12:30 | 2008-05-22 |
| 160751 | MW 6 | water | 2008-05-20 | 13:00 | 2008-05-22 |
| 160752 | MW 3 | water | 2008-05-20 | 13:30 | 2008-05-22 |
| 160753 | MW 16 | water | 2008-05-20 | 14:00 | 2008-05-22 |
| 160754 | MW 2 | water | 2008-05-20 | 14:30 | 2008-05-22 |
| 160755 | MW 5 | water | 2008-05-20 | 15:00 | 2008-05-22 |
| 160756 | MW 23 | water | 2008-05-21 | 09:45 | 2008-05-22 |
| 160757 | MW 24 | water | 2008-05-21 | 10:00 | 2008-05-22 |
| 160758 | MW 26 | water | 2008-05-21 | 10:15 | 2008-05-22 |
| 160759 | MW 27 | water | 2008-05-21 | 10:30 | 2008-05-22 |
| 160760 | MW 28 | water | 2008-05-21 | 10:45 | 2008-05-22 |
| 160761 | MW 31 | water | 2008-05-21 | 11:00 | 2008-05-22 |
| 160762 | MW 33 | water | 2008-05-21 | 11:15 | 2008-05-22 |
| 160763 | MW 9 | water | 2008-05-21 | 11:30 | 2008-05-22 |
| 160764 | MW 15 | water | 2008-05-21 | 11:45 | 2008-05-22 |
| 160765 | MW 10 | water | 2008-05-21 | 12:00 | 2008-05-22 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 160766 | MW 32 | water | 2008-05-21 | 12:15 | 2008-05-22 |
| 160767 | MW 37 | water | 2008-05-21 | 12:30 | 2008-05-22 |
| 160768 | MW 14 | water | 2008-05-21 | 12:45 | 2008-05-22 |
| 160769 | MW 13 | water | 2008-05-21 | 13:00 | 2008-05-22 |
| 160770 | MW 38 | water | 2008-05-21 | 13:15 | 2008-05-22 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Dr. Blair Leftwich, Director

**Certifications**
Lubbock - NELAP T104704219-08-TX
El Paso - NELAP T104704221-08-TX

**Standard Flags**
**B** - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2008-05-22 and assigned to work order 8052201. Samples for work order 8052201 were received intact without headspace and at a temperature of 3.2 deg C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method |
|---|---|
| BTEX | S 8021B |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 8052201 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 160749 - MW 7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | **0.00120** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0967 | mg/L | 1 | 0.100 | 97 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0885 | mg/L | 1 | 0.100 | 88 | 70 - 130 |

**Sample: 160750 - MW 8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.100 | mg/L | 1 | 0.100 | 100 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0893 | mg/L | 1 | 0.100 | 89 | 70 - 130 |

**Sample: 160751 - MW 6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00380** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00340** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00320** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0967 | mg/L | 1 | 0.100 | 97 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0887 | mg/L | 1 | 0.100 | 89 | 70 - 130 |

**Sample: 160752 - MW 3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0978 | mg/L | 1 | 0.100 | 98 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0876 | mg/L | 1 | 0.100 | 88 | 70 - 130 |

**Sample: 160753 - MW 16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00210** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00330** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00220** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0976 | mg/L | 1 | 0.100 | 98 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0972 | mg/L | 1 | 0.100 | 97 | 70 - 130 |

**Sample: 160754 - MW 2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0185** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0997 | mg/L | 1 | 0.100 | 100 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.101 | mg/L | 1 | 0.100 | 101 | 70 - 130 |

**Sample: 160755 - MW 5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0995** | mg/L | 5 | 0.00100 |
| Toluene | | <0.00500 | mg/L | 5 | 0.00100 |
| Ethylbenzene | | **0.0170** | mg/L | 5 | 0.00100 |
| Xylene | | <0.00500 | mg/L | 5 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.480 | mg/L | 5 | 0.500 | 96 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.441 | mg/L | 5 | 0.500 | 88 | 70 - 130 |

**Sample: 160756 - MW 23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0994 | mg/L | 1 | 0.100 | 99 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0882 | mg/L | 1 | 0.100 | 88 | 70 - 130 |

**Sample: 160757 - MW 24**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0943 | mg/L | 1 | 0.100 | 94 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0842 | mg/L | 1 | 0.100 | 84 | 70 - 130 |

**Sample: 160758 - MW 26**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0969 | mg/L | 1 | 0.100 | 97 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0863 | mg/L | 1 | 0.100 | 86 | 70 - 130 |

**Sample: 160759 - MW 27**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0972 | mg/L | 1 | 0.100 | 97 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0869 | mg/L | 1 | 0.100 | 87 | 70 - 130 |

**Sample: 160760 - MW 28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.101 | mg/L | 1 | 0.100 | 101 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0895 | mg/L | 1 | 0.100 | 90 | 70 - 130 |

**Sample: 160761 - MW 31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0949 | mg/L | 1 | 0.100 | 95 | 70 - 130 |

**Sample: 160762 - MW 33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0967 | mg/L | 1 | 0.100 | 97 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0864 | mg/L | 1 | 0.100 | 86 | 70 - 130 |

**Sample: 160763 - MW 9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | Sample Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0992 | mg/L | 1 | 0.100 | 99 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0882 | mg/L | 1 | 0.100 | 88 | 70 - 130 |

**Sample: 160764 - MW 15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48752 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41851 | Sample Preparation: | 2008-05-23 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0964 | mg/L | 1 | 0.100 | 96 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0859 | mg/L | 1 | 0.100 | 86 | 70 - 130 |

**Sample: 160765 - MW 10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48752 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41851 | Sample Preparation: | 2008-05-23 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0963 | mg/L | 1 | 0.100 | 96 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0863 | mg/L | 1 | 0.100 | 86 | 70 - 130 |

**Sample: 160766 - MW 32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48752 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41851 | Sample Preparation: | 2008-05-23 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0955 | mg/L | 1 | 0.100 | 96 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0859 | mg/L | 1 | 0.100 | 86 | 70 - 130 |

**Sample: 160767 - MW 37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48752 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41851 | Sample Preparation: | 2008-05-23 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0973 | mg/L | 1 | 0.100 | 97 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0871 | mg/L | 1 | 0.100 | 87 | 70 - 130 |

**Sample: 160768 - MW 14**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48752 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41851 | Sample Preparation: | 2008-05-23 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbeuzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0944 | mg/L | 1 | 0.100 | 94 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0847 | mg/L | 1 | 0.100 | 85 | 70 - 130 |

**Sample: 160769 - MW 13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48752 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41851 | Sample Preparation: | 2008-05-23 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0187** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0994 | mg/L | 1 | 0.100 | 99 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 70 - 130 |

**Sample: 160770 - MW 38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 48752 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41851 | Sample Preparation: | 2008-05-23 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0121** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.0287** | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0932 | mg/L | 1 | 0.100 | 93 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0878 | mg/L | 1 | 0.100 | 88 | 70 - 130 |

**Method Blank (1)** QC Batch: 48720

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 48720 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41827 | QC Preparation: | 2008-05-22 | Prepared By: | DC |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000200 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000200 | mg/L | 0.001 |
| Xylene | | <0.000300 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0962 | mg/L | 1 | 0.100 | 96 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0860 | mg/L | 1 | 0.100 | 86 | 70 - 130 |

**Method Blank (1)** QC Batch: 48752

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 48752 | Date Analyzed: | 2008-05-23 | Analyzed By: | DC |
| Prep Batch: | 41851 | QC Preparation: | 2008-05-23 | Prepared By: | DC |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000200 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |

*continued ...*

*method blank continued ...*

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Ethylbenzene | | <0.000200 | mg/L | 0.001 |
| Xylene | | <0.000300 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0989 | mg/L | 1 | 0.100 | 99 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0874 | mg/L | 1 | 0.100 | 87 | 70 - 130 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 48720 | Date Analyzed: 2008-05-23 | Analyzed By: DC
Prep Batch: 41827 | QC Preparation: 2008-05-22 | Prepared By: DC

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0819 | mg/L | 1 | 0.100 | <0.000200 | 82 | 70 - 130 |
| Toluene | 0.0827 | mg/L | 1 | 0.100 | <0.000200 | 83 | 70 - 130 |
| Ethylbenzene | 0.0837 | mg/L | 1 | 0.100 | <0.000200 | 84 | 70 - 130 |
| Xylene | 0.248 | mg/L | 1 | 0.300 | <0.000300 | 83 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0851 | mg/L | 1 | 0.100 | <0.000200 | 85 | 70 - 130 | 4 | 20 |
| Toluene | 0.0868 | mg/L | 1 | 0.100 | <0.000200 | 87 | 70 - 130 | 5 | 20 |
| Ethylbenzene | 0.0896 | mg/L | 1 | 0.100 | <0.000200 | 90 | 70 - 130 | 7 | 20 |
| Xylene | 0.265 | mg/L | 1 | 0.300 | <0.000300 | 88 | 70 - 130 | 7 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0955 | 0.0957 | mg/L | 1 | 0.100 | 96 | 96 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 0.0860 | 0.0867 | mg/L | 1 | 0.100 | 86 | 87 | 70 - 130 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 48752 | Date Analyzed: 2008-05-23 | Analyzed By: DC
Prep Batch: 41851 | QC Preparation: 2008-05-23 | Prepared By: DC

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0944 | mg/L | 1 | 0.100 | <0.000200 | 94 | 70 - 130 |
| Toluene | 0.0976 | mg/L | 1 | 0.100 | <0.000200 | 98 | 70 - 130 |
| Ethylbenzene | 0.101 | mg/L | 1 | 0.100 | <0.000200 | 101 | 70 - 130 |
| Xylene | 0.298 | mg/L | 1 | 0.300 | <0.000300 | 99 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0936 | mg/L | 1 | 0.100 | <0.000200 | 94 | 70 - 130 | 1 | 20 |
| Toluene | 0.0967 | mg/L | 1 | 0.100 | <0.000200 | 97 | 70 - 130 | 1 | 20 |
| Ethylbenzene | 0.0997 | mg/L | 1 | 0.100 | <0.000200 | 100 | 70 - 130 | 1 | 20 |
| Xylene | 0.294 | mg/L | 1 | 0.300 | <0.000300 | 98 | 70 - 130 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0981 | 0.0993 | mg/L | 1 | 0.100 | 98 | 99 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 0.0893 | 0.0899 | mg/L | 1 | 0.100 | 89 | 90 | 70 - 130 |

**Matrix Spike (MS-1)** Spiked Sample: 160747

QC Batch: 48720 | Date Analyzed: 2008-05-23 | Analyzed By: DC
Prep Batch: 41827 | QC Preparation: 2008-05-22 | Prepared By: DC

| Param | MS Result | Units | Dil. | Spike Amonnt | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 7.99 | mg/L | 50 | 5.00 | 3.115 | 98 | 70 - 130 |
| Toluene | 4.69 | mg/L | 50 | 5.00 | 0.0763 | 92 | 70 - 130 |
| Ethylbenzene | 4.71 | mg/L | 50 | 5.00 | 0.0199 | 94 | 70 - 130 |
| Xylene | 13.8 | mg/L | 50 | 15.0 | 0.0368 | 92 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 7.89 | mg/L | 50 | 5.00 | 3.115 | 96 | 70 - 130 | 1 | 20 |
| Toluene | 4.64 | mg/L | 50 | 5.00 | 0.0763 | 91 | 70 - 130 | 1 | 20 |
| Ethylbenzene | 4.61 | mg/L | 50 | 5.00 | 0.0199 | 92 | 70 - 130 | 2 | 20 |
| Xylene | 13.6 | mg/L | 50 | 15.0 | 0.0368 | 90 | 70 - 130 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 5.27 | 5.32 | mg/L | 50 | 5 | 105 | 106 | 70 - 130 |

*continued ...*

*matrix spikes continued ...*

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (4-BFB) | 4.76 | 4.80 | mg/L | 50 | 5 | 95 | 96 | 70 - 130 |

**Matrix Spike (MS-1)** Spiked Sample: 160841

QC Batch: 48752 Date Analyzed: 2008-05-23 Analyzed By: DC
Prep Batch: 41851 QC Preparation: 2008-05-23 Prepared By: DC

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.378 | mg/L | 5 | 0.500 | 0.0053 | 74 | 70 - 130 |
| Toluene | 0.385 | mg/L | 5 | 0.500 | <0.00100 | 77 | 70 - 130 |
| Ethylbenzene | 0.398 | mg/L | 5 | 0.500 | <0.00100 | 80 | 70 - 130 |
| Xylene | 1.17 | mg/L | 5 | 1.50 | <0.00150 | 78 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.378 | mg/L | 5 | 0.500 | 0.0053 | 74 | 70 - 130 | 0 | 20 |
| Toluene | 0.385 | mg/L | 5 | 0.500 | <0.00100 | 77 | 70 - 130 | 0 | 20 |
| Ethylbenzene | 0.399 | mg/L | 5 | 0.500 | <0.00100 | 80 | 70 - 130 | 0 | 20 |
| Xylene | 1.18 | mg/L | 5 | 1.50 | <0.00150 | 79 | 70 - 130 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.471 | 0.478 | mg/L | 5 | 0.5 | 94 | 96 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 0.429 | 0.434 | mg/L | 5 | 0.5 | 86 | 87 | 70 - 130 |

**Standard (ICV-1)**

QC Batch: 48720 Date Analyzed: 2008-05-23 Analyzed By: DC

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0872 | 87 | 85 - 115 | 2008-05-23 |
| Toluene | | mg/L | 0.100 | 0.0891 | 89 | 85 - 115 | 2008-05-23 |
| Ethylbenzene | | mg/L | 0.100 | 0.0919 | 92 | 85 - 115 | 2008-05-23 |
| Xylene | | mg/L | 0.300 | 0.272 | 91 | 85 - 115 | 2008-05-23 |

**Standard (CCV-1)**

QC Batch: 48720 Date Analyzed: 2008-05-23 Analyzed By: DC

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0846 | 85 | 85 - 115 | 2008-05-23 |
| Toluene | | mg/L | 0.100 | 0.0857 | 86 | 85 - 115 | 2008-05-23 |
| Ethylbenzene | | mg/L | 0.100 | 0.0879 | 88 | 85 - 115 | 2008-05-23 |
| Xylene | | mg/L | 0.300 | 0.259 | 86 | 85 - 115 | 2008-05-23 |

**Standard (ICV-1)**

QC Batch: 48752 Date Analyzed: 2008-05-23 Analyzed By: DC

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0849 | 85 | 85 - 115 | 2008-05-23 |
| Toluene | | mg/L | 0.100 | 0.0870 | 87 | 85 - 115 | 2008-05-23 |
| Ethylbenzene | | mg/L | 0.100 | 0.0897 | 90 | 85 - 115 | 2008-05-23 |
| Xylene | | mg/L | 0.300 | 0.265 | 88 | 85 - 115 | 2008-05-23 |

**Standard (CCV-1)**

QC Batch: 48752 Date Analyzed: 2008-05-23 Analyzed By: DC

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.104 | 104 | 85 - 115 | 2008-05-23 |
| Toluene | | mg/L | 0.100 | 0.106 | 106 | 85 - 115 | 2008-05-23 |
| Ethylbenzene | | mg/L | 0.100 | 0.109 | 109 | 85 - 115 | 2008-05-23 |
| Xylene | | mg/L | 0.300 | 0.322 | 107 | 85 - 115 | 2008-05-23 |

LAB Order ID # 8052201



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
**Lubbock, Texas 79424**
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
**Midland, Texas 79703**
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
**El Paso, Texas 79922**
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
**Ft. Worth, Texas 76116**
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: NOVA
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Comerce Dr.
Fax #:
Contact Person: Ron R.
E-mail:
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): NM
Sampler Signature: JM

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | | SAMPLING: DATE | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 160749 | MW 7 | 3 | VOA | X | | | | | X | | | | X | | | 5.20.8 | 1200 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 750 | MW 8 | 3 | VOA | X | | | | | X | | | | X | | | 5.20.8 | 1230 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 751 | MW 6 | 3 | VOA | X | | | | | X | | | | X | | | 5.20.8 | 1300 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 752 | MW 3 | 3 | VOA | X | | | | | X | | | | X | | | 5.20.8 | 1330 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 753 | MW 16 | 3 | VOA | X | | | | | X | | | | X | | | 5.20.8 | 1400 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 754 | MW 2 | 3 | VOA | X | | | | | X | | | | X | | | 5.20.8 | 1430 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 755 | MW 5 | 3 | VOA | X | | | | | X | | | | X | | | 5.20.8 | 1500 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 756 | MW 23 | 3 | VOA | X | | | | | X | | | | X | | | 5.21.8 | 945 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 757 | MW 24 | 3 | VOA | X | | | | | X | | | | X | | | 5.21.8 | 1000 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 758 | MW 26 | 3 | VOA | X | | | | | X | | | | X | | | 5.21.8 | 1015 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 759 | MW 27 | 3 | VOA | X | | | | | X | | | | X | | | 5.21.8 | 1030 | | X | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°C: |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 5/22/08 | 8:00 am | [signature] | | 5/22/08 | 8:00 | |
| | | | | | | | | |
| | | | | | | | | |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
3.2 °
Log-in-Review [signature]

**REMARKS:**
All tests - Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # CARRY IN

ORIGINAL COPY

LAB Order ID # 8052201



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: NOVA
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Comerce Dr.
Fax #:
Contact Person: Ron R.
E-mail:
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): NM
Sampler Signature: JM

ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH B015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1600760 | MW28 | 3 | VOA | X | | | | X | | | | X | | 5.21.8 | 1045 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 761 | MW31 | 3 | VOA | X | | | | X | | | | X | | 5.21.8 | 1100 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 762 | MW33 | 3 | VOA | X | | | | X | | | | X | | 5.21.8 | 1115 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 763 | MW9 | 3 | VOA | X | | | | X | | | | X | | 5.21.8 | 1130 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 764 | MW15 | 3 | VOA | X | | | | X | | | | X | | 5.21.8 | 1145 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 765 | MW10 | 3 | VOA | X | | | | X | | | | X | | 5.21.8 | 1200 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 766 | MW32 | 3 | VOA | X | | | | X | | | | X | | 5.21.8 | 1215 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 767 | MW37 | 3 | VOA | X | | | | X | | | | X | | 5.21.8 | 1230 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 768 | MW14 | 3 | VOA | X | | | | X | | | | X | | 5.21.8 | 1245 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 769 | MW13 | 3 | VOA | X | | | | X | | | | X | | 5.21.8 | 1300 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 770 | MW38 | 3 | VOA | X | | | | X | | | | X | | 5.21.8 | 1315 | | X | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°C: |
|---|---|---|---|---|---|---|---|---|
| [signature] | NOVA | 5/22/08 | 8:00am | [signature] | | 5/22/08 | 8:00 | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°C: |
| | | | | | | | | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°C: |
| | | | | | | | | |

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
3.2
Log-in-Review A

REMARKS:
All to Lab-Midland

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # CARRY IN

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: June 11, 2008

Work Order: 8060642

Project Location: West of Monument, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 162256 | MW 1 | water | 2008-06-05 | 14:30 | 2008-06-06 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 6 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

**Certifications**
Lubbock - NELAP T104704219-08-TX
El Paso - NELAP T104704221-08-TX

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2008-06-06 and assigned to work order 8060642. Samples for work order 8060642 were received intact without headspace and at a temperature of 4.0 deg C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method |
|---|---|
| BTEX | S 8021B |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 8060642 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 162256 - MW 1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 49208 | Date Analyzed: | 2008-06-10 | Analyzed By: | DC |
| Prep Batch: | 42246 | Sample Preparation: | 2008-06-09 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0466** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.0244** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0208** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0932 | mg/L | 1 | 0.100 | 93 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.109 | mg/L | 1 | 0.100 | 109 | 52 - 124.1 |

**Method Blank (1)** QC Batch: 49208

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 49208 | Date Analyzed: | 2008-06-10 | Analyzed By: | DC |
| Prep Batch: | 42246 | QC Preparation: | 2008-06-09 | Prepared By: | DC |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000200 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000200 | mg/L | 0.001 |
| Xylene | | <0.000300 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0920 | mg/L | 1 | 0.100 | 92 | 44.6 - 137.4 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0903 | mg/L | 1 | 0.100 | 90 | 37.1 - 130.9 |

**Laboratory Control Spike (LCS-1)**

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 49208 | Date Analyzed: | 2008-06-10 | Analyzed By: | DC |
| Prep Batch: | 42246 | QC Preparation: | 2008-06-09 | Prepared By: | DC |

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0837 | mg/L | 1 | 0.100 | <0.000200 | 84 | 71.7 - 120.5 |
| Toluene | 0.0838 | mg/L | 1 | 0.100 | <0.000200 | 84 | 75.4 - 118.8 |
| Ethylbenzene | 0.0835 | mg/L | 1 | 0.100 | <0.000200 | 84 | 73.5 - 118 |
| Xylene | 0.251 | mg/L | 1 | 0.300 | <0.000300 | 84 | 72.9 - 118.2 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0832 | mg/L | 1 | 0.100 | <0.000200 | 83 | 71.7 - 120.5 | 1 | 20 |
| Toluene | 0.0833 | mg/L | 1 | 0.100 | <0.000200 | 83 | 75.4 - 118.8 | 1 | 20 |
| Ethylbenzene | 0.0830 | mg/L | 1 | 0.100 | <0.000200 | 83 | 73.5 - 118 | 1 | 20 |
| Xylene | 0.248 | mg/L | 1 | 0.300 | <0.000300 | 83 | 72.9 - 118.2 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0937 | 0.0933 | mg/L | 1 | 0.100 | 94 | 93 | 38.2 - 131.6 |
| 4-Bromofluorobenzene (4-BFB) | 0.0928 | 0.0924 | mg/L | 1 | 0.100 | 93 | 92 | 43.9 - 132.4 |

**Matrix Spike (MS-1)** Spiked Sample: 162257

QC Batch: 49208 Date Analyzed: 2008-06-10 Analyzed By: DC
Prep Batch: 42246 QC Preparation: 2008-06-09 Prepared By: DC

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 8.56 | mg/L | 50 | 5.00 | 3.6152 | 99 | 10 - 160.8 |
| Toluene | 4.43 | mg/L | 50 | 5.00 | 0.122 | 86 | 10 - 160.7 |
| Ethylbenzene | 5.40 | mg/L | 50 | 5.00 | 0.9841 | 88 | 10 - 158.3 |
| Xylene | 12.9 | mg/L | 50 | 15.0 | 0.1792 | 85 | 10 - 158 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 8.53 | mg/L | 50 | 5.00 | 3.6152 | 98 | 10 - 160.8 | 0 | 20 |
| Toluene | 4.37 | mg/L | 50 | 5.00 | 0.122 | 85 | 10 - 160.7 | 1 | 20 |
| Ethylbenzene | 5.38 | mg/L | 50 | 5.00 | 0.9841 | 88 | 10 - 158.3 | 0 | 20 |
| Xylene | 12.8 | mg/L | 50 | 15.0 | 0.1792 | 84 | 10 - 158 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 4.90 | 4.82 | mg/L | 50 | 5 | 98 | 96 | 33.1 - 132.5 |

*continued ...*

*matrix spikes continued ...*

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (4-BFB) | 4.83 | 4.76 | mg/L | 50 | 5 | 97 | 95 | 37.5 - 136 |

**Standard (ICV-1)**

QC Batch: 49208 Date Analyzed: 2008-06-10 Analyzed By: DC

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0852 | 85 | 85 - 115 | 2008-06-10 |
| Toluene | | mg/L | 0.100 | 0.0856 | 86 | 85 - 115 | 2008-06-10 |
| Ethylbenzene | | mg/L | 0.100 | 0.0851 | 85 | 85 - 115 | 2008-06-10 |
| Xylene | | mg/L | 0.300 | 0.255 | 85 | 85 - 115 | 2008-06-10 |

**Standard (CCV-1)**

QC Batch: 49208 Date Analyzed: 2008-06-10 Analyzed By: DC

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.104 | 104 | 85 - 115 | 2008-06-10 |
| Toluene | | mg/L | 0.100 | 0.103 | 103 | 85 - 115 | 2008-06-10 |
| Ethylbenzene | | mg/L | 0.100 | 0.102 | 102 | 85 - 115 | 2008-06-10 |
| Xylene | | mg/L | 0.300 | 0.306 | 102 | 85 - 115 | 2008-06-10 |

LAB Order ID # 8060642



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: NOVA

Phone #: 432-520-7720

Address: (Street, City, Zip) 2057 Commerce Dr

Fax #:

Contact Person: Ron Rounsaville

E-mail:

Invoice to: (If different from above) Plains

Project #: TNM-LF-2000-7

Project Name: Bob Durham

Project Location (including state): NM

Sampler Signature: JI

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2256 | mw 1 | 3 | voa | X | | | | X | | | | X | | 6.5.8 | 1430 | | X | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°C: |
|---|---|---|---|---|---|---|---|---|
| [signature] | NOVA | 6.6.8 | 1300 | ARoss | TRACE | 6.6.08 | 1300 | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°C: |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°C: |

LAB USE ONLY
Intact Y N
Headspace Y N NA
Log-in-Review

REMARKS:
All tests - Midland

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Carry In

ORIGINAL COPY

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1296
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

## NELAP Certifications

**Lubbock:** T104704219-08-TX
LELAP-02003
Kansas E-10317

**El Paso:** T104704221-08-TX
LELAP-02002

**Midland:** T104704392-08-TX

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: August 29, 2008

Work Order: 8082127

Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM LF 2000-07

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 171384 | MW-37 | water | 2008-08-20 | 10:00 | 2008-08-21 |
| 171385 | MW-8 | water | 2008-08-20 | 10:25 | 2008-08-21 |
| 171386 | MW-28 | water | 2008-08-20 | 10:40 | 2008-08-21 |
| 171387 | MW-3 | water | 2008-08-20 | 11:00 | 2008-08-21 |
| 171388 | MW-16 | water | 2008-08-20 | 11:20 | 2008-08-21 |
| 171389 | MW-6 | water | 2008-08-20 | 11:40 | 2008-08-21 |
| 171390 | MW-38 | water | 2008-08-20 | 12:00 | 2008-08-21 |
| 171391 | MW-2 | water | 2008-08-20 | 12:25 | 2008-08-21 |
| 171392 | MW-13 | water | 2008-08-20 | 12:45 | 2008-08-21 |
| 171393 | MW-1 | water | 2008-08-20 | 13:00 | 2008-08-21 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 171394 | MW-23 | water | 2008-08-20 | 12:45 | 2008-08-21 |
| 171395 | MW-26 | water | 2008-08-20 | 13:15 | 2008-08-21 |
| 171396 | MW-31 | water | 2008-08-20 | 14:00 | 2008-08-21 |
| 171397 | MW-33 | water | 2008-08-20 | 14:45 | 2008-08-21 |
| 171398 | MW-9 | water | 2008-08-20 | 15:20 | 2008-08-21 |
| 171399 | MW-15 | water | 2008-08-20 | 16:00 | 2008-08-21 |
| 171400 | MW-10 | water | 2008-08-20 | 16:30 | 2008-08-21 |
| 171401 | MW-7 | water | 2008-08-20 | 17:15 | 2008-08-21 |
| 171402 | MW-32 | water | 2008-08-20 | 17:45 | 2008-08-21 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Dr. Blair Leftwich, Director

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2008-08-21 and assigned to work order 8082127. Samples for work order 8082127 were received intact without headspace and at a temperature of 3.9 deg. C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method |
|---|---|
| BTEX | S 8021B |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occnrring, however, it may not pertain to the samples for work order 8082127 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 171384 - MW-37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.109 | mg/L | 1 | 0.100 | 109 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.107 | mg/L | 1 | 0.100 | 107 | 52 - 124.1 |

**Sample: 171385 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.112 | mg/L | 1 | 0.100 | 112 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.110 | mg/L | 1 | 0.100 | 110 | 52 - 124.1 |

**Sample: 171386 - MW-28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.113 | mg/L | 1 | 0.100 | 113 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.110 | mg/L | 1 | 0.100 | 110 | 52 - 124.1 |

**Sample: 171387 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.110 | mg/L | 1 | 0.100 | 110 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 52 - 124.1 |

**Sample: 171388 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00130** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00140** | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.108 | mg/L | 1 | 0.100 | 108 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.120 | mg/L | 1 | 0.100 | 120 | 52 - 124.1 |

**Sample: 171389 - MW-6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00320** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00270** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00270** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.114 | mg/L | 1 | 0.100 | 114 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.115 | mg/L | 1 | 0.100 | 115 | 52 - 124.1 |

**Sample: 171390 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0258** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.0940** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00340** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.114 | mg/L | 1 | 0.100 | 114 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.120 | mg/L | 1 | 0.100 | 120 | 52 - 124.1 |

**Sample: 171391 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0177** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00190** | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.109 | mg/L | 1 | 0.100 | 109 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.123 | mg/L | 1 | 0.100 | 123 | 52 - 124.1 |

**Sample: 171392 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0121** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00130** | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.112 | mg/L | 1 | 0.100 | 112 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | [1] | 0.129 | mg/L | 1 | 0.100 | 129 | 52 - 124.1 |

**Sample: 171393 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

[1] High surrogate recovery due to peak interference.

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0809** | mg/L | 1 | 0.00100 |
| Toluene | | **0.00250** | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.0482** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0763** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.114 | mg/L | 1 | 0.100 | 114 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | [2] | 0.136 | mg/L | 1 | 0.100 | 136 | 52 - 124.1 |

**Sample: 171394 - MW-23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00160** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.109 | mg/L | 1 | 0.100 | 109 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 52 - 124.1 |

**Sample: 171395 - MW-26**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

[2]High surrogate recovery due to peak interference.

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 52 - 124.1 |

**Sample: 171396 - MW-31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Triflnorotoluene (TFT) | | 0.107 | mg/L | 1 | 0.100 | 107 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.107 | mg/L | 1 | 0.100 | 107 | 52 - 124.1 |

**Sample: 171397 - MW-33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.108 | mg/L | 1 | 0.100 | 108 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 52 - 124.1 |

**Sample: 171398 - MW-9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.108 | mg/L | 1 | 0.100 | 108 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 52 - 124.1 |

**Sample: 171399 - MW-15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.108 | mg/L | 1 | 0.100 | 108 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 52 - 124.1 |

**Sample: 171400 - MW-10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.105 | mg/L | 1 | 0.100 | 105 | 52 - 124.1 |

**Sample: 171401 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.108 | mg/L | 1 | 0.100 | 108 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 52 - 124.1 |

**Sample: 171402 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Aualysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 51894 | Date Analyzed: | 2008-08-28 | Analyzed By: | DC |
| Prep Batch: | 44472 | Sample Preparation: | 2008-08-28 | Prepared By: | DC |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.111 | mg/L | 1 | 0.100 | 111 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.110 | mg/L | 1 | 0.100 | 110 | 52 - 124.1 |

**Method Blank (1)** QC Batch: 51894

QC Batch: 51894 Date Analyzed: 2008-08-28 Analyzed By: DC
Prep Batch: 44472 QC Preparation: 2008-08-28 Prepared By: DC

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000500 | mg/L | 0.001 |
| Toluene | | <0.000700 | mg/L | 0.001 |
| Ethylbenzene | | <0.000700 | mg/L | 0.001 |
| Xylene | | <0.00180 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.108 | mg/L | 1 | 0.100 | 108 | 44.6 - 137.4 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 37.1 - 130.9 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 51894 Date Analyzed: 2008-08-28 Analyzed By: DC
Prep Batch: 44472 QC Preparation: 2008-08-28 Prepared By: DC

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.112 | mg/L | 1 | 0.100 | <0.000500 | 112 | 71.7 - 120.5 |
| Toluene | 0.110 | mg/L | 1 | 0.100 | <0.000700 | 110 | 75.4 - 118.8 |
| Ethylbenzene | 0.109 | mg/L | 1 | 0.100 | <0.000700 | 109 | 73.5 - 118 |
| Xylene | 0.325 | mg/L | 1 | 0.300 | <0.00180 | 108 | 72.9 - 118.2 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.112 | mg/L | 1 | 0.100 | <0.000500 | 112 | 71.7 - 120.5 | 0 | 20 |
| Toluene | 0.111 | mg/L | 1 | 0.100 | <0.000700 | 111 | 75.4 - 118.8 | 1 | 20 |
| Ethylbenzene | 0.110 | mg/L | 1 | 0.100 | <0.000700 | 110 | 73.5 - 118 | 1 | 20 |
| Xylene | 0.330 | mg/L | 1 | 0.300 | <0.00180 | 110 | 72.9 - 118.2 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.109 | 0.107 | mg/L | 1 | 0.100 | 109 | 107 | 38.2 - 131.6 |
| 4-Bromofluorobenzene (4-BFB) | 0.109 | 0.109 | mg/L | 1 | 0.100 | 109 | 109 | 43.9 - 132.4 |

**Matrix Spike (MS-1)** Spiked Sample: 171422

QC Batch: 51894
Prep Batch: 44472

Date Analyzed: 2008-08-28
QC Preparation: 2008-08-28

Analyzed By: DC
Prepared By: DC

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0956 | mg/L | 1 | 0.100 | <0.000500 | 96 | 10 - 160.8 |
| Toluene | 0.0922 | mg/L | 1 | 0.100 | <0.000700 | 92 | 10 - 160.7 |
| Ethylbenzene | 0.0904 | mg/L | 1 | 0.100 | <0.000700 | 90 | 10 - 158.3 |
| Xylene | 0.269 | mg/L | 1 | 0.300 | <0.00180 | 90 | 10 - 158 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.100 | mg/L | 1 | 0.100 | <0.000500 | 100 | 10 - 160.8 | 4 | 20 |
| Toluene | 0.0990 | mg/L | 1 | 0.100 | <0.000700 | 99 | 10 - 160.7 | 7 | 20 |
| Ethylbenzene | 0.0980 | mg/L | 1 | 0.100 | <0.000700 | 98 | 10 - 158.3 | 8 | 20 |
| Xylene | 0.294 | mg/L | 1 | 0.300 | <0.00180 | 98 | 10 - 158 | 9 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.107 | 0.106 | mg/L | 1 | 0.1 | 107 | 106 | 33.1 - 132.5 |
| 4-Bromofluorobenzene (4-BFB) | 0.109 | 0.108 | mg/L | 1 | 0.1 | 109 | 108 | 37.5 - 136 |

**Standard (ICV-1)**

QC Batch: 51894

Date Analyzed: 2008-08-28

Analyzed By: DC

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.112 | 112 | 85 - 115 | 2008-08-28 |
| Toluene | | mg/L | 0.100 | 0.110 | 110 | 85 - 115 | 2008-08-28 |
| Ethylbenzene | | mg/L | 0.100 | 0.110 | 110 | 85 - 115 | 2008-08-28 |
| Xylene | | mg/L | 0.300 | 0.329 | 110 | 85 - 115 | 2008-08-28 |

**Standard (CCV-1)**

QC Batch: 51894 Date Analyzed: 2008-08-28 Analyzed By: DC

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.108 | 108 | 85 - 115 | 2008-08-28 |
| Toluene | | mg/L | 0.100 | 0.108 | 108 | 85 - 115 | 2008-08-28 |
| Ethylbenzene | | mg/L | 0.100 | 0.107 | 107 | 85 - 115 | 2008-08-28 |
| Xylene | | mg/L | 0.300 | 0.319 | 106 | 85 - 115 | 2008-08-28 |

LAB O 'D # 8082127

Page 1 f 2

# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

6808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: Nova
Address: (Street, City, Zip) 2057 Commerce
Contact Person: Robin Savile
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Location (including state): NM.

Phone #: (432) 520-7720
Fax #: (432) 520-7701
E-mail:
Project Name: BoB Durham
Sampler Signature:

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 171384 | MW-37 | 3 | | X | | | | X | | | | X | | 8-20-08 | 10:00 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 385 | MW-8 | 3 | | X | | | | X | | | | X | | | 10:25 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 386 | MW-26 | 3 | | X | | | | X | | | | X | | | 10:40 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 387 | MW-3 | 3 | | X | | | | X | | | | X | | | 11:00 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 388 | MW-16 | 3 | | X | | | | X | | | | X | | | 11:20 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 389 | MW-6 | 3 | | X | | | | X | | | | X | | | 11:40 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 390 | MW-38 | 3 | | X | | | | X | | | | X | | | 12:00 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 391 | MW-2 | 3 | | X | | | | X | | | | X | | | 12:25 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 392 | MW-13 | 3 | | X | | | | X | | | | X | | | 12:45 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 393 | MW-1 | 3 | | X | | | | X | | | | X | | | 13:00 | | X | | | | | | | | | | | | | | | | | | | | | | |
| | | 3 | | X | | | | X | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°C: |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 8.21.8 | 1700 | [signature] | TRACE | 8/21/08 | 17:00 | 3.9°C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°C: |
| | | | | | | | | |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°C: |
| | | | | | | | | |

**LAB USE ONLY**
Intact: Y / N
Headspace: Y / N NA
3.9
Log-In-Review

REMARKS:
All tests - Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Carry in

ORIGINAL COPY

LAB C ID # 8082127



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: NOVA
Address: (Street, City, Zip) 2057 Commerce
Phone #: (432) 520-7720
Fax #: (432) 520-7701
Contact Person: Ron Rousseau
E-mail:
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): NM
Sampler Signature: JL

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) delete | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71394 | MW 23 | 5 | | X | | | | X | | | | X | | 8/20 | 1245 | | X | X | | | | | | | | | | | | | | | | |
| 395 | MW 26 | | | | | | | | | | | | | | 1315 | | | | | | | | | | | | | | | | | | | |
| 396 | MW 31 | | | | | | | | | | | | | | 1400 | | | | | | | | | | | | | | | | | | | |
| 397 | MW 33 | | | | | | | | | | | | | | 1445 | | | | | | | | | | | | | | | | | | | |
| 398 | MW 9 | | | | | | | | | | | | | | 1520 | | | | | | | | | | | | | | | | | | | |
| 399 | MW 15 | | | | | | | | | | | | | | 1600 | | | | | | | | | | | | | | | | | | | |
| 400 | MW 10 | | | | | | | | | | | | | | 1630 | | | | | | | | | | | | | | | | | | | |
| 401 | MW 7 | | | | | | | | | | | | | | 1715 | | | | | | | | | | | | | | | | | | | |
| 402 | MW 32 | | | | | | | | | | | | | | 1745 | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| [signature] | NOVA | 8-21-08 | 1700 | [signature] | TRACE | 8/21/08 | 17:00 | 3.9°C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |

LAB USE ONLY
Intact Y / N
Headspace Y / N NA
Log In Review

REMARKS:
All trasfer Midland

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Courier

ORIGINAL COPY

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

## Certifications

**WBENC:** 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
**NCTRCA** WFWB38444Y0909

## NELAP Certifications

**Lubbock:** T104704219-08-TX LELAP-02003 Kansas E-10317
**El Paso:** T104704221-08-TX LELAP-02002
**Midland:** T104704392-08-TX

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: December 15, 2008

Work Order: 8112004

Project Location: West of Monument, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 180014 | MW 11 | water | 2008-11-18 | 10:00 | 2008-11-19 |
| 180015 | MW 20 | water | 2008-11-18 | 10:20 | 2008-11-19 |
| 180016 | MW 21 | water | 2008-11-18 | 10:40 | 2008-11-19 |
| 180017 | MW 25 | water | 2008-11-18 | 11:00 | 2008-11-19 |
| 180018 | MW 29 | water | 2008-11-18 | 11:20 | 2008-11-19 |
| 180019 | MW 30 | water | 2008-11-18 | 11:40 | 2008-11-19 |
| 180020 | MW 27 | water | 2008-11-18 | 12:00 | 2008-11-19 |
| 180021 | MW 14 | water | 2008-11-18 | 12:20 | 2008-11-19 |
| 180022 | MW 24 | water | 2008-11-18 | 12:40 | 2008-11-19 |
| 180023 | MW 26 | water | 2008-11-18 | 13:00 | 2008-11-19 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 180024 | MW 31 | water | 2008-11-18 | 13:20 | 2008-11-19 |
| 180025 | MW 33 | water | 2008-11-18 | 13:40 | 2008-11-19 |
| 180026 | MW 9 | water | 2008-11-18 | 14:00 | 2008-11-19 |
| 180027 | MW 15 | water | 2008-11-18 | 14:20 | 2008-11-19 |
| 180028 | MW 10 | water | 2008-11-18 | 14:40 | 2008-11-19 |
| 180029 | MW 7 | water | 2008-11-18 | 15:00 | 2008-11-19 |
| 180030 | MW 32 | water | 2008-11-18 | 15:20 | 2008-11-19 |
| 180031 | MW 37 | water | 2008-11-18 | 15:40 | 2008-11-19 |
| 180032 | MW 8 | water | 2008-11-18 | 16:00 | 2008-11-19 |
| 180033 | MW 28 | water | 2008-11-18 | 16:20 | 2008-11-19 |
| 180034 | MW 3 | water | 2008-11-18 | 16:40 | 2008-11-19 |
| 180035 | MW 16 | water | 2008-11-18 | 17:00 | 2008-11-19 |
| 180036 | MW 23 | water | 2008-11-18 | 17:20 | 2008-11-19 |
| 180037 | MW 6 | water | 2008-11-18 | 17:40 | 2008-11-19 |
| 180038 | MW 4 | water | 2008-11-18 | 18:00 | 2008-11-19 |
| 180039 | MW 13 | water | 2008-11-18 | 18:20 | 2008-11-19 |
| 180040 | MW 2 | water | 2008-11-18 | 18:40 | 2008-11-19 |
| 180041 | MW 38 | water | 2008-11-18 | 19:00 | 2008-11-19 |
| 180042 | MW 1 | water | 2008-11-18 | 19:20 | 2008-11-19 |
| 180043 | MW 5 | water | 2008-11-18 | 19:40 | 2008-11-19 |
| 180044 | MW 12 | water | 2008-11-18 | 20:00 | 2008-11-19 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 63 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2008-11-19 and assigned to work order 8112004. Samples for work order 8112004 were received intact without headspace and at a temperature of 4.0 deg. C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method |
|---|---|
| BTEX | S 8021B |
| PAH | S 8270C |
| TPH DRO | Mod. 8015B |
| TPH GRO | S 8015B |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 8112004 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate aualytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 180014 - MW 11**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54505 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46613 | Sample Preparation: | 2008-11-20 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Resnlt | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0952 | mg/L | 1 | 0.100 | 95 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0921 | mg/L | 1 | 0.100 | 92 | 52 - 124.1 |

**Sample: 180014 - MW 11**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54678 | Date Analyzed: | 2008-12-01 | Analyzed By: | DS |
| Prep Batch: | 46747 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |

*continued ...*

*sample 180014 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0487 | mg/L | 0.922 | 0.0800 | 61 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0455 | mg/L | 0.922 | 0.0800 | 57 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0783 | mg/L | 0.922 | 0.0800 | 98 | 55 - 117 |

**Sample: 180015 - MW 20**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54505 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46613 | Sample Preparation: | 2008-11-20 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.101 | mg/L | 1 | 0.100 | 101 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0970 | mg/L | 1 | 0.100 | 97 | 52 - 124.1 |

**Sample: 180015 - MW 20**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 2-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 1-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |

*continued ...*

*sample 180015 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Acenaphthylene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzofuran | | **0.000259** | mg/L | 0.926 | 0.000200 |
| Fluorene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Phenanthrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Chrysene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000185 | mg/L | 0.926 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0776 | mg/L | 0.926 | 0.0800 | 97 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0701 | mg/L | 0.926 | 0.0800 | 88 | 16 - 91.6 |
| Terphenyl-d14 | [1] | 0.0941 | mg/L | 0.926 | 0.0800 | 118 | 55 - 117 |

**Sample: 180016 - MW 21**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54505 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46613 | Sample Preparation: | 2008-11-20 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0972 | mg/L | 1 | 0.100 | 97 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0946 | mg/L | 1 | 0.100 | 95 | 52 - 124.1 |

[1] 8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

**Sample: 180016 - MW 21**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0342 | mg/L | 0.922 | 0.0800 | 43 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0233 | mg/L | 0.922 | 0.0800 | 29 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0636 | mg/L | 0.922 | 0.0800 | 80 | 55 - 117 |

**Sample: 180017 - MW 25**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54505 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46613 | Sample Preparation: | 2008-11-20 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |

*continued ...*

*sample 180017 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0985 | mg/L | 1 | 0.100 | 98 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0945 | mg/L | 1 | 0.100 | 94 | 52 - 124.1 |

**Sample: 180017 - MW 25**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| 2-Methylnaphthalene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| 1-Methylnaphthalene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Acenaphthylene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Acenaphthene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Dibenzofuran | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Fluorene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Anthracene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Phenanthrene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Fluoranthene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Pyrene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Benzo(a)anthracene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Chrysene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Benzo(a)pyrene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000189 | mg/L | 0.943 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000189 | mg/L | 0.943 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0302 | mg/L | 0.943 | 0.0800 | 38 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0274 | mg/L | 0.943 | 0.0800 | 34 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0540 | mg/L | 0.943 | 0.0800 | 68 | 55 - 117 |

**Sample: 180018 - MW 29**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0958 | mg/L | 1 | 0.100 | 96 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0928 | mg/L | 1 | 0.100 | 93 | 52 - 124.1 |

**Sample: 180018 - MW 29**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |

*continued ...*

*sample 180018 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0427 | mg/L | 0.922 | 0.0800 | 53 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0376 | mg/L | 0.922 | 0.0800 | 47 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0780 | mg/L | 0.922 | 0.0800 | 98 | 55 - 117 |

**Sample: 180019 - MW 30**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.100 | mg/L | 1 | 0.100 | 100 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0948 | mg/L | 1 | 0.100 | 95 | 52 - 124.1 |

**Sample: 180019 - MW 30**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |

*continued ...*

*sample 180019 continued ...*

| Parameter | Flag | RL Resnlt | Units | Dilution | RL |
|---|---|---|---|---|---|
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilntion | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0412 | mg/L | 0.922 | 0.0800 | 52 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0363 | mg/L | 0.922 | 0.0800 | 45 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0798 | mg/L | 0.922 | 0.0800 | 100 | 55 - 117 |

**Sample: 180020 - MW 27**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0975 | mg/L | 1 | 0.100 | 98 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0943 | mg/L | 1 | 0.100 | 94 | 52 - 124.1 |

**Sample: 180020 - MW 27**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 2-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 1-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthylene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzofuran | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Fluorene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Phenanthrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Chrysene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000185 | mg/L | 0.926 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0380 | mg/L | 0.926 | 0.0800 | 48 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0309 | mg/L | 0.926 | 0.0800 | 39 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0745 | mg/L | 0.926 | 0.0800 | 93 | 55 - 117 |

**Sample: 180021 - MW 14**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |

*continued . . .*

*sample 180021 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0992 | mg/L | 1 | 0.100 | 99 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0951 | mg/L | 1 | 0.100 | 95 | 52 - 124.1 |

**Sample: 180021 - MW 14**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 2-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 1-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthylene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzofuran | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Fluorene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Phenanthrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Chrysene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000185 | mg/L | 0.926 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0364 | mg/L | 0.926 | 0.0800 | 46 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0324 | mg/L | 0.926 | 0.0800 | 40 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0696 | mg/L | 0.926 | 0.0800 | 87 | 55 - 117 |

**Sample: 180022 - MW 24**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0973 | mg/L | 1 | 0.100 | 97 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0935 | mg/L | 1 | 0.100 | 94 | 52 - 124.1 |

**Sample: 180022 - MW 24**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthaleue | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |

*continued ...*

*sample 180022 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0404 | mg/L | 0.922 | 0.0800 | 50 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0374 | mg/L | 0.922 | 0.0800 | 47 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0698 | mg/L | 0.922 | 0.0800 | 87 | 55 - 117 |

**Sample: 180023 - MW 26**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0976 | mg/L | 1 | 0.100 | 98 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0940 | mg/L | 1 | 0.100 | 94 | 52 - 124.1 |

**Sample: 180023 - MW 26**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |

*continued ...*

*sample 180023 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0596 | mg/L | 0.917 | 0.0800 | 74 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0462 | mg/L | 0.917 | 0.0800 | 58 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0746 | mg/L | 0.917 | 0.0800 | 93 | 55 - 117 |

**Sample: 180024 - MW 31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0956 | mg/L | 1 | 0.100 | 96 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0925 | mg/L | 1 | 0.100 | 92 | 52 - 124.1 |

**Sample: 180024 - MW 31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0592 | mg/L | 0.922 | 0.0800 | 74 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0430 | mg/L | 0.922 | 0.0800 | 54 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0813 | mg/L | 0.922 | 0.0800 | 102 | 55 - 117 |

**Sample: 180025 - MW 33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |

*continued ...*

*sample 180025 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0981 | mg/L | 1 | 0.100 | 98 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0936 | mg/L | 1 | 0.100 | 94 | 52 - 124.1 |

**Sample: 180025 - MW 33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 2-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 1-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthylene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzofuran | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Fluorene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Phenanthrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Chrysene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000185 | mg/L | 0.926 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0557 | mg/L | 0.926 | 0.0800 | 70 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0442 | mg/L | 0.926 | 0.0800 | 55 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0795 | mg/L | 0.926 | 0.0800 | 99 | 55 - 117 |

**Sample: 180026 - MW 9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0966 | mg/L | 1 | 0.100 | 97 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0937 | mg/L | 1 | 0.100 | 94 | 52 - 124.1 |

**Sample: 180026 - MW 9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |

*continued . . .*

*sample 180026 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilntion | Spike Amonnt | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0637 | mg/L | 0.922 | 0.0800 | 80 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0515 | mg/L | 0.922 | 0.0800 | 64 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0820 | mg/L | 0.922 | 0.0800 | 102 | 55 - 117 |

**Sample: 180027 - MW 15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.101 | mg/L | 1 | 0.100 | 101 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0954 | mg/L | 1 | 0.100 | 95 | 52 - 124.1 |

**Sample: 180027 - MW 15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Resnlt | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| 2-Methylnaphthalene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| 1-Methylnaphthalene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Acenaphthylene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Acenaphthene | | <0.000186 | mg/L | 0.93 | 0.000200 |

*continued . . .*

*sample 180027 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Dibenzofuran | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Fluorene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Anthracene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Phenanthrene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Fluoranthene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Pyrene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Benzo(a)anthracene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Chrysene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Benzo(a)pyrene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000186 | mg/L | 0.93 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000186 | mg/L | 0.93 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0666 | mg/L | 0.93 | 0.0800 | 83 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0573 | mg/L | 0.93 | 0.0800 | 72 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0829 | mg/L | 0.93 | 0.0800 | 104 | 55 - 117 |

**Sample: 180028 - MW 10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0973 | mg/L | 1 | 0.100 | 97 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0934 | mg/L | 1 | 0.100 | 93 | 52 - 124.1 |

**Sample: 180028 - MW 10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Aceuaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0523 | mg/L | 0.922 | 0.0800 | 65 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0485 | mg/L | 0.922 | 0.0800 | 61 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0764 | mg/L | 0.922 | 0.0800 | 96 | 55 - 117 |

**Sample: 180029 - MW 7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |

*continued ...*

*sample 180029 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0977 | mg/L | 1 | 0.100 | 98 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0968 | mg/L | 1 | 0.100 | 97 | 52 - 124.1 |

**Sample: 180029 - MW 7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | **0.00176** | mg/L | 0.917 | 0.000200 |
| Fluorene | | **0.00372** | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | **0.000522** | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | **0.000278** | mg/L | 0.917 | 0.000200 |
| Pyrene | | **0.000533** | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | [2] | 0.0783 | mg/L | 0.917 | 0.0800 | 98 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0540 | mg/L | 0.917 | 0.0800 | 68 | 16 - 91.6 |

*continued ...*

[2]8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

*sample continued ...*

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Terphenyl-d14 | | 0.0711 | mg/L | 0.917 | 0.0800 | 89 | 55 - 117 |

**Sample: 180030 - MW 32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | **0.00230** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0960 | mg/L | 1 | 0.100 | 96 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0944 | mg/L | 1 | 0.100 | 94 | 52 - 124.1 |

**Sample: 180030 - MW 32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 2-Methylnaphthalene | | **0.00140** | mg/L | 0.926 | 0.000200 |
| 1-Methylnaphthalene | | **0.0103** | mg/L | 0.926 | 0.000200 |
| Acenaphthylene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzofuran | | **0.00266** | mg/L | 0.926 | 0.000200 |
| Fluorene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Phenanthrene | | **0.00170** | mg/L | 0.926 | 0.000200 |
| Fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |

*continued ...*

*sample 180030 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Chrysene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000185 | mg/L | 0.926 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | [3] | 0.0815 | mg/L | 0.926 | 0.0800 | 102 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0548 | mg/L | 0.926 | 0.0800 | 68 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0737 | mg/L | 0.926 | 0.0800 | 92 | 55 - 117 |

**Sample: 180031 - MW 37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0955 | mg/L | 1 | 0.100 | 96 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0937 | mg/L | 1 | 0.100 | 94 | 52 - 124.1 |

**Sample: 180031 - MW 37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

[3]8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 2-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 1-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthylene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzofuran | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Fluorene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Phenanthrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Chrysene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000185 | mg/L | 0.926 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0546 | mg/L | 0.926 | 0.0800 | 68 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0493 | mg/L | 0.926 | 0.0800 | 62 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0772 | mg/L | 0.926 | 0.0800 | 96 | 55 - 117 |

**Sample: 180032 - MW 8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0986 | mg/L | 1 | 0.100 | 99 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0957 | mg/L | 1 | 0.100 | 96 | 52 - 124.1 |

**Sample: 180032 - MW 8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.000200** | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | **0.00123** | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | **0.000228** | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | **0.000341** | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | **0.00116** | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0760 | mg/L | 0.922 | 0.0800 | 95 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0532 | mg/L | 0.922 | 0.0800 | 66 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0766 | mg/L | 0.922 | 0.0800 | 96 | 55 - 117 |

**Sample: 180033 - MW 28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |

*continued ...*

*sample 180033 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0959 | mg/L | 1 | 0.100 | 96 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0917 | mg/L | 1 | 0.100 | 92 | 52 - 124.1 |

**Sample: 180033 - MW 28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0484 | mg/L | 0.922 | 0.0800 | 60 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0424 | mg/L | 0.922 | 0.0800 | 53 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0806 | mg/L | 0.922 | 0.0800 | 101 | 55 - 117 |

**Sample: 180034 - MW 3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0944 | mg/L | 1 | 0.100 | 94 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0912 | mg/L | 1 | 0.100 | 91 | 52 - 124.1 |

**Sample: 180034 - MW 3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54853 | Date Analyzed: | 2008-12-04 | Analyzed By: | DS |
| Prep Batch: | 46889 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| 2-Methylnaphthalene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| 1-Methylnaphthalene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| Acenaphthylene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| Acenaphthene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| Dibenzofuran | | **0.000242** | mg/L | 0.935 | 0.000200 |
| Fluorene | | **0.000342** | mg/L | 0.935 | 0.000200 |
| Anthracene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| Phenanthrene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| Fluoranthene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| Pyrene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| Benzo(a)anthracene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| Chrysene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| Benzo(a)pyrene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000187 | mg/L | 0.935 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000187 | mg/L | 0.935 | 0.000200 |

*continued . . .*

*sample 180034 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | | <0.000187 | mg/L | 0.935 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobeuzene-d5 | | 0.0624 | mg/L | 0.935 | 0.0800 | 78 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0569 | mg/L | 0.935 | 0.0800 | 71 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0752 | mg/L | 0.935 | 0.0800 | 94 | 55 - 117 |

**Sample: 180035 - MW 16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00160** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | **0.00100** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0973 | mg/L | 1 | 0.100 | 97 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.105 | mg/L | 1 | 0.100 | 105 | 52 - 124.1 |

**Sample: 180035 - MW 16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54852 | Date Analyzed: | 2008-12-05 | Analyzed By: | DS |
| Prep Batch: | 46890 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.00172** | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | **0.00112** | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | **0.00735** | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | **0.000440** | mg/L | 0.917 | 0.000200 |

*continued ...*

*sample 180035 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Dibenzofuran | | **0.00295** | mg/L | 0.917 | 0.000200 |
| Fluorene | | **0.00460** | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | **0.00132** | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | **0.000463** | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | **0.000711** | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0721 | mg/L | 0.917 | 0.0800 | 90 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0540 | mg/L | 0.917 | 0.0800 | 68 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0798 | mg/L | 0.917 | 0.0800 | 100 | 55 - 117 |

**Sample: 180036 - MW 23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54540 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0962 | mg/L | 1 | 0.100 | 96 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0949 | mg/L | 1 | 0.100 | 95 | 52 - 124.1 |

**Sample: 180036 - MW 23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54852 | Date Analyzed: | 2008-12-05 | Analyzed By: | DS |
| Prep Batch: | 46890 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | **0.00106** | mg/L | 0.922 | 0.000200 |
| Fluorene | | **0.000503** | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0688 | mg/L | 0.922 | 0.0800 | 86 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0599 | mg/L | 0.922 | 0.0800 | 75 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0838 | mg/L | 0.922 | 0.0800 | 105 | 55 - 117 |

**Sample: 180037 - MW 6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54541 | Date Analyzed: | 2008-11-22 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00470** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |

*continued ...*

*sample 180037 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Ethylbenzene | | **0.00470** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00850** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.100 | mg/L | 1 | 0.100 | 100 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.100 | mg/L | 1 | 0.100 | 100 | 52 - 124.1 |

**Sample: 180037 - MW 6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54852 | Date Analyzed: | 2008-12-05 | Analyzed By: | DS |
| Prep Batch: | 46890 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| 2-Methylnaphthalene | | **0.00103** | mg/L | 4.63 | 0.000200 |
| 1-Methylnaphthalene | | **0.00344** | mg/L | 4.63 | 0.000200 |
| Acenaphthylene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Acenaphthene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Dibenzofuran | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Fluorene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Anthracene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Phenanthrene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Fluoranthene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Pyrene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Benzo(a)anthracene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Chrysene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Benzo(a)pyrene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000926 | mg/L | 4.63 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0771 | mg/L | 4.63 | 0.0800 | 96 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0651 | mg/L | 4.63 | 0.0800 | 81 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0835 | mg/L | 4.63 | 0.0800 | 104 | 55 - 117 |

**Sample: 180038 - MW 4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54541 | Date Analyzed: | 2008-11-22 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00160** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00340** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00210** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.100 | mg/L | 1 | 0.100 | 100 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0996 | mg/L | 1 | 0.100 | 100 | 52 - 124.1 |

**Sample: 180038 - MW 4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54852 | Date Analyzed: | 2008-12-05 | Analyzed By: | DS |
| Prep Batch: | 46890 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.00101** | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | **0.000821** | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | **0.00227** | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | **0.00160** | mg/L | 0.922 | 0.000200 |
| Fluorene | | **0.00258** | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | **0.000606** | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | **0.000202** | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | **0.000466** | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |

*continued . . .*

*sample 180038 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0659 | mg/L | 0.922 | 0.0800 | 82 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0534 | mg/L | 0.922 | 0.0800 | 67 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0788 | mg/L | 0.922 | 0.0800 | 98 | 55 - 117 |

**Sample: 180039 - MW 13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54541 | Date Analyzed: | 2008-11-22 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0110** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00150** | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0992 | mg/L | 1 | 0.100 | 99 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.118 | mg/L | 1 | 0.100 | 118 | 52 - 124.1 |

**Sample: 180039 - MW 13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54852 | Date Analyzed: | 2008-12-05 | Analyzed By: | DS |
| Prep Batch: | 46890 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.00435** | mg/L | 0.926 | 0.000200 |
| 2-Methylnaphthalene | | **0.00275** | mg/L | 0.926 | 0.000200 |
| 1-Methylnaphthalene | | **0.00450** | mg/L | 0.926 | 0.000200 |
| Acenaphthylene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthene | | <0.000185 | mg/L | 0.926 | 0.000200 |

*continued . . .*

*sample 180039 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Dibenzofuran | | **0.00133** | mg/L | 0.926 | 0.000200 |
| Fluorene | | **0.00130** | mg/L | 0.926 | 0.000200 |
| Anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Phenanthrene | | **0.000397** | mg/L | 0.926 | 0.000200 |
| Fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Chrysene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000185 | mg/L | 0.926 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0536 | mg/L | 0.926 | 0.0800 | 67 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0468 | mg/L | 0.926 | 0.0800 | 58 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0815 | mg/L | 0.926 | 0.0800 | 102 | 55 - 117 |

**Sample: 180040 - MW 2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54541 | Date Analyzed: | 2008-11-22 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0119** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.101 | mg/L | 1 | 0.100 | 101 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.113 | mg/L | 1 | 0.100 | 113 | 52 - 124.1 |

**Sample: 180040 - MW 2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54852 | Date Analyzed: | 2008-12-05 | Analyzed By: | DS |
| Prep Batch: | 46890 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.00345** | mg/L | 4.63 | 0.000200 |
| 2-Methylnaphthalene | | **0.00205** | mg/L | 4.63 | 0.000200 |
| 1-Methylnaphthalene | | **0.00608** | mg/L | 4.63 | 0.000200 |
| Acenaphthylene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Acenaphthene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Dibenzofuran | | **0.00167** | mg/L | 4.63 | 0.000200 |
| Fluorene | | **0.00314** | mg/L | 4.63 | 0.000200 |
| Anthracene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Phenanthrene | | **0.00148** | mg/L | 4.63 | 0.000200 |
| Fluoranthene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Pyrene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Benzo(a)anthracene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Chrysene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Benzo(a)pyrene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000926 | mg/L | 4.63 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000926 | mg/L | 4.63 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0301 | mg/L | 4.63 | 0.0800 | 38 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0305 | mg/L | 4.63 | 0.0800 | 38 | 16 - 91.6 |
| Terphenyl-d14 | [4] | 0.0414 | mg/L | 4.63 | 0.0800 | 52 | 55 - 117 |

**Sample: 180041 - MW 38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54541 | Date Analyzed: | 2008-11-22 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilutiou | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0265** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.0860** | mg/L | 1 | 0.00100 |

[4]8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

continued...

*sample 180041 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Xylene | | **0.00350** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0994 | mg/L | 1 | 0.100 | 99 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.105 | mg/L | 1 | 0.100 | 105 | 52 - 124.1 |

**Sample: 180041 - MW 38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54852 | Date Analyzed: | 2008-12-05 | Analyzed By: | DS |
| Prep Batch: | 46890 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.00344** | mg/L | 4.608 | 0.000200 |
| 2-Methylnaphthalene | | **0.00114** | mg/L | 4.608 | 0.000200 |
| 1-Methylnaphthalene | | **0.0117** | mg/L | 4.608 | 0.000200 |
| Acenaphthylene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Acenaphthene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Dibenzofuran | | **0.00472** | mg/L | 4.608 | 0.000200 |
| Fluorene | | **0.00551** | mg/L | 4.608 | 0.000200 |
| Anthracene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Phenanthrene | | **0.00502** | mg/L | 4.608 | 0.000200 |
| Fluoranthene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Pyrene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Benzo(a)anthracene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Chrysene | | **0.00247** | mg/L | 4.608 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Benzo(a)pyrene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000922 | mg/L | 4.608 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | [5] | 0.0863 | mg/L | 4.608 | 0.0800 | 108 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0669 | mg/L | 4.608 | 0.0800 | 84 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0882 | mg/L | 4.608 | 0.0800 | 110 | 55 - 117 |

[5]8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

**Sample: 180042 - MW 1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54541 | Date Analyzed: | 2008-11-22 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0457** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.0145** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0269** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.103 | mg/L | 1 | 0.100 | 103 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.119 | mg/L | 1 | 0.100 | 119 | 52 - 124.1 |

**Sample: 180042 - MW 1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54852 | Date Analyzed: | 2008-12-05 | Analyzed By: | DS |
| Prep Batch: | 46890 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.0382** | mg/L | 4.608 | 0.000200 |
| 2-Methylnaphthalene | | **0.0855** | mg/L | 4.608 | 0.000200 |
| 1-Methylnaphthalene | | **0.0912** | mg/L | 4.608 | 0.000200 |
| Acenaphthylene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Acenaphthene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Dibenzofuran | | **0.00764** | mg/L | 4.608 | 0.000200 |
| Fluorene | | **0.0154** | mg/L | 4.608 | 0.000200 |
| Anthracene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Phenanthrene | | **0.0145** | mg/L | 4.608 | 0.000200 |
| Fluoranthene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Pyrene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Benzo(a)anthracene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Chrysene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Benzo(a)pyrene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000922 | mg/L | 4.608 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000922 | mg/L | 4.608 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | [6] | 0.0889 | mg/L | 4.608 | 0.0800 | 111 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0608 | mg/L | 4.608 | 0.0800 | 76 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0826 | mg/L | 4.608 | 0.0800 | 103 | 55 - 117 |

**Sample: 180043 - MW 5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54541 | Date Analyzed: | 2008-11-22 | Analyzed By: | AG |
| Prep Batch: | 46650 | Sample Preparation: | 2008-11-21 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.114** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.0536** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0304** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilntion | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0989 | mg/L | 1 | 0.100 | 99 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.117 | mg/L | 1 | 0.100 | 117 | 52 - 124.1 |

**Sample: 180043 - MW 5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54852 | Date Analyzed: | 2008-12-05 | Analyzed By: | DS |
| Prep Batch: | 46890 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.0295** | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | **0.0504** | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | **0.0560** | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | **0.00288** | mg/L | 0.922 | 0.000200 |
| Fluorene | | **0.00720** | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | **0.00558** | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | **0.000494** | mg/L | 0.922 | 0.000200 |

[6]8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

*continued*

*sample 180043 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | **0.00114** | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | [7] | 0.0800 | mg/L | 0.922 | 0.0800 | 100 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0531 | mg/L | 0.922 | 0.0800 | 66 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0778 | mg/L | 0.922 | 0.0800 | 97 | 55 - 117 |

**Sample: 180044 - MW 12**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 54505 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46613 | Sample Preparation: | 2008-11-20 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0281** | mg/L | 10 | 0.00100 |
| Toluene | | <0.0100 | mg/L | 10 | 0.00100 |
| Ethylbenzene | | **0.0672** | mg/L | 10 | 0.00100 |
| Xylene | | **0.144** | mg/L | 10 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.992 | mg/L | 10 | 1.00 | 99 | 65.1 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.993 | mg/L | 10 | 1.00 | 99 | 52 - 124.1 |

**Sample: 180044 - MW 12**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 54852 | Date Analyzed: | 2008-12-05 | Analyzed By: | DS |
| Prep Batch: | 46890 | Sample Preparation: | 2008-11-20 | Prepared By: | DS |

[7]8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.0196** | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | **0.0305** | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | **0.0414** | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | **0.00416** | mg/L | 0.922 | 0.000200 |
| Fluorene | | **0.00533** | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | **0.00545** | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | **0.000774** | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Resnlt | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0655 | mg/L | 0.922 | 0.0800 | 82 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0470 | mg/L | 0.922 | 0.0800 | 59 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0783 | mg/L | 0.922 | 0.0800 | 98 | 55 - 117 |

**Sample: 180044 - MW 12**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 54524 | Date Analyzed: | 2008-11-21 | Analyzed By: | LD |
| Prep Batch: | 46618 | Sample Preparation: | 2008-11-21 | Prepared By: | LD |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | **265** | mg/L | 1 | 5.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | [8] | 30.4 | mg/L | 1 | 10.0 | 304 | 70 - 130 |

[8]High surrogate recovery due to peak interference.

**Sample: 180044 - MW 12**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5030B |
| QC Batch: | 54506 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46613 | Sample Preparation: | 2008-11-20 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | **2.60** | mg/L | 10 | 0.100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.942 | mg/L | 10 | 1.00 | 94 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | 0.990 | mg/L | 10 | 1.00 | 99 | 70 - 130 |

**Method Blank (1)** QC Batch: 54505

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 54505 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46613 | QC Preparation: | 2008-11-20 | Prepared By: | AG |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000800 | mg/L | 0.001 |
| Toluene | | <0.000800 | mg/L | 0.001 |
| Ethylbenzene | | <0.000500 | mg/L | 0.001 |
| Xylene | | <0.000900 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0949 | mg/L | 1 | 0.100 | 95 | 44.6 - 137.4 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0909 | mg/L | 1 | 0.100 | 91 | 37.1 - 130.9 |

**Method Blank (1)** QC Batch: 54506

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 54506 | Date Analyzed: | 2008-11-21 | Analyzed By: | AG |
| Prep Batch: | 46613 | QC Preparation: | 2008-11-20 | Prepared By: | AG |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| GRO | | 0.0841 | mg/L | 0.1 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0891 | mg/L | 1 | 0.100 | 89 | 70 - 130 |

*continued ...*

*method blank continued ...*

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (4-BFB) | | 0.0842 | mg/L | 1 | 0.100 | 84 | 50 - 130 |

**Method Blank (1)** QC Batch: 54524

QC Batch: 54524 Date Analyzed: 2008-11-21 Analyzed By: LD
Prep Batch: 46618 QC Preparation: 2008-11-21 Prepared By: LD

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| DRO | | <2.44 | mg/L | 5 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Perceut Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 11.5 | mg/L | 1 | 10.0 | 115 | 70 - 130 |

**Method Blank (1)** QC Batch: 54540

QC Batch: 54540 Date Analyzed: 2008-11-21 Analyzed By: AG
Prep Batch: 46650 QC Preparation: 2008-11-21 Prepared By: AG

| Parameter | Flag | MDL Result | Uuits | RL |
|---|---|---|---|---|
| Benzene | | <0.000800 | mg/L | 0.001 |
| Toluene | | <0.000800 | mg/L | 0.001 |
| Ethylbenzene | | <0.000500 | mg/L | 0.001 |
| Xylene | | <0.000900 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amouut | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0966 | mg/L | 1 | 0.100 | 97 | 44.6 - 137.4 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0938 | mg/L | 1 | 0.100 | 94 | 37.1 - 130.9 |

**Method Blank (1)** QC Batch: 54541

QC Batch: 54541 Date Analyzed: 2008-11-22 Analyzed By: AG
Prep Batch: 46650 QC Preparation: 2008-11-21 Prepared By: AG

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Beuzene | | <0.000800 | mg/L | 0.001 |

*continued ...*

*method blank continued ...*

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Toluene | | <0.000800 | mg/L | 0.001 |
| Ethylbenzene | | <0.000500 | mg/L | 0.001 |
| Xylene | | <0.000900 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.101 | mg/L | 1 | 0.100 | 101 | 44.6 - 137.4 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0972 | mg/L | 1 | 0.100 | 97 | 37.1 - 130.9 |

**Method Blank (1)** QC Batch: 54678

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 54678 | Date Analyzed: | 2008-12-01 | Analyzed By: | DS |
| Prep Batch: | 46747 | QC Preparation: | 2008-11-20 | Prepared By: | DS |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Naphthalene | | <0.0000730 | mg/L | 0.0002 |
| 2-Methylnaphthalene | | <0.0000509 | mg/L | 0.0002 |
| 1-Methylnaphthalene | | <0.0000748 | mg/L | 0.0002 |
| Acenaphthylene | | <0.0000767 | mg/L | 0.0002 |
| Acenaphthene | | <0.000142 | mg/L | 0.0002 |
| Dibenzofuran | | <0.0000470 | mg/L | 0.0002 |
| Fluorene | | <0.0000569 | mg/L | 0.0002 |
| Anthracene | | <0.0000876 | mg/L | 0.0002 |
| Phenanthrene | | <0.0000552 | mg/L | 0.0002 |
| Fluoranthene | | <0.0000954 | mg/L | 0.0002 |
| Pyrene | | <0.0000497 | mg/L | 0.0002 |
| Benzo(a)anthracene | | <0.0000328 | mg/L | 0.0002 |
| Chrysene | | <0.0000990 | mg/L | 0.0002 |
| Benzo(b)fluoranthene | | <0.0000684 | mg/L | 0.0002 |
| Benzo(k)fluoranthene | | <0.0000830 | mg/L | 0.0002 |
| Benzo(a)pyrene | | <0.0000549 | mg/L | 0.0002 |
| Indeno(1,2,3-cd)pyrene | | <0.0000869 | mg/L | 0.0002 |
| Dibenzo(a,h)anthracene | | <0.0000605 | mg/L | 0.0002 |
| Benzo(g,h,i)perylene | | <0.0000681 | mg/L | 0.0002 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0316 | mg/L | 1 | 0.0800 | 40 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0244 | mg/L | 1 | 0.0800 | 30 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0521 | mg/L | 1 | 0.0800 | 65 | 55 - 117 |

**Method Blank (1)** QC Batch: 54852

QC Batch: 54852 | Date Analyzed: 2008-12-05 | Analyzed By: DS
Prep Batch: 46890 | QC Preparation: 2008-11-20 | Prepared By: DS

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Naphthalene | | <0.0000730 | mg/L | 0.0002 |
| 2-Methylnaphthalene | | <0.0000509 | mg/L | 0.0002 |
| 1-Methylnaphthalene | | <0.0000748 | mg/L | 0.0002 |
| Acenaphthylene | | <0.0000767 | mg/L | 0.0002 |
| Acenaphthene | | <0.000142 | mg/L | 0.0002 |
| Dibenzofuran | | <0.0000470 | mg/L | 0.0002 |
| Fluorene | | <0.0000569 | mg/L | 0.0002 |
| Anthracene | | <0.0000876 | mg/L | 0.0002 |
| Phenanthrene | | <0.0000552 | mg/L | 0.0002 |
| Fluoranthene | | <0.0000954 | mg/L | 0.0002 |
| Pyrene | | <0.0000497 | mg/L | 0.0002 |
| Benzo(a)anthracene | | <0.0000328 | mg/L | 0.0002 |
| Chrysene | | <0.0000990 | mg/L | 0.0002 |
| Benzo(b)fluoranthene | | <0.0000684 | mg/L | 0.0002 |
| Benzo(k)fluoranthene | | <0.0000830 | mg/L | 0.0002 |
| Benzo(a)pyrene | | <0.0000549 | mg/L | 0.0002 |
| Indeno(1,2,3-cd)pyrene | | <0.0000869 | mg/L | 0.0002 |
| Dibenzo(a,h)anthracene | | <0.0000605 | mg/L | 0.0002 |
| Benzo(g,h,i)perylene | | <0.0000681 | mg/L | 0.0002 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0440 | mg/L | 1 | 0.0800 | 55 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0391 | mg/L | 1 | 0.0800 | 49 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0831 | mg/L | 1 | 0.0800 | 104 | 55 - 117 |

**Method Blank (1)** QC Batch: 54853

QC Batch: 54853 | Date Analyzed: 2008-12-04 | Analyzed By: DS
Prep Batch: 46889 | QC Preparation: 2008-11-20 | Prepared By: DS

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Naphthalene | | <0.0000730 | mg/L | 0.0002 |
| 2-Methylnaphthalene | | <0.0000509 | mg/L | 0.0002 |
| 1-Methylnaphthalene | | <0.0000748 | mg/L | 0.0002 |
| Acenaphthylene | | <0.0000767 | mg/L | 0.0002 |
| Acenaphthene | | <0.000142 | mg/L | 0.0002 |
| Dibenzofuran | | <0.0000470 | mg/L | 0.0002 |

*continued ...*

*method blank continued . . .*

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Fluorene | | <0.0000569 | mg/L | 0.0002 |
| Anthracene | | <0.0000876 | mg/L | 0.0002 |
| Phenanthrene | | <0.0000552 | mg/L | 0.0002 |
| Fluoranthene | | <0.0000954 | mg/L | 0.0002 |
| Pyrene | | <0.0000497 | mg/L | 0.0002 |
| Benzo(a)anthracene | | <0.0000328 | mg/L | 0.0002 |
| Chrysene | | <0.0000990 | mg/L | 0.0002 |
| Benzo(b)fluoranthene | | <0.0000684 | mg/L | 0.0002 |
| Benzo(k)fluoranthene | | <0.0000830 | mg/L | 0.0002 |
| Benzo(a)pyrene | | <0.0000549 | mg/L | 0.0002 |
| Indeno(1,2,3-cd)pyrene | | <0.0000869 | mg/L | 0.0002 |
| Dibenzo(a,h)anthracene | | <0.0000605 | mg/L | 0.0002 |
| Benzo(g,h,i)perylene | | <0.0000681 | mg/L | 0.0002 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0409 | mg/L | 1 | 0.0800 | 51 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | | 0.0355 | mg/L | 1 | 0.0800 | 44 | 16 - 91.6 |
| Terphenyl-d14 | | 0.0868 | mg/L | 1 | 0.0800 | 108 | 55 - 117 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 54505 | Date Analyzed: 2008-11-21 | Analyzed By: AG
Prep Batch: 46613 | QC Preparation: 2008-11-20 | Prepared By: AG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0939 | mg/L | 1 | 0.100 | <0.000800 | 94 | 71.7 - 120.5 |
| Toluene | 0.0929 | mg/L | 1 | 0.100 | <0.000800 | 93 | 75.4 - 118.8 |
| Ethylbenzene | 0.0913 | mg/L | 1 | 0.100 | <0.000500 | 91 | 73.5 - 118 |
| Xylene | 0.274 | mg/L | 1 | 0.300 | <0.000900 | 91 | 72.9 - 118.2 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0944 | mg/L | 1 | 0.100 | <0.000800 | 94 | 71.7 - 120.5 | 0 | 20 |
| Toluene | 0.0930 | mg/L | 1 | 0.100 | <0.000800 | 93 | 75.4 - 118.8 | 0 | 20 |
| Ethylbenzene | 0.0921 | mg/L | 1 | 0.100 | <0.000500 | 92 | 73.5 - 118 | 1 | 20 |
| Xylene | 0.278 | mg/L | 1 | 0.300 | <0.000900 | 93 | 72.9 - 118.2 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0963 | 0.0947 | mg/L | 1 | 0.100 | 96 | 95 | 38.2 - 131.6 |
| 4-Bromofluorobenzene (4-BFB) | 0.0960 | 0.0953 | mg/L | 1 | 0.100 | 96 | 95 | 43.9 - 132.4 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 54506 Date Analyzed: 2008-11-21 Analyzed By: AG
Prep Batch: 46613 QC Preparation: 2008-11-20 Prepared By: AG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| GRO | 0.825 | mg/L | 1 | 1.00 | <0.0590 | 82 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| GRO | 0.885 | mg/L | 1 | 1.00 | <0.0590 | 88 | 70 - 130 | 7 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0888 | 0.0925 | mg/L | 1 | 0.100 | 89 | 92 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 0.0890 | 0.0924 | mg/L | 1 | 0.100 | 89 | 92 | 70 - 130 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 54524 Date Analyzed: 2008-11-21 Analyzed By: LD
Prep Batch: 46618 QC Preparation: 2008-11-21 Prepared By: LD

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| DRO | 26.3 | mg/L | 1 | 25.0 | <2.44 | 105 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| DRO | 24.7 | mg/L | 1 | 25.0 | <2.44 | 99 | 70 - 130 | 6 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| n-Triacontane | 10.5 | 10.4 | mg/L | 1 | 10.0 | 105 | 104 | 70 - 130 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 54540
Prep Batch: 46650

Date Analyzed: 2008-11-21
QC Preparation: 2008-11-21

Analyzed By: AG
Prepared By: AG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0978 | mg/L | 1 | 0.100 | <0.000800 | 98 | 71.7 - 120.5 |
| Toluene | 0.0964 | mg/L | 1 | 0.100 | <0.000800 | 96 | 75.4 - 118.8 |
| Ethylbenzene | 0.0948 | mg/L | 1 | 0.100 | <0.000500 | 95 | 73.5 - 118 |
| Xylene | 0.285 | mg/L | 1 | 0.300 | <0.000900 | 95 | 72.9 - 118.2 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0991 | mg/L | 1 | 0.100 | <0.000800 | 99 | 71.7 - 120.5 | 1 | 20 |
| Toluene | 0.0982 | mg/L | 1 | 0.100 | <0.000800 | 98 | 75.4 - 118.8 | 2 | 20 |
| Ethylbenzene | 0.0970 | mg/L | 1 | 0.100 | <0.000500 | 97 | 73.5 - 118 | 2 | 20 |
| Xylene | 0.292 | mg/L | 1 | 0.300 | <0.000900 | 97 | 72.9 - 118.2 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0984 | 0.0978 | mg/L | 1 | 0.100 | 98 | 98 | 38.2 - 131.6 |
| 4-Bromofluorobenzene (4-BFB) | 0.0973 | 0.0974 | mg/L | 1 | 0.100 | 97 | 97 | 43.9 - 132.4 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 54541
Prep Batch: 46650

Date Analyzed: 2008-11-22
QC Preparation: 2008-11-21

Analyzed By: AG
Prepared By: AG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.102 | mg/L | 1 | 0.100 | <0.000800 | 102 | 71.7 - 120.5 |
| Toluene | 0.0997 | mg/L | 1 | 0.100 | <0.000800 | 100 | 75.4 - 118.8 |
| Ethylbenzene | 0.0980 | mg/L | 1 | 0.100 | <0.000500 | 98 | 73.5 - 118 |
| Xylene | 0.295 | mg/L | 1 | 0.300 | <0.000900 | 98 | 72.9 - 118.2 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0994 | mg/L | 1 | 0.100 | <0.000800 | 99 | 71.7 - 120.5 | 3 | 20 |
| Toluene | 0.0972 | mg/L | 1 | 0.100 | <0.000800 | 97 | 75.4 - 118.8 | 2 | 20 |
| Ethylbenzene | 0.0963 | mg/L | 1 | 0.100 | <0.000500 | 96 | 73.5 - 118 | 2 | 20 |
| Xylene | 0.290 | mg/L | 1 | 0.300 | <0.000900 | 97 | 72.9 - 118.2 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.101 | 0.0982 | mg/L | 1 | 0.100 | 101 | 98 | 38.2 - 131.6 |
| 4-Bromofluorobenzene (4-BFB) | 0.100 | 0.0987 | mg/L | 1 | 0.100 | 100 | 99 | 43.9 - 132.4 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 54678 | Date Analyzed: 2008-12-01 | Analyzed By: DS
Prep Batch: 46747 | QC Preparation: 2008-11-20 | Prepared By: DS

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Naphthalene | 0.0267 | mg/L | 1 | 0.0800 | <0.0000730 | 33 | 20.4 - 86.5 |
| 2-Methylnaphthalene | 0.0301 | mg/L | 1 | 0.0800 | <0.0000509 | 38 | 18.2 - 94.2 |
| 1-Methylnaphthalene | 0.0303 | mg/L | 1 | 0.0800 | <0.0000748 | 38 | 25.4 - 91.1 |
| Acenaphthylene | 0.0351 | mg/L | 1 | 0.0800 | <0.0000767 | 44 | 32.4 - 109 |
| Acenaphthene | 0.0341 | mg/L | 1 | 0.0800 | <0.000142 | 43 | 30.4 - 104 |
| Dibenzofuran | 0.0349 | mg/L | 1 | 0.0800 | <0.0000470 | 44 | 14.8 - 119 |
| Fluorene | 0.0406 | mg/L | 1 | 0.0800 | <0.0000569 | 51 | 26.5 - 124 |
| Anthracene | 0.0404 | mg/L | 1 | 0.0800 | <0.0000876 | 50 | 44.2 - 113 |
| Phenanthrene | 0.0403 | mg/L | 1 | 0.0800 | <0.0000552 | 50 | 44.7 - 109 |
| Fluoranthene | 0.0470 | mg/L | 1 | 0.0800 | <0.0000954 | 59 | 48.2 - 125 |
| Pyrene | 0.0474 | mg/L | 1 | 0.0800 | <0.0000497 | 59 | 40.5 - 128 |
| Benzo(a)anthracene | 0.0443 | mg/L | 1 | 0.0800 | <0.0000328 | 55 | 45 - 115 |
| Chrysene | 0.0466 | mg/L | 1 | 0.0800 | <0.0000990 | 58 | 46.8 - 119 |
| Benzo(b)fluoranthene | 0.0427 | mg/L | 1 | 0.0800 | <0.0000684 | 53 | 39.9 - 129 |
| Benzo(k)fluoranthene | 0.0480 | mg/L | 1 | 0.0800 | <0.0000830 | 60 | 42.6 - 136 |
| Benzo(a)pyrene | 0.0499 | mg/L | 1 | 0.0800 | <0.0000549 | 62 | 45 - 143 |
| Indeno(1,2,3-cd)pyrene | 0.0607 | mg/L | 1 | 0.0800 | <0.0000869 | 76 | 51.1 - 156 |
| Dibenzo(a,h)anthracene | 0.0600 | mg/L | 1 | 0.0800 | <0.0000605 | 75 | 48.2 - 151 |
| Benzo(g,h,i)perylene | 0.0594 | mg/L | 1 | 0.0800 | <0.0000681 | 74 | 48.3 - 152 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 0.0269 | mg/L | 1 | 0.0800 | <0.0000730 | 34 | 20.4 - 86.5 | 1 | 20 |
| 2-Methylnaphthalene | 0.0298 | mg/L | 1 | 0.0800 | <0.0000509 | 37 | 18.2 - 94.2 | 1 | 20 |
| 1-Methylnaphthalene | 0.0302 | mg/L | 1 | 0.0800 | <0.0000748 | 38 | 25.4 - 91.1 | 0 | 20 |
| Acenaphthylene | 0.0349 | mg/L | 1 | 0.0800 | <0.0000767 | 44 | 32.4 - 109 | 1 | 20 |
| Acenaphthene | 0.0342 | mg/L | 1 | 0.0800 | <0.000142 | 43 | 30.4 - 104 | 0 | 20 |
| Dibenzofuran | 0.0356 | mg/L | 1 | 0.0800 | <0.0000470 | 44 | 14.8 - 119 | 2 | 20 |
| Fluorene | 0.0418 | mg/L | 1 | 0.0800 | <0.0000569 | 52 | 26.5 - 124 | 3 | 20 |
| Anthracene | 0.0401 | mg/L | 1 | 0.0800 | <0.0000876 | 50 | 44.2 - 113 | 1 | 20 |
| Phenanthrene | 0.0395 | mg/L | 1 | 0.0800 | <0.0000552 | 49 | 44.7 - 109 | 2 | 20 |

*continued ...*

*control spikes continued ...*

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Fluoranthene | 0.0460 | mg/L | 1 | 0.0800 | <0.0000954 | 58 | 48.2 - 125 | 2 | 20 |
| Pyrene | 0.0475 | mg/L | 1 | 0.0800 | <0.0000497 | 59 | 40.5 - 128 | 0 | 20 |
| Benzo(a)anthracene | 0.0444 | mg/L | 1 | 0.0800 | <0.0000328 | 56 | 45 - 115 | 0 | 20 |
| Chrysene | 0.0465 | mg/L | 1 | 0.0800 | <0.0000990 | 58 | 46.8 - 119 | 0 | 20 |
| Benzo(b)fluoranthene | 0.0425 | mg/L | 1 | 0.0800 | <0.0000684 | 53 | 39.9 - 129 | 0 | 20 |
| Benzo(k)fluoranthene | 0.0478 | mg/L | 1 | 0.0800 | <0.0000830 | 60 | 42.6 - 136 | 0 | 20 |
| Benzo(a)pyrene | 0.0495 | mg/L | 1 | 0.0800 | <0.0000549 | 62 | 45 - 143 | 1 | 20 |
| Indeno(1,2,3-cd)pyrene | 0.0595 | mg/L | 1 | 0.0800 | <0.0000869 | 74 | 51.1 - 156 | 2 | 20 |
| Dibenzo(a,h)anthracene | 0.0590 | mg/L | 1 | 0.0800 | <0.0000605 | 74 | 48.2 - 151 | 2 | 20 |
| Benzo(g,h,i)perylene | 0.0592 | mg/L | 1 | 0.0800 | <0.0000681 | 74 | 48.3 - 152 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 0.0368 | 0.0370 | mg/L | 1 | 0.0800 | 46 | 46 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | 0.0332 | 0.0324 | mg/L | 1 | 0.0800 | 42 | 40 | 16 - 91.6 |
| Terphenyl-d14 | 0.0596 | 0.0585 | mg/L | 1 | 0.0800 | 74 | 73 | 55 - 117 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 54852 | Date Analyzed: 2008-12-05 | Analyzed By: DS
Prep Batch: 46890 | QC Preparation: 2008-11-20 | Prepared By: DS

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Naphthalene | 0.0406 | mg/L | 1 | 0.0800 | <0.0000730 | 51 | 20.4 - 86.5 |
| 2-Methylnaphthalene | 0.0431 | mg/L | 1 | 0.0800 | <0.0000509 | 54 | 18.2 - 94.2 |
| 1-Methylnaphthalene | 0.0426 | mg/L | 1 | 0.0800 | <0.0000748 | 53 | 25.4 - 91.1 |
| Acenaphthylene | 0.0511 | mg/L | 1 | 0.0800 | <0.0000767 | 64 | 32.4 - 109 |
| Acenaphthene | 0.0492 | mg/L | 1 | 0.0800 | <0.000142 | 62 | 30.4 - 104 |
| Dibenzofuran | 0.0524 | mg/L | 1 | 0.0800 | <0.0000470 | 66 | 14.8 - 119 |
| Fluorene | 0.0613 | mg/L | 1 | 0.0800 | <0.0000569 | 77 | 26.5 - 124 |
| Anthracene | 0.0600 | mg/L | 1 | 0.0800 | <0.0000876 | 75 | 44.2 - 113 |
| Phenanthrene | 0.0589 | mg/L | 1 | 0.0800 | <0.0000552 | 74 | 44.7 - 109 |
| Fluoranthene | 0.0720 | mg/L | 1 | 0.0800 | <0.0000954 | 90 | 48.2 - 125 |
| Pyrene | 0.0675 | mg/L | 1 | 0.0800 | <0.0000497 | 84 | 40.5 - 128 |
| Benzo(a)anthracene | 0.0668 | mg/L | 1 | 0.0800 | <0.0000328 | 84 | 45 - 115 |
| Chrysene | 0.0698 | mg/L | 1 | 0.0800 | <0.0000990 | 87 | 46.8 - 119 |
| Benzo(b)fluoranthene | 0.0722 | mg/L | 1 | 0.0800 | <0.0000684 | 90 | 39.9 - 129 |
| Benzo(k)fluoranthene | 0.0760 | mg/L | 1 | 0.0800 | <0.0000830 | 95 | 42.6 - 136 |
| Benzo(a)pyrene | 0.0805 | mg/L | 1 | 0.0800 | <0.0000549 | 101 | 45 - 143 |
| Indeno(1,2,3-cd)pyrene | 0.0976 | mg/L | 1 | 0.0800 | <0.0000869 | 122 | 51.1 - 156 |
| Dibenzo(a,h)anthracene | 0.0975 | mg/L | 1 | 0.0800 | <0.0000605 | 122 | 48.2 - 151 |

*continued ...*

*control spikes continued ...*

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | 0.0961 | mg/L | 1 | 0.0800 | <0.0000681 | 120 | 48.3 - 152 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 0.0400 | mg/L | 1 | 0.0800 | <0.0000730 | 50 | 20.4 - 86.5 | 2 | 20 |
| 2-Methylnaphthalene | 0.0419 | mg/L | 1 | 0.0800 | <0.0000509 | 52 | 18.2 - 94.2 | 3 | 20 |
| 1-Methylnaphthalene | 0.0414 | mg/L | 1 | 0.0800 | <0.0000748 | 52 | 25.4 - 91.1 | 3 | 20 |
| Acenaphthylene | 0.0505 | mg/L | 1 | 0.0800 | <0.0000767 | 63 | 32.4 - 109 | 1 | 20 |
| Acenaphthene | 0.0490 | mg/L | 1 | 0.0800 | <0.000142 | 61 | 30.4 - 104 | 0 | 20 |
| Dibenzofuran | 0.0529 | mg/L | 1 | 0.0800 | <0.0000470 | 66 | 14.8 - 119 | 1 | 20 |
| Fluorene | 0.0614 | mg/L | 1 | 0.0800 | <0.0000569 | 77 | 26.5 - 124 | 0 | 20 |
| Anthracene | 0.0603 | mg/L | 1 | 0.0800 | <0.0000876 | 75 | 44.2 - 113 | 0 | 20 |
| Phenanthrene | 0.0589 | mg/L | 1 | 0.0800 | <0.0000552 | 74 | 44.7 - 109 | 0 | 20 |
| Fluoranthene | 0.0726 | mg/L | 1 | 0.0800 | <0.0000954 | 91 | 48.2 - 125 | 1 | 20 |
| Pyrene | 0.0684 | mg/L | 1 | 0.0800 | <0.0000497 | 86 | 40.5 - 128 | 1 | 20 |
| Benzo(a)anthracene | 0.0668 | mg/L | 1 | 0.0800 | <0.0000328 | 84 | 45 - 115 | 0 | 20 |
| Chrysene | 0.0695 | mg/L | 1 | 0.0800 | <0.0000990 | 87 | 46.8 - 119 | 0 | 20 |
| Benzo(b)fluoranthene | 0.0731 | mg/L | 1 | 0.0800 | <0.0000684 | 91 | 39.9 - 129 | 1 | 20 |
| Benzo(k)fluoranthene | 0.0764 | mg/L | 1 | 0.0800 | <0.0000830 | 96 | 42.6 - 136 | 0 | 20 |
| Benzo(a)pyrene | 0.0808 | mg/L | 1 | 0.0800 | <0.0000549 | 101 | 45 - 143 | 0 | 20 |
| Indeno(1,2,3-cd)pyrene | 0.0977 | mg/L | 1 | 0.0800 | <0.0000869 | 122 | 51.1 - 156 | 0 | 20 |
| Dibenzo(a,h)anthracene | 0.0975 | mg/L | 1 | 0.0800 | <0.0000605 | 122 | 48.2 - 151 | 0 | 20 |
| Benzo(g,h,i)perylene | 0.0963 | mg/L | 1 | 0.0800 | <0.0000681 | 120 | 48.3 - 152 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 0.0555 | 0.0559 | mg/L | 1 | 0.0800 | 69 | 70 | 15.8 - 97.2 |
| 2-Fluorobiphenyl | 0.0494 | 0.0495 | mg/L | 1 | 0.0800 | 62 | 62 | 16 - 91.6 |
| Terphenyl-d14 | 0.0848 | 0.0858 | mg/L | 1 | 0.0800 | 106 | 107 | 55 - 117 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 54853 | Date Analyzed: 2008-12-04 | Analyzed By: DS
Prep Batch: 46889 | QC Preparation: 2008-11-20 | Prepared By: DS

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Naphthalene | 0.0418 | mg/L | 1 | 0.0800 | <0.0000730 | 52 | 20.4 - 86.5 |
| 2-Methylnaphthalene | 0.0429 | mg/L | 1 | 0.0800 | <0.0000509 | 54 | 18.2 - 94.2 |
| 1-Methylnaphthalene | 0.0424 | mg/L | 1 | 0.0800 | <0.0000748 | 53 | 25.4 - 91.1 |

*continued ...*

*control spikes continued . . .*

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Acenaphthylene | 0.0533 | mg/L | 1 | 0.0800 | <0.0000767 | 67 | 32.4 - 109 |
| Acenaphthene | 0.0518 | mg/L | 1 | 0.0800 | <0.000142 | 65 | 30.4 - 104 |
| Dibenzofuran | 0.0549 | mg/L | 1 | 0.0800 | <0.0000470 | 69 | 14.8 - 119 |
| Fluorene | 0.0700 | mg/L | 1 | 0.0800 | <0.0000569 | 88 | 26.5 - 124 |
| Anthracene | 0.0696 | mg/L | 1 | 0.0800 | <0.0000876 | 87 | 44.2 - 113 |
| Phenanthrene | 0.0694 | mg/L | 1 | 0.0800 | <0.0000552 | 87 | 44.7 - 109 |
| Fluoranthene | 0.0818 | mg/L | 1 | 0.0800 | <0.0000954 | 102 | 48.2 - 125 |
| Pyrene | 0.0805 | mg/L | 1 | 0.0800 | <0.0000497 | 101 | 40.5 - 128 |
| Benzo(a)anthracene | 0.0761 | mg/L | 1 | 0.0800 | <0.0000328 | 95 | 45 - 115 |
| Chrysene | 0.0795 | mg/L | 1 | 0.0800 | <0.0000990 | 99 | 46.8 - 119 |
| Benzo(b)fluoranthene | 0.0794 | mg/L | 1 | 0.0800 | <0.0000684 | 99 | 39.9 - 129 |
| Benzo(k)fluoranthene | 0.0865 | mg/L | 1 | 0.0800 | <0.0000830 | 108 | 42.6 - 136 |
| Benzo(a)pyrene | 0.0922 | mg/L | 1 | 0.0800 | <0.0000549 | 115 | 45 - 143 |
| Indeno(1,2,3-cd)pyrene | 0.112 | mg/L | 1 | 0.0800 | <0.0000869 | 140 | 51.1 - 156 |
| Dibenzo(a,h)anthracene | 0.110 | mg/L | 1 | 0.0800 | <0.0000605 | 138 | 48.2 - 151 |
| Benzo(g,h,i)perylene | 0.110 | mg/L | 1 | 0.0800 | <0.0000681 | 138 | 48.3 - 152 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 0.0412 | mg/L | 1 | 0.0800 | <0.0000730 | 52 | 20.4 - 86.5 | 1 | 20 |
| 2-Methylnaphthalene | 0.0439 | mg/L | 1 | 0.0800 | <0.0000509 | 55 | 18.2 - 94.2 | 2 | 20 |
| 1-Methylnaphthalene | 0.0438 | mg/L | 1 | 0.0800 | <0.0000748 | 55 | 25.4 - 91.1 | 3 | 20 |
| Acenaphthylene | 0.0536 | mg/L | 1 | 0.0800 | <0.0000767 | 67 | 32.4 - 109 | 1 | 20 |
| Acenaphthene | 0.0525 | mg/L | 1 | 0.0800 | <0.000142 | 66 | 30.4 - 104 | 1 | 20 |
| Dibenzofuran | 0.0554 | mg/L | 1 | 0.0800 | <0.0000470 | 69 | 14.8 - 119 | 1 | 20 |
| Fluorene | 0.0688 | mg/L | 1 | 0.0800 | <0.0000569 | 86 | 26.5 - 124 | 2 | 20 |
| Anthracene | 0.0682 | mg/L | 1 | 0.0800 | <0.0000876 | 85 | 44.2 - 113 | 2 | 20 |
| Phenanthrene | 0.0671 | mg/L | 1 | 0.0800 | <0.0000552 | 84 | 44.7 - 109 | 3 | 20 |
| Fluoranthene | 0.0774 | mg/L | 1 | 0.0800 | <0.0000954 | 97 | 48.2 - 125 | 6 | 20 |
| Pyrene | 0.0782 | mg/L | 1 | 0.0800 | <0.0000497 | 98 | 40.5 - 128 | 3 | 20 |
| Benzo(a)anthracene | 0.0746 | mg/L | 1 | 0.0800 | <0.0000328 | 93 | 45 - 115 | 2 | 20 |
| Chrysene | 0.0778 | mg/L | 1 | 0.0800 | <0.0000990 | 97 | 46.8 - 119 | 2 | 20 |
| Benzo(b)fluoranthene | 0.0775 | mg/L | 1 | 0.0800 | <0.0000684 | 97 | 39.9 - 129 | 2 | 20 |
| Benzo(k)fluoranthene | 0.0852 | mg/L | 1 | 0.0800 | <0.0000830 | 106 | 42.6 - 136 | 2 | 20 |
| Benzo(a)pyrene | 0.0905 | mg/L | 1 | 0.0800 | <0.0000549 | 113 | 45 - 143 | 2 | 20 |
| Indeno(1,2,3-cd)pyrene | 0.109 | mg/L | 1 | 0.0800 | <0.0000869 | 136 | 51.1 - 156 | 3 | 20 |
| Dibenzo(a,h)anthracene | 0.109 | mg/L | 1 | 0.0800 | <0.0000605 | 136 | 48.2 - 151 | 1 | 20 |
| Benzo(g,h,i)perylene | 0.108 | mg/L | 1 | 0.0800 | <0.0000681 | 135 | 48.3 - 152 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 0.0517 | 0.0506 | mg/L | 1 | 0.0800 | 65 | 63 | 15.8 - 97.2 |

*continued . . .*

*control spikes continued . . .*

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 0.0464 | 0.0453 | mg/L | 1 | 0.0800 | 58 | 57 | 16 - 91.6 |
| Terphenyl-d14 | 0.0893 | 0.0876 | mg/L | 1 | 0.0800 | 112 | 110 | 55 - 117 |

**Matrix Spike (MS-1)** Spiked Sample: 179850

QC Batch: 54505 | Date Analyzed: 2008-11-21 | Analyzed By: AG
Prep Batch: 46613 | QC Preparation: 2008-11-20 | Prepared By: AG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 3.22 | mg/L | 20 | 2.00 | 1.2185 | 100 | 10 - 160.8 |
| Toluene | 1.92 | mg/L | 20 | 2.00 | 0.0253 | 95 | 10 - 160.7 |
| Ethylbenzene | 2.10 | mg/L | 20 | 2.00 | 0.2215 | 94 | 10 - 158.3 |
| Xylene | 5.69 | mg/L | 20 | 6.00 | 0.0469 | 94 | 10 - 158 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 3.22 | mg/L | 20 | 2.00 | 1.2185 | 100 | 10 - 160.8 | 0 | 20 |
| Toluene | 1.92 | mg/L | 20 | 2.00 | 0.0253 | 95 | 10 - 160.7 | 0 | 20 |
| Ethylbenzene | 2.13 | mg/L | 20 | 2.00 | 0.2215 | 95 | 10 - 158.3 | 1 | 20 |
| Xylene | 5.76 | mg/L | 20 | 6.00 | 0.0469 | 95 | 10 - 158 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 1.98 | 1.97 | mg/L | 20 | 2 | 99 | 98 | 33.1 - 132.5 |
| 4-Bromofluorobenzene (4-BFB) | 1.99 | 1.98 | mg/L | 20 | 2 | 100 | 99 | 37.5 - 136 |

**Matrix Spike (MS-1)** Spiked Sample: 180162

QC Batch: 54506 | Date Analyzed: 2008-11-21 | Analyzed By: AG
Prep Batch: 46613 | QC Preparation: 2008-11-20 | Prepared By: AG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| GRO | 67.8 | mg/L | 50 | 50.0 | 21 | 94 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

*continued . . .*

*matrix spikes continued ...*

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
| GRO | 66.4 | mg/L | 50 | 50.0 | 21 | 91 | 70 - 130 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 5.05 | 4.84 | mg/L | 50 | 5 | 101 | 97 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 5.17 | 5.02 | mg/L | 50 | 5 | 103 | 100 | 70 - 130 |

**Matrix Spike (MS-1)** Spiked Sample: 179985

QC Batch: 54524 | Date Analyzed: 2008-11-21 | Analyzed By: LD
Prep Batch: 46618 | QC Preparation: 2008-11-21 | Prepared By: LD

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| DRO [9] | 34.7 | mg/L | 1 | 25.0 | <2.44 | 139 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| DRO [10] | 34.5 | mg/L | 1 | 25.0 | <2.44 | 138 | 70 - 130 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| n-Triacontane | 10.1 | 9.77 | mg/L | 1 | 10 | 101 | 98 | 70 - 130 |

**Matrix Spike (MS-1)** Spiked Sample: 180036

QC Batch: 54540 | Date Analyzed: 2008-11-21 | Analyzed By: AG
Prep Batch: 46650 | QC Preparation: 2008-11-21 | Prepared By: AG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0972 | mg/L | 1 | 0.100 | <0.000800 | 97 | 10 - 160.8 |
| Toluene | 0.0954 | mg/L | 1 | 0.100 | <0.000800 | 95 | 10 - 160.7 |

*continued ...*

[9] Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[10] Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

*matrix spikes continued ...*

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Ethylbenzene | 0.0941 | mg/L | 1 | 0.100 | <0.000500 | 94 | 10 - 158.3 |
| Xylene | 0.282 | mg/L | 1 | 0.300 | <0.000900 | 94 | 10 - 158 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0976 | mg/L | 1 | 0.100 | <0.000800 | 98 | 10 - 160.8 | 0 | 20 |
| Toluene | 0.0966 | mg/L | 1 | 0.100 | <0.000800 | 97 | 10 - 160.7 | 1 | 20 |
| Ethylbenzene | 0.0960 | mg/L | 1 | 0.100 | <0.000500 | 96 | 10 - 158.3 | 2 | 20 |
| Xylene | 0.289 | mg/L | 1 | 0.300 | <0.000900 | 96 | 10 - 158 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0955 | 0.0952 | mg/L | 1 | 0.1 | 96 | 95 | 33.1 - 132.5 |
| 4-Bromofluorobenzene (4-BFB) | 0.0957 | 0.0960 | mg/L | 1 | 0.1 | 96 | 96 | 37.5 - 136 |

**Matrix Spike (MS-1)** Spiked Sample: 180039

QC Batch: 54541 | Date Analyzed: 2008-11-22 | Analyzed By: AG
Prep Batch: 46650 | QC Preparation: 2008-11-21 | Prepared By: AG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.115 | mg/L | 1 | 0.100 | 0.011 | 104 | 10 - 160.8 |
| Toluene | 0.102 | mg/L | 1 | 0.100 | <0.000800 | 102 | 10 - 160.7 |
| Ethylbenzene | 0.101 | mg/L | 1 | 0.100 | 0.0015 | 100 | 10 - 158.3 |
| Xylene | 0.300 | mg/L | 1 | 0.300 | <0.000900 | 100 | 10 - 158 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.114 | mg/L | 1 | 0.100 | 0.011 | 103 | 10 - 160.8 | 1 | 20 |
| Toluene | 0.101 | mg/L | 1 | 0.100 | <0.000800 | 101 | 10 - 160.7 | 1 | 20 |
| Ethylbenzene | 0.100 | mg/L | 1 | 0.100 | 0.0015 | 98 | 10 - 158.3 | 1 | 20 |
| Xylene | 0.300 | mg/L | 1 | 0.300 | <0.000900 | 100 | 10 - 158 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.104 | 0.102 | mg/L | 1 | 0.1 | 104 | 102 | 33.1 - 132.5 |
| 4-Bromofluorobenzene (4-BFB) | 0.127 | 0.124 | mg/L | 1 | 0.1 | 127 | 124 | 37.5 - 136 |

**Standard (ICV-1)**

QC Batch: 54505 Date Analyzed: 2008-11-21 Analyzed By: AG

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0939 | 94 | 85 - 115 | 2008-11-21 |
| Toluene | | mg/L | 0.100 | 0.0931 | 93 | 85 - 115 | 2008-11-21 |
| Ethylbenzene | | mg/L | 0.100 | 0.0948 | 95 | 85 - 115 | 2008-11-21 |
| Xylene | | mg/L | 0.300 | 0.284 | 95 | 85 - 115 | 2008-11-21 |

**Standard (CCV-1)**

QC Batch: 54505 Date Analyzed: 2008-11-21 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0991 | 99 | 85 - 115 | 2008-11-21 |
| Toluene | | mg/L | 0.100 | 0.0973 | 97 | 85 - 115 | 2008-11-21 |
| Ethylbenzene | | mg/L | 0.100 | 0.0969 | 97 | 85 - 115 | 2008-11-21 |
| Xylene | | mg/L | 0.300 | 0.290 | 97 | 85 - 115 | 2008-11-21 |

**Standard (ICV-1)**

QC Batch: 54506 Date Analyzed: 2008-11-21 Analyzed By: AG

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| GRO | | mg/L | 1.00 | 0.882 | 88 | 85 - 115 | 2008-11-21 |

**Standard (CCV-1)**

QC Batch: 54506 Date Analyzed: 2008-11-21 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| GRO | | mg/L | 1.00 | 1.05 | 105 | 85 - 115 | 2008-11-21 |

**Standard (ICV-1)**

QC Batch: 54524 Date Analyzed: 2008-11-21 Analyzed By: LD

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| DRO | | mg/L | 250 | 249 | 100 | 85 - 115 | 2008-11-21 |

**Standard (CCV-1)**

QC Batch: 54524 Date Analyzed: 2008-11-21 Analyzed By: LD

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| DRO | | mg/L | 250 | 263 | 105 | 85 - 115 | 2008-11-21 |

**Standard (ICV-1)**

QC Batch: 54540 Date Analyzed: 2008-11-21 Analyzed By: AG

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0978 | 98 | 85 - 115 | 2008-11-21 |
| Toluene | | mg/L | 0.100 | 0.0978 | 98 | 85 - 115 | 2008-11-21 |
| Ethylbenzene | | mg/L | 0.100 | 0.0956 | 96 | 85 - 115 | 2008-11-21 |
| Xylene | | mg/L | 0.300 | 0.289 | 96 | 85 - 115 | 2008-11-21 |

**Standard (CCV-1)**

QC Batch: 54540 Date Analyzed: 2008-11-21 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.103 | 103 | 85 - 115 | 2008-11-21 |
| Toluene | | mg/L | 0.100 | 0.104 | 104 | 85 - 115 | 2008-11-21 |
| Ethylbenzene | | mg/L | 0.100 | 0.106 | 106 | 85 - 115 | 2008-11-21 |
| Xylene | | mg/L | 0.300 | 0.318 | 106 | 85 - 115 | 2008-11-21 |

**Standard (ICV-1)**

QC Batch: 54541 Date Analyzed: 2008-11-22 Analyzed By: AG

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.104 | 104 | 85 - 115 | 2008-11-22 |
| Toluene | | mg/L | 0.100 | 0.103 | 103 | 85 - 115 | 2008-11-22 |
| Ethylbenzene | | mg/L | 0.100 | 0.102 | 102 | 85 - 115 | 2008-11-22 |
| Xylene | | mg/L | 0.300 | 0.308 | 103 | 85 - 115 | 2008-11-22 |

**Standard (CCV-1)**

QC Batch: 54541 Date Analyzed: 2008-11-22 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0999 | 100 | 85 - 115 | 2008-11-22 |
| Toluene | | mg/L | 0.100 | 0.0996 | 100 | 85 - 115 | 2008-11-22 |
| Ethylbenzene | | mg/L | 0.100 | 0.0976 | 98 | 85 - 115 | 2008-11-22 |
| Xylene | | mg/L | 0.300 | 0.294 | 98 | 85 - 115 | 2008-11-22 |

**Standard (CCV-2)**

QC Batch: 54678 Date Analyzed: 2008-12-01 Analyzed By: DS

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Naphthalene | | mg/L | 60.0 | 55.2 | 92 | 80 - 120 | 2008-12-01 |
| 2-Methylnaphthalene | | mg/L | 60.0 | 50.6 | 84 | 80 - 120 | 2008-12-01 |
| 1-Methylnaphthalene | | mg/L | 60.0 | 51.1 | 85 | 80 - 120 | 2008-12-01 |
| Acenaphthylene | | mg/L | 60.0 | 56.6 | 94 | 80 - 120 | 2008-12-01 |
| Acenaphthene | | mg/L | 60.0 | 56.7 | 94 | 80 - 120 | 2008-12-01 |
| Dibenzofuran | | mg/L | 60.0 | 62.0 | 103 | 80 - 120 | 2008-12-01 |
| Fluorene | | mg/L | 60.0 | 69.6 | 116 | 80 - 120 | 2008-12-01 |
| Anthracene | | mg/L | 60.0 | 58.7 | 98 | 80 - 120 | 2008-12-01 |
| Phenanthrene | | mg/L | 60.0 | 56.7 | 94 | 80 - 120 | 2008-12-01 |
| Fluoranthene | | mg/L | 60.0 | 60.7 | 101 | 80 - 120 | 2008-12-01 |
| Pyrene | | mg/L | 60.0 | 60.6 | 101 | 80 - 120 | 2008-12-01 |
| Benzo(a)anthracene | | mg/L | 60.0 | 57.3 | 96 | 80 - 120 | 2008-12-01 |
| Chrysene | | mg/L | 60.0 | 58.9 | 98 | 80 - 120 | 2008-12-01 |
| Benzo(b)fluoranthene | | mg/L | 60.0 | 60.8 | 101 | 80 - 120 | 2008-12-01 |
| Benzo(k)fluoranthene | | mg/L | 60.0 | 59.0 | 98 | 80 - 120 | 2008-12-01 |
| Benzo(a)pyrene | | mg/L | 60.0 | 62.2 | 104 | 80 - 120 | 2008-12-01 |
| Indeno(1,2,3-cd)pyrene | [11] | mg/L | 60.0 | 74.8 | 125 | 80 - 120 | 2008-12-01 |

*continued ...*

[11] Indeno(1,2,3-cd)pyrene out of range for CV. Sample values above reporting limit are flagged as estimated concentration. •

*standard continued ...*

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Dibenzo(a,h)anthracene | [12] | mg/L | 60.0 | 75.5 | 126 | 80 - 120 | 2008-12-01 |
| Benzo(g,h,i)perylene | [13] | mg/L | 60.0 | 72.7 | 121 | 80 - 120 | 2008-12-01 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 68.8 | mg/L | 1 | 60.0 | 115 | 80 - 120 |
| 2-Fluorobiphenyl | | 57.1 | mg/L | 1 | 60.0 | 95 | 80 - 120 |
| Terphenyl-d14 | | 67.0 | mg/L | 1 | 60.0 | 112 | 80 - 120 |

**Standard (CCV-1)**

QC Batch: 54852 | Date Analyzed: 2008-12-05 | Analyzed By: DS

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Naphthalene | | mg/L | 60.0 | 55.5 | 92 | 80 - 120 | 2008-12-05 |
| 2-Methylnaphthalene | | mg/L | 60.0 | 52.7 | 88 | 80 - 120 | 2008-12-05 |
| 1-Methylnaphthalene | | mg/L | 60.0 | 53.1 | 88 | 80 - 120 | 2008-12-05 |
| Acenaphthylene | | mg/L | 60.0 | 56.2 | 94 | 80 - 120 | 2008-12-05 |
| Acenaphthene | | mg/L | 60.0 | 56.4 | 94 | 80 - 120 | 2008-12-05 |
| Dibenzofuran | | mg/L | 60.0 | 61.2 | 102 | 80 - 120 | 2008-12-05 |
| Fluorene | | mg/L | 60.0 | 68.4 | 114 | 80 - 120 | 2008-12-05 |
| Anthracene | | mg/L | 60.0 | 58.1 | 97 | 80 - 120 | 2008-12-05 |
| Phenanthrene | | mg/L | 60.0 | 56.7 | 94 | 80 - 120 | 2008-12-05 |
| Fluoranthene | | mg/L | 60.0 | 60.8 | 101 | 80 - 120 | 2008-12-05 |
| Pyrene | | mg/L | 60.0 | 58.7 | 98 | 80 - 120 | 2008-12-05 |
| Benzo(a)anthracene | | mg/L | 60.0 | 55.8 | 93 | 80 - 120 | 2008-12-05 |
| Chrysene | | mg/L | 60.0 | 58.4 | 97 | 80 - 120 | 2008-12-05 |
| Benzo(b)fluoranthene | | mg/L | 60.0 | 60.5 | 101 | 80 - 120 | 2008-12-05 |
| Benzo(k)fluoranthene | | mg/L | 60.0 | 61.2 | 102 | 80 - 120 | 2008-12-05 |
| Benzo(a)pyrene | | mg/L | 60.0 | 61.2 | 102 | 80 - 120 | 2008-12-05 |
| Indeno(1,2,3-cd)pyrene | [14] | mg/L | 60.0 | 75.5 | 126 | 80 - 120 | 2008-12-05 |
| Dibenzo(a,h)anthracene | [15] | mg/L | 60.0 | 74.9 | 125 | 80 - 120 | 2008-12-05 |
| Benzo(g,h,i)perylene | [16] | mg/L | 60.0 | 73.3 | 122 | 80 - 120 | 2008-12-05 |

*continued ...*

[12] Dibenzo(a,h)anthracene out of range for CV. Sample values above reporting limit are flagged as estimated concentration. •
[13] Benzo(g,h,i)perylene out of range for CV. Sample values above reporting limit are flagged as estimated concentration. •
[14] Indeno(1,2,3-cd)pyrene out of range for CV. Sample results that are above reporting limits will be flagged as estimated concentration. •
[15] Dibenzo(a,h)anthracene out of range for CV. Sample results that are above reporting limits will be flagged as estimated concentration. •
[16] Benzo(g,h,i)perylene out of range for CV. Sample results that are above reporting limits will be flagged as estimated concentration. •

*standard continued . . .*

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|
| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
| Nitrobenzene-d5 | | 67.7 | mg/L | 1 | 60.0 | 113 | 80 - 120 |
| 2-Fluorobiphenyl | | 56.0 | mg/L | 1 | 60.0 | 93 | 80 - 120 |
| Terphenyl-d14 | | 65.9 | mg/L | 1 | 60.0 | 110 | 80 - 120 |

**Standard (CCV-2)**

QC Batch: 54852 Date Analyzed: 2008-12-05 Analyzed By: DS

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Naphthalene | | mg/L | 60.0 | 55.2 | 92 | 80 - 120 | 2008-12-05 |
| 2-Methylnaphthaleue | | mg/L | 60.0 | 57.6 | 96 | 80 - 120 | 2008-12-05 |
| 1-Methylnaphthalene | | mg/L | 60.0 | 59.1 | 98 | 80 - 120 | 2008-12-05 |
| Acenaphthylene | | mg/L | 60.0 | 56.8 | 95 | 80 - 120 | 2008-12-05 |
| Acenaphthene | | mg/L | 60.0 | 56.8 | 95 | 80 - 120 | 2008-12-05 |
| Dibenzofuran | | mg/L | 60.0 | 63.4 | 106 | 80 - 120 | 2008-12-05 |
| Fluorene | | mg/L | 60.0 | 71.2 | 119 | 80 - 120 | 2008-12-05 |
| Anthracene | | mg/L | 60.0 | 57.8 | 96 | 80 - 120 | 2008-12-05 |
| Phenanthrene | | mg/L | 60.0 | 56.4 | 94 | 80 - 120 | 2008-12-05 |
| Fluoranthene | | mg/L | 60.0 | 55.9 | 93 | 80 - 120 | 2008-12-05 |
| Pyrene | | mg/L | 60.0 | 57.9 | 96 | 80 - 120 | 2008-12-05 |
| Benzo(a)anthracene | | mg/L | 60.0 | 56.1 | 94 | 80 - 120 | 2008-12-05 |
| Chrysene | | mg/L | 60.0 | 58.8 | 98 | 80 - 120 | 2008-12-05 |
| Benzo(b)fluoranthene | | mg/L | 60.0 | 61.3 | 102 | 80 - 120 | 2008-12-05 |
| Benzo(k)fluoranthene | | mg/L | 60.0 | 59.6 | 99 | 80 - 120 | 2008-12-05 |
| Benzo(a)pyrene | | mg/L | 60.0 | 63.4 | 106 | 80 - 120 | 2008-12-05 |
| Indeno(1,2,3-cd)pyrene | [17] | mg/L | 60.0 | 76.9 | 128 | 80 - 120 | 2008-12-05 |
| Dibenzo(a,h)anthracene | [18] | mg/L | 60.0 | 77.2 | 129 | 80 - 120 | 2008-12-05 |
| Benzo(g,h,i)perylene | [19] | mg/L | 60.0 | 74.6 | 124 | 80 - 120 | 2008-12-05 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 67.2 | mg/L | 1 | 60.0 | 112 | 80 - 120 |
| 2-Fluorobiphenyl | | 51.8 | mg/L | 1 | 60.0 | 86 | 80 - 120 |
| Terphenyl-d14 | | 64.4 | mg/L | 1 | 60.0 | 107 | 80 - 120 |

[17]Indeno(1,2,3-cd)pyrene out of range for CV. Sample results that are above reporting limits will be flagged as estimated concentration. •
[18]Dibenzo(a,h)anthracene out of range for CV. Sample results that are above reporting limits will be flagged as estimated concentration. •
[19]Benzo(g,h,i)perylene out of range for CV. Sample results that are above reporting limits will be flagged as estimated concentration. •

**Standard (CCV-1)**

QC Batch: 54853 Date Analyzed: 2008-12-04 Analyzed By: DS

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Naphthalene | | mg/L | 60.0 | 55.1 | 92 | 80 - 120 | 2008-12-04 |
| 2-Methylnaphtbalene | | mg/L | 60.0 | 52.0 | 87 | 80 - 120 | 2008-12-04 |
| 1-Methylnaphthalene | | mg/L | 60.0 | 52.2 | 87 | 80 - 120 | 2008-12-04 |
| Acenaphthylene | | mg/L | 60.0 | 56.0 | 93 | 80 - 120 | 2008-12-04 |
| Acenaphthene | | mg/L | 60.0 | 56.8 | 95 | 80 - 120 | 2008-12-04 |
| Dibenzofuran | | mg/L | 60.0 | 63.2 | 105 | 80 - 120 | 2008-12-04 |
| Fluorene | | mg/L | 60.0 | 71.8 | 120 | 80 - 120 | 2008-12-04 |
| Anthracene | | mg/L | 60.0 | 57.8 | 96 | 80 - 120 | 2008-12-04 |
| Phenanthrene | | mg/L | 60.0 | 55.9 | 93 | 80 - 120 | 2008-12-04 |
| Fluoranthene | | mg/L | 60.0 | 57.4 | 96 | 80 - 120 | 2008-12-04 |
| Pyrene | | mg/L | 60.0 | 59.6 | 99 | 80 - 120 | 2008-12-04 |
| Benzo(a)anthracene | | mg/L | 60.0 | 56.1 | 94 | 80 - 120 | 2008-12-04 |
| Chrysene | | mg/L | 60.0 | 58.1 | 97 | 80 - 120 | 2008-12-04 |
| Benzo(b)fluoranthene | | mg/L | 60.0 | 60.0 | 100 | 80 - 120 | 2008-12-04 |
| Benzo(k)fluoranthene | | mg/L | 60.0 | 59.5 | 99 | 80 - 120 | 2008-12-04 |
| Benzo(a)pyrene | | mg/L | 60.0 | 62.4 | 104 | 80 - 120 | 2008-12-04 |
| Indeno(1,2,3-cd)pyrene | [20] | mg/L | 60.0 | 77.0 | 128 | 80 - 120 | 2008-12-04 |
| Dibenzo(a,h)anthracene | [21] | mg/L | 60.0 | 77.6 | 129 | 80 - 120 | 2008-12-04 |
| Benzo(g,h,i)perylene | [22] | mg/L | 60.0 | 74.5 | 124 | 80 - 120 | 2008-12-04 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 67.4 | mg/L | 1 | 60.0 | 112 | 80 - 120 |
| 2-Fluorobiphenyl | | 53.9 | mg/L | 1 | 60.0 | 90 | 80 - 120 |
| Terphenyl-d14 | | 66.8 | mg/L | 1 | 60.0 | 111 | 80 - 120 |

**Standard (CCV-2)**

QC Batch: 54853 Date Analyzed: 2008-12-04 Analyzed By: DS

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Naphthalene | | mg/L | 60.0 | 55.5 | 92 | 80 - 120 | 2008-12-04 |
| 2-Methylnaphthalene | | mg/L | 60.0 | 52.7 | 88 | 80 - 120 | 2008-12-04 |
| 1-Methylnaphthalene | | mg/L | 60.0 | 53.1 | 88 | 80 - 120 | 2008-12-04 |
| Acenapbthylene | | mg/L | 60.0 | 56.2 | 94 | 80 - 120 | 2008-12-04 |

*continued ...*

[20] Indeno(1,2,3-cd)pyrene out of range for CV. Sample results that are above reporting limits will be flagged as estimated concentration. •
[21] Dibenzo(a,h)anthracene out of range for CV. Sample results that are above reporting limits will be flagged as estimated concentration. •
[22] Benzo(g,h,i)perylene out of range for CV. Sample results that are above reporting limits will be flagged as estimated concentration. •

*standard continued ...*

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Acenaphthene | | mg/L | 60.0 | 56.4 | 94 | 80 - 120 | 2008-12-04 |
| Dibenzofuran | | mg/L | 60.0 | 61.2 | 102 | 80 - 120 | 2008-12-04 |
| Fluorene | | mg/L | 60.0 | 68.4 | 114 | 80 - 120 | 2008-12-04 |
| Anthracene | | mg/L | 60.0 | 58.1 | 97 | 80 - 120 | 2008-12-04 |
| Phenanthrene | | mg/L | 60.0 | 56.7 | 94 | 80 - 120 | 2008-12-04 |
| Fluoranthene | | mg/L | 60.0 | 60.8 | 101 | 80 - 120 | 2008-12-04 |
| Pyrene | | mg/L | 60.0 | 58.7 | 98 | 80 - 120 | 2008-12-04 |
| Benzo(a)anthracene | | mg/L | 60.0 | 55.8 | 93 | 80 - 120 | 2008-12-04 |
| Chrysene | | mg/L | 60.0 | 58.4 | 97 | 80 - 120 | 2008-12-04 |
| Benzo(b)fluoranthene | | mg/L | 60.0 | 60.5 | 101 | 80 - 120 | 2008-12-04 |
| Benzo(k)fluoranthene | | mg/L | 60.0 | 61.2 | 102 | 80 - 120 | 2008-12-04 |
| Benzo(a)pyrene | | mg/L | 60.0 | 61.2 | 102 | 80 - 120 | 2008-12-04 |
| Indeno(1,2,3-cd)pyrene | [23] | mg/L | 60.0 | 75.5 | 126 | 80 - 120 | 2008-12-04 |
| Dibenzo(a,h)anthracene | [24] | mg/L | 60.0 | 74.9 | 125 | 80 - 120 | 2008-12-04 |
| Benzo(g,h,i)perylene | [25] | mg/L | 60.0 | 73.3 | 122 | 80 - 120 | 2008-12-04 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 67.7 | mg/L | 1 | 60.0 | 113 | 80 - 120 |
| 2-Fluorobiphenyl | | 56.0 | mg/L | 1 | 60.0 | 93 | 80 - 120 |
| Terphenyl-d14 | | 65.9 | mg/L | 1 | 60.0 | 110 | 80 - 120 |

[23]Indeno(1,2,3-cd)pyrene out of range for CV. Sample results that are above reporting limits will be flagged as estimated concentration. •
[24]Dibenzo(a,h)anthracene out of range for CV. Sample results that are above reporting limits will be flagged as estimated concentration. •
[25]Benzo(g,h,i)perylene out of range for CV. Sample results that are above reporting limits will be flagged as estimated concentration. •

LAB Order ID # 8112004



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: NOVA
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron Romsaville
E-mail:
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): NM
Sampler Signature: JI

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0014 | mw 11 | 5X | | X | | | | X | | | | X | | 11.18.8 | 1000 | | X | | | X | | | | | | | | | | | | | | | | | | |
| 015 | mw 20 | 4 | | | | | | | | | | | | | 1020 | | | | | | | | | | | | | | | | | | | | | | | |
| 016 | mw 21 | 5 | | | | | | | | | | | | | 1040 | | | | | | | | | | | | | | | | | | | | | | | |
| 017 | mw 25 | 4 | | | | | | | | | | | | | 1100 | | | | | | | | | | | | | | | | | | | | | | | |
| 018 | mw 29 | | | | | | | | | | | | | | 1120 | | | | | | | | | | | | | | | | | | | | | | | |
| 019 | mw 30 | | | | | | | | | | | | | | 1140 | | | | | | | | | | | | | | | | | | | | | | | |
| 020 | mw 27 | | | | | | | | | | | | | | 1200 | | | | | | | | | | | | | | | | | | | | | | | |
| 021 | mw 14 | | | | | | | | | | | | | | 1220 | | | | | | | | | | | | | | | | | | | | | | | |
| 022 | mw 24 | | | | | | | | | | | | | | 1240 | | | | | | | | | | | | | | | | | | | | | | | |
| 023 | mw 26 | | | | | | | | | | | | | | 1300 | | | | | | | | | | | | | | | | | | | | | | | |
| 024 | mw 31 | | | | | | | | | | | | | | 1320 | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| [signature] | NOVA | 11.19.8 | 440 | Lindsey Hills | Trace | 11-19-08 | 16:40 | 4.0 |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
2.5
Log-in-Review

REMARKS:
BTEX, GRO, DRO - Midland
PAH - Lubbock

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Carry-11

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LAB Order ID # 8112004



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
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Fax (817) 560-4336

Company Name: NOVA
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron Ponsaille
E-mail:
Invoice to: (If different from above) Plains
Project #: TNM LF-2000-7
Project Name: Bob Durham
Project Location (including state): NM
Sampler Signature: J I

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8025 | mw 33 | 4 | | X | | | | X | | | | X | | 11-18-08 | 1340 | | X | | | X | | | | | | | | | | | | | | | | | | |
| 026 | mw 9 | | | | | | | | | | | | | | 1400 | | | | | | | | | | | | | | | | | | | | | | | |
| 027 | mw 15 | | | | | | | | | | | | | | 1420 | | | | | | | | | | | | | | | | | | | | | | | |
| 028 | mw 10 | | | | | | | | | | | | | | 1440 | | | | | | | | | | | | | | | | | | | | | | | |
| 029 | mw 7 | | | | | | | | | | | | | | 1500 | | | | | | | | | | | | | | | | | | | | | | | |
| 030 | mw 32 | | | | | | | | | | | | | | 1520 | | | | | | | | | | | | | | | | | | | | | | | |
| 031 | mw 37 | | | | | | | | | | | | | | 1540 | | | | | | | | | | | | | | | | | | | | | | | |
| 032 | mw 8 | | | | | | | | | | | | | | 1600 | | | | | | | | | | | | | | | | | | | | | | | |
| 033 | mw 28 | | | | | | | | | | | | | | 1620 | | | | | | | | | | | | | | | | | | | | | | | |
| 034 | mw 3 | | | | | | | | | | | | | | 1640 | | | | | | | | | | | | | | | | | | | | | | | |
| 035 | mw 16 | | | | | | | | | | | | | | 1700 | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| [signature] | NOVA | 11-19-08 | 1640 | Lindsey Vilas | Trace | 11-19-08 | 16:40 | 4.0 |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |

LAB USE ONLY
Intact: (Y) N
Headspace: Y N (NA)
Log-in-Review

REMARKS: BTEX, GRO, DRO - Midland
PAH - Lubbock

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

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Carrier # carry-in

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E-mail:
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): NM
Sampler Signature: J

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 00036 | mw 23 | 4 | | X | | | | X | | | | X | | 11-18-08 | 1720 | | X | | | X | | | | | | | | | | | | | | | | | | | |
| 037 | mw 6 | | | | | | | | | | | | | | 1740 | | | | | | | | | | | | | | | | | | | | | | | | |
| 038 | mw 4 | | | | | | | | | | | | | | 1800 | | | | | | | | | | | | | | | | | | | | | | | | |
| 039 | mw 13 | | | | | | | | | | | | | | 1820 | | | | | | | | | | | | | | | | | | | | | | | | |
| 040 | mw - 2 | | | | | | | | | | | | | | 1840 | | | | | | | | | | | | | | | | | | | | | | | | |
| 041 | mw 38 | | | | | | | | | | | | | | 1900 | | | | | | | | | | | | | | | | | | | | | | | | |
| 042 | mw 1 | | | | | | | | | | | | | | 1920 | | | | | | | | | | | | | | | | | | | | | | | | |
| 043 | mw 5 | | | | | | | | | | | | | | 1940 | | | | | | | | | | | | | | | | | | | | | | | | |
| 044 | mw 12 | 6 | | | | | | | | | | | | | 2000 | | | | X | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| [signature] | NOVA | 11-19-08 | 1640 | Lindsay Allen | Trace | 11-19-08 | 16:40 | 4.0 |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |

LAB USE ONLY
Intact: Y / N
Headspace: Y / N / NA
Log-in Review

REMARKS: BTEX, GRO, DRO - Midland
PAH - Lubbock

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

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Carrier # Carry-in

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TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
5015 Harris Parkway, Suite 119 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

## Certifications

**WBENC:** 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
**NCTRCA** WFWB38444Y0909

## NELAP Certifications

**Lubbock:** T104704219-08-TX
LELAP-02003
Kansas E-10317

**El Paso:** T104704221-08-TX
LELAP-02002

**Midland:** T104704392-08-TX

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: February 23, 2009

Work Order: 9021909

Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-07

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 187846 | MW-26 | water | 2009-02-17 | 14:10 | 2009-02-19 |
| 187847 | MW-31 | water | 2009-02-17 | 14:35 | 2009-02-19 |
| 187848 | MW-33 | water | 2009-02-17 | 15:00 | 2009-02-19 |
| 187849 | MW-9 | water | 2009-02-17 | 15:25 | 2009-02-19 |
| 187850 | MW-15 | water | 2009-02-17 | 15:50 | 2009-02-19 |
| 187851 | MW-10 | water | 2009-02-17 | 16:15 | 2009-02-19 |
| 187852 | MW-7 | water | 2009-02-17 | 16:40 | 2009-02-19 |
| 187853 | MW-32 | water | 2009-02-17 | 17:05 | 2009-02-19 |
| 187854 | MW-37 | water | 2009-02-17 | 17:30 | 2009-02-19 |
| 187855 | MW-8 | water | 2009-02-17 | 17:55 | 2009-02-19 |

| Sample | Descriptiou | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 187856 | MW-28 | water | 2009-02-18 | 09:00 | 2009-02-19 |
| 187857 | MW-3 | water | 2009-02-18 | 09:20 | 2009-02-19 |
| 187858 | MW-23 | water | 2009-02-18 | 09:40 | 2009-02-19 |
| 187859 | MW-16 | water | 2009-02-18 | 10:00 | 2009-02-19 |
| 187860 | MW-4 | water | 2009-02-18 | 10:20 | 2009-02-19 |
| 187861 | MW-6 | water | 2009-02-18 | 10:40 | 2009-02-19 |
| 187862 | MW-13 | water | 2009-02-18 | 11:00 | 2009-02-19 |
| 187863 | MW-2 | water | 2009-02-18 | 11:20 | 2009-02-19 |
| 187864 | MW-5 | water | 2009-02-18 | 11:40 | 2009-02-19 |
| 187865 | MW-38 | water | 2009-02-18 | 12:00 | 2009-02-19 |
| 187866 | MW-1 | water | 2009-02-18 | 12:40 | 2009-02-19 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Dr. Blair Leftwich, Director

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2009-02-19 and assigned to work order 9021909. Samples for work order 9021909 were received intact without headspace and at a temperature of 3.2 deg. C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 48699 | 2009-02-19 at 10:30 | 57001 | 2009-02-19 at 10:30 |
| BTEX | S 8021B | 48736 | 2009-02-20 at 15:14 | 57046 | 2009-02-20 at 15:14 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9021909 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 187846 - MW-26**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57001 | Date Analyzed: | 2009-02-19 | Analyzed By: | ME |
| Prep Batch: | 48699 | Sample Preparation: | 2009-02-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0986 | mg/L | 1 | 0.100 | 99 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0732 | mg/L | 1 | 0.100 | 73 | 40.1 - 136 |

**Sample: 187847 - MW-31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57001 | Date Analyzed: | 2009-02-19 | Analyzed By: | ME |
| Prep Batch: | 48699 | Sample Preparation: | 2009-02-19 | Prepared By: | ME |

| Parameter | Flag | RL Resnlt | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0978 | mg/L | 1 | 0.100 | 98 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0740 | mg/L | 1 | 0.100 | 74 | 40.1 - 136 |

**Sample: 187848 - MW-33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57001 | Date Analyzed: | 2009-02-19 | Analyzed By: | ME |
| Prep Batch: | 48699 | Sample Preparation: | 2009-02-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0985 | mg/L | 1 | 0.100 | 98 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0757 | mg/L | 1 | 0.100 | 76 | 40.1 - 136 |

**Sample: 187849 - MW-9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57001 | Date Analyzed: | 2009-02-19 | Analyzed By: | ME |
| Prep Batch: | 48699 | Sample Preparation: | 2009-02-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0997 | mg/L | 1 | 0.100 | 100 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0778 | mg/L | 1 | 0.100 | 78 | 40.1 - 136 |

**Sample: 187850 - MW-15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57001 | Date Analyzed: | 2009-02-19 | Analyzed By: | ME |
| Prep Batch: | 48699 | Sample Preparation: | 2009-02-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0989 | mg/L | 1 | 0.100 | 99 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0780 | mg/L | 1 | 0.100 | 78 | 40.1 - 136 |

**Sample: 187851 - MW-10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57001 | Date Analyzed: | 2009-02-19 | Analyzed By: | ME |
| Prep Batch: | 48699 | Sample Preparation: | 2009-02-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0989 | mg/L | 1 | 0.100 | 99 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0794 | mg/L | 1 | 0.100 | 79 | 40.1 - 136 |

**Sample: 187852 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57001 | Date Analyzed: | 2009-02-19 | Analyzed By: | ME |
| Prep Batch: | 48699 | Sample Preparation: | 2009-02-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0980 | mg/L | 1 | 0.100 | 98 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0814 | mg/L | 1 | 0.100 | 81 | 40.1 - 136 |

**Sample: 187853 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57001 | Date Analyzed: | 2009-02-19 | Analyzed By: | ME |
| Prep Batch: | 48699 | Sample Preparation: | 2009-02-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0971 | mg/L | 1 | 0.100 | 97 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0795 | mg/L | 1 | 0.100 | 80 | 40.1 - 136 |

**Sample: 187854 - MW-37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57046 | Date Analyzed: | 2009-02-20 | Analyzed By: | ME |
| Prep Batch: | 48736 | Sample Preparation: | 2009-02-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0974 | mg/L | 1 | 0.100 | 97 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0821 | mg/L | 1 | 0.100 | 82 | 40.1 - 136 |

**Sample: 187855 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57046 | Date Analyzed: | 2009-02-20 | Analyzed By: | ME |
| Prep Batch: | 48736 | Sample Preparation: | 2009-02-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0980 | mg/L | 1 | 0.100 | 98 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0788 | mg/L | 1 | 0.100 | 79 | 40.1 - 136 |

**Sample: 187856 - MW-28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57046 | Date Analyzed: | 2009-02-20 | Analyzed By: | ME |
| Prep Batch: | 48736 | Sample Preparation: | 2009-02-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0965 | mg/L | 1 | 0.100 | 96 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0841 | mg/L | 1 | 0.100 | 84 | 40.1 - 136 |

**Sample: 187857 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57046 | Date Analyzed: | 2009-02-20 | Analyzed By: | ME |
| Prep Batch: | 48736 | Sample Preparation: | 2009-02-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Snrrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0958 | mg/L | 1 | 0.100 | 96 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0768 | mg/L | 1 | 0.100 | 77 | 40.1 - 136 |

**Sample: 187858 - MW-23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57046 | Date Analyzed: | 2009-02-20 | Analyzed By: | ME |
| Prep Batch: | 48736 | Sample Preparation: | 2009-02-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0962 | mg/L | 1 | 0.100 | 96 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0740 | mg/L | 1 | 0.100 | 74 | 40.1 - 136 |

**Sample: 187859 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57046 | Date Analyzed: | 2009-02-20 | Analyzed By: | ME |
| Prep Batch: | 48736 | Sample Preparation: | 2009-02-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00130** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0958 | mg/L | 1 | 0.100 | 96 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0866 | mg/L | 1 | 0.100 | 87 | 40.1 - 136 |

**Sample: 187860 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57046 | Date Analyzed: | 2009-02-20 | Analyzed By: | ME |
| Prep Batch: | 48736 | Sample Preparation: | 2009-02-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00150** | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0950 | mg/L | 1 | 0.100 | 95 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0791 | mg/L | 1 | 0.100 | 79 | 40.1 - 136 |

**Sample: 187861 - MW-6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57046 | Date Analyzed: | 2009-02-20 | Analyzed By: | ME |
| Prep Batch: | 48736 | Sample Preparation: | 2009-02-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00150** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0934 | mg/L | 1 | 0.100 | 93 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0763 | mg/L | 1 | 0.100 | 76 | 40.1 - 136 |

**Sample: 187862 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57046 | Date Analyzed: | 2009-02-20 | Analyzed By: | ME |
| Prep Batch: | 48736 | Sample Preparation: | 2009-02-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0966 | mg/L | 1 | 0.100 | 97 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0932 | mg/L | 1 | 0.100 | 93 | 40.1 - 136 |

**Sample: 187863 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57046 | Date Analyzed: | 2009-02-20 | Analyzed By: | ME |
| Prep Batch: | 48736 | Sample Preparation: | 2009-02-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00410** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0970 | mg/L | 1 | 0.100 | 97 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0905 | mg/L | 1 | 0.100 | 90 | 40.1 - 136 |

**Sample: 187864 - MW-5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57046 | Date Analyzed: | 2009-02-20 | Analyzed By: | ME |
| Prep Batch: | 48736 | Sample Preparation: | 2009-02-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0970** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.0273** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0180** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0952 | mg/L | 1 | 0.100 | 95 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0933 | mg/L | 1 | 0.100 | 93 | 40.1 - 136 |

**Sample: 187865 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57046 | Date Analyzed: | 2009-02-20 | Analyzed By: | ME |
| Prep Batch: | 48736 | Sample Preparation: | 2009-02-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0123** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00840** | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0941 | mg/L | 1 | 0.100 | 94 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0794 | mg/L | 1 | 0.100 | 79 | 40.1 - 136 |

**Sample: 187866 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 57046 | Date Analyzed: | 2009-02-20 | Analyzed By: | ME |
| Prep Batch: | 48736 | Sample Preparation: | 2009-02-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0152** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.0183** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0164** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0930 | mg/L | 1 | 0.100 | 93 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.100 | mg/L | 1 | 0.100 | 100 | 40.1 - 136 |

**Method Blank (1)** QC Batch: 57001

QC Batch: 57001 | Date Analyzed: 2009-02-19 | Analyzed By: ME
Prep Batch: 48699 | QC Preparation: 2009-02-19 | Prepared By: ME

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000500 | mg/L | 0.001 |
| Xylene | | <0.000400 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0974 | mg/L | 1 | 0.100 | 97 | 77.2 - 129.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0754 | mg/L | 1 | 0.100 | 75 | 69.1 - 132.3 |

**Method Blank (1)** QC Batch: 57046

QC Batch: 57046 | Date Analyzed: 2009-02-20 | Analyzed By: ME
Prep Batch: 48736 | QC Preparation: 2009-02-20 | Prepared By: ME

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000500 | mg/L | 0.001 |
| Xylene | | <0.000400 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0976 | mg/L | 1 | 0.100 | 98 | 77.2 - 129.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0888 | mg/L | 1 | 0.100 | 89 | 69.1 - 132.3 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 57001 | Date Analyzed: 2009-02-19 | Analyzed By: ME
Prep Batch: 48699 | QC Preparation: 2009-02-19 | Prepared By: ME

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0982 | mg/L | 1 | 0.100 | <0.00110 | 98 | 84 - 119.7 |
| Toluene | 0.0980 | mg/L | 1 | 0.100 | <0.00100 | 98 | 84.9 - 118.2 |
| Ethylbenzene | 0.0996 | mg/L | 1 | 0.100 | <0.00100 | 100 | 84.4 - 118.6 |

*continued . . .*

*control spikes continued ...*

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Xylene | 0.293 | mg/L | 1 | 0.300 | <0.00290 | 98 | 84.8 - 117.8 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0887 | mg/L | 1 | 0.100 | <0.00110 | 89 | 84 - 119.7 | 10 | 20 |
| Toluene | 0.0890 | mg/L | 1 | 0.100 | <0.00100 | 89 | 84.9 - 118.2 | 10 | 20 |
| Ethylbenzene | 0.0900 | mg/L | 1 | 0.100 | <0.00100 | 90 | 84.4 - 118.6 | 10 | 20 |
| Xylene | 0.262 | mg/L | 1 | 0.300 | <0.00290 | 87 | 84.8 - 117.8 | 11 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.100 | 0.0977 | mg/L | 1 | 0.100 | 100 | 98 | 80 - 128.3 |
| 4-Bromofluorobenzene (4-BFB) | 0.0894 | 0.0790 | mg/L | 1 | 0.100 | 89 | 79 | 59.7 - 136.3 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 57046 | Date Analyzed: 2009-02-20 | Analyzed By: ME
Prep Batch: 48736 | QC Preparation: 2009-02-20 | Prepared By: ME

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0937 | mg/L | 1 | 0.100 | <0.00110 | 94 | 84 - 119.7 |
| Toluene | 0.0938 | mg/L | 1 | 0.100 | <0.00100 | 94 | 84.9 - 118.2 |
| Ethylbenzene | 0.0931 | mg/L | 1 | 0.100 | <0.00100 | 93 | 84.4 - 118.6 |
| Xylene | 0.275 | mg/L | 1 | 0.300 | <0.00290 | 92 | 84.8 - 117.8 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0982 | mg/L | 1 | 0.100 | <0.00110 | 98 | 84 - 119.7 | 5 | 20 |
| Toluene | 0.0986 | mg/L | 1 | 0.100 | <0.00100 | 99 | 84.9 - 118.2 | 5 | 20 |
| Ethylbenzene | 0.100 | mg/L | 1 | 0.100 | <0.00100 | 100 | 84.4 - 118.6 | 7 | 20 |
| Xylene | 0.296 | mg/L | 1 | 0.300 | <0.00290 | 99 | 84.8 - 117.8 | 7 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0982 | 0.0985 | mg/L | 1 | 0.100 | 98 | 98 | 80 - 128.3 |
| 4-Bromofluorobenzene (4-BFB) | 0.0907 | 0.0911 | mg/L | 1 | 0.100 | 91 | 91 | 59.7 - 136.3 |

**Matrix Spike (MS-1)** Spiked Sample: 187845

QC Batch: 57001
Prep Batch: 48699

Date Analyzed: 2009-02-19
QC Preparation: 2009-02-19

Analyzed By: ME
Prepared By: ME

| Param | | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Benzene | [1] | 9.30 | mg/L | 100 | 10.0 | 6.3196 | 30 | 77.5 - 121.1 |
| Toluene | [2] | 5.05 | mg/L | 100 | 10.0 | <0.100 | 50 | 78.8 - 119.6 |
| Ethylbenzene | [3] | 5.89 | mg/L | 100 | 10.0 | 1.0746 | 48 | 77.9 - 120.5 |
| Xylene | [4] | 15.3 | mg/L | 100 | 30.0 | <0.290 | 50 | 78 - 119.4 |

Percent recovery is based on the spike result. RPD is based on the spike aud spike duplicate result.

| Param | | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | [5] | 16.2 | mg/L | 100 | 10.0 | 6.3196 | 99 | 77.5 - 121.1 | 54 | 20 |
| Toluene | [6] | 9.66 | mg/L | 100 | 10.0 | <0.100 | 97 | 78.8 - 119.6 | 63 | 20 |
| Ethylbenzene | [7] | 11.1 | mg/L | 100 | 10.0 | 1.0746 | 100 | 77.9 - 120.5 | 61 | 20 |
| Xylene | [8] | 29.0 | mg/L | 100 | 30.0 | <0.290 | 96 | 78 - 119.4 | 62 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 10.2 | 9.69 | mg/L | 100 | 10 | 102 | 97 | 86.6 - 118.9 |
| 4-Bromofluorobenzene (4-BFB) | 8.17 | 8.69 | mg/L | 100 | 10 | 82 | 87 | 59.4 - 127.3 |

**Matrix Spike (MS-1)** Spiked Sample: 187831

QC Batch: 57046
Prep Batch: 48736

Date Analyzed: 2009-02-20
QC Preparation: 2009-02-20

Analyzed By: ME
Prepared By: ME

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 1.81 | mg/L | 10 | 1.00 | 0.9229 | 89 | 77.5 - 121.1 |
| Toluene | 0.892 | mg/L | 10 | 1.00 | <0.0100 | 89 | 78.8 - 119.6 |
| Ethylbenzene | 0.883 | mg/L | 10 | 1.00 | <0.0100 | 88 | 77.9 - 120.5 |
| Xylene | 2.64 | mg/L | 10 | 3.00 | 0.0456 | 86 | 78 - 119.4 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[1]Matrix spike recovery out of control limits due to peak iuterference. Use LCS/LCSD to demonstrate analysis is under control.
[2]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[3]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[4]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[5]MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.
[6]MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.
[7]MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.
[8]MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene [9] | 1.72 | mg/L | 10 | 1.00 | 0.9229 | 73 | 77.5 - 121.1 | 5 | 20 |
| Toluene | 0.888 | mg/L | 10 | 1.00 | <0.0100 | 89 | 78.8 - 119.6 | 0 | 20 |
| Ethylbenzene | 0.894 | mg/L | 10 | 1.00 | <0.0100 | 89 | 77.9 - 120.5 | 1 | 20 |
| Xylene | 2.66 | mg/L | 10 | 3.00 | 0.0456 | 87 | 78 - 119.4 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.970 | 0.969 | mg/L | 10 | 1 | 97 | 97 | 86.6 - 118.9 |
| 4-Bromofluorobenzene (4-BFB) | 0.753 | 0.751 | mg/L | 10 | 1 | 75 | 75 | 59.4 - 127.3 |

**Standard (CCV-1)**

QC Batch: 57001 Date Analyzed: 2009-02-19 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0883 | 88 | 85 - 115 | 2009-02-19 |
| Toluene | | mg/L | 0.100 | 0.0879 | 88 | 85 - 115 | 2009-02-19 |
| Ethylbenzene | | mg/L | 0.100 | 0.0875 | 88 | 85 - 115 | 2009-02-19 |
| Xylene | | mg/L | 0.300 | 0.258 | 86 | 85 - 115 | 2009-02-19 |

**Standard (CCV-2)**

QC Batch: 57001 Date Analyzed: 2009-02-19 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0987 | 99 | 85 - 115 | 2009-02-19 |
| Toluene | | mg/L | 0.100 | 0.0972 | 97 | 85 - 115 | 2009-02-19 |
| Ethylbenzene | | mg/L | 0.100 | 0.100 | 100 | 85 - 115 | 2009-02-19 |
| Xylene | | mg/L | 0.300 | 0.291 | 97 | 85 - 115 | 2009-02-19 |

**Standard (ICV-1)**

QC Batch: 57046 Date Analyzed: 2009-02-20 Analyzed By: ME

[9]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0960 | 96 | 85 - 115 | 2009-02-20 |
| Toluene | | mg/L | 0.100 | 0.0970 | 97 | 85 - 115 | 2009-02-20 |
| Ethylbenzene | | mg/L | 0.100 | 0.0994 | 99 | 85 - 115 | 2009-02-20 |
| Xylene | | mg/L | 0.300 | 0.291 | 97 | 85 - 115 | 2009-02-20 |

**Standard (CCV-1)**

QC Batch: 57046 Date Analyzed: 2009-02-20 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0906 | 91 | 85 - 115 | 2009-02-20 |
| Toluene | | mg/L | 0.100 | 0.0905 | 90 | 85 - 115 | 2009-02-20 |
| Ethylbenzene | | mg/L | 0.100 | 0.0903 | 90 | 85 - 115 | 2009-02-20 |
| Xylene | | mg/L | 0.300 | 0.260 | 87 | 85 - 115 | 2009-02-20 |

**Standard (CCV-2)**

QC Batch: 57046 Date Analyzed: 2009-02-20 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0874 | 87 | 85 - 115 | 2009-02-20 |
| Toluene | | mg/L | 0.100 | 0.0875 | 88 | 85 - 115 | 2009-02-20 |
| Ethylbenzene | | mg/L | 0.100 | 0.0887 | 89 | 85 - 115 | 2009-02-20 |
| Xylene | | mg/L | 0.300 | 0.257 | 86 | 85 - 115 | 2009-02-20 |

LAB Order ID # 902190 4



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: NOVA
Address: (Street, City, Zip) 2057 Commerce
Contact Person: Ron Rounsaville
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Location (including state): NM
Phone #: 432 520 7720
Fax #:
E-mail:
Project Name: BOB Durham
Sampler Signature:

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8246 | MW-26 | 3 | VOA | X | | | | X | | | | X | | 2-17-09 | 1410 | | X | | | | | | | | | | | | | | | | | |
| 847 | MW-31 | | | | | | | | | | | | | | 1435 | | | | | | | | | | | | | | | | | | | |
| 848 | MW-33 | | | | | | | | | | | | | | 1500 | | | | | | | | | | | | | | | | | | | |
| 849 | MW-9 | | | | | | | | | | | | | | 1525 | | | | | | | | | | | | | | | | | | | |
| 850 | MW-15 | | | | | | | | | | | | | | 1550 | | | | | | | | | | | | | | | | | | | |
| 851 | MW-10 | | | | | | | | | | | | | | 16:15 | | | | | | | | | | | | | | | | | | | |
| 852 | MW-7 | | | | | | | | | | | | | | 1640 | | | | | | | | | | | | | | | | | | | |
| 853 | MW-32 | | | | | | | | | | | | | | 17:05 | | | | | | | | | | | | | | | | | | | |
| 854 | MW-37 | | | | | | | | | | | | | | 1730 | | | | | | | | | | | | | | | | | | | |
| 855 | MW-8 | | | | | | | | | | | | | | 17:55 | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| [signature] | NOVA | 2-18-09 | 8:25 | [signature] | Trace | 2-18-09 | 08:25 | 3.2C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |

LAB USE ONLY
Intact: Y / N
Headspace: Y / N / NA
3.2
Log-in Review

REMARKS: All tests Midland

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # carry-in

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LAB Order ID # 402 1407



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
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Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: NOVA
Phone #: 432 520 7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron Roussaville
E-mail:
Invoice to: (If different from above) Plains
Project #: TNM-LF 2000-7
Project Name: BOB Durham
Project Location (including state): NM
Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 856 | MW-28 | 3 | VOA | X | | | | X | | | | X | | 2-18-09 | 900 | | X | | | | | | | | | | | | | | | | | |
| 857 | MW-3 | | | | | | | | | | | | | | 920 | | | | | | | | | | | | | | | | | | | |
| 858 | MW-23 | | | | | | | | | | | | | | 940 | | | | | | | | | | | | | | | | | | | |
| 859 | MW-16 | | | | | | | | | | | | | | 1000 | | | | | | | | | | | | | | | | | | | |
| 860 | MW-4 | | | | | | | | | | | | | | 1020 | | | | | | | | | | | | | | | | | | | |
| 861 | MW-6 | | | | | | | | | | | | | | 1040 | | | | | | | | | | | | | | | | | | | |
| 862 | MW-13 | | | | | | | | | | | | | | 1100 | | | | | | | | | | | | | | | | | | | |
| 863 | MW-2 | | | | | | | | | | | | | | 1120 | | | | | | | | | | | | | | | | | | | |
| 864 | MW-5 | | | | | | | | | | | | | | 1140 | | | | | | | | | | | | | | | | | | | |
| 865 | MW-38 | | | | | | | | | | | | | | 1200 | | | | | | | | | | | | | | | | | | | |
| 866 | MW-1 | | | | | | | | | | | | | | 1240 | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°C: |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 2-19-09 | 825 | [signature] | Trace | 2-19-09 | 08:25 | 3.2°C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°C: |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°C: |

LAB USE ONLY
Intact Y N
Headspace Y N NA
3.2
Log-in Review

REMARKS: All tests Midland

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Carry-in

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TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sonse Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
5015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

## Certifications

**WBENC:** 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
**NCTRCA** WFWB38444Y0909

## NELAP Certifications

**Lubbock:** T104704219-08-TX
LELAP-02003
Kansas E-10317

**El Paso:** T104704221-08-TX
LELAP-02002

**Midland:** T104704392-08-TX

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: May 21, 2009

Work Order: 9051916

Project Location: West of Monument, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 196349 | MW-23 | water | 2009-05-18 | 07:00 | 2009-05-19 |
| 196350 | MW-26 | water | 2009-05-18 | 07:30 | 2009-05-19 |
| 196351 | MW-31 | water | 2009-05-18 | 08:00 | 2009-05-19 |
| 196352 | MW-33 | water | 2009-05-18 | 08:30 | 2009-05-19 |
| 196353 | MW-9 | water | 2009-05-18 | 09:00 | 2009-05-19 |
| 196354 | MW-15 | water | 2009-05-18 | 09:30 | 2009-05-19 |
| 196355 | MW-10 | water | 2009-05-18 | 10:00 | 2009-05-19 |
| 196356 | MW-7 | water | 2009-05-18 | 10:30 | 2009-05-19 |
| 196357 | MW-32 | water | 2009-05-18 | 11:00 | 2009-05-19 |
| 196358 | MW-37 | water | 2009-05-18 | 11:30 | 2009-05-19 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 196359 | MW-8 | water | 2009-05-18 | 12:00 | 2009-05-19 |
| 196360 | MW-28 | water | 2009-05-18 | 12:30 | 2009-05-19 |
| 196361 | MW-3 | water | 2009-05-18 | 13:00 | 2009-05-19 |
| 196362 | MW-16 | water | 2009-05-18 | 13:30 | 2009-05-19 |
| 196363 | MW-6 | water | 2009-05-18 | 14:00 | 2009-05-19 |
| 196364 | MW-38 | water | 2009-05-18 | 14:30 | 2009-05-19 |
| 196365 | MW-2 | water | 2009-05-18 | 15:00 | 2009-05-19 |
| 196366 | MW-13 | water | 2009-05-18 | 15:30 | 2009-05-19 |
| 196367 | MW-4 | water | 2009-05-18 | 16:00 | 2009-05-19 |
| 196368 | MW-1 | water | 2009-05-18 | 16:30 | 2009-05-19 |
| 196369 | MW-5 | water | 2009-05-18 | 17:00 | 2009-05-19 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Dr. Blair Leftwich, Director

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2009-05-19 and assigned to work order 9051916. Samples for work order 9051916 were received intact without headspace and at a temperature of 4.0 deg. C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 50905 | 2009-05-19 at 14:51 | 59637 | 2009-05-19 at 14:51 |
| BTEX | S 8021B | 50932 | 2009-05-20 at 09:03 | 59672 | 2009-05-20 at 09:03 |

Results for these samples are reported on a wet weight hasis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9051916 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensnre data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 196349 - MW-23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59672 | Date Analyzed: | 2009-05-20 | Analyzed By: | ME |
| Prep Batch: | 50932 | Sample Preparation: | 2009-05-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.102 | mg/L | 1 | 0.100 | 102 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0845 | mg/L | 1 | 0.100 | 84 | 40.1 - 136 |

**Sample: 196350 - MW-26**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.100 | mg/L | 1 | 0.100 | 100 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0805 | mg/L | 1 | 0.100 | 80 | 40.1 - 136 |

**Sample: 196351 - MW-31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0973 | mg/L | 1 | 0.100 | 97 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0824 | mg/L | 1 | 0.100 | 82 | 40.1 - 136 |

**Sample: 196352 - MW-33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0980 | mg/L | 1 | 0.100 | 98 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0801 | mg/L | 1 | 0.100 | 80 | 40.1 - 136 |

**Sample: 196353 - MW-9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0976 | mg/L | 1 | 0.100 | 98 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0858 | mg/L | 1 | 0.100 | 86 | 40.1 - 136 |

**Sample: 196354 - MW-15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0977 | mg/L | 1 | 0.100 | 98 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0781 | mg/L | 1 | 0.100 | 78 | 40.1 - 136 |

**Sample: 196355 - MW-10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.101 | mg/L | 1 | 0.100 | 101 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0838 | mg/L | 1 | 0.100 | 84 | 40.1 - 136 |

**Sample: 196356 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00500** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0973 | mg/L | 1 | 0.100 | 97 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0809 | mg/L | 1 | 0.100 | 81 | 40.1 - 136 |

**Sample: 196357 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00700** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0165** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0932 | mg/L | 1 | 0.100 | 93 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0885 | mg/L | 1 | 0.100 | 88 | 40.1 - 136 |

**Sample: 196358 - MW-37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0937 | mg/L | 1 | 0.100 | 94 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0822 | mg/L | 1 | 0.100 | 82 | 40.1 - 136 |

**Sample: 196359 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0925 | mg/L | 1 | 0.100 | 92 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0798 | mg/L | 1 | 0.100 | 80 | 40.1 - 136 |

**Sample: 196360 - MW-28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amonnt | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0957 | mg/L | 1 | 0.100 | 96 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0899 | mg/L | 1 | 0.100 | 90 | 40.1 - 136 |

**Sample: 196361 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0980 | mg/L | 1 | 0.100 | 98 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0846 | mg/L | 1 | 0.100 | 85 | 40.1 - 136 |

**Sample: 196362 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0944 | mg/L | 1 | 0.100 | 94 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0975 | mg/L | 1 | 0.100 | 98 | 40.1 - 136 |

**Sample: 196363 - MW-6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00580** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0922 | mg/L | 1 | 0.100 | 92 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0839 | mg/L | 1 | 0.100 | 84 | 40.1 - 136 |

**Sample: 196364 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0172** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00890** | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0920 | mg/L | 1 | 0.100 | 92 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0944 | mg/L | 1 | 0.100 | 94 | 40.1 - 136 |

**Sample: 196365 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59637 | Date Analyzed: | 2009-05-19 | Analyzed By: | ME |
| Prep Batch: | 50905 | Sample Preparation: | 2009-05-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00710** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00550** | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0934 | mg/L | 1 | 0.100 | 93 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.100 | mg/L | 1 | 0.100 | 100 | 40.1 - 136 |

**Sample: 196366 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59672 | Date Analyzed: | 2009-05-20 | Analyzed By: | ME |
| Prep Batch: | 50932 | Sample Preparation: | 2009-05-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0939 | mg/L | 1 | 0.100 | 94 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.101 | mg/L | 1 | 0.100 | 101 | 40.1 - 136 |

**Sample: 196367 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59672 | Date Analyzed: | 2009-05-20 | Analyzed By: | ME |
| Prep Batch: | 50932 | Sample Preparation: | 2009-05-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0940 | mg/L | 1 | 0.100 | 94 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0822 | mg/L | 1 | 0.100 | 82 | 40.1 - 136 |

**Sample: 196368 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59672 | Date Analyzed: | 2009-05-20 | Analyzed By: | ME |
| Prep Batch: | 50932 | Sample Preparation: | 2009-05-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0214** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.0153** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0205** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0942 | mg/L | 1 | 0.100 | 94 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.111 | mg/L | 1 | 0.100 | 111 | 40.1 - 136 |

**Sample: 196369 - MW-5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 59672 | Date Analyzed: | 2009-05-20 | Analyzed By: | ME |
| Prep Batch: | 50932 | Sample Preparation: | 2009-05-20 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0486** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.0157** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0220** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0946 | mg/L | 1 | 0.100 | 95 | 77.8 - 121.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.101 | mg/L | 1 | 0.100 | 101 | 40.1 - 136 |

**Method Blank (1)** QC Batch: 59637

QC Batch: 59637 | Date Analyzed: 2009-05-19 | Analyzed By: ME
Prep Batch: 50905 | QC Preparation: 2009-05-19 | Prepared By: ME

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000500 | mg/L | 0.001 |
| Xylene | | <0.000400 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0971 | mg/L | 1 | 0.100 | 97 | 77.2 - 129.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0809 | mg/L | 1 | 0.100 | 81 | 69.1 - 132.3 |

**Method Blank (1)** QC Batch: 59672

QC Batch: 59672 | Date Analyzed: 2009-05-20 | Analyzed By: ME
Prep Batch: 50932 | QC Preparation: 2009-05-20 | Prepared By: ME

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000500 | mg/L | 0.001 |
| Xylene | | <0.000400 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0954 | mg/L | 1 | 0.100 | 95 | 77.2 - 129.1 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0771 | mg/L | 1 | 0.100 | 77 | 69.1 - 132.3 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 59637 | Date Analyzed: 2009-05-19 | Analyzed By: ME
Prep Batch: 50905 | QC Preparation: 2009-05-19 | Prepared By: ME

| Param | | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Benzene | [1] | 0.0923 | mg/L | 1 | 0.100 | <0.00110 | 92 | 84 - 119.7 |
| Toluene | | 0.0911 | mg/L | 1 | 0.100 | <0.00100 | 91 | 84.9 - 118.2 |

*continued ...*

[1]SPECIAL - MS/MSD was run but not reported due to analytes being out of range. •

*control spikes continued ...*

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Ethylbenzene | 0.0945 | mg/L | 1 | 0.100 | <0.00100 | 94 | 84.4 - 118.6 |
| Xylene | 0.273 | mg/L | 1 | 0.300 | <0.00290 | 91 | 84.8 - 117.8 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0984 | mg/L | 1 | 0.100 | <0.00110 | 98 | 84 - 119.7 | 6 | 20 |
| Toluene | 0.100 | mg/L | 1 | 0.100 | <0.00100 | 100 | 84.9 - 118.2 | 9 | 20 |
| Ethylbenzene | 0.0982 | mg/L | 1 | 0.100 | <0.00100 | 98 | 84.4 - 118.6 | 4 | 20 |
| Xylene | 0.290 | mg/L | 1 | 0.300 | <0.00290 | 97 | 84.8 - 117.8 | 6 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.101 | 0.104 | mg/L | 1 | 0.100 | 101 | 104 | 80 - 128.3 |
| 4-Bromofluorobenzene (4-BFB) | 0.0840 | 0.0862 | mg/L | 1 | 0.100 | 84 | 86 | 59.7 - 136.3 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 59672 | Date Analyzed: 2009-05-20 | Analyzed By: ME
Prep Batch: 50932 | QC Preparation: 2009-05-20 | Prepared By: ME

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0924 | mg/L | 1 | 0.100 | <0.00110 | 92 | 84 - 119.7 |
| Toluene | 0.0929 | mg/L | 1 | 0.100 | <0.00100 | 93 | 84.9 - 118.2 |
| Ethylbenzene | 0.0915 | mg/L | 1 | 0.100 | <0.00100 | 92 | 84.4 - 118.6 |
| Xylene | 0.267 | mg/L | 1 | 0.300 | <0.00290 | 89 | 84.8 - 117.8 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0908 | mg/L | 1 | 0.100 | <0.00110 | 91 | 84 - 119.7 | 2 | 20 |
| Toluene | 0.0893 | mg/L | 1 | 0.100 | <0.00100 | 89 | 84.9 - 118.2 | 4 | 20 |
| Ethylbenzene | 0.0872 | mg/L | 1 | 0.100 | <0.00100 | 87 | 84.4 - 118.6 | 5 | 20 |
| Xylene | 0.257 | mg/L | 1 | 0.300 | <0.00290 | 86 | 84.8 - 117.8 | 4 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0968 | 0.0989 | mg/L | 1 | 0.100 | 97 | 99 | 80 - 128.3 |
| 4-Bromofluorobenzene (4-BFB) | 0.0841 | 0.0797 | mg/L | 1 | 0.100 | 84 | 80 | 59.7 - 136.3 |

**Matrix Spike (MS-1)** Spiked Sample: 196419

QC Batch: 59672
Prep Batch: 50932

Date Analyzed: 2009-05-20
QC Preparation: 2009-05-20

Analyzed By: ME
Prepared By: ME

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 31.1 | mg/L | 100 | 10.0 | 20.7127 | 104 | 77.5 - 121.1 |
| Toluene | 9.84 | mg/L | 100 | 10.0 | <0.100 | 98 | 78.8 - 119.6 |
| Ethylbenzene | 9.37 | mg/L | 100 | 10.0 | <0.100 | 94 | 77.9 - 120.5 |
| Xylene | 27.4 | mg/L | 100 | 30.0 | <0.290 | 91 | 78 - 119.4 |

Percent recovery is based on the spike result. RPD is based on the spike and spike dnplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Resnlt | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 29.6 | mg/L | 100 | 10.0 | 20.7127 | 89 | 77.5 - 121.1 | 5 | 20 |
| Toluene | 9.39 | mg/L | 100 | 10.0 | <0.100 | 94 | 78.8 - 119.6 | 5 | 20 |
| Ethylbenzene | 9.45 | mg/L | 100 | 10.0 | <0.100 | 94 | 77.9 - 120.5 | 1 | 20 |
| Xylene | 27.7 | mg/L | 100 | 30.0 | <0.290 | 92 | 78 - 119.4 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Aruount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 9.82 | 10.3 | mg/L | 100 | 10 | 98 | 103 | 86.6 - 118.9 |
| 4-Bromofluorobenzene (4-BFB) | 8.51 | 8.57 | mg/L | 100 | 10 | 85 | 86 | 59.4 - 127.3 |

**Standard (CCV-1)**

QC Batch: 59637

Date Analyzed: 2009-05-19

Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Perceut Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0935 | 94 | 80 - 120 | 2009-05-19 |
| Toluene | | mg/L | 0.100 | 0.0898 | 90 | 80 - 120 | 2009-05-19 |
| Ethylbenzene | | mg/L | 0.100 | 0.0910 | 91 | 80 - 120 | 2009-05-19 |
| Xylene | | mg/L | 0.300 | 0.271 | 90 | 80 - 120 | 2009-05-19 |

**Standard (CCV-2)**

QC Batch: 59637

Date Analyzed: 2009-05-19

Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0969 | 97 | 80 - 120 | 2009-05-19 |
| Toluene | | mg/L | 0.100 | 0.0965 | 96 | 80 - 120 | 2009-05-19 |
| Ethylbenzene | | mg/L | 0.100 | 0.0929 | 93 | 80 - 120 | 2009-05-19 |
| Xylene | | mg/L | 0.300 | 0.278 | 93 | 80 - 120 | 2009-05-19 |

**Standard (CCV-3)**

QC Batch: 59637 Date Analyzed: 2009-05-19 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0896 | 90 | 80 - 120 | 2009-05-19 |
| Toluene | | mg/L | 0.100 | 0.112 | 112 | 80 - 120 | 2009-05-19 |
| Ethylbenzene | | mg/L | 0.100 | 0.115 | 115 | 80 - 120 | 2009-05-19 |
| Xylene | | mg/L | 0.300 | 0.333 | 111 | 80 - 120 | 2009-05-19 |

**Standard (CCV-1)**

QC Batch: 59672 Date Analyzed: 2009-05-20 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0927 | 93 | 80 - 120 | 2009-05-20 |
| Toluene | | mg/L | 0.100 | 0.0990 | 99 | 80 - 120 | 2009-05-20 |
| Ethylbenzene | | mg/L | 0.100 | 0.0992 | 99 | 80 - 120 | 2009-05-20 |
| Xylene | | mg/L | 0.300 | 0.289 | 96 | 80 - 120 | 2009-05-20 |

**Standard (CCV-2)**

QC Batch: 59672 Date Analyzed: 2009-05-20 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0992 | 99 | 80 - 120 | 2009-05-20 |
| Toluene | | mg/L | 0.100 | 0.0963 | 96 | 80 - 120 | 2009-05-20 |
| Ethylbenzene | | mg/L | 0.100 | 0.0922 | 92 | 80 - 120 | 2009-05-20 |
| Xylene | | mg/L | 0.300 | 0.273 | 91 | 80 - 120 | 2009-05-20 |

LAB Order ID # 4U J1 116



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: Nova
Address: (Street, City, Zip) 2057 Commerce
Contact Person: Ron Rounsaville
Invoice to: (if different from above) Plains
Project #: TNM-LF-2000-7
Project Location (including state): NM.
Phone #: 432-520-7720
Fax #:
E-mail:
Project Name: Bob Durham
Sampler Signature:

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING DATE (89') | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 349 | MW-23 | 3 | Jar | X | | | | X | | | | X | | 5-18 | 1700 | | X | | | | | | | | | | | | | | | | | |
| 350 | MW-26 | | | | | | | | | | | | | | 730 | | | | | | | | | | | | | | | | | | | |
| 351 | MW-31 | | | | | | | | | | | | | | 800 | | | | | | | | | | | | | | | | | | | |
| 352 | MW-33 | | | | | | | | | | | | | | 830 | | | | | | | | | | | | | | | | | | | |
| 353 | MW-9 | | | | | | | | | | | | | | 900 | | | | | | | | | | | | | | | | | | | |
| 354 | MW-15 | | | | | | | | | | | | | | 930 | | | | | | | | | | | | | | | | | | | |
| 355 | MW-10 | | | | | | | | | | | | | | 1000 | | | | | | | | | | | | | | | | | | | |
| 356 | MW-17 | | | | | | | | | | | | | | 1030 | | | | | | | | | | | | | | | | | | | |
| 357 | MW-32 | | | | | | | | | | | | | | 1100 | | | | | | | | | | | | | | | | | | | |
| 358 | MW-37 | | | | | | | | | | | | | | 1130 | | | | | | | | | | | | | | | | | | | |
| 359 | MW-8 | | | | | | | | | | | | | | 1200 | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| | Nova | 5-19-09 | 8:20 | | TRACE | 5/19/09 | 8:20 | INST ___ OBS 4.0 °C COR 4.0 °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS: All tests Midland

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Carrier # Overnight



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LAB Order ID # 10[illegible]116



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
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Fax (817) 560-4336

Company Name: Nova
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron Rousseaville
E-mail:
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Name: BOB Durham
Project Location (including state): N.M.
Sampler Signature: [signature]

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26360 | MW-28 | 3 | 40a | X | | | | X | | | | X | | 5-18 | 1230 | | X | | | | | | | | | | | | | | | | | | |
| 361 | MW-3 | | | | | | | | | | | | | | 1300 | | | | | | | | | | | | | | | | | | | | |
| 362 | MW-16 | | | | | | | | | | | | | | 1330 | | | | | | | | | | | | | | | | | | | | |
| 363 | MW-6 | | | | | | | | | | | | | | 1400 | | | | | | | | | | | | | | | | | | | | |
| 364 | MW-38 | | | | | | | | | | | | | | 1430 | | | | | | | | | | | | | | | | | | | | |
| 365 | MW-2 | | | | | | | | | | | | | | 1500 | | | | | | | | | | | | | | | | | | | | |
| 366 | MW-13 | | | | | | | | | | | | | | 1530 | | | | | | | | | | | | | | | | | | | | |
| 367 | MW-4 | | | | | | | | | | | | | | 1600 | | | | | | | | | | | | | | | | | | | | |
| 368 | MW-1 | | | | | | | | | | | | | | 1630 | | | | | | | | | | | | | | | | | | | | |
| 369 | MW-5 | | | | | | | | | | | | | | 1700 | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | 30 | [illegible] | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 5-19-09 | 820 | [signature] | TRACE | 5/19/09 | 8:20 | INST ___ OBS 4.0 °C COR 4.0 °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS: All tests Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

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Carrier # Carry in

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
8015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

## Certifications

**WBENC:** 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
**NCTRCA** WFWB38444Y0909

## NELAP Certifications

**Lubbock:** T104704219-08-TX LELAP-02003 Kansas E-10317
**El Paso:** T104704221-08-TX LELAP-02002
**Midland:** T104704392-08-TX

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: August 20, 2009

Work Order: 9081817

Project Location: West of Monument, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 206350 | MW-3 | water | 2009-08-17 | 08:00 | 2009-08-18 |
| 206351 | MW-4 | water | 2009-08-17 | 08:30 | 2009-08-18 |
| 206352 | MW-8 | water | 2009-08-17 | 09:00 | 2009-08-18 |
| 206353 | MW-9 | water | 2009-08-17 | 09:30 | 2009-08-18 |
| 206354 | MW-10 | water | 2009-08-17 | 10:00 | 2009-08-18 |
| 206355 | MW-13 | water | 2009-08-17 | 10:30 | 2009-08-18 |
| 206356 | MW-15 | water | 2009-08-17 | 11:00 | 2009-08-18 |
| 206357 | MW-16 | water | 2009-08-17 | 11:30 | 2009-08-18 |
| 206358 | MW-23 | water | 2009-08-17 | 12:00 | 2009-08-18 |
| 206359 | MW-26 | water | 2009-08-17 | 12:30 | 2009-08-18 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 206360 | MW-28 | water | 2009-08-17 | 13:00 | 2009-08-18 |
| 206361 | MW-31 | water | 2009-08-17 | 13:30 | 2009-08-18 |
| 206362 | MW-32 | water | 2009-08-17 | 14:00 | 2009-08-18 |
| 206363 | MW-33 | water | 2009-08-17 | 14:30 | 2009-08-18 |
| 206364 | MW-37 | water | 2009-08-17 | 15:00 | 2009-08-18 |
| 206365 | MW-7 | water | 2009-08-17 | 15:30 | 2009-08-18 |
| 206366 | MW-6 | water | 2009-08-17 | 16:00 | 2009-08-18 |
| 206367 | MW-2 | water | 2009-08-17 | 16:30 | 2009-08-18 |
| 206368 | MW-38 | water | 2009-08-17 | 17:00 | 2009-08-18 |
| 206369 | MW-1 | water | 2009-08-17 | 17:30 | 2009-08-18 |
| 206370 | MW-5 | water | 2009-08-17 | 18:00 | 2009-08-18 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2009-08-18 and assigned to work order 9081817. Samples for work order 9081817 were received intact without headspace and at a temperature of 5.5 deg. C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 53485 | 2009-08-19 at 08:52 | 62680 | 2009-08-19 at 08:52 |
| BTEX | S 8021B | 53498 | 2009-08-19 at 16:06 | 62691 | 2009-08-19 at 16:06 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9081817 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any qnestions regarding this project.

# Analytical Report

**Sample: 206350 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62680 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53485 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0983 | mg/L | 1 | 0.100 | 98 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 49.8 - 130.8 |

**Sample: 206351 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62680 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53485 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | **0.00770** | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00860** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0170** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.101 | mg/L | 1 | 0.100 | 101 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | [1] | 0.137 | mg/L | 1 | 0.100 | 137 | 49.8 - 130.8 |

**Sample: 206352 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62680 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53485 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

[1] High surrogate recovery due to peak interference.

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0982 | mg/L | 1 | 0.100 | 98 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.114 | mg/L | 1 | 0.100 | 114 | 49.8 - 130.8 |

**Sample: 206353 - MW-9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62680 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53485 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0992 | mg/L | 1 | 0.100 | 99 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.110 | mg/L | 1 | 0.100 | 110 | 49.8 - 130.8 |

**Sample: 206354 - MW-10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62680 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53485 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0992 | mg/L | 1 | 0.100 | 99 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.105 | mg/L | 1 | 0.100 | 105 | 49.8 - 130.8 |

**Sample: 206355 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62680 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53485 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.101 | mg/L | 1 | 0.100 | 101 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | [2] | 0.143 | mg/L | 1 | 0.100 | 143 | 49.8 - 130.8 |

**Sample: 206356 - MW-15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62680 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53485 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilntion | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0978 | mg/L | 1 | 0.100 | 98 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.110 | mg/L | 1 | 0.100 | 110 | 49.8 - 130.8 |

[2]High surrogate recovery due to peak interference.

**Sample: 206357 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62680 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53485 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0942 | mg/L | 1 | 0.100 | 94 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.121 | mg/L | 1 | 0.100 | 121 | 49.8 - 130.8 |

**Sample: 206358 - MW-23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62680 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53485 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0981 | mg/L | 1 | 0.100 | 98 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.103 | mg/L | 1 | 0.100 | 103 | 49.8 - 130.8 |

**Sample: 206359 - MW-26**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62680 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53485 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0965 | mg/L | 1 | 0.100 | 96 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.105 | mg/L | 1 | 0.100 | 105 | 49.8 - 130.8 |

**Sample: 206360 - MW-28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62680 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53485 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0978 | mg/L | 1 | 0.100 | 98 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.111 | mg/L | 1 | 0.100 | 111 | 49.8 - 130.8 |

**Sample: 206361 - MW-31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62680 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53485 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0967 | mg/L | 1 | 0.100 | 97 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.101 | mg/L | 1 | 0.100 | 101 | 49.8 - 130.8 |

**Sample: 206362 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62680 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53485 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0962 | mg/L | 1 | 0.100 | 96 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.102 | mg/L | 1 | 0.100 | 102 | 49.8 - 130.8 |

**Sample: 206363 - MW-33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62691 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53498 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0965 | mg/L | 1 | 0.100 | 96 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0916 | mg/L | 1 | 0.100 | 92 | 49.8 - 130.8 |

**Sample: 206364 - MW-37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62691 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53498 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0960 | mg/L | 1 | 0.100 | 96 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0911 | mg/L | 1 | 0.100 | 91 | 49.8 - 130.8 |

**Sample: 206365 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62691 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53498 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0974 | mg/L | 1 | 0.100 | 97 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0950 | mg/L | 1 | 0.100 | 95 | 49.8 - 130.8 |

**Sample: 206366 - MW-6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62691 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53498 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0921 | mg/L | 1 | 0.100 | 92 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0921 | mg/L | 1 | 0.100 | 92 | 49.8 - 130.8 |

**Sample: 206367 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62691 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53498 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0932 | mg/L | 1 | 0.100 | 93 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.115 | mg/L | 1 | 0.100 | 115 | 49.8 - 130.8 |

**Sample: 206368 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62691 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53498 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0131** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00890** | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotolueue (TFT) | | 0.0921 | mg/L | 1 | 0.100 | 92 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.103 | mg/L | 1 | 0.100 | 103 | 49.8 - 130.8 |

**Sample: 206369 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62691 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53498 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0151** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.0180** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0151** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0947 | mg/L | 1 | 0.100 | 95 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | [3] | 0.139 | mg/L | 1 | 0.100 | 139 | 49.8 - 130.8 |

**Sample: 206370 - MW-5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 62691 | Date Analyzed: | 2009-08-19 | Analyzed By: | ME |
| Prep Batch: | 53498 | Sample Preparation: | 2009-08-19 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0724** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.0180** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0267** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0946 | mg/L | 1 | 0.100 | 95 | 87 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.118 | mg/L | 1 | 0.100 | 118 | 49.8 - 130.8 |

[3]High surrogate recovery due to peak interference.

**Method Blank (1)** QC Batch: 62680

QC Batch: 62680 | Date Analyzed: 2009-08-19 | Analyzed By: ME
Prep Batch: 53485 | QC Preparation: 2009-08-19 | Prepared By: ME

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000500 | mg/L | 0.001 |
| Xylene | | <0.000400 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0967 | mg/L | 1 | 0.100 | 97 | 85.4 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0926 | mg/L | 1 | 0.100 | 93 | 52.8 - 124.2 |

**Method Blank (1)** QC Batch: 62691

QC Batch: 62691 | Date Analyzed: 2009-08-19 | Analyzed By: ME
Prep Batch: 53498 | QC Preparation: 2009-08-19 | Prepared By: ME

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000500 | mg/L | 0.001 |
| Xylene | | <0.000400 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0992 | mg/L | 1 | 0.100 | 99 | 85.4 - 105.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.101 | mg/L | 1 | 0.100 | 101 | 52.8 - 124.2 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 62680 | Date Analyzed: 2009-08-19 | Analyzed By: ME
Prep Batch: 53485 | QC Preparation: 2009-08-19 | Prepared By: ME

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.101 | mg/L | 1 | 0.100 | <0.00110 | 101 | 74.3 - 123.4 |
| Toluene | 0.100 | mg/L | 1 | 0.100 | <0.00100 | 100 | 70.1 - 126.2 |
| Ethylbenzene | 0.0972 | mg/L | 1 | 0.100 | <0.00100 | 97 | 68.6 - 124.7 |

*continued . . .*

*control spikes continued . . .*

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Xylene | 0.291 | mg/L | 1 | 0.300 | <0.00290 | 97 | 64.8 - 127.2 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.101 | mg/L | 1 | 0.100 | <0.00110 | 101 | 74.3 - 123.4 | 0 | 20 |
| Toluene | 0.100 | mg/L | 1 | 0.100 | <0.00100 | 100 | 70.1 - 126.2 | 0 | 20 |
| Ethylbenzene | 0.100 | mg/L | 1 | 0.100 | <0.00100 | 100 | 68.6 - 124.7 | 3 | 20 |
| Xylene | 0.301 | mg/L | 1 | 0.300 | <0.00290 | 100 | 64.8 - 127.2 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0984 | 0.0958 | mg/L | 1 | 0.100 | 98 | 96 | 84.8 - 110.8 |
| 4-Bromofluorobenzene (4-BFB) | 0.0993 | 0.0953 | mg/L | 1 | 0.100 | 99 | 95 | 51.7 - 134.7 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 62691 | Date Analyzed: 2009-08-19 | Analyzed By: ME
Prep Batch: 53498 | QC Preparation: 2009-08-19 | Prepared By: ME

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.103 | mg/L | 1 | 0.100 | <0.00110 | 103 | 74.3 - 123.4 |
| Toluene | 0.101 | mg/L | 1 | 0.100 | <0.00100 | 101 | 70.1 - 126.2 |
| Ethylbenzene | 0.0976 | mg/L | 1 | 0.100 | <0.00100 | 98 | 68.6 - 124.7 |
| Xylene | 0.292 | mg/L | 1 | 0.300 | <0.00290 | 97 | 64.8 - 127.2 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.103 | mg/L | 1 | 0.100 | <0.00110 | 103 | 74.3 - 123.4 | 0 | 20 |
| Toluene | 0.103 | mg/L | 1 | 0.100 | <0.00100 | 103 | 70.1 - 126.2 | 2 | 20 |
| Ethylbenzene | 0.103 | mg/L | 1 | 0.100 | <0.00100 | 103 | 68.6 - 124.7 | 5 | 20 |
| Xylene | 0.310 | mg/L | 1 | 0.300 | <0.00290 | 103 | 64.8 - 127.2 | 6 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.100 | 0.0985 | mg/L | 1 | 0.100 | 100 | 98 | 84.8 - 110.8 |
| 4-Bromofluorobenzene (4-BFB) | 0.101 | 0.105 | mg/L | 1 | 0.100 | 101 | 105 | 51.7 - 134.7 |

**Matrix Spike (MS-1)** Spiked Sample: 206073

QC Batch: 62680
Prep Batch: 53485

Date Analyzed: 2009-08-19
QC Preparation: 2009-08-19

Analyzed By: ME
Prepared By: ME

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 17.9 | mg/L | 100 | 10.0 | 6.8223 | 111 | 61 - 130 |
| Toluene | 10.9 | mg/L | 100 | 10.0 | <0.100 | 109 | 69.2 - 121.4 |
| Ethylbenzene | 12.3 | mg/L | 100 | 10.0 | 1.6903 | 106 | 56.3 - 124.9 |
| Xylene | 32.6 | mg/L | 100 | 30.0 | 1.4058 | 104 | 60.2 - 122.9 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 17.5 | mg/L | 100 | 10.0 | 6.8223 | 107 | 61 - 130 | 2 | 20 |
| Toluene | 10.8 | mg/L | 100 | 10.0 | <0.100 | 108 | 69.2 - 121.4 | 1 | 20 |
| Ethylbenzene | 12.4 | mg/L | 100 | 10.0 | 1.6903 | 107 | 56.3 - 124.9 | 1 | 20 |
| Xylene | 33.4 | mg/L | 100 | 30.0 | 1.4058 | 107 | 60.2 - 122.9 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 9.66 | 10.1 | mg/L | 100 | 10 | 97 | 101 | 85.6 - 108.1 |
| 4-Bromofluorobenzene (4-BFB) | 10.8 | 10.7 | mg/L | 100 | 10 | 108 | 107 | 53.7 - 127.3 |

**Matrix Spike (MS-1)** Spiked Sample: 206445

QC Batch: 62691
Prep Batch: 53498

Date Analyzed: 2009-08-19
QC Preparation: 2009-08-19

Analyzed By: ME
Prepared By: ME

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 20.1 | mg/L | 50 | 5.00 | 14.5233 | 112 | 61 - 130 |
| Toluene [4] | 18.7 | mg/L | 50 | 5.00 | 12.1245 | 132 | 69.2 - 121.4 |
| Ethylbenzene | 7.43 | mg/L | 50 | 5.00 | 1.8043 | 112 | 56.3 - 124.9 |
| Xylene | 20.8 | mg/L | 50 | 15.0 | 4.3404 | 110 | 60.2 - 122.9 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 20.3 | mg/L | 50 | 5.00 | 14.5233 | 116 | 61 - 130 | 1 | 20 |
| Toluene [5] | 18.8 | mg/L | 50 | 5.00 | 12.1245 | 134 | 69.2 - 121.4 | 0 | 20 |

*continued ...*

[4]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[5]MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.

*matrix spikes continued ...*

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | 8.00 | mg/L | 50 | 5.00 | 1.8043 | 124 | 56.3 - 124.9 | 7 | 20 |
| Xylene | 22.6 | mg/L | 50 | 15.0 | 4.3404 | 122 | 60.2 - 122.9 | 8 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike dnplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 4.86 | 4.88 | mg/L | 50 | 5 | 97 | 98 | 85.6 - 108.1 |
| 4-Bromofluorobenzene (4-BFB) | 5.67 | 5.82 | mg/L | 50 | 5 | 113 | 116 | 53.7 - 127.3 |

**Standard (CCV-1)**

QC Batch: 62680 Date Analyzed: 2009-08-19 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.106 | 106 | 80 - 120 | 2009-08-19 |
| Toluene | | mg/L | 0.100 | 0.101 | 101 | 80 - 120 | 2009-08-19 |
| Ethylbenzene | | mg/L | 0.100 | 0.102 | 102 | 80 - 120 | 2009-08-19 |
| Xylene | | mg/L | 0.300 | 0.305 | 102 | 80 - 120 | 2009-08-19 |

**Standard (CCV-2)**

QC Batch: 62680 Date Analyzed: 2009-08-19 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.110 | 110 | 80 - 120 | 2009-08-19 |
| Toluene | | mg/L | 0.100 | 0.110 | 110 | 80 - 120 | 2009-08-19 |
| Ethylbenzene | | mg/L | 0.100 | 0.108 | 108 | 80 - 120 | 2009-08-19 |
| Xylene | | mg/L | 0.300 | 0.327 | 109 | 80 - 120 | 2009-08-19 |

**Standard (CCV-3)**

QC Batch: 62680 Date Analyzed: 2009-08-19 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.103 | 103 | 80 - 120 | 2009-08-19 |
| Toluene | | mg/L | 0.100 | 0.102 | 102 | 80 - 120 | 2009-08-19 |

*continued ...*

*standard continued ...*

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Ethylbenzene | | mg/L | 0.100 | 0.104 | 104 | 80 - 120 | 2009-08-19 |
| Xylene | | mg/L | 0.300 | 0.314 | 105 | 80 - 120 | 2009-08-19 |

**Standard (CCV-1)**

QC Batch: 62691 Date Analyzed: 2009-08-19 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.101 | 101 | 80 - 120 | 2009-08-19 |
| Toluene | | mg/L | 0.100 | 0.101 | 101 | 80 - 120 | 2009-08-19 |
| Ethylbenzene | | mg/L | 0.100 | 0.102 | 102 | 80 - 120 | 2009-08-19 |
| Xylene | | mg/L | 0.300 | 0.308 | 103 | 80 - 120 | 2009-08-19 |

**Standard (CCV-2)**

QC Batch: 62691 Date Analyzed: 2009-08-19 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.103 | 103 | 80 - 120 | 2009-08-19 |
| Toluene | | mg/L | 0.100 | 0.103 | 103 | 80 - 120 | 2009-08-19 |
| Ethylbenzene | | mg/L | 0.100 | 0.0993 | 99 | 80 - 120 | 2009-08-19 |
| Xylene | | mg/L | 0.300 | 0.302 | 101 | 80 - 120 | 2009-08-19 |

LAB Order ID # 4081817



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: Nova
Phone #: 520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron Raunsaville
E-mail:
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Name: BOB Ourbum
Project Location (including state): N.M.
Sampler Signature:

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | | SAMPLING: DATE | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20350 | MW-3 | 3 | Vom | X | | | | | X | | | | X | | | 8-17 | 800 | | X | | | | | | | | | | | | | | | | | | | | | |
| 351 | MW-4 | | | | | | | | | | | | | | | | 830 | | | | | | | | | | | | | | | | | | | | | | | |
| 352 | MW-8 | | | | | | | | | | | | | | | | 900 | | | | | | | | | | | | | | | | | | | | | | | |
| 353 | MW-9 | | | | | | | | | | | | | | | | 930 | | | | | | | | | | | | | | | | | | | | | | | |
| 354 | MW-10 | | | | | | | | | | | | | | | | 1000 | | | | | | | | | | | | | | | | | | | | | | | |
| 355 | MW-13 | | | | | | | | | | | | | | | | 1030 | | | | | | | | | | | | | | | | | | | | | | | |
| 356 | MW-15 | | | | | | | | | | | | | | | | 1100 | | | | | | | | | | | | | | | | | | | | | | | |
| 357 | MW-16 | | | | | | | | | | | | | | | | 1130 | | | | | | | | | | | | | | | | | | | | | | | |
| 358 | MW-23 | | | | | | | | | | | | | | | | 1200 | | | | | | | | | | | | | | | | | | | | | | | |
| 359 | MW-26 | | | | | | | | | | | | | | | | 1230 | | | | | | | | | | | | | | | | | | | | | | | |
| 360 | MW-28 | | | | | | | | | | | | | | | | 1300 | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| Ron Raunsaville | Nova | 8-18-09 | 1125 | Andrea Dunn | Trace | 8/18/09 | 11:25 | 5.5 |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |

LAB USE ONLY
Intact Y / N
Headspace Y / N NA
Log-in Review

REMARKS:
All tests - Midland.

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Carry-in

ORIGINAL COPY

LAB Order ID # T08 1817



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
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200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: Nova
Phone #: 520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron Rounsaville
E-mail:
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Name: BOB Durham
Project Location (including state): N.M.
Sampler Signature:

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE (09") | TIME | MTBE 8021B / 602 / 8260B / 624 | BTEX 8021B / 602 / 8260B / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270C / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C / 625 | PCB's 8082 / 608 | Pesticides 8081A / 608 | BOD, TSS, pH | Moisture Content | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 361 | MW-31 | 3 | Vom | X | | | | X | | | | X | | 8-17 | 1330 | | X | | | | | | | | | | | | | | | | | |
| 362 | MW-32 | | | | | | | | | | | | | | 1400 | | | | | | | | | | | | | | | | | | | |
| 363 | MW-33 | | | | | | | | | | | | | | 1430 | | | | | | | | | | | | | | | | | | | |
| 364 | MW-37 | | | | | | | | | | | | | | 1500 | | | | | | | | | | | | | | | | | | | |
| 365 | MW-7 | | | | | | | | | | | | | | 1530 | | | | | | | | | | | | | | | | | | | |
| 366 | MW-6 | | | | | | | | | | | | | | 1600 | | | | | | | | | | | | | | | | | | | |
| 367 | MW-2 | | | | | | | | | | | | | | 1630 | | | | | | | | | | | | | | | | | | | |
| 368 | MW-38 | | | | | | | | | | | | | | 1700 | | | | | | | | | | | | | | | | | | | |
| 369 | MW-1 | | | | | | | | | | | | | | 1730 | | | | | | | | | | | | | | | | | | | |
| 370 | MW-5 | | | | | | | | | | | | | | 1800 | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 8-18-09 | 1125 | [signature] | Trace | 8/18/09 | 11:25 | 5.5 |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | Temp°c: |

LAB USE ONLY
Intact Y N
Headspace Y N NA
Log-In-Review

REMARKS:
All tests - Midland.

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Carry-in

ORIGINAL COPY

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
5015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

## Certifications

**WBENC:** 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
**NCTRCA** WFWB38444Y0909

## NELAP Certifications

**Lubbock:** T104704219-08-TX LELAP-02003 Kansas E-10317
**El Paso:** T104704221-08-TX LELAP-02002
**Midland:** T104704392-08-TX

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: December 1, 2009

Work Order: 9111612

Project Location: West of Monument, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 215008 | MW-11 | water | 2009-11-12 | 07:00 | 2009-11-16 |
| 215009 | MW-14 | water | 2009-11-12 | 07:45 | 2009-11-16 |
| 215010 | MW-20 | water | 2009-11-12 | 08:30 | 2009-11-16 |
| 215011 | MW-21 | water | 2009-11-12 | 09:15 | 2009-11-16 |
| 215012 | MW-24 | water | 2009-11-12 | 10:00 | 2009-11-16 |
| 215013 | MW-25 | water | 2009-11-12 | 10:45 | 2009-11-16 |
| 215014 | MW-27 | water | 2009-11-12 | 11:30 | 2009-11-16 |
| 215015 | MW-29 | water | 2009-11-12 | 12:15 | 2009-11-16 |
| 215016 | MW-30 | water | 2009-11-12 | 13:00 | 2009-11-16 |
| 215017 | MW-3 | water | 2009-11-12 | 13:45 | 2009-11-16 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 215018 | MW-4 | water | 2009-11-12 | 14:30 | 2009-11-16 |
| 215019 | MW-8 | water | 2009-11-12 | 15:15 | 2009-11-16 |
| 215020 | MW-9 | water | 2009-11-12 | 16:00 | 2009-11-16 |
| 215021 | MW-10 | water | 2009-11-12 | 16:45 | 2009-11-16 |
| 215022 | MW-13 | water | 2009-11-12 | 17:30 | 2009-11-16 |
| 215023 | MW-15 | water | 2009-11-12 | 18:15 | 2009-11-16 |
| 215024 | MW-16 | water | 2009-11-12 | 19:00 | 2009-11-16 |
| 215025 | MW-23 | water | 2009-11-13 | 07:00 | 2009-11-16 |
| 215026 | MW-26 | water | 2009-11-13 | 07:45 | 2009-11-16 |
| 215027 | MW-28 | water | 2009-11-13 | 08:30 | 2009-11-16 |
| 215028 | MW-31 | water | 2009-11-13 | 09:15 | 2009-11-16 |
| 215029 | MW-32 | water | 2009-11-13 | 10:00 | 2009-11-16 |
| 215030 | MW-33 | water | 2009-11-13 | 10:45 | 2009-11-16 |
| 215031 | MW-37 | water | 2009-11-13 | 11:30 | 2009-11-16 |
| 215032 | MW-7 | water | 2009-11-13 | 12:15 | 2009-11-16 |
| 215033 | MW-6 | water | 2009-11-13 | 13:00 | 2009-11-16 |
| 215034 | MW-2 | water | 2009-11-13 | 13:45 | 2009-11-16 |
| 215035 | MW-38 | water | 2009-11-13 | 14:30 | 2009-11-16 |
| 215036 | MW-1 | water | 2009-11-13 | 15:15 | 2009-11-16 |
| 215037 | MW-5 | water | 2009-11-13 | 16:00 | 2009-11-16 |
| 215038 | MW-12 | water | 2009-11-13 | 16:45 | 2009-11-16 |
| 215039 | Field Blank | water | 2009-11-13 | 00:00 | 2009-11-16 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2009-11-16 and assigned to work order 9111612. Samples for work order 9111612 were received intact without headspace and at a temperature of 3.8 deg. C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 55898 | 2009-11-18 at 15:00 | 65421 | 2009-11-18 at 13:32 |
| BTEX | S 8021B | 55970 | 2009-11-20 at 12:13 | 65503 | 2009-11-20 at 13:47 |
| BTEX | S 8021B | 55970 | 2009-11-20 at 12:13 | 65513 | 2009-11-21 at 07:42 |
| PAH | S 8270C | 55941 | 2009-11-18 at 15:00 | 65468 | 2009-11-20 at 13:43 |
| PAH | S 8270C | 55942 | 2009-11-19 at 15:00 | 65469 | 2009-11-20 at 13:47 |
| PAH | S 8270C | 55996 | 2009-11-20 at 15:00 | 65519 | 2009-11-23 at 13:49 |
| TPH DRO - NEW | Mod. 8015B | 55893 | 2009-11-18 at 13:26 | 65416 | 2009-11-18 at 13:26 |
| TPH GRO | S 8015B | 55970 | 2009-11-20 at 12:13 | 65521 | 2009-11-20 at 14:15 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9111612 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have heen footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 215008 - MW-11**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.108 | mg/L | 1 | 0.100 | 108 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0915 | mg/L | 1 | 0.100 | 92 | 68.1 - 118.8 |

**Sample: 215008 - MW-11**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65468 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55941 | Sample Preparation: | 2009-11-18 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 2-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 1-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthylene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzofuran | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Fluorene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Phenanthrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Chrysene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |

*continued ...*

*sample 215008 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Indeno(1,2,3-cd)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000185 | mg/L | 0.926 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0381 | mg/L | 0.926 | 0.0800 | 48 | 25.9 - 97.5 |
| 2-Fluorohiphenyl | | 0.0313 | mg/L | 0.926 | 0.0800 | 39 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0438 | mg/L | 0.926 | 0.0800 | 55 | 37.7 - 114 |

**Sample: 215009 - MW-14**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0878 | mg/L | 1 | 0.100 | 88 | 68.1 - 118.8 |

**Sample: 215009 - MW-14**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65468 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55941 | Sample Preparation: | 2009-11-18 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |

*continued ...*

*sample 215009 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0314 | mg/L | 0.917 | 0.0800 | 39 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0289 | mg/L | 0.917 | 0.0800 | 36 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0465 | mg/L | 0.917 | 0.0800 | 58 | 37.7 - 114 |

**Sample: 215010 - MW-20**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0889 | mg/L | 1 | 0.100 | 89 | 68.1 - 118.8 |

**Sample: 215010 - MW-20**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65468 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55941 | Sample Preparation: | 2009-11-18 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthaleue | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0576 | mg/L | 0.917 | 0.0800 | 72 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0502 | mg/L | 0.917 | 0.0800 | 63 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0561 | mg/L | 0.917 | 0.0800 | 70 | 37.7 - 114 |

**Sample: 215011 - MW-21**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |

*continued . . .*

*sample 215011 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0884 | mg/L | 1 | 0.100 | 88 | 68.1 - 118.8 |

**Sample: 215011 - MW-21**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Aualytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65468 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55941 | Sample Preparation: | 2009-11-18 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Metbylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0574 | mg/L | 0.922 | 0.0800 | 72 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0472 | mg/L | 0.922 | 0.0800 | 59 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0553 | mg/L | 0.922 | 0.0800 | 69 | 37.7 - 114 |

**Sample: 215012 - MW-24**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0887 | mg/L | 1 | 0.100 | 89 | 68.1 - 118.8 |

**Sample: 215012 - MW-24**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65468 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55941 | Sample Preparation: | 2009-11-18 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |

*continued . . .*

*sample 215012 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0508 | mg/L | 0.917 | 0.0800 | 64 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0384 | mg/L | 0.917 | 0.0800 | 48 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0529 | mg/L | 0.917 | 0.0800 | 66 | 37.7 - 114 |

**Sample: 215013 - MW-25**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.108 | mg/L | 1 | 0.100 | 108 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0913 | mg/L | 1 | 0.100 | 91 | 68.1 - 118.8 |

**Sample: 215013 - MW-25**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65468 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55941 | Sample Preparation: | 2009-11-18 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |

*continued ...*

*sample 215013 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0398 | mg/L | 0.922 | 0.0800 | 50 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0355 | mg/L | 0.922 | 0.0800 | 44 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0593 | mg/L | 0.922 | 0.0800 | 74 | 37.7 - 114 |

**Sample: 215014 - MW-27**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.107 | mg/L | 1 | 0.100 | 107 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0909 | mg/L | 1 | 0.100 | 91 | 68.1 - 118.8 |

**Sample: 215014 - MW-27**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65468 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55941 | Sample Preparation: | 2009-11-18 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0405 | mg/L | 0.922 | 0.0800 | 51 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0347 | mg/L | 0.922 | 0.0800 | 43 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0496 | mg/L | 0.922 | 0.0800 | 62 | 37.7 - 114 |

**Sample: 215015 - MW-29**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |

*continued ...*

*sample 215015 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.108 | mg/L | 1 | 0.100 | 108 | 70.9 - 119.8 |
| 4-Bromofluorohenzene (4-BFB) | | 0.0911 | mg/L | 1 | 0.100 | 91 | 68.1 - 118.8 |

**Sample: 215015 - MW-29**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65468 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55941 | Sample Preparation: | 2009-11-18 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0366 | mg/L | 0.917 | 0.0800 | 46 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0297 | mg/L | 0.917 | 0.0800 | 37 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0538 | mg/L | 0.917 | 0.0800 | 67 | 37.7 - 114 |

**Sample: 215016 - MW-30**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0881 | mg/L | 1 | 0.100 | 88 | 68.1 - 118.8 |

**Sample: 215016 - MW-30**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65468 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55941 | Sample Preparation: | 2009-11-18 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |

*continued ...*

*sample 215016 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0417 | mg/L | 0.922 | 0.0800 | 52 | 25.9 - 97.5 |
| 2-Fluorobipheuyl | | 0.0414 | mg/L | 0.922 | 0.0800 | 52 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0531 | mg/L | 0.922 | 0.0800 | 66 | 37.7 - 114 |

**Sample: 215017 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0904 | mg/L | 1 | 0.100 | 90 | 68.1 - 118.8 |

**Sample: 215017 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65468 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55941 | Sample Preparation: | 2009-11-18 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |

*continued . . .*

*sample 215017 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0396 | mg/L | 0.922 | 0.0800 | 50 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0344 | mg/L | 0.922 | 0.0800 | 43 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0469 | mg/L | 0.922 | 0.0800 | 59 | 37.7 - 114 |

**Sample: 215018 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00130** | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0932 | mg/L | 1 | 0.100 | 93 | 68.1 - 118.8 |

**Sample: 215018 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | **0.000962** | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0510 | mg/L | 0.922 | 0.0800 | 64 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0499 | mg/L | 0.922 | 0.0800 | 62 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0514 | mg/L | 0.922 | 0.0800 | 64 | 37.7 - 114 |

**Sample: 215019 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |

*continued ...*

*sample 215019 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0891 | mg/L | 1 | 0.100 | 89 | 68.1 - 118.8 |

**Sample: 215019 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | **0.00198** | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0516 | mg/L | 0.917 | 0.0800 | 64 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0375 | mg/L | 0.917 | 0.0800 | 47 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0507 | mg/L | 0.917 | 0.0800 | 63 | 37.7 - 114 |

**Sample: 215020 - MW-9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0885 | mg/L | 1 | 0.100 | 88 | 68.1 - 118.8 |

**Sample: 215020 - MW-9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |

*continued . . .*

*sample 215020 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0523 | mg/L | 0.917 | 0.0800 | 65 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0427 | mg/L | 0.917 | 0.0800 | 53 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0551 | mg/L | 0.917 | 0.0800 | 69 | 37.7 - 114 |

**Sample: 215021 - MW-10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0885 | mg/L | 1 | 0.100 | 88 | 68.1 - 118.8 |

**Sample: 215021 - MW-10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphtbylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |

*continued . . .*

*sample 215021 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0368 | mg/L | 0.917 | 0.0800 | 46 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0348 | mg/L | 0.917 | 0.0800 | 44 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0474 | mg/L | 0.917 | 0.0800 | 59 | 37.7 - 114 |

**Sample: 215022 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0101** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 68.1 - 118.8 |

**Sample: 215022 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | **0.00276** | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | **0.000500** | mg/L | 0.922 | 0.000200 |
| Fluorene | | **0.000700** | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0455 | mg/L | 0.922 | 0.0800 | 57 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0366 | mg/L | 0.922 | 0.0800 | 46 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0509 | mg/L | 0.922 | 0.0800 | 64 | 37.7 - 114 |

**Sample: 215023 - MW-15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65421 | Date Analyzed: | 2009-11-18 | Analyzed By: | AG |
| Prep Batch: | 55898 | Sample Preparation: | 2009-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |

*continued ...*

*sample 215023 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.103 | mg/L | 1 | 0.100 | 103 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0886 | mg/L | 1 | 0.100 | 89 | 68.1 - 118.8 |

**Sample: 215023 - MW-15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0444 | mg/L | 0.917 | 0.0800 | 56 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0393 | mg/L | 0.917 | 0.0800 | 49 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0532 | mg/L | 0.917 | 0.0800 | 66 | 37.7 - 114 |

**Sample: 215024 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65503 | Date Analyzed: | 2009-11-20 | Analyzed By: | tn |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilntion | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0987 | mg/L | 1 | 0.100 | 99 | 68.1 - 118.8 |

**Sample: 215024 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.000754** | mg/L | 0.926 | 0.000200 |
| 2-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 1-Methylnaphthalene | | **0.00384** | mg/L | 0.926 | 0.000200 |
| Acenaphthylene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzofuran | | **0.00120** | mg/L | 0.926 | 0.000200 |
| Fluorene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Phenanthrene | | **0.000459** | mg/L | 0.926 | 0.000200 |
| Fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Chrysene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |

*continued . . .*

*sample 215024 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | | <0.000185 | mg/L | 0.926 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0478 | mg/L | 0.926 | 0.0800 | 60 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0390 | mg/L | 0.926 | 0.0800 | 49 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0521 | mg/L | 0.926 | 0.0800 | 65 | 37.7 - 114 |

**Sample: 215025 - MW-23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65503 | Date Analyzed: | 2009-11-20 | Analyzed By: | tn |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0883 | mg/L | 1 | 0.100 | 88 | 68.1 - 118.8 |

**Sample: 215025 - MW-23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |

*continued ...*

*sample 215025 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0418 | mg/L | 0.922 | 0.0800 | 52 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0337 | mg/L | 0.922 | 0.0800 | 42 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0431 | mg/L | 0.922 | 0.0800 | 54 | 37.7 - 114 |

**Sample: 215026 - MW-26**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65503 | Date Analyzed: | 2009-11-20 | Analyzed By: | tn |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Resnlt | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0896 | mg/L | 1 | 0.100 | 90 | 68.1 - 118.8 |

**Sample: 215026 - MW-26**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 2-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| 1-Methylnaphthalene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthylene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Acenaphthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzofuran | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Fluorene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Phenanthrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Chrysene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(a)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000185 | mg/L | 0.926 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000185 | mg/L | 0.926 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0487 | mg/L | 0.926 | 0.0800 | 61 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0402 | mg/L | 0.926 | 0.0800 | 50 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0529 | mg/L | 0.926 | 0.0800 | 66 | 37.7 - 114 |

**Sample: 215027 - MW-28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65503 | Date Analyzed: | 2009-11-20 | Analyzed By: | tn |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |

*continued . . .*

*sample 215027 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0870 | mg/L | 1 | 0.100 | 87 | 68.1 - 118.8 |

**Sample: 215027 - MW-28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0466 | mg/L | 0.917 | 0.0800 | 58 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0374 | mg/L | 0.917 | 0.0800 | 47 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0528 | mg/L | 0.917 | 0.0800 | 66 | 37.7 - 114 |

**Sample: 215028 - MW-31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65503 | Date Analyzed: | 2009-11-20 | Analyzed By: | tn |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.103 | mg/L | 1 | 0.100 | 103 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0868 | mg/L | 1 | 0.100 | 87 | 68.1 - 118.8 |

**Sample: 215028 - MW-31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |

*continued . . .*

*sample 215028 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0499 | mg/L | 0.917 | 0.0800 | 62 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0410 | mg/L | 0.917 | 0.0800 | 51 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0490 | mg/L | 0.917 | 0.0800 | 61 | 37.7 - 114 |

**Sample: 215029 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65503 | Date Analyzed: | 2009-11-20 | Analyzed By: | tn |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0897 | mg/L | 1 | 0.100 | 90 | 68.1 - 118.8 |

**Sample: 215029 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |

*continued . . .*

*sample 215029 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0368 | mg/L | 0.917 | 0.0800 | 46 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0343 | mg/L | 0.917 | 0.0800 | 43 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0408 | mg/L | 0.917 | 0.0800 | 51 | 37.7 - 114 |

**Sample: 215030 - MW-33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65503 | Date Aualyzed: | 2009-11-20 | Analyzed By: | tn |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0893 | mg/L | 1 | 0.100 | 89 | 68.1 - 118.8 |

**Sample: 215030 - MW-33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0382 | mg/L | 0.917 | 0.0800 | 48 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0324 | mg/L | 0.917 | 0.0800 | 40 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0415 | mg/L | 0.917 | 0.0800 | 52 | 37.7 - 114 |

**Sample: 215031 - MW-37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65503 | Date Analyzed: | 2009-11-20 | Analyzed By: | tn |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |

*continued ...*

*sample 215031 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.103 | mg/L | 1 | 0.100 | 103 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0865 | mg/L | 1 | 0.100 | 86 | 68.1 - 118.8 |

**Sample: 215031 - MW-37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluorene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0382 | mg/L | 0.922 | 0.0800 | 48 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0313 | mg/L | 0.922 | 0.0800 | 39 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0390 | mg/L | 0.922 | 0.0800 | 49 | 37.7 - 114 |

**Sample: 215032 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65503 | Date Analyzed: | 2009-11-20 | Analyzed By: | tn |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0891 | mg/L | 1 | 0.100 | 89 | 68.1 - 118.8 |

**Sample: 215032 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | **0.000658** | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |

*continued ...*

*sample 215032 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0762 | mg/L | 0.917 | 0.0800 | 95 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0703 | mg/L | 0.917 | 0.0800 | 88 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0757 | mg/L | 0.917 | 0.0800 | 95 | 37.7 - 114 |

**Sample: 215033 - MW-6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65503 | Date Analyzed: | 2009-11-20 | Analyzed By: | tn |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.107 | mg/L | 1 | 0.100 | 107 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0935 | mg/L | 1 | 0.100 | 94 | 68.1 - 118.8 |

**Sample: 215033 - MW-6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | **0.000610** | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |

*continued ...*

*sample 215033 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0539 | mg/L | 0.917 | 0.0800 | 67 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0503 | mg/L | 0.917 | 0.0800 | 63 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0582 | mg/L | 0.917 | 0.0800 | 73 | 37.7 - 114 |

**Sample: 215034 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65503 | Date Analyzed: | 2009-11-20 | Analyzed By: | tn |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00830** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.102 | mg/L | 1 | 0.100 | 102 | 68.1 - 118.8 |

**Sample: 215034 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.00505** | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | **0.00390** | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | **0.00838** | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | **0.00161** | mg/L | 0.922 | 0.000200 |
| Fluorene | | **0.00220** | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | **0.000670** | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0612 | mg/L | 0.922 | 0.0800 | 76 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0489 | mg/L | 0.922 | 0.0800 | 61 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0537 | mg/L | 0.922 | 0.0800 | 67 | 37.7 - 114 |

**Sample: 215035 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65513 | Date Analyzed: | 2009-11-21 | Analyzed By: | tn |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0181** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |

*continued ...*

*sample 215035 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Ethylbenzene | | **0.00100** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00630** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0986 | mg/L | 1 | 0.100 | 99 | 68.1 - 118.8 |

**Sample: 215035 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.00173** | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | **0.00835** | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | **0.00247** | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | **0.00216** | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0464 | mg/L | 0.917 | 0.0800 | 58 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0469 | mg/L | 0.917 | 0.0800 | 59 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0562 | mg/L | 0.917 | 0.0800 | 70 | 37.7 - 114 |

**Sample: 215036 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65513 | Date Analyzed: | 2009-11-21 | Analyzed By: | tn |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0391** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00440** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00110** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.111 | mg/L | 1 | 0.100 | 111 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | [1] | 0.121 | mg/L | 1 | 0.100 | 121 | 68.1 - 118.8 |

**Sample: 215036 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | Sample Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.0192** | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | **0.0289** | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | **0.0325** | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | **0.00192** | mg/L | 0.917 | 0.000200 |
| Fluorene | | **0.00262** | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | **0.00220** | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

[1]High surrogate recovery due to peak interference.

*sample 215037 continued ...*

| Parameter | Flag | RL Result | Uuits | Dilution | RL |
|---|---|---|---|---|---|
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0510 | mg/L | 0.917 | 0.0800 | 64 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0449 | mg/L | 0.917 | 0.0800 | 56 | 13.9 - 100 |
| Terpbenyl-d14 | | 0.0534 | mg/L | 0.917 | 0.0800 | 67 | 37.7 - 114 |

**Sample: 215038 - MW-12**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 65503 | Date Analyzed: | 2009-11-20 | Analyzed By: | tn |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0103** | mg/L | 10 | 0.00100 |
| Toluene | | <0.0100 | mg/L | 10 | 0.00100 |
| Ethylbenzene | | **0.0224** | mg/L | 10 | 0.00100 |
| Xylene | | <0.0100 | mg/L | 10 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 1.04 | mg/L | 10 | 1.00 | 104 | 70.9 - 119.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.919 | mg/L | 10 | 1.00 | 92 | 68.1 - 118.8 |

**Sample: 215038 - MW-12**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65519 | Date Analyzed: | 2009-11-23 | Analyzed By: | MN |
| Prep Batch: | 55996 | Sample Preparation: | 2009-11-20 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.0233** | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | **0.0414** | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | **0.0507** | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | **0.00380** | mg/L | 0.922 | 0.000200 |
| Fluorene | | **0.00498** | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | **0.00620** | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0427 | mg/L | 0.922 | 0.0800 | 53 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0439 | mg/L | 0.922 | 0.0800 | 55 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0569 | mg/L | 0.922 | 0.0800 | 71 | 37.7 - 114 |

**Sample: 215038 - MW-12**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | TPH DRO - NEW | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 65416 | Date Analyzed: | 2009-11-18 | Analyzed By: | kg |
| Prep Batch: | 55893 | Sample Preparation: | 2009-11-18 | Prepared By: | kg |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | **35.1** | mg/L | 1 | 5.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Tricosane | | 11.3 | mg/L | 1 | 10.0 | 113 | 70 - 130 |

**Sample: 215038 - MW-12**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5030B |
| QC Batch: | 65521 | Date Analyzed: | 2009-11-20 | Analyzed By: | AG |
| Prep Batch: | 55970 | Sample Preparation: | 2009-11-20 | Prepared By: | tn |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/L | 10 | 0.100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 1.06 | mg/L | 10 | 1.00 | 106 | 69.8 - 110.2 |
| 4-Bromofluorobenzene (4-BFB) | | 0.954 | mg/L | 10 | 1.00 | 95 | 65.4 - 118.8 |

**Sample: 215039 - Field Blank**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270C | Prep Method: | S 3510C |
| QC Batch: | 65519 | Date Analyzed: | 2009-11-23 | Analyzed By: | MN |
| Prep Batch: | 55996 | Sample Preparation: | 2009-11-20 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0336 | mg/L | 0.917 | 0.0800 | 42 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0196 | mg/L | 0.917 | 0.0800 | 24 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0465 | mg/L | 0.917 | 0.0800 | 58 | 37.7 - 114 |

**Method Blank (1)** QC Batch: 65416

QC Batch: 65416 Date Analyzed: 2009-11-18 Analyzed By: kg
Prep Batch: 55893 QC Preparation: 2009-11-18 Prepared By: kg

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| DRO | | <0.801 | mg/L | 5 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Tricosane | | 8.75 | mg/L | 1 | 10.0 | 88 | 70 - 130 |

**Method Blank (1)** QC Batch: 65421

QC Batch: 65421 Date Analyzed: 2009-11-18 Analyzed By: AG
Prep Batch: 55898 QC Preparation: 2009-11-18 Prepared By: AG

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000200 | mg/L | 0.001 |
| Xylene | | <0.000900 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 73.6 - 116.6 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0892 | mg/L | 1 | 0.100 | 89 | 70.6 - 107.5 |

**Method Blank (1)** QC Batch: 65468

QC Batch: 65468 Date Analyzed: 2009-11-20 Analyzed By: MN
Prep Batch: 55941 QC Preparation: 2009-11-18 Prepared By: MN

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Naphthalene | | <0.0000784 | mg/L | 0.0002 |
| 2-Methylnaphthalene | | <0.0000747 | mg/L | 0.0002 |
| 1-Methylnaphthalene | | <0.0000575 | mg/L | 0.0002 |
| Acenaphthylene | | <0.0000963 | mg/L | 0.0002 |
| Acenaphthene | | <0.0000617 | mg/L | 0.0002 |
| Dibenzofuran | | <0.0000952 | mg/L | 0.0002 |
| Fluorene | | <0.000134 | mg/L | 0.0002 |
| Anthracene | | <0.000441 | mg/L | 0.0002 |
| Phenanthrene | | <0.000435 | mg/L | 0.0002 |
| Fluoranthene | | <0.000476 | mg/L | 0.0002 |
| Pyrene | | <0.000590 | mg/L | 0.0002 |
| Benzo(a)anthracene | | <0.000118 | mg/L | 0.0002 |
| Chrysene | | <0.0000766 | mg/L | 0.0002 |
| Benzo(b)fluoranthene | | <0.000146 | mg/L | 0.0002 |
| Benzo(k)fluoranthene | | <0.000141 | mg/L | 0.0002 |
| Benzo(a)pyrene | | <0.000132 | mg/L | 0.0002 |
| Indeno(1,2,3-cd)pyrene | | <0.0000702 | mg/L | 0.0002 |
| Dibenzo(a,h)anthracene | | <0.0000534 | mg/L | 0.0002 |
| Benzo(g,h,i)perylene | | <0.0000473 | mg/L | 0.0002 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0500 | mg/L | 1 | 0.0800 | 62 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0463 | mg/L | 1 | 0.0800 | 58 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0528 | mg/L | 1 | 0.0800 | 66 | 37.7 - 114 |

**Method Blank (1)** QC Batch: 65469

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 65469 | Date Analyzed: | 2009-11-20 | Analyzed By: | MN |
| Prep Batch: | 55942 | QC Preparation: | 2009-11-19 | Prepared By: | MN |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Naphthalene | | <0.0000784 | mg/L | 0.0002 |
| 2-Methylnaphthalene | | <0.0000747 | mg/L | 0.0002 |
| 1-Methylnaphthalene | | <0.0000575 | mg/L | 0.0002 |
| Acenaphthylene | | <0.0000963 | mg/L | 0.0002 |
| Acenaphthene | | <0.0000617 | mg/L | 0.0002 |
| Dibenzofuran | | <0.0000952 | mg/L | 0.0002 |
| Fluorene | | <0.000134 | mg/L | 0.0002 |
| Anthracene | | <0.000441 | mg/L | 0.0002 |
| Phenanthrene | | <0.000435 | mg/L | 0.0002 |
| Fluoranthene | | <0.000476 | mg/L | 0.0002 |
| Pyrene | | <0.000590 | mg/L | 0.0002 |

*continued ...*

*method blank continued ...*

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzo(a)anthracene | | <0.000118 | mg/L | 0.0002 |
| Chrysene | | <0.0000766 | mg/L | 0.0002 |
| Benzo(b)fluoranthene | | <0.000146 | mg/L | 0.0002 |
| Benzo(k)fluoranthene | | <0.000141 | mg/L | 0.0002 |
| Benzo(a)pyrene | | <0.000132 | mg/L | 0.0002 |
| Indeno(1,2,3-cd)pyrene | | <0.0000702 | mg/L | 0.0002 |
| Dibenzo(a,h)anthracene | | <0.0000534 | mg/L | 0.0002 |
| Benzo(g,h,i)perylene | | <0.0000473 | mg/L | 0.0002 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0431 | mg/L | 1 | 0.0800 | 54 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0354 | mg/L | 1 | 0.0800 | 44 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0534 | mg/L | 1 | 0.0800 | 67 | 37.7 - 114 |

**Method Blank (1)** QC Batch: 65503

QC Batch: 65503 | Date Analyzed: 2009-11-20 | Analyzed By: tn
Prep Batch: 55970 | QC Preparation: 2009-11-20 | Prepared By: tn

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000200 | mg/L | 0.001 |
| Xylene | | <0.000900 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 73.6 - 116.6 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0899 | mg/L | 1 | 0.100 | 90 | 70.6 - 107.5 |

**Method Blank (1)** QC Batch: 65513

QC Batch: 65513 | Date Analyzed: 2009-11-21 | Analyzed By: tn
Prep Batch: 55970 | QC Preparation: 2009-11-20 | Prepared By: tn

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |

*continued ...*

*method blank continued ...*

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Ethylbenzene | | <0.000200 | mg/L | 0.001 |
| Xylene | | <0.000900 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.103 | mg/L | 1 | 0.100 | 103 | 73.6 - 116.6 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0869 | mg/L | 1 | 0.100 | 87 | 70.6 - 107.5 |

**Method Blank (1)** QC Batch: 65519

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 65519 | Date Analyzed: | 2009-11-23 | Analyzed By: | MN |
| Prep Batch: | 55996 | QC Preparation: | 2009-11-20 | Prepared By: | MN |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Naphthalene | | <0.0000784 | mg/L | 0.0002 |
| 2-Methylnaphthalene | | <0.0000747 | mg/L | 0.0002 |
| 1-Methylnaphthalene | | <0.0000575 | mg/L | 0.0002 |
| Acenaphthylene | | <0.0000963 | mg/L | 0.0002 |
| Acenaphthene | | <0.0000617 | mg/L | 0.0002 |
| Dibenzofuran | | <0.0000952 | mg/L | 0.0002 |
| Fluorene | | <0.000134 | mg/L | 0.0002 |
| Anthracene | | <0.000441 | mg/L | 0.0002 |
| Phenanthrene | | <0.000435 | mg/L | 0.0002 |
| Fluoranthene | | <0.000476 | mg/L | 0.0002 |
| Pyrene | | <0.000590 | mg/L | 0.0002 |
| Benzo(a)anthracene | | <0.000118 | mg/L | 0.0002 |
| Chrysene | | <0.0000766 | mg/L | 0.0002 |
| Benzo(b)fluoranthene | | <0.000146 | mg/L | 0.0002 |
| Benzo(k)fluoranthene | | <0.000141 | mg/L | 0.0002 |
| Benzo(a)pyrene | | <0.000132 | mg/L | 0.0002 |
| Indeno(1,2,3-cd)pyrene | | <0.0000702 | mg/L | 0.0002 |
| Dibenzo(a,h)anthracene | | <0.0000534 | mg/L | 0.0002 |
| Benzo(g,h,i)perylene | | <0.0000473 | mg/L | 0.0002 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0456 | mg/L | 1 | 0.0800 | 57 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | | 0.0385 | mg/L | 1 | 0.0800 | 48 | 13.9 - 100 |
| Terphenyl-d14 | | 0.0671 | mg/L | 1 | 0.0800 | 84 | 37.7 - 114 |

**Method Blank (1)** QC Batch: 65521

QC Batch: 65521 | Date Analyzed: 2009-11-20 | Analyzed By: AG
Prep Batch: 55970 | QC Preparation: 2009-11-20 | Prepared By: tn

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| GRO | | <0.0462 | mg/L | 0.1 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.107 | mg/L | 1 | 0.100 | 107 | 58.6 - 116.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0895 | mg/L | 1 | 0.100 | 90 | 43 - 130.8 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 65416 | Date Analyzed: 2009-11-18 | Analyzed By: kg
Prep Batch: 55893 | QC Preparation: 2009-11-18 | Prepared By: kg

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| DRO | 21.9 | mg/L | 1 | 25.0 | <0.801 | 88 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| DRO | 22.1 | mg/L | 1 | 25.0 | <0.801 | 88 | 70 - 130 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| n-Tricosane | 10.1 | 10.2 | mg/L | 1 | 10.0 | 101 | 102 | 70 - 130 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 65421 | Date Analyzed: 2009-11-18 | Analyzed By: AG
Prep Batch: 55898 | QC Preparation: 2009-11-18 | Prepared By: AG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0975 | mg/L | 1 | 0.100 | <0.000300 | 98 | 79.4 - 111.8 |
| Toluene | 0.0965 | mg/L | 1 | 0.100 | <0.000200 | 96 | 79.3 - 110 |
| Ethylbenzene | 0.0944 | mg/L | 1 | 0.100 | <0.000200 | 94 | 73.8 - 113.1 |
| Xylene | 0.282 | mg/L | 1 | 0.300 | <0.000900 | 94 | 73.9 - 113.6 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0969 | mg/L | 1 | 0.100 | <0.000300 | 97 | 79.4 - 111.8 | 1 | 20 |
| Toluene | 0.0962 | mg/L | 1 | 0.100 | <0.000200 | 96 | 79.3 - 110 | 0 | 20 |
| Ethylbenzene | 0.0945 | mg/L | 1 | 0.100 | <0.000200 | 94 | 73.8 - 113.1 | 0 | 20 |
| Xylene | 0.283 | mg/L | 1 | 0.300 | <0.000900 | 94 | 73.9 - 113.6 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.107 | 0.106 | mg/L | 1 | 0.100 | 107 | 106 | 76.2 - 119.6 |
| 4-Bromofluorobenzene (4-BFB) | 0.0944 | 0.0944 | mg/L | 1 | 0.100 | 94 | 94 | 77.9 - 109.8 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 65468 | Date Analyzed: 2009-11-20 | Analyzed By: MN
Prep Batch: 55941 | QC Preparation: 2009-11-18 | Prepared By: MN

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Naphthalene | 0.0526 | mg/L | 1 | 0.0800 | <0.0000784 | 66 | 22.2 - 87.9 |
| 2-Methylnaphthalene | 0.0552 | mg/L | 1 | 0.0800 | <0.0000747 | 69 | 23.3 - 86.1 |
| 1-Methylnaphthalene | 0.0577 | mg/L | 1 | 0.0800 | <0.0000575 | 72 | 24.6 - 87.8 |
| Acenaphthylene | 0.0552 | mg/L | 1 | 0.0800 | <0.0000963 | 69 | 27.4 - 114 |
| Acenaphthene | 0.0553 | mg/L | 1 | 0.0800 | <0.0000617 | 69 | 27.2 - 111 |
| Dibenzofnran | 0.0515 | mg/L | 1 | 0.0800 | <0.0000952 | 64 | 27.3 - 100 |
| Fluorene | 0.0602 | mg/L | 1 | 0.0800 | <0.000134 | 75 | 31.5 - 122 |
| Anthracene | 0.0570 | mg/L | 1 | 0.0800 | <0.000441 | 71 | 32.4 - 115 |
| Phenanthrene | 0.0573 | mg/L | 1 | 0.0800 | <0.000435 | 72 | 34.2 - 111 |
| Fluoranthene | 0.0637 | mg/L | 1 | 0.0800 | <0.000476 | 80 | 40.1 - 114 |
| Pyrene | 0.0550 | mg/L | 1 | 0.0800 | <0.000590 | 69 | 39.2 - 124 |
| Benzo(a)anthracene | 0.0515 | mg/L | 1 | 0.0800 | <0.000118 | 64 | 39.4 - 114 |
| Chrysene | 0.0613 | mg/L | 1 | 0.0800 | <0.0000766 | 77 | 38.2 - 116 |
| Benzo(b)fluoranthene | 0.0509 | mg/L | 1 | 0.0800 | <0.000146 | 64 | 34.5 - 118 |
| Benzo(k)fluoranthene | 0.0938 | mg/L | 1 | 0.0800 | <0.000141 | 117 | 38.7 - 133 |
| Benzo(a)pyrene | 0.0812 | mg/L | 1 | 0.0800 | <0.000132 | 102 | 38 - 134 |
| Indeno(1,2,3-cd)pyrene | 0.0618 | mg/L | 1 | 0.0800 | <0.0000702 | 77 | 34.6 - 124 |
| Dibenzo(a,h)anthracene | 0.0592 | mg/L | 1 | 0.0800 | <0.0000534 | 74 | 33.9 - 120 |
| Benzo(g,h,i)perylene | 0.0668 | mg/L | 1 | 0.0800 | <0.0000473 | 84 | 33.8 - 138 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 0.0507 | mg/L | 1 | 0.0800 | <0.0000784 | 63 | 22.2 - 87.9 | 4 | 20 |

*continued ...*

*control spikes continued ...*

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 2-Methylnaphthalene | 0.0531 | mg/L | 1 | 0.0800 | <0.0000747 | 66 | 23.3 - 86.1 | 4 | 20 |
| 1-Methylnaphthalene | 0.0542 | mg/L | 1 | 0.0800 | <0.0000575 | 68 | 24.6 - 87.8 | 6 | 20 |
| Acenaphtbylene | 0.0545 | mg/L | 1 | 0.0800 | <0.0000963 | 68 | 27.4 - 114 | 1 | 20 |
| Acenaphthene | 0.0555 | mg/L | 1 | 0.0800 | <0.0000617 | 69 | 27.2 - 111 | 0 | 20 |
| Dibenzofuran | 0.0507 | mg/L | 1 | 0.0800 | <0.0000952 | 63 | 27.3 - 100 | 2 | 20 |
| Fluorene | 0.0585 | mg/L | 1 | 0.0800 | <0.000134 | 73 | 31.5 - 122 | 3 | 20 |
| Anthracene | 0.0545 | mg/L | 1 | 0.0800 | <0.000441 | 68 | 32.4 - 115 | 4 | 20 |
| Phenanthrene | 0.0545 | mg/L | 1 | 0.0800 | <0.000435 | 68 | 34.2 - 111 | 5 | 20 |
| Fluoranthene | 0.0612 | mg/L | 1 | 0.0800 | <0.000476 | 76 | 40.1 - 114 | 4 | 20 |
| Pyrene | 0.0544 | mg/L | 1 | 0.0800 | <0.000590 | 68 | 39.2 - 124 | 1 | 20 |
| Benzo(a)anthracene | 0.0530 | mg/L | 1 | 0.0800 | <0.000118 | 66 | 39.4 - 114 | 3 | 20 |
| Chrysene | 0.0612 | mg/L | 1 | 0.0800 | <0.0000766 | 76 | 38.2 - 116 | 0 | 20 |
| Benzo(b)fluoranthene [2] | 0.0629 | mg/L | 1 | 0.0800 | <0.000146 | 79 | 34.5 - 118 | 21 | 20 |
| Benzo(k)fluoranthene | 0.0847 | mg/L | 1 | 0.0800 | <0.000141 | 106 | 38.7 - 133 | 10 | 20 |
| Benzo(a)pyrene | 0.0762 | mg/L | 1 | 0.0800 | <0.000132 | 95 | 38 - 134 | 6 | 20 |
| Indeno(1,2,3-cd)pyrene | 0.0617 | mg/L | 1 | 0.0800 | <0.0000702 | 77 | 34.6 - 124 | 0 | 20 |
| Dibenzo(a,h)anthracene | 0.0572 | mg/L | 1 | 0.0800 | <0.0000534 | 72 | 33.9 - 120 | 3 | 20 |
| Benzo(g,h,i)perylene | 0.0606 | mg/L | 1 | 0.0800 | <0.0000473 | 76 | 33.8 - 138 | 10 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 0.0531 | 0.0541 | mg/L | 1 | 0.0800 | 66 | 68 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | 0.0456 | 0.0470 | mg/L | 1 | 0.0800 | 57 | 59 | 13.9 - 100 |
| Terphenyl-d14 | 0.0500 | 0.0505 | mg/L | 1 | 0.0800 | 62 | 63 | 37.7 - 114 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 65469 | Date Analyzed: 2009-11-20 | Analyzed By: MN
Prep Batch: 55942 | QC Preparation: 2009-11-19 | Prepared By: MN

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Naphthalene | 0.0517 | mg/L | 1 | 0.0800 | <0.0000784 | 65 | 22.2 - 87.9 |
| 2-Methylnaphthalene | 0.0560 | mg/L | 1 | 0.0800 | <0.0000747 | 70 | 23.3 - 86.1 |
| 1-Methylnaphthalene | 0.0571 | mg/L | 1 | 0.0800 | <0.0000575 | 71 | 24.6 - 87.8 |
| Acenaphthylene | 0.0564 | mg/L | 1 | 0.0800 | <0.0000963 | 70 | 27.4 - 114 |
| Acenaphthene | 0.0564 | mg/L | 1 | 0.0800 | <0.0000617 | 70 | 27.2 - 111 |
| Dibenzofuran | 0.0534 | mg/L | 1 | 0.0800 | <0.0000952 | 67 | 27.3 - 100 |
| Fluorene | 0.0618 | mg/L | 1 | 0.0800 | <0.000134 | 77 | 31.5 - 122 |
| Anthracene | 0.0524 | mg/L | 1 | 0.0800 | <0.000441 | 66 | 32.4 - 115 |

*continued ...*

[2]RPD outside control limits. Reportable concentrations considered estimated values. •

*control spikes continued . . .*

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Phenanthrene | 0.0529 | mg/L | 1 | 0.0800 | <0.000435 | 66 | 34.2 - 111 |
| Fluoranthene | 0.0586 | mg/L | 1 | 0.0800 | <0.000476 | 73 | 40.1 - 114 |
| Pyrene | 0.0521 | mg/L | 1 | 0.0800 | <0.000590 | 65 | 39.2 - 124 |
| Benzo(a)anthracene | 0.0489 | mg/L | 1 | 0.0800 | <0.000118 | 61 | 39.4 - 114 |
| Chrysene | 0.0575 | mg/L | 1 | 0.0800 | <0.0000766 | 72 | 38.2 - 116 |
| Benzo(b)fluoranthene | 0.0627 | mg/L | 1 | 0.0800 | <0.000146 | 78 | 34.5 - 118 |
| Benzo(k)fluoranthene | 0.0798 | mg/L | 1 | 0.0800 | <0.000141 | 100 | 38.7 - 133 |
| Benzo(a)pyrene | 0.0744 | mg/L | 1 | 0.0800 | <0.000132 | 93 | 38 - 134 |
| Indeno(1,2,3-cd)pyrene | 0.0553 | mg/L | 1 | 0.0800 | <0.0000702 | 69 | 34.6 - 124 |
| Dibenzo(a,h)anthracene | 0.0570 | mg/L | 1 | 0.0800 | <0.0000534 | 71 | 33.9 - 120 |
| Benzo(g,h,i)perylene | 0.0566 | mg/L | 1 | 0.0800 | <0.0000473 | 71 | 33.8 - 138 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 0.0490 | mg/L | 1 | 0.0800 | <0.0000784 | 61 | 22.2 - 87.9 | 5 | 20 |
| 2-Methylnaphthalene | 0.0523 | mg/L | 1 | 0.0800 | <0.0000747 | 65 | 23.3 - 86.1 | 7 | 20 |
| 1-Methylnaphthalene | 0.0550 | mg/L | 1 | 0.0800 | <0.0000575 | 69 | 24.6 - 87.8 | 4 | 20 |
| Acenaphthylene | 0.0564 | mg/L | 1 | 0.0800 | <0.0000963 | 70 | 27.4 - 114 | 0 | 20 |
| Acenaphthene | 0.0556 | mg/L | 1 | 0.0800 | <0.0000617 | 70 | 27.2 - 111 | 1 | 20 |
| Dibenzofuran | 0.0527 | mg/L | 1 | 0.0800 | <0.0000952 | 66 | 27.3 - 100 | 1 | 20 |
| Fluorene | 0.0611 | mg/L | 1 | 0.0800 | <0.000134 | 76 | 31.5 - 122 | 1 | 20 |
| Anthracene | 0.0513 | mg/L | 1 | 0.0800 | <0.000441 | 64 | 32.4 - 115 | 2 | 20 |
| Phenanthrene | 0.0526 | mg/L | 1 | 0.0800 | <0.000435 | 66 | 34.2 - 111 | 1 | 20 |
| Fluoranthene | 0.0573 | mg/L | 1 | 0.0800 | <0.000476 | 72 | 40.1 - 114 | 2 | 20 |
| Pyrene | 0.0501 | mg/L | 1 | 0.0800 | <0.000590 | 63 | 39.2 - 124 | 4 | 20 |
| Benzo(a)anthracene | 0.0478 | mg/L | 1 | 0.0800 | <0.000118 | 60 | 39.4 - 114 | 2 | 20 |
| Chrysene | 0.0553 | mg/L | 1 | 0.0800 | <0.0000766 | 69 | 38.2 - 116 | 4 | 20 |
| Benzo(b)fluoranthene | 0.0591 | mg/L | 1 | 0.0800 | <0.000146 | 74 | 34.5 - 118 | 6 | 20 |
| Benzo(k)fluoranthene | 0.0694 | mg/L | 1 | 0.0800 | <0.000141 | 87 | 38.7 - 133 | 14 | 20 |
| Benzo(a)pyrene | 0.0671 | mg/L | 1 | 0.0800 | <0.000132 | 84 | 38 - 134 | 10 | 20 |
| Indeno(1,2,3-cd)pyrene | 0.0500 | mg/L | 1 | 0.0800 | <0.0000702 | 62 | 34.6 - 124 | 10 | 20 |
| Dibenzo(a,h)anthracene | 0.0494 | mg/L | 1 | 0.0800 | <0.0000534 | 62 | 33.9 - 120 | 14 | 20 |
| Benzo(g,h,i)perylene | 0.0535 | mg/L | 1 | 0.0800 | <0.0000473 | 67 | 33.8 - 138 | 6 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 0.0566 | 0.0537 | mg/L | 1 | 0.0800 | 71 | 67 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | 0.0494 | 0.0487 | mg/L | 1 | 0.0800 | 62 | 61 | 13.9 - 100 |
| Terphenyl-d14 | 0.0512 | 0.0485 | mg/L | 1 | 0.0800 | 64 | 61 | 37.7 - 114 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 65503 | Date Analyzed: 2009-11-20 | Analyzed By: tn
Prep Batch: 55970 | QC Preparation: 2009-11-20 | Prepared By: tn

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0838 | mg/L | 1 | 0.100 | <0.000300 | 84 | 79.4 - 111.8 |
| Toluene | 0.0830 | mg/L | 1 | 0.100 | <0.000200 | 83 | 79.3 - 110 |
| Ethylbenzene | 0.0805 | mg/L | 1 | 0.100 | <0.000200 | 80 | 73.8 - 113.1 |
| Xylene | 0.241 | mg/L | 1 | 0.300 | <0.000900 | 80 | 73.9 - 113.6 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0917 | mg/L | 1 | 0.100 | <0.000300 | 92 | 79.4 - 111.8 | 9 | 20 |
| Toluene | 0.0905 | mg/L | 1 | 0.100 | <0.000200 | 90 | 79.3 - 110 | 9 | 20 |
| Ethylbenzene | 0.0882 | mg/L | 1 | 0.100 | <0.000200 | 88 | 73.8 - 113.1 | 9 | 20 |
| Xylene | 0.264 | mg/L | 1 | 0.300 | <0.000900 | 88 | 73.9 - 113.6 | 9 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.107 | 0.104 | mg/L | 1 | 0.100 | 107 | 104 | 76.2 - 119.6 |
| 4-Bromofluorobenzene (4-BFB) | 0.0950 | 0.0930 | mg/L | 1 | 0.100 | 95 | 93 | 77.9 - 109.8 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 65513 | Date Analyzed: 2009-11-21 | Analyzed By: tn
Prep Batch: 55970 | QC Preparation: 2009-11-20 | Prepared By: tn

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0904 | mg/L | 1 | 0.100 | <0.000300 | 90 | 79.4 - 111.8 |
| Toluene | 0.0889 | mg/L | 1 | 0.100 | <0.000200 | 89 | 79.3 - 110 |
| Ethylbenzene | 0.0878 | mg/L | 1 | 0.100 | <0.000200 | 88 | 73.8 - 113.1 |
| Xylene | 0.261 | mg/L | 1 | 0.300 | <0.000900 | 87 | 73.9 - 113.6 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0918 | mg/L | 1 | 0.100 | <0.000300 | 92 | 79.4 - 111.8 | 2 | 20 |
| Toluene | 0.0902 | mg/L | 1 | 0.100 | <0.000200 | 90 | 79.3 - 110 | 1 | 20 |
| Ethylbenzene | 0.0893 | mg/L | 1 | 0.100 | <0.000200 | 89 | 73.8 - 113.1 | 2 | 20 |
| Xylene | 0.267 | mg/L | 1 | 0.300 | <0.000900 | 89 | 73.9 - 113.6 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.103 | 0.102 | mg/L | 1 | 0.100 | 103 | 102 | 76.2 - 119.6 |
| 4-Bromofluorobenzene (4-BFB) | 0.0908 | 0.0921 | mg/L | 1 | 0.100 | 91 | 92 | 77.9 - 109.8 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 65519 | Date Analyzed: 2009-11-23 | Analyzed By: MN
Prep Batch: 55996 | QC Preparation: 2009-11-20 | Prepared By: MN

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Naphthalene | 0.0558 | mg/L | 1 | 0.0800 | <0.0000784 | 70 | 22.2 - 87.9 |
| 2-Methylnaphthalene | 0.0583 | mg/L | 1 | 0.0800 | <0.0000747 | 73 | 23.3 - 86.1 |
| 1-Methylnaphthalene | 0.0609 | mg/L | 1 | 0.0800 | <0.0000575 | 76 | 24.6 - 87.8 |
| Acenaphthylene | 0.0612 | mg/L | 1 | 0.0800 | <0.0000963 | 76 | 27.4 - 114 |
| Acenaphthene | 0.0609 | mg/L | 1 | 0.0800 | <0.0000617 | 76 | 27.2 - 111 |
| Dibenzofuran | 0.0580 | mg/L | 1 | 0.0800 | <0.0000952 | 72 | 27.3 - 100 |
| Fluorene | 0.0658 | mg/L | 1 | 0.0800 | <0.000134 | 82 | 31.5 - 122 |
| Anthracene | 0.0605 | mg/L | 1 | 0.0800 | <0.000441 | 76 | 32.4 - 115 |
| Phenanthrene | 0.0605 | mg/L | 1 | 0.0800 | <0.000435 | 76 | 34.2 - 111 |
| Fluoranthene | 0.0678 | mg/L | 1 | 0.0800 | <0.000476 | 85 | 40.1 - 114 |
| Pyrene | 0.0626 | mg/L | 1 | 0.0800 | <0.000590 | 78 | 39.2 - 124 |
| Benzo(a)anthracene | 0.0604 | mg/L | 1 | 0.0800 | <0.000118 | 76 | 39.4 - 114 |
| Chrysene | 0.0684 | mg/L | 1 | 0.0800 | <0.0000766 | 86 | 38.2 - 116 |
| Benzo(b)fluoranthene | 0.0577 | mg/L | 1 | 0.0800 | <0.000146 | 72 | 34.5 - 118 |
| Benzo(k)fluoranthene | 0.0874 | mg/L | 1 | 0.0800 | <0.000141 | 109 | 38.7 - 133 |
| Benzo(a)pyrene | 0.0905 | mg/L | 1 | 0.0800 | <0.000132 | 113 | 38 - 134 |
| Indeno(1,2,3-cd)pyrene | 0.0723 | mg/L | 1 | 0.0800 | <0.0000702 | 90 | 34.6 - 124 |
| Dibenzo(a,h)anthracene | 0.0705 | mg/L | 1 | 0.0800 | <0.0000534 | 88 | 33.9 - 120 |
| Benzo(g,h,i)perylene | 0.0703 | mg/L | 1 | 0.0800 | <0.0000473 | 88 | 33.8 - 138 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 0.0530 | mg/L | 1 | 0.0800 | <0.0000784 | 66 | 22.2 - 87.9 | 5 | 20 |
| 2-Methylnaphthalene | 0.0551 | mg/L | 1 | 0.0800 | <0.0000747 | 69 | 23.3 - 86.1 | 6 | 20 |
| 1-Methylnaphthalene | 0.0573 | mg/L | 1 | 0.0800 | <0.0000575 | 72 | 24.6 - 87.8 | 6 | 20 |
| Acenaphthylene | 0.0582 | mg/L | 1 | 0.0800 | <0.0000963 | 73 | 27.4 - 114 | 5 | 20 |
| Acenaphthene | 0.0573 | mg/L | 1 | 0.0800 | <0.0000617 | 72 | 27.2 - 111 | 6 | 20 |
| Dibenzofuran | 0.0552 | mg/L | 1 | 0.0800 | <0.0000952 | 69 | 27.3 - 100 | 5 | 20 |
| Fluorene | 0.0627 | mg/L | 1 | 0.0800 | <0.000134 | 78 | 31.5 - 122 | 5 | 20 |
| Anthracene | 0.0584 | mg/L | 1 | 0.0800 | <0.000441 | 73 | 32.4 - 115 | 4 | 20 |
| Phenanthrene | 0.0582 | mg/L | 1 | 0.0800 | <0.000435 | 73 | 34.2 - 111 | 4 | 20 |

*continued ...*

*control spikes continued ...*

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Fluoranthene | 0.0654 | mg/L | 1 | 0.0800 | <0.000476 | 82 | 40.1 - 114 | 4 | 20 |
| Pyrene | 0.0584 | mg/L | 1 | 0.0800 | <0.000590 | 73 | 39.2 - 124 | 7 | 20 |
| Benzo(a)anthracene | 0.0559 | mg/L | 1 | 0.0800 | <0.000118 | 70 | 39.4 - 114 | 8 | 20 |
| Chrysene | 0.0631 | mg/L | 1 | 0.0800 | <0.0000766 | 79 | 38.2 - 116 | 8 | 20 |
| Benzo(b)fluoranthene | 0.0593 | mg/L | 1 | 0.0800 | <0.000146 | 74 | 34.5 - 118 | 3 | 20 |
| Benzo(k)fluoranthene | 0.0853 | mg/L | 1 | 0.0800 | <0.000141 | 107 | 38.7 - 133 | 2 | 20 |
| Benzo(a)pyrene | 0.0861 | mg/L | 1 | 0.0800 | <0.000132 | 108 | 38 - 134 | 5 | 20 |
| Indeno(1,2,3-cd)pyrene | 0.0665 | mg/L | 1 | 0.0800 | <0.0000702 | 83 | 34.6 - 124 | 8 | 20 |
| Dibenzo(a,h)anthracene | 0.0671 | mg/L | 1 | 0.0800 | <0.0000534 | 84 | 33.9 - 120 | 5 | 20 |
| Benzo(g,h,i)perylene | 0.0656 | mg/L | 1 | 0.0800 | <0.0000473 | 82 | 33.8 - 138 | 7 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 0.0598 | 0.0560 | mg/L | 1 | 0.0800 | 75 | 70 | 25.9 - 97.5 |
| 2-Fluorobiphenyl | 0.0521 | 0.0490 | mg/L | 1 | 0.0800 | 65 | 61 | 13.9 - 100 |
| Terphenyl-d14 | 0.0573 | 0.0540 | mg/L | 1 | 0.0800 | 72 | 68 | 37.7 - 114 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 65521 | Date Analyzed: 2009-11-20 | Analyzed By: AG
Prep Batch: 55970 | QC Preparation: 2009-11-20 | Prepared By: tn

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| GRO | 0.712 | mg/L | 1 | 1.00 | <0.0462 | 71 | 60.5 - 102.6 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| GRO | 0.658 | mg/L | 1 | 1.00 | <0.0462 | 66 | 60.5 - 102.6 | 8 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.108 | 0.107 | mg/L | 1 | 0.100 | 108 | 107 | 54.3 - 132.4 |
| 4-Bromofluorobenzene (4-BFB) | 0.0919 | 0.0918 | mg/L | 1 | 0.100 | 92 | 92 | 71.8 - 111.2 |

**Matrix Spike (MS-1)** Spiked Sample: 215038

QC Batch: 65416 | Date Analyzed: 2009-11-18 | Analyzed By: kg
Prep Batch: 55893 | QC Preparation: 2009-11-18 | Prepared By: kg

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| DRO | 58.0 | mg/L | 1 | 25.0 | 35.1 | 92 | 70 - 130 |

Percent recovery is based on the spike resnlt. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Resnlt | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| DRO [3] | 45.6 | mg/L | 1 | 25.0 | 35.1 | 42 | 70 - 130 | 24 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Resnlt | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| n-Tricosane | 8.11 | 7.57 | mg/L | 1 | 10 | 81 | 76 | 70 - 130 |

**Matrix Spike (MS-1)** Spiked Sample: 215015

QC Batch: 65421 | Date Analyzed: 2009-11-18 | Analyzed By: AG
Prep Batch: 55898 | QC Preparation: 2009-11-18 | Prepared By: AG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0979 | mg/L | 1 | 0.100 | <0.000300 | 98 | 77.3 - 117.4 |
| Toluene | 0.0961 | mg/L | 1 | 0.100 | <0.000200 | 96 | 75 - 111.8 |
| Ethylbenzene | 0.0931 | mg/L | 1 | 0.100 | <0.000200 | 93 | 78.8 - 106.6 |
| Xylene | 0.278 | mg/L | 1 | 0.300 | <0.000900 | 93 | 68.9 - 114 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0978 | mg/L | 1 | 0.100 | <0.000300 | 98 | 77.3 - 117.4 | 0 | 20 |
| Toluene | 0.0968 | mg/L | 1 | 0.100 | <0.000200 | 97 | 75 - 111.8 | 1 | 20 |
| Ethylbenzene | 0.0948 | mg/L | 1 | 0.100 | <0.000200 | 95 | 78.8 - 106.6 | 2 | 20 |
| Xylene | 0.283 | mg/L | 1 | 0.300 | <0.000900 | 94 | 68.9 - 114 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.105 | 0.106 | mg/L | 1 | 0.1 | 105 | 106 | 76.3 - 109.8 |
| 4-Bromofluorobenzene (4-BFB) | 0.0921 | 0.0944 | mg/L | 1 | 0.1 | 92 | 94 | 75.2 - 112.8 |

**Matrix Spike (MS-1)** Spiked Sample: 215034

QC Batch: 65503 | Date Analyzed: 2009-11-20 | Analyzed By: tn
Prep Batch: 55970 | QC Preparation: 2009-11-20 | Prepared By: tn

[3]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.109 | mg/L | 1 | 0.100 | 0.008 | 101 | 77.3 - 117.4 |
| Toluene | 0.0987 | mg/L | 1 | 0.100 | <0.000200 | 99 | 75 - 111.8 |
| Ethylbenzene | 0.0960 | mg/L | 1 | 0.100 | <0.000200 | 96 | 78.8 - 106.6 |
| Xylene | 0.286 | mg/L | 1 | 0.300 | <0.000900 | 95 | 68.9 - 114 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.107 | mg/L | 1 | 0.100 | 0.008 | 99 | 77.3 - 117.4 | 2 | 20 |
| Toluene | 0.0972 | mg/L | 1 | 0.100 | <0.000200 | 97 | 75 - 111.8 | 2 | 20 |
| Ethylbenzene | 0.0936 | mg/L | 1 | 0.100 | <0.000200 | 94 | 78.8 - 106.6 | 2 | 20 |
| Xylene | 0.280 | mg/L | 1 | 0.300 | <0.000900 | 93 | 68.9 - 114 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.105 | 0.106 | mg/L | 1 | 0.1 | 105 | 106 | 76.3 - 109.8 |
| 4-Bromofluorobenzene (4-BFB) | 0.105 | 0.106 | mg/L | 1 | 0.1 | 105 | 106 | 75.2 - 112.8 |

**Matrix Spike (MS-1)** Spiked Sample: 215116

QC Batch: 65513 | Date Analyzed: 2009-11-21 | Analyzed By: tn
Prep Batch: 55970 | QC Preparation: 2009-11-20 | Prepared By: tn

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 1.00 | mg/L | 5 | 0.500 | 0.5124 | 98 | 77.3 - 117.4 |
| Toluene | 0.485 | mg/L | 5 | 0.500 | <0.00100 | 97 | 75 - 111.8 |
| Ethylbenzene | 0.490 | mg/L | 5 | 0.500 | 0.0176 | 94 | 78.8 - 106.6 |
| Xylene | 1.40 | mg/L | 5 | 1.50 | <0.00450 | 93 | 68.9 - 114 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 1.01 | mg/L | 5 | 0.500 | 0.5124 | 100 | 77.3 - 117.4 | 1 | 20 |
| Toluene | 0.482 | mg/L | 5 | 0.500 | <0.00100 | 96 | 75 - 111.8 | 1 | 20 |
| Ethylbenzene | 0.493 | mg/L | 5 | 0.500 | 0.0176 | 95 | 78.8 - 106.6 | 1 | 20 |
| Xylene | 1.41 | mg/L | 5 | 1.50 | <0.00450 | 94 | 68.9 - 114 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.524 | 0.520 | mg/L | 5 | 0.5 | 105 | 104 | 76.3 - 109.8 |

*continued ...*

*matrix spikes continued ...*

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (4-BFB) | 0.477 | 0.477 | mg/L | 5 | 0.5 | 95 | 95 | 75.2 - 112.8 |

**Matrix Spike (MS-1)** Spiked Sample: 215335

QC Batch: 65521
Prep Batch: 55970

Date Analyzed: 2009-11-20
QC Preparation: 2009-11-20

Analyzed By: AG
Prepared By: tn

| Param | MS Resnlt | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| GRO [4] | 10.7 | mg/L | 10 | 10.0 | 10.7 | 0 | 10 - 159.8 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| GRO [5] | 10.9 | mg/L | 10 | 10.0 | 10.7 | 0 | 10 - 159.8 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 1.08 | 1.07 | mg/L | 10 | 1 | 108 | 107 | 69.7 - 116.1 |
| 4-Bromofluorobenzene (4-BFB) | 1.10 | 1.08 | mg/L | 10 | 1 | 110 | 108 | 71.3 - 118.9 |

**Standard (CCV-1)**

QC Batch: 65416

Date Analyzed: 2009-11-18

Analyzed By: kg

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| DRO | | mg/L | 250 | 220 | 88 | 80 - 120 | 2009-11-18 |

**Standard (CCV-2)**

QC Batch: 65416

Date Analyzed: 2009-11-18

Analyzed By: kg

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| DRO | | mg/L | 250 | 215 | 86 | 80 - 120 | 2009-11-18 |

[4]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[5]MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.

**Standard (CCV-1)**

QC Batch: 65421 Date Analyzed: 2009-11-18 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0969 | 97 | 80 - 120 | 2009-11-18 |
| Toluene | | mg/L | 0.100 | 0.0962 | 96 | 80 - 120 | 2009-11-18 |
| Ethylbenzene | | mg/L | 0.100 | 0.0956 | 96 | 80 - 120 | 2009-11-18 |
| Xylene | | mg/L | 0.300 | 0.287 | 96 | 80 - 120 | 2009-11-18 |

**Standard (CCV-2)**

QC Batch: 65421 Date Analyzed: 2009-11-18 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0958 | 96 | 80 - 120 | 2009-11-18 |
| Toluene | | mg/L | 0.100 | 0.0952 | 95 | 80 - 120 | 2009-11-18 |
| Ethylbenzene | | mg/L | 0.100 | 0.0936 | 94 | 80 - 120 | 2009-11-18 |
| Xylene | | mg/L | 0.300 | 0.280 | 93 | 80 - 120 | 2009-11-18 |

**Standard (CCV-3)**

QC Batch: 65421 Date Analyzed: 2009-11-18 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0945 | 94 | 80 - 120 | 2009-11-18 |
| Toluene | | mg/L | 0.100 | 0.0937 | 94 | 80 - 120 | 2009-11-18 |
| Ethylbenzene | | mg/L | 0.100 | 0.0926 | 93 | 80 - 120 | 2009-11-18 |
| Xylene | | mg/L | 0.300 | 0.278 | 93 | 80 - 120 | 2009-11-18 |

**Standard (CCV-2)**

QC Batch: 65468 Date Analyzed: 2009-11-20 Analyzed By: MN

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Naphthalene | | mg/L | 60.0 | 53.5 | 89 | 80 - 120 | 2009-11-20 |
| 2-Methylnaphthalene | | mg/L | 60.0 | 58.7 | 98 | 80 - 120 | 2009-11-20 |
| 1-Methylnaphthalene | | mg/L | 60.0 | 58.9 | 98 | 80 - 120 | 2009-11-20 |

*continued . . .*

*standard continued . . .*

| Param | Flag | Units | CCVs True Conc. | CCVs Found Couc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Acenaphthylene | | mg/L | 60.0 | 51.0 | 85 | 80 - 120 | 2009-11-20 |
| Acenaphthene | | mg/L | 60.0 | 51.1 | 85 | 80 - 120 | 2009-11-20 |
| Dibenzofuran | | mg/L | 60.0 | 52.9 | 88 | 80 - 120 | 2009-11-20 |
| Fluorene | | mg/L | 60.0 | 55.7 | 93 | 80 - 120 | 2009-11-20 |
| Anthracene | | mg/L | 60.0 | 56.1 | 94 | 80 - 120 | 2009-11-20 |
| Phenanthrene | | mg/L | 60.0 | 54.1 | 90 | 80 - 120 | 2009-11-20 |
| Fluoranthene | | mg/L | 60.0 | 56.8 | 95 | 80 - 120 | 2009-11-20 |
| Pyrene | | mg/L | 60.0 | 50.6 | 84 | 80 - 120 | 2009-11-20 |
| Benzo(a)anthracene | | mg/L | 60.0 | 49.9 | 83 | 80 - 120 | 2009-11-20 |
| Chrysene | | mg/L | 60.0 | 54.3 | 90 | 80 - 120 | 2009-11-20 |
| Benzo(b)fluoranthene | | mg/L | 60.0 | 52.8 | 88 | 80 - 120 | 2009-11-20 |
| Benzo(k)fluoranthene | | mg/L | 60.0 | 66.5 | 111 | 80 - 120 | 2009-11-20 |
| Benzo(a)pyrene | | mg/L | 60.0 | 63.6 | 106 | 80 - 120 | 2009-11-20 |
| Indeno(1,2,3-cd)pyrene | | mg/L | 60.0 | 50.4 | 84 | 80 - 120 | 2009-11-20 |
| Dibenzo(a,h)anthracene | | mg/L | 60.0 | 54.5 | 91 | 80 - 120 | 2009-11-20 |
| Benzo(g,h,i)perylene | | mg/L | 60.0 | 57.1 | 95 | 80 - 120 | 2009-11-20 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 59.5 | mg/L | 1 | 60.0 | 99 | 80 - 120 |
| 2-Fluorobiphenyl | | 48.3 | mg/L | 1 | 60.0 | 80 | 80 - 120 |
| Terphenyl-d14 | [6] | 47.6 | mg/L | 1 | 60.0 | 79 | 80 - 120 |

**Standard (CCV-1)**

QC Batch: 65469 Date Analyzed: 2009-11-20 Analyzed By: MN

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Naphthalene | | mg/L | 60.0 | 53.5 | 89 | 80 - 120 | 2009-11-20 |
| 2-Methylnaphthalene | | mg/L | 60.0 | 58.7 | 98 | 80 - 120 | 2009-11-20 |
| 1-Methylnaphthalene | | mg/L | 60.0 | 58.9 | 98 | 80 - 120 | 2009-11-20 |
| Acenaphthylene | | mg/L | 60.0 | 51.0 | 85 | 80 - 120 | 2009-11-20 |
| Acenaphthene | | mg/L | 60.0 | 51.1 | 85 | 80 - 120 | 2009-11-20 |
| Dibenzofuran | | mg/L | 60.0 | 52.9 | 88 | 80 - 120 | 2009-11-20 |
| Fluorene | | mg/L | 60.0 | 55.7 | 93 | 80 - 120 | 2009-11-20 |
| Anthracene | | mg/L | 60.0 | 56.1 | 94 | 80 - 120 | 2009-11-20 |
| Phenanthrene | | mg/L | 60.0 | 54.1 | 90 | 80 - 120 | 2009-11-20 |
| Fluoranthene | | mg/L | 60.0 | 56.8 | 95 | 80 - 120 | 2009-11-20 |
| Pyrene | | mg/L | 60.0 | 50.6 | 84 | 80 - 120 | 2009-11-20 |

*continued . . .*

[6] 8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

*standard continued ...*

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzo(a)anthracene | | mg/L | 60.0 | 49.9 | 83 | 80 - 120 | 2009-11-20 |
| Chrysene | | mg/L | 60.0 | 54.3 | 90 | 80 - 120 | 2009-11-20 |
| Benzo(b)fluoranthene | | mg/L | 60.0 | 52.8 | 88 | 80 - 120 | 2009-11-20 |
| Benzo(k)fluoranthene | | mg/L | 60.0 | 66.5 | 111 | 80 - 120 | 2009-11-20 |
| Benzo(a)pyrene | | mg/L | 60.0 | 63.6 | 106 | 80 - 120 | 2009-11-20 |
| Indeno(1,2,3-cd)pyrene | | mg/L | 60.0 | 50.4 | 84 | 80 - 120 | 2009-11-20 |
| Dibenzo(a,h)anthracene | | mg/L | 60.0 | 54.5 | 91 | 80 - 120 | 2009-11-20 |
| Benzo(g,h,i)perylene | | mg/L | 60.0 | 57.1 | 95 | 80 - 120 | 2009-11-20 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 59.5 | mg/L | 1 | 60.0 | 99 | 80 - 120 |
| 2-Fluorobiphenyl | | 48.3 | mg/L | 1 | 60.0 | 80 | 80 - 120 |
| Terphenyl-d14 | [7] | 47.6 | mg/L | 1 | 60.0 | 79 | 80 - 120 |

**Standard (CCV-2)**

QC Batch: 65469 Date Analyzed: 2009-11-20 Analyzed By: MN

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Naphthalene | | mg/L | 60.0 | 52.9 | 88 | 80 - 120 | 2009-11-20 |
| 2-Methylnaphthalene | | mg/L | 60.0 | 59.5 | 99 | 80 - 120 | 2009-11-20 |
| 1-Methylnaphthalene | | mg/L | 60.0 | 59.0 | 98 | 80 - 120 | 2009-11-20 |
| Acenaphthylene | | mg/L | 60.0 | 51.4 | 86 | 80 - 120 | 2009-11-20 |
| Acenaphthene | | mg/L | 60.0 | 51.0 | 85 | 80 - 120 | 2009-11-20 |
| Dibenzofuran | | mg/L | 60.0 | 52.5 | 88 | 80 - 120 | 2009-11-20 |
| Fluorene | | mg/L | 60.0 | 55.8 | 93 | 80 - 120 | 2009-11-20 |
| Anthracene | | mg/L | 60.0 | 56.0 | 93 | 80 - 120 | 2009-11-20 |
| Phenanthrene | | mg/L | 60.0 | 53.9 | 90 | 80 - 120 | 2009-11-20 |
| Fluoranthene | | mg/L | 60.0 | 55.7 | 93 | 80 - 120 | 2009-11-20 |
| Pyrene | | mg/L | 60.0 | 49.2 | 82 | 80 - 120 | 2009-11-20 |
| Benzo(a)anthracene | | mg/L | 60.0 | 50.4 | 84 | 80 - 120 | 2009-11-20 |
| Chrysene | | mg/L | 60.0 | 54.2 | 90 | 80 - 120 | 2009-11-20 |
| Benzo(b)fluoranthene | | mg/L | 60.0 | 60.6 | 101 | 80 - 120 | 2009-11-20 |
| Benzo(k)fluoranthene | | mg/L | 60.0 | 64.7 | 108 | 80 - 120 | 2009-11-20 |
| Benzo(a)pyrene | | mg/L | 60.0 | 65.6 | 109 | 80 - 120 | 2009-11-20 |
| Indeno(1,2,3-cd)pyrene | | mg/L | 60.0 | 54.5 | 91 | 80 - 120 | 2009-11-20 |
| Dibenzo(a,h)anthracene | | mg/L | 60.0 | 53.3 | 89 | 80 - 120 | 2009-11-20 |
| Benzo(g,h,i)perylene | | mg/L | 60.0 | 55.9 | 93 | 80 - 120 | 2009-11-20 |

[7] 8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 59.0 | mg/L | 1 | 60.0 | 98 | 80 - 120 |
| 2-Fluorobiphenyl | | 48.8 | mg/L | 1 | 60.0 | 81 | 80 - 120 |
| Terphenyl-d14 | [8] | 46.0 | mg/L | 1 | 60.0 | 77 | 80 - 120 |

**Standard (CCV-3)**

QC Batch: 65469 Date Analyzed: 2009-11-20 Analyzed By: MN

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Naphthalene | | mg/L | 60.0 | 53.2 | 89 | 80 - 120 | 2009-11-20 |
| 2-Methylnaphthalene | | mg/L | 60.0 | 57.2 | 95 | 80 - 120 | 2009-11-20 |
| 1-Methylnaphthalene | | mg/L | 60.0 | 58.2 | 97 | 80 - 120 | 2009-11-20 |
| Acenaphthylene | | mg/L | 60.0 | 51.0 | 85 | 80 - 120 | 2009-11-20 |
| Acenaphthene | | mg/L | 60.0 | 50.4 | 84 | 80 - 120 | 2009-11-20 |
| Dibenzofuran | | mg/L | 60.0 | 51.6 | 86 | 80 - 120 | 2009-11-20 |
| Fluorene | | mg/L | 60.0 | 54.6 | 91 | 80 - 120 | 2009-11-20 |
| Anthracene | | mg/L | 60.0 | 56.5 | 94 | 80 - 120 | 2009-11-20 |
| Phenanthrene | | mg/L | 60.0 | 54.2 | 90 | 80 - 120 | 2009-11-20 |
| Fluoranthene | | mg/L | 60.0 | 57.3 | 96 | 80 - 120 | 2009-11-20 |
| Pyrene | | mg/L | 60.0 | 48.9 | 82 | 80 - 120 | 2009-11-20 |
| Benzo(a)anthracene | | mg/L | 60.0 | 50.3 | 84 | 80 - 120 | 2009-11-20 |
| Chrysene | | mg/L | 60.0 | 51.9 | 86 | 80 - 120 | 2009-11-20 |
| Benzo(b)fluoranthene | | mg/L | 60.0 | 50.8 | 85 | 80 - 120 | 2009-11-20 |
| Benzo(k)fluoranthene | | mg/L | 60.0 | 63.3 | 106 | 80 - 120 | 2009-11-20 |
| Benzo(a)pyrene | | mg/L | 60.0 | 63.0 | 105 | 80 - 120 | 2009-11-20 |
| Indeno(1,2,3-cd)pyrene | | mg/L | 60.0 | 53.8 | 90 | 80 - 120 | 2009-11-20 |
| Dibenzo(a,h)anthracene | | mg/L | 60.0 | 54.4 | 91 | 80 - 120 | 2009-11-20 |
| Benzo(g,h,i)perylene | | mg/L | 60.0 | 51.6 | 86 | 80 - 120 | 2009-11-20 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 58.5 | mg/L | 1 | 60.0 | 98 | 80 - 120 |
| 2-Fluorobiphenyl | | 48.2 | mg/L | 1 | 60.0 | 80 | 80 - 120 |
| Terphenyl-d14 | [9] | 46.2 | mg/L | 1 | 60.0 | 77 | 80 - 120 |

**Standard (CCV-1)**

QC Batch: 65503 Date Analyzed: 2009-11-20 Analyzed By: tn

[8] 8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.
[9] 8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

| Param | Flag | Units | CCVs True Conc. | CCVs Found Couc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0925 | 92 | 80 - 120 | 2009-11-20 |
| Toluene | | mg/L | 0.100 | 0.0918 | 92 | 80 - 120 | 2009-11-20 |
| Ethylbenzene | | mg/L | 0.100 | 0.0892 | 89 | 80 - 120 | 2009-11-20 |
| Xylene | | mg/L | 0.300 | 0.266 | 89 | 80 - 120 | 2009-11-20 |

**Standard (CCV-2)**

QC Batch: 65503 Date Analyzed: 2009-11-20 Analyzed By: tn

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0900 | 90 | 80 - 120 | 2009-11-20 |
| Toluene | | mg/L | 0.100 | 0.0893 | 89 | 80 - 120 | 2009-11-20 |
| Ethylbenzene | | mg/L | 0.100 | 0.0861 | 86 | 80 - 120 | 2009-11-20 |
| Xylene | | mg/L | 0.300 | 0.258 | 86 | 80 - 120 | 2009-11-20 |

**Standard (CCV-3)**

QC Batch: 65503 Date Analyzed: 2009-11-20 Analyzed By: tn

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0949 | 95 | 80 - 120 | 2009-11-20 |
| Toluene | | mg/L | 0.100 | 0.0933 | 93 | 80 - 120 | 2009-11-20 |
| Ethylbenzene | | mg/L | 0.100 | 0.0921 | 92 | 80 - 120 | 2009-11-20 |
| Xylene | | mg/L | 0.300 | 0.274 | 91 | 80 - 120 | 2009-11-20 |

**Standard (CCV-2)**

QC Batch: 65513 Date Analyzed: 2009-11-21 Analyzed By: tn

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0942 | 94 | 80 - 120 | 2009-11-21 |
| Toluene | | mg/L | 0.100 | 0.0925 | 92 | 80 - 120 | 2009-11-21 |
| Ethylbenzene | | mg/L | 0.100 | 0.0879 | 88 | 80 - 120 | 2009-11-21 |
| Xylene | | mg/L | 0.300 | 0.270 | 90 | 80 - 120 | 2009-11-21 |

**Standard (CCV-3)**

QC Batch: 65513 Date Analyzed: 2009-11-21 Analyzed By: tn

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0976 | 98 | 80 - 120 | 2009-11-21 |
| Toluene | | mg/L | 0.100 | 0.0965 | 96 | 80 - 120 | 2009-11-21 |
| Ethylbenzene | | mg/L | 0.100 | 0.0909 | 91 | 80 - 120 | 2009-11-21 |
| Xylene | | mg/L | 0.300 | 0.282 | 94 | 80 - 120 | 2009-11-21 |

**Standard (CCV-1)**

QC Batch: 65519 Date Analyzed: 2009-11-23 Analyzed By: MN

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Naphthalene | | mg/L | 60.0 | 53.2 | 89 | 80 - 120 | 2009-11-23 |
| 2-Methylnaphthalene | | mg/L | 60.0 | 57.2 | 95 | 80 - 120 | 2009-11-23 |
| 1-Methylnaphthalene | | mg/L | 60.0 | 58.2 | 97 | 80 - 120 | 2009-11-23 |
| Acenaphthylene | | mg/L | 60.0 | 51.0 | 85 | 80 - 120 | 2009-11-23 |
| Acenaphthene | | mg/L | 60.0 | 50.4 | 84 | 80 - 120 | 2009-11-23 |
| Dibenzofuran | | mg/L | 60.0 | 51.6 | 86 | 80 - 120 | 2009-11-23 |
| Fluorene | | mg/L | 60.0 | 54.6 | 91 | 80 - 120 | 2009-11-23 |
| Anthracene | | mg/L | 60.0 | 56.5 | 94 | 80 - 120 | 2009-11-23 |
| Phenanthrene | | mg/L | 60.0 | 54.2 | 90 | 80 - 120 | 2009-11-23 |
| Fluoranthene | | mg/L | 60.0 | 57.3 | 96 | 80 - 120 | 2009-11-23 |
| Pyrene | | mg/L | 60.0 | 48.9 | 82 | 80 - 120 | 2009-11-23 |
| Benzo(a)anthraceue | | mg/L | 60.0 | 50.3 | 84 | 80 - 120 | 2009-11-23 |
| Chrysene | | mg/L | 60.0 | 51.9 | 86 | 80 - 120 | 2009-11-23 |
| Benzo(b)fluorauthene | | mg/L | 60.0 | 50.8 | 85 | 80 - 120 | 2009-11-23 |
| Benzo(k)fluoranthene | | mg/L | 60.0 | 63.3 | 106 | 80 - 120 | 2009-11-23 |
| Benzo(a)pyrene | | mg/L | 60.0 | 63.0 | 105 | 80 - 120 | 2009-11-23 |
| Indeno(1,2,3-cd)pyrene | | mg/L | 60.0 | 53.8 | 90 | 80 - 120 | 2009-11-23 |
| Dibenzo(a,h)anthracene | | mg/L | 60.0 | 54.4 | 91 | 80 - 120 | 2009-11-23 |
| Benzo(g,h,i)perylene | | mg/L | 60.0 | 51.6 | 86 | 80 - 120 | 2009-11-23 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 58.5 | mg/L | 1 | 60.0 | 98 | 80 - 120 |
| 2-Fluorobiphenyl | | 48.2 | mg/L | 1 | 60.0 | 80 | 80 - 120 |
| Terphenyl-d14 | [10] | 46.2 | mg/L | 1 | 60.0 | 77 | 80 - 120 |

[10]8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

**Standard (CCV-2)**

QC Batch: 65519 Date Analyzed: 2009-11-23 Analyzed By: MN

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Naphthalene | | mg/L | 60.0 | 52.7 | 88 | 80 - 120 | 2009-11-23 |
| 2-Methylnaphthalene | | mg/L | 60.0 | 57.0 | 95 | 80 - 120 | 2009-11-23 |
| 1-Methylnaphthalene | | mg/L | 60.0 | 56.1 | 94 | 80 - 120 | 2009-11-23 |
| Acenaphthylene | | mg/L | 60.0 | 50.8 | 85 | 80 - 120 | 2009-11-23 |
| Acenaphthene | | mg/L | 60.0 | 50.3 | 84 | 80 - 120 | 2009-11-23 |
| Dibenzofuran | | mg/L | 60.0 | 52.2 | 87 | 80 - 120 | 2009-11-23 |
| Fluorene | | mg/L | 60.0 | 54.9 | 92 | 80 - 120 | 2009-11-23 |
| Anthracene | | mg/L | 60.0 | 56.4 | 94 | 80 - 120 | 2009-11-23 |
| Phenanthrene | | mg/L | 60.0 | 54.3 | 90 | 80 - 120 | 2009-11-23 |
| Fluoranthene | | mg/L | 60.0 | 56.9 | 95 | 80 - 120 | 2009-11-23 |
| Pyrene | | mg/L | 60.0 | 49.5 | 82 | 80 - 120 | 2009-11-23 |
| Benzo(a)anthracene | | mg/L | 60.0 | 50.0 | 83 | 80 - 120 | 2009-11-23 |
| Chrysene | | mg/L | 60.0 | 53.2 | 89 | 80 - 120 | 2009-11-23 |
| Benzo(b)fluoranthene | | mg/L | 60.0 | 53.3 | 89 | 80 - 120 | 2009-11-23 |
| Benzo(k)fluoranthene | | mg/L | 60.0 | 58.5 | 98 | 80 - 120 | 2009-11-23 |
| Benzo(a)pyrene | | mg/L | 60.0 | 63.7 | 106 | 80 - 120 | 2009-11-23 |
| Indeno(1,2,3-cd)pyrene | | mg/L | 60.0 | 52.0 | 87 | 80 - 120 | 2009-11-23 |
| Dibenzo(a,h)anthracene | | mg/L | 60.0 | 54.7 | 91 | 80 - 120 | 2009-11-23 |
| Benzo(g,h,i)perylene | | mg/L | 60.0 | 51.6 | 86 | 80 - 120 | 2009-11-23 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 59.2 | mg/L | 1 | 60.0 | 99 | 80 - 120 |
| 2-Fluorobiphenyl | | 47.7 | mg/L | 1 | 60.0 | 80 | 80 - 120 |
| Terphenyl-d14 | [11] | 47.0 | mg/L | 1 | 60.0 | 78 | 80 - 120 |

**Standard (CCV-1)**

QC Batch: 65521 Date Analyzed: 2009-11-20 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| GRO | | mg/L | 1.00 | 0.927 | 93 | 80 - 120 | 2009-11-20 |

**Standard (CCV-2)**

QC Batch: 65521 Date Analyzed: 2009-11-20 Analyzed By: AG

[11] 8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| GRO | | mg/L | 1.00 | 0.879 | 88 | 80 - 120 | 2009-11-20 |

LAB Order ID # 9111612



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Nova
Phone #: 520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron R.
E-mail:
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Name: Bors Durham
Project Location (including state): N.M.
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE (09) | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 215008 | MW-11 | 4 | | X | | | | X | | | | X | | 11-12 | 700 | | X | | | X | | | | | | | | | | | | | | | | |
| 009 | MW-14 | | | | | | | | | | | | | | 745 | | | | | | | | | | | | | | | | | | | | | |
| 010 | MW-20 | | | | | | | | | | | | | | 830 | | | | | | | | | | | | | | | | | | | | | |
| 011 | MW-21 | | | | | | | | | | | | | | 915 | | | | | | | | | | | | | | | | | | | | | |
| 012 | MW-24 | | | | | | | | | | | | | | 1000 | | | | | | | | | | | | | | | | | | | | | |
| 013 | MW 25 | | | | | | | | | | | | | | 1045 | | | | | | | | | | | | | | | | | | | | | |
| 014 | MW-27 | | | | | | | | | | | | | | 1130 | | | | | | | | | | | | | | | | | | | | | |
| 015 | MW-29 | | | | | | | | | | | | | | 1215 | | | | | | | | | | | | | | | | | | | | | |
| 016 | MW-30 | | | | | | | | | | | | | | 1300 | | | | | | | | | | | | | | | | | | | | | |
| 017 | MW-3 | | | | | | | | | | | | | | 1345 | | | | | | | | | | | | | | | | | | | | | |
| 018 | MW-4 | | | | | | | | | | | | | | 1430 | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 11-16-09 | 820 | [signature] | TRACE | 11/16/09 | 8:20 am | INST ___ OBS 3.8 °C COR 3.8 °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: Carol Fox | Company: Trace LBK | Date: 11-17-09 | Time: 9:35 AM | INST ___ OBS ___ °C COR ___ °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS:
Midland - Btex, TPH
Lubbock - PAH
LS 2J293478
5.0/5.4 IR
4.3/4.7 IR

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed 3.8/4.2 IR

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # carry in (LS 2J293472, LS 2J293564)

LAB Order ID # 9111612



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
**Lubbock, Texas 79424**
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
**Midland, Texas 79703**
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
**El Paso, Texas 79922**
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
**Carrollton, Texas 75006**
Tel (972) 242-7750

Company Name: Nova
Phone #: 520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron R.
E-mail:
Invoice to: (If different from above) Nuns
Project #: TNM-LF-2000-7
Project Name: Bors Durham
Project Location (including state): N.M.
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, SO4, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 215019 | MW-8 | 4 | | X | | | | X | | | | X | | 11-12-09 | 1515 | | X | | | X | | | | | | | | | | | | | | | | |
| 020 | MW-9 | | | | | | | | | | | | | | 1600 | | | | | | | | | | | | | | | | | | | | | |
| 021 | MW-10 | | | | | | | | | | | | | | 1645 | | | | | | | | | | | | | | | | | | | | | |
| 022 | MW-13 | | | | | | | | | | | | | | 1730 | | | | | | | | | | | | | | | | | | | | | |
| 023 | MW-15 | | | | | | | | | | | | | | 1815 | | | | | | | | | | | | | | | | | | | | | |
| 024 | MW-16 | | | | | | | | | | | | | | 1900 | | | | | | | | | | | | | | | | | | | | | |
| 025 | MW-23 | | | | | | | | | | | | | 11-13-09 | 700 | | | | | | | | | | | | | | | | | | | | | |
| 026 | MW-26 | | | | | | | | | | | | | | 745 | | | | | | | | | | | | | | | | | | | | | |
| 027 | MW-28 | | | | | | | | | | | | | | 830 | | | | | | | | | | | | | | | | | | | | | |
| 028 | MW-31 | | | | | | | | | | | | | | 915 | | | | | | | | | | | | | | | | | | | | | |
| 029 | MW-32 | | | | | | | | | | | | | | 1000 | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 11/6/09 | 820 | [signature] | TRACE | 11/6/09 | 8:20 | INST / OBS 3.8 °C / COR 3.8 °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST / OBS °C / COR °C |
| Relinquished by: | Company: | Date: | Time: | Received by: Carol Fox | Company: Trace-Lbk | Date: 11-17-09 | Time: 9:35 AM | INST / OBS °C / COR °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS:
LS ZJ293478
5.0/5.4 JR
JR
4.3/4.7
LS ZJ293564

- Dry Weight Basis Required
- TRRP Report Required
- Check If Special Reporting Limits Are Needed 3.8/4.2

Carrier # LS ZJ293472

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LAB Order ID # 9111612



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
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BioAquatic Testing
2501 Mayes Rd., Ste 100
**Carrollton, Texas 75006**
Tel (972) 242-7750

Company Name: Nova
Phone #: 520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron R.
E-mail:
Invoice to: (If different from above) Mairs
Project #: JNM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): N.M.
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING DATE 09' | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 215030 | MW-33 | 4 | | X | | | | X | | | | X | | 11-13 | 10:45 | | X | | | X | | | | | | | | | | | | | | | | | | | |
| 031 | MW-37 | | | | | | | | | | | | | | 11:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| 032 | MW-7 | | | | | | | | | | | | | | 12:15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 033 | MW-6 | | | | | | | | | | | | | | 13:00 | | | | | | | | | | | | | | | | | | | | | | | | |
| 034 | MW-2 | | | | | | | | | | | | | | 13:45 | | | | | | | | | | | | | | | | | | | | | | | | |
| 035 | MW-38 | | | | | | | | | | | | | | 14:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| 036 | MW-1 | | | | | | | | | | | | | | 15:15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 037 | MW-5 | | | | | | | | | | | | | | 16:00 | | | | | | | | | | | | | | | | | | | | | | | | |
| 038 | MW-12 | 6 | | | | | | | | | | | | | 16:45 | | | | X | | | | | | | | | | | | | | | | | | | | |
| 039 | Field Blank | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST / OBS / COR |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 11/6/09 | 820 | [signature] | TRACE | 11/16/09 | 8:20 | INST ___ OBS 3.8 °C COR 3.8 °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: Carol Fox | Company: Trace Lab | Date: 11-17-09 | Time: 9:35 AM | INST ___ OBS ___ °C COR ___ °C |

**LAB USE ONLY**
Intact (Y) N
Headspace Y (N) NA
Log-in-Review

**REMARKS:**
LS ZJ293478
5.0/5.4 JR

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required JR
- ☐ Check If Special Reporting Limits Are Needed 3.8/4.2 4.3/4.7 JR

Carrier # carry in (LS ZJ293472, ZJ293564)

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
5015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: labs@traceanalysis.com

## Certifications

**WBENC:** 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
**NCTRCA** WFWB38444Y0909

## NELAP Certifications

**Lubbock:** T104704219-08-TX
LELAP-02003
Kansas E-10317

**El Paso:** T104704221-08-TX
LELAP-02002

**Midland:** T104704392-08-TX

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: February 26, 2010

Work Order: 10021904

Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-07

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 222957 | MW-26 | water | 2010-02-18 | 08:00 | 2010-02-19 |
| 222958 | MW-31 | water | 2010-02-18 | 08:30 | 2010-02-19 |
| 222959 | MW-33 | water | 2010-02-18 | 09:00 | 2010-02-19 |
| 222960 | MW-9 | water | 2010-02-18 | 09:30 | 2010-02-19 |
| 222961 | MW-15 | water | 2010-02-18 | 10:00 | 2010-02-19 |
| 222962 | MW-10 | water | 2010-02-18 | 10:30 | 2010-02-19 |
| 222963 | MW-7 | water | 2010-02-18 | 11:00 | 2010-02-19 |
| 222964 | MW-32 | water | 2010-02-18 | 11:30 | 2010-02-19 |
| 222965 | MW-37 | water | 2010-02-18 | 12:00 | 2010-02-19 |
| 222966 | MW-8 | water | 2010-02-18 | 12:30 | 2010-02-19 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 222967 | MW-28 | water | 2010-02-18 | 13:00 | 2010-02-19 |
| 222968 | MW-3 | water | 2010-02-18 | 13:30 | 2010-02-19 |
| 222969 | MW-23 | water | 2010-02-18 | 14:00 | 2010-02-19 |
| 222970 | MW-16 | water | 2010-02-18 | 14:45 | 2010-02-19 |
| 222971 | MW-4 | water | 2010-02-18 | 15:15 | 2010-02-19 |
| 222972 | MW-6 | water | 2010-02-18 | 15:45 | 2010-02-19 |
| 222973 | MW-2 | water | 2010-02-18 | 16:30 | 2010-02-19 |
| 222974 | MW-13 | water | 2010-02-18 | 17:00 | 2010-02-19 |
| 222975 | MW-38 | water | 2010-02-18 | 17:36 | 2010-02-19 |
| 222976 | MW-1 | water | 2010-02-18 | 18:15 | 2010-02-19 |
| 222977 | MW-5 | water | 2010-02-18 | 19:00 | 2010-02-19 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2010-02-19 and assigned to work order 10021904. Samples for work order 10021904 were received intact without headspace and at a temperature of 3.1 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 58011 | 2010-02-24 at 11:00 | 67815 | 2010-02-24 at 12:32 |
| BTEX | S 8021B | 58042 | 2010-02-25 at 14:00 | 67848 | 2010-02-25 at 17:21 |

Results for these samples are reported on a wet weigbt basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10021904 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 222957 - MW-26**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0913 | mg/L | 1 | 0.100 | 91 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0819 | mg/L | 1 | 0.100 | 82 | 51.1 - 118.8 |

**Sample: 222958 - MW-31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0960 | mg/L | 1 | 0.100 | 96 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0863 | mg/L | 1 | 0.100 | 86 | 51.1 - 118.8 |

**Sample: 222959 - MW-33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0940 | mg/L | 1 | 0.100 | 94 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0819 | mg/L | 1 | 0.100 | 82 | 51.1 - 118.8 |

**Sample: 222960 - MW-9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0964 | mg/L | 1 | 0.100 | 96 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0838 | mg/L | 1 | 0.100 | 84 | 51.1 - 118.8 |

**Sample: 222961 - MW-15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0898 | mg/L | 1 | 0.100 | 90 | 65.9 - 129.8 |
| 4-Bromoflnorobenzene (4-BFB) | | 0.0763 | mg/L | 1 | 0.100 | 76 | 51.1 - 118.8 |

**Sample: 222962 - MW-10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Resnlt | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0981 | mg/L | 1 | 0.100 | 98 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0844 | mg/L | 1 | 0.100 | 84 | 51.1 - 118.8 |

**Sample: 222963 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0919 | mg/L | 1 | 0.100 | 92 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0872 | mg/L | 1 | 0.100 | 87 | 51.1 - 118.8 |

**Sample: 222964 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0903 | mg/L | 1 | 0.100 | 90 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0855 | mg/L | 1 | 0.100 | 86 | 51.1 - 118.8 |

**Sample: 222965 - MW-37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0849 | mg/L | 1 | 0.100 | 85 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0715 | mg/L | 1 | 0.100 | 72 | 51.1 - 118.8 |

**Sample: 222966 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0898 | mg/L | 1 | 0.100 | 90 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0796 | mg/L | 1 | 0.100 | 80 | 51.1 - 118.8 |

**Sample: 222967 - MW-28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotolnene (TFT) | | 0.0899 | mg/L | 1 | 0.100 | 90 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0746 | mg/L | 1 | 0.100 | 75 | 51.1 - 118.8 |

**Sample: 222968 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0931 | mg/L | 1 | 0.100 | 93 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0751 | mg/L | 1 | 0.100 | 75 | 51.1 - 118.8 |

**Sample: 222969 - MW-23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Aualyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0913 | mg/L | 1 | 0.100 | 91 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0752 | mg/L | 1 | 0.100 | 75 | 51.1 - 118.8 |

**Sample: 222970 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0919 | mg/L | 1 | 0.100 | 92 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0995 | mg/L | 1 | 0.100 | 100 | 51.1 - 118.8 |

**Sample: 222971 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0889 | mg/L | 1 | 0.100 | 89 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0806 | mg/L | 1 | 0.100 | 81 | 51.1 - 118.8 |

**Sample: 222972 - MW-6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0918 | mg/L | 1 | 0.100 | 92 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0827 | mg/L | 1 | 0.100 | 83 | 51.1 - 118.8 |

**Sample: 222973 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67815 | Date Analyzed: | 2010-02-24 | Analyzed By: | AG |
| Prep Batch: | 58011 | Sample Preparation: | 2010-02-24 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00910** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0932 | mg/L | 1 | 0.100 | 93 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.107 | mg/L | 1 | 0.100 | 107 | 51.1 - 118.8 |

**Sample: 222974 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67848 | Date Analyzed: | 2010-02-25 | Analyzed By: | AG |
| Prep Batch: | 58042 | Sample Preparation: | 2010-02-25 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0947 | mg/L | 1 | 0.100 | 95 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.112 | mg/L | 1 | 0.100 | 112 | 51.1 - 118.8 |

**Sample: 222975 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67848 | Date Analyzed: | 2010-02-25 | Analyzed By: | AG |
| Prep Batch: | 58042 | Sample Preparation: | 2010-02-25 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0142** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | **0.00370** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0877 | mg/L | 1 | 0.100 | 88 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0961 | mg/L | 1 | 0.100 | 96 | 51.1 - 118.8 |

**Sample: 222976 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67848 | Date Analyzed: | 2010-02-25 | Analyzed By: | AG |
| Prep Batch: | 58042 | Sample Preparation: | 2010-02-25 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0298** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00520** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00410** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0863 | mg/L | 1 | 0.100 | 86 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | [1] | 0.127 | mg/L | 1 | 0.100 | 127 | 51.1 - 118.8 |

**Sample: 222977 - MW-5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 67848 | Date Analyzed: | 2010-02-25 | Analyzed By: | AG |
| Prep Batch: | 58042 | Sample Preparation: | 2010-02-25 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0495** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00500** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00660** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0869 | mg/L | 1 | 0.100 | 87 | 65.9 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | | 0.110 | mg/L | 1 | 0.100 | 110 | 51.1 - 118.8 |

[1]High surrogate recovery due to peak interference.

**Method Blank (1)** QC Batch: 67815

QC Batch: 67815 | Date Analyzed: 2010-02-24 | Analyzed By: AG
Prep Batch: 58011 | QC Preparation: 2010-02-24 | Prepared By: AG

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000200 | mg/L | 0.001 |
| Xylene | | <0.000900 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0895 | mg/L | 1 | 0.100 | 90 | 73.6 - 126.6 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0842 | mg/L | 1 | 0.100 | 84 | 62.6 - 117.5 |

**Method Blank (1)** QC Batch: 67848

QC Batch: 67848 | Date Analyzed: 2010-02-25 | Analyzed By: AG
Prep Batch: 58042 | QC Preparation: 2010-02-25 | Prepared By: AG

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000200 | mg/L | 0.001 |
| Xylene | | <0.000900 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0956 | mg/L | 1 | 0.100 | 96 | 73.6 - 126.6 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0849 | mg/L | 1 | 0.100 | 85 | 62.6 - 117.5 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 67815 | Date Analyzed: 2010-02-24 | Analyzed By: AG
Prep Batch: 58011 | QC Preparation: 2010-02-24 | Prepared By: AG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0937 | mg/L | 1 | 0.100 | <0.000300 | 94 | 79.4 - 112.4 |
| Toluene | 0.0940 | mg/L | 1 | 0.100 | <0.000200 | 94 | 79.3 - 110 |
| Ethylbenzene | 0.0935 | mg/L | 1 | 0.100 | <0.000200 | 94 | 73.8 - 113.1 |

*continued ...*

*control spikes continued ...*

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Xylene | 0.281 | mg/L | 1 | 0.300 | <0.000900 | 94 | 73.9 - 113.6 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0932 | mg/L | 1 | 0.100 | <0.000300 | 93 | 79.4 - 112.4 | 0 | 20 |
| Toluene | 0.0933 | mg/L | 1 | 0.100 | <0.000200 | 93 | 79.3 - 110 | 1 | 20 |
| Ethylbenzene | 0.0929 | mg/L | 1 | 0.100 | <0.000200 | 93 | 73.8 - 113.1 | 1 | 20 |
| Xylene | 0.280 | mg/L | 1 | 0.300 | <0.000900 | 93 | 73.9 - 113.6 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0887 | 0.0933 | mg/L | 1 | 0.100 | 89 | 93 | 76.2 - 129.6 |
| 4-Bromofluorobenzene (4-BFB) | 0.0941 | 0.0983 | mg/L | 1 | 0.100 | 94 | 98 | 77.9 - 119.8 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 67848
Prep Batch: 58042

Date Analyzed: 2010-02-25
QC Preparation: 2010-02-25

Analyzed By: AG
Prepared By: AG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0879 | mg/L | 1 | 0.100 | <0.000300 | 88 | 79.4 - 112.4 |
| Toluene | 0.0874 | mg/L | 1 | 0.100 | <0.000200 | 87 | 79.3 - 110 |
| Ethylbenzene | 0.0867 | mg/L | 1 | 0.100 | <0.000200 | 87 | 73.8 - 113.1 |
| Xylene | 0.262 | mg/L | 1 | 0.300 | <0.000900 | 87 | 73.9 - 113.6 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0929 | mg/L | 1 | 0.100 | <0.000300 | 93 | 79.4 - 112.4 | 6 | 20 |
| Toluene | 0.0928 | mg/L | 1 | 0.100 | <0.000200 | 93 | 79.3 - 110 | 6 | 20 |
| Ethylbenzene | 0.0924 | mg/L | 1 | 0.100 | <0.000200 | 92 | 73.8 - 113.1 | 6 | 20 |
| Xylene | 0.279 | mg/L | 1 | 0.300 | <0.000900 | 93 | 73.9 - 113.6 | 6 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0844 | 0.0916 | mg/L | 1 | 0.100 | 84 | 92 | 76.2 - 129.6 |
| 4-Bromofluorobenzene (4-BFB) | 0.0892 | 0.0971 | mg/L | 1 | 0.100 | 89 | 97 | 77.9 - 119.8 |

**Matrix Spike (MS-1)** Spiked Sample: 222839

QC Batch: 67815
Prep Batch: 58011

Date Analyzed: 2010-02-24
QC Preparation: 2010-02-24

Analyzed By: AG
Prepared By: AG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 25.6 | mg/L | 100 | 10.0 | 16.6242 | 90 | 77.3 - 117.4 |
| Toluene | 16.3 | mg/L | 100 | 10.0 | 8.1788 | 81 | 75 - 111.8 |
| Ethylbenzene | 9.84 | mg/L | 100 | 10.0 | 1.4033 | 84 | 78.8 - 106.6 |
| Xylene | 29.3 | mg/L | 100 | 30.0 | 4.0697 | 84 | 68.9 - 114 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 25.7 | mg/L | 100 | 10.0 | 16.6242 | 91 | 77.3 - 117.4 | 0 | 20 |
| Toluene | 16.4 | mg/L | 100 | 10.0 | 8.1788 | 82 | 75 - 111.8 | 1 | 20 |
| Ethylbenzene | 10.0 | mg/L | 100 | 10.0 | 1.4033 | 86 | 78.8 - 106.6 | 2 | 20 |
| Xylene | 29.7 | mg/L | 100 | 30.0 | 4.0697 | 85 | 68.9 - 114 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 8.60 | 8.44 | mg/L | 100 | 10 | 86 | 84 | 76.3 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | 9.28 | 9.06 | mg/L | 100 | 10 | 93 | 91 | 75.2 - 112.8 |

**Matrix Spike (MS-1)** Spiked Sample: 223206

QC Batch: 67848
Prep Batch: 58042

Date Analyzed: 2010-02-25
QC Preparation: 2010-02-25

Analyzed By: AG
Prepared By: AG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 1.84 | mg/L | 5 | 0.500 | 1.3635 | 95 | 77.3 - 117.4 |
| Toluene | 0.475 | mg/L | 5 | 0.500 | 0.0375 | 88 | 75 - 111.8 |
| Ethylbenzene | 0.479 | mg/L | 5 | 0.500 | 0.0456 | 87 | 78.8 - 106.6 |
| Xylene | 1.37 | mg/L | 5 | 1.50 | 0.0733 | 86 | 68.9 - 114 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 1.81 | mg/L | 5 | 0.500 | 1.3635 | 89 | 77.3 - 117.4 | 2 | 20 |
| Toluene | 0.482 | mg/L | 5 | 0.500 | 0.0375 | 89 | 75 - 111.8 | 2 | 20 |
| Ethylbenzene | 0.491 | mg/L | 5 | 0.500 | 0.0456 | 89 | 78.8 - 106.6 | 2 | 20 |
| Xylene | 1.41 | mg/L | 5 | 1.50 | 0.0733 | 89 | 68.9 - 114 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.434 | 0.427 | mg/L | 5 | 0.5 | 87 | 85 | 76.3 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | 0.455 | 0.455 | mg/L | 5 | 0.5 | 91 | 91 | 75.2 - 112.8 |

**Standard (CCV-1)**

QC Batch: 67815 Date Analyzed: 2010-02-24 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0889 | 89 | 80 - 120 | 2010-02-24 |
| Toluene | | mg/L | 0.100 | 0.0902 | 90 | 80 - 120 | 2010-02-24 |
| Ethylbenzene | | mg/L | 0.100 | 0.0889 | 89 | 80 - 120 | 2010-02-24 |
| Xylene | | mg/L | 0.300 | 0.269 | 90 | 80 - 120 | 2010-02-24 |

**Standard (CCV-2)**

QC Batch: 67815 Date Analyzed: 2010-02-24 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0921 | 92 | 80 - 120 | 2010-02-24 |
| Toluene | | mg/L | 0.100 | 0.0919 | 92 | 80 - 120 | 2010-02-24 |
| Ethylbenzene | | mg/L | 0.100 | 0.0907 | 91 | 80 - 120 | 2010-02-24 |
| Xylene | | mg/L | 0.300 | 0.274 | 91 | 80 - 120 | 2010-02-24 |

**Standard (CCV-3)**

QC Batch: 67815 Date Analyzed: 2010-02-24 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0881 | 88 | 80 - 120 | 2010-02-24 |
| Toluene | | mg/L | 0.100 | 0.0877 | 88 | 80 - 120 | 2010-02-24 |
| Ethylbenzene | | mg/L | 0.100 | 0.0870 | 87 | 80 - 120 | 2010-02-24 |
| Xylene | | mg/L | 0.300 | 0.262 | 87 | 80 - 120 | 2010-02-24 |

**Standard (CCV-1)**

QC Batch: 67848 Date Analyzed: 2010-02-25 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0902 | 90 | 80 - 120 | 2010-02-25 |
| Toluene | | mg/L | 0.100 | 0.0905 | 90 | 80 - 120 | 2010-02-25 |
| Ethylbenzene | | mg/L | 0.100 | 0.0900 | 90 | 80 - 120 | 2010-02-25 |
| Xylene | | mg/L | 0.300 | 0.271 | 90 | 80 - 120 | 2010-02-25 |

**Standard (CCV-2)**

QC Batch: 67848 Date Analyzed: 2010-02-25 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0907 | 91 | 80 - 120 | 2010-02-25 |
| Toluene | | mg/L | 0.100 | 0.0898 | 90 | 80 - 120 | 2010-02-25 |
| Ethylbenzene | | mg/L | 0.100 | 0.0889 | 89 | 80 - 120 | 2010-02-25 |
| Xylene | | mg/L | 0.300 | 0.268 | 89 | 80 - 120 | 2010-02-25 |

LAB Order ID # 10021904



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-8313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Nova
Phone #: 520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron R.
E-mail:
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Name: Bob Dunham
Project Location (including state): N.M.
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 222957 | MW-26 | 3 | 40 ml | X | | | | X | | | | X | | 2.18 | 800 | | X | | | | | | | | | | | | | | | | | | | |
| 958 | MW-31 | | | | | | | | | | | | | | 830 | | | | | | | | | | | | | | | | | | | | | |
| 959 | MW-33 | | | | | | | | | | | | | | 900 | | | | | | | | | | | | | | | | | | | | | |
| 9600 | MW-9 | | | | | | | | | | | | | | 930 | | | | | | | | | | | | | | | | | | | | | |
| 9601 | MW-15 | | | | | | | | | | | | | | 1000 | | | | | | | | | | | | | | | | | | | | | |
| 9602 | MW-10 | | | | | | | | | | | | | | 1030 | | | | | | | | | | | | | | | | | | | | | |
| 9603 | MW-7 | | | | | | | | | | | | | | 1100 | | | | | | | | | | | | | | | | | | | | | |
| 9604 | MW-32 | | | | | | | | | | | | | | 1130 | | | | | | | | | | | | | | | | | | | | | |
| 9605 | MW-37 | | | | | | | | | | | | | | 1200 | | | | | | | | | | | | | | | | | | | | | |
| 9606 | MW-8 | | | | | | | | | | | | | | 1230 | | | | | | | | | | | | | | | | | | | | | |
| 9607 | MW-28 | | | | | | | | | | | | | | 1300 | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 2/19/10 | 820 | [signature] | TRACE | 2/19/10 | 8:20 | INST ____ OBS 3.1 °C COR 3.1 °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ____ OBS ____ °C COR ____ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ____ OBS ____ °C COR ____ °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-in-Review ____

**REMARKS:**
All tests Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Courier

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LAB Order ID # 10021904



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
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5002 Basin Street, Suite A1
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1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Nova
Phone #: 520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron L.
E-mail:
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Name: Bob Barham
Project Location (including state):
Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE (10') | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 222968 | MW-3 | 3 | Voa | X | | | | X | | | | X | | 2-18 | 1330 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 969 | MW-23 | | | | | | | | | | | | | | 1400 | | | | | | | | | | | | | | | | | | | | | | | | |
| 970 | MW-16 | | | | | | | | | | | | | | 1445 | | | | | | | | | | | | | | | | | | | | | | | | |
| 971 | MW-4 | | | | | | | | | | | | | | 1515 | | | | | | | | | | | | | | | | | | | | | | | | |
| 972 | MW-6 | | | | | | | | | | | | | | 1545 | | | | | | | | | | | | | | | | | | | | | | | | |
| 973 | MW-2 | | | | | | | | | | | | | | 1630 | | | | | | | | | | | | | | | | | | | | | | | | |
| 974 | MW-13 | | | | | | | | | | | | | | 1700 | | | | | | | | | | | | | | | | | | | | | | | | |
| 975 | MW-38 | | | | | | | | | | | | | | 1730 | | | | | | | | | | | | | | | | | | | | | | | | |
| 976 | MW-1 | | | | | | | | | | | | | | 1815 | | | | | | | | | | | | | | | | | | | | | | | | |
| 977 | MW-5 | | | | | | | | | | | | | | 1900 | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | NOVA | 2/19/10 | 820 | [signature] | TRACE | 2/19/10 | 8:20 | INST ___ OBS 3.1 °C COR 3.1 °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |

LAB USE ONLY
Intact Y N
Headspace Y N NA
Log-in-Review

REMARKS:
* All tests Midland

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # carry in

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TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

## Certifications

**WBENC:** 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
**NCTRCA** WFWB38444Y0909

## NELAP Certifications

**Lubbock:** T104704219-08-TX
LELAP-02003
Kansas E-10317

**El Paso:** T104704221-08-TX
LELAP-02002

**Midland:** T104704392-08-TX

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: June 1, 2010

Work Order: 10052025

Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-07

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 232370 | MW-14 | water | 2010-05-18 | 10:30 | 2010-05-20 |
| 232371 | MW-24 | water | 2010-05-18 | 11:00 | 2010-05-20 |
| 232372 | MW-26 | water | 2010-05-18 | 11:30 | 2010-05-20 |
| 232373 | MW-31 | water | 2010-05-18 | 12:00 | 2010-05-20 |
| 232374 | MW-33 | water | 2010-05-18 | 12:30 | 2010-05-20 |
| 232375 | MW-9 | water | 2010-05-18 | 13:00 | 2010-05-20 |
| 232376 | MW-15 | water | 2010-05-18 | 13:30 | 2010-05-20 |
| 232377 | MW-10 | water | 2010-05-18 | 14:00 | 2010-05-20 |
| 232378 | MW-7 | water | 2010-05-18 | 14:30 | 2010-05-20 |
| 232379 | MW-32 | water | 2010-05-18 | 15:00 | 2010-05-20 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 232380 | MW-37 | water | 2010-05-18 | 15:30 | 2010-05-20 |
| 232381 | MW-8 | water | 2010-05-19 | 09:30 | 2010-05-20 |
| 232382 | MW-28 | water | 2010-05-18 | 10:00 | 2010-05-20 |
| 232383 | MW-3 | water | 2010-05-18 | 10:30 | 2010-05-20 |
| 232384 | MW-23 | water | 2010-05-18 | 11:00 | 2010-05-20 |
| 232385 | MW-16 | water | 2010-05-18 | 11:30 | 2010-05-20 |
| 232386 | MW-4 | water | 2010-05-18 | 12:00 | 2010-05-20 |
| 232387 | MW-6 | water | 2010-05-18 | 12:30 | 2010-05-20 |
| 232388 | MW-13 | water | 2010-05-18 | 13:00 | 2010-05-20 |
| 232389 | MW-2 | water | 2010-05-18 | 13:30 | 2010-05-20 |
| 232390 | MW-38 | water | 2010-05-18 | 14:00 | 2010-05-20 |
| 232391 | MW-1 | water | 2010-05-18 | 14:30 | 2010-05-20 |
| 232392 | MW-5 | water | 2010-05-18 | 15:00 | 2010-05-20 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2010-05-20 and assigned to work order 10052025. Samples for work order 10052025 were received intact without headspace and at a temperature of 4.0 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 60311 | 2010-05-26 at 16:00 | 70430 | 2010-05-26 at 23:28 |
| BTEX | S 8021B | 60365 | 2010-05-27 at 11:00 | 70492 | 2010-05-27 at 13:26 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10052025 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 232370 - MW-14**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70430 | Date Analyzed: | 2010-05-26 | Analyzed By: | AG |
| Prep Batch: | 60311 | Sample Preparation: | 2010-05-26 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.109 | mg/L | 1 | 0.100 | 109 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.104 | mg/L | 1 | 0.100 | 104 | 51.1 - 121.7 |

**Sample: 232371 - MW-24**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70430 | Date Analyzed: | 2010-05-26 | Analyzed By: | AG |
| Prep Batch: | 60311 | Sample Preparation: | 2010-05-26 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0880 | mg/L | 1 | 0.100 | 88 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0851 | mg/L | 1 | 0.100 | 85 | 51.1 - 121.7 |

**Sample: 232372 - MW-26**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70430 | Date Analyzed: | 2010-05-26 | Analyzed By: | AG |
| Prep Batch: | 60311 | Sample Preparation: | 2010-05-26 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotolnene (TFT) | | 0.0870 | mg/L | 1 | 0.100 | 87 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0843 | mg/L | 1 | 0.100 | 84 | 51.1 - 121.7 |

**Sample: 232373 - MW-31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Tolnene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0880 | mg/L | 1 | 0.100 | 88 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0836 | mg/L | 1 | 0.100 | 84 | 51.1 - 121.7 |

**Sample: 232374 - MW-33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0931 | mg/L | 1 | 0.100 | 93 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0878 | mg/L | 1 | 0.100 | 88 | 51.1 - 121.7 |

**Sample: 232375 - MW-9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Tolueue | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0989 | mg/L | 1 | 0.100 | 99 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0949 | mg/L | 1 | 0.100 | 95 | 51.1 - 121.7 |

**Sample: 232376 - MW-15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0897 | mg/L | 1 | 0.100 | 90 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0854 | mg/L | 1 | 0.100 | 85 | 51.1 - 121.7 |

**Sample: 232377 - MW-10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0990 | mg/L | 1 | 0.100 | 99 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0924 | mg/L | 1 | 0.100 | 92 | 51.1 - 121.7 |

**Sample: 232378 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0993 | mg/L | 1 | 0.100 | 99 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0977 | mg/L | 1 | 0.100 | 98 | 51.1 - 121.7 |

**Sample: 232379 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0860 | mg/L | 1 | 0.100 | 86 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0822 | mg/L | 1 | 0.100 | 82 | 51.1 - 121.7 |

**Sample: 232380 - MW-37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0842 | mg/L | 1 | 0.100 | 84 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0800 | mg/L | 1 | 0.100 | 80 | 51.1 - 121.7 |

**Sample: 232381 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.103 | mg/L | 1 | 0.100 | 103 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0973 | mg/L | 1 | 0.100 | 97 | 51.1 - 121.7 |

**Sample: 232382 - MW-28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0983 | mg/L | 1 | 0.100 | 98 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0947 | mg/L | 1 | 0.100 | 95 | 51.1 - 121.7 |

**Sample: 232383 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0943 | mg/L | 1 | 0.100 | 94 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0882 | mg/L | 1 | 0.100 | 88 | 51.1 - 121.7 |

**Sample: 232384 - MW-23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0949 | mg/L | 1 | 0.100 | 95 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0897 | mg/L | 1 | 0.100 | 90 | 51.1 - 121.7 |

**Sample: 232385 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0935 | mg/L | 1 | 0.100 | 94 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.101 | mg/L | 1 | 0.100 | 101 | 51.1 - 121.7 |

**Sample: 232386 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0984 | mg/L | 1 | 0.100 | 98 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0919 | mg/L | 1 | 0.100 | 92 | 51.1 - 121.7 |

**Sample: 232387 - MW-6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0917 | mg/L | 1 | 0.100 | 92 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0861 | mg/L | 1 | 0.100 | 86 | 51.1 - 121.7 |

**Sample: 232388 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0898 | mg/L | 1 | 0.100 | 90 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.105 | mg/L | 1 | 0.100 | 105 | 51.1 - 121.7 |

**Sample: 232389 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00650** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00180** | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.102 | mg/L | 1 | 0.100 | 102 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.114 | mg/L | 1 | 0.100 | 114 | 51.1 - 121.7 |

**Sample: 232390 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparatiou: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0106** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | **0.00400** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0813 | mg/L | 1 | 0.100 | 81 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0816 | mg/L | 1 | 0.100 | 82 | 51.1 - 121.7 |

**Sample: 232391 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0182** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00390** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00340** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0901 | mg/L | 1 | 0.100 | 90 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.119 | mg/L | 1 | 0.100 | 119 | 51.1 - 121.7 |

**Sample: 232392 - MW-5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 70492 | Date Analyzed: | 2010-05-27 | Analyzed By: | AG |
| Prep Batch: | 60365 | Sample Preparation: | 2010-05-27 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0386** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00440** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00510** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0960 | mg/L | 1 | 0.100 | 96 | 65.2 - 130.3 |
| 4-Bromofluorobenzene (4-BFB) | | 0.110 | mg/L | 1 | 0.100 | 110 | 51.1 - 121.7 |

**Method Blank (1)** QC Batch: 70430

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 70430 | Date Analyzed: | 2010-05-26 | Analyzed By: | AG |
| Prep Batch: | 60311 | QC Preparation: | 2010-05-26 | Prepared By: | AG |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000200 | mg/L | 0.001 |
| Xylene | | <0.000900 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.110 | mg/L | 1 | 0.100 | 110 | 73.6 - 126.6 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 62.6 - 117.5 |

**Method Blank (1)** QC Batch: 70492

QC Batch: 70492 Date Analyzed: 2010-05-27 Analyzed By: AG
Prep Batch: 60365 QC Preparation: 2010-05-27 Prepared By: AG

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000300 | mg/L | 0.001 |
| Toluene | | <0.000200 | mg/L | 0.001 |
| Ethylbenzene | | <0.000200 | mg/L | 0.001 |
| Xylene | | <0.000900 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.101 | mg/L | 1 | 0.100 | 101 | 73.6 - 126.6 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0962 | mg/L | 1 | 0.100 | 96 | 62.6 - 117.5 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 70430 Date Analyzed: 2010-05-26 Analyzed By: AG
Prep Batch: 60311 QC Preparation: 2010-05-26 Prepared By: AG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.101 | mg/L | 1 | 0.100 | <0.000300 | 101 | 79.4 - 112.4 |
| Toluene | 0.101 | mg/L | 1 | 0.100 | <0.000200 | 101 | 79.3 - 110 |
| Ethylbenzene | 0.0992 | mg/L | 1 | 0.100 | <0.000200 | 99 | 73.8 - 113.1 |
| Xylene | 0.298 | mg/L | 1 | 0.300 | <0.000900 | 99 | 73.9 - 113.6 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0991 | mg/L | 1 | 0.100 | <0.000300 | 99 | 79.4 - 112.4 | 2 | 20 |
| Toluene | 0.0991 | mg/L | 1 | 0.100 | <0.000200 | 99 | 79.3 - 110 | 2 | 20 |
| Ethylbenzene | 0.0981 | mg/L | 1 | 0.100 | <0.000200 | 98 | 73.8 - 113.1 | 1 | 20 |
| Xylene | 0.295 | mg/L | 1 | 0.300 | <0.000900 | 98 | 73.9 - 113.6 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0942 | 0.0947 | mg/L | 1 | 0.100 | 94 | 95 | 73.2 - 129.6 |
| 4-Bromofluorobenzene (4-BFB) | 0.0961 | 0.0956 | mg/L | 1 | 0.100 | 96 | 96 | 77.9 - 119.8 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 70492 | Date Analyzed: 2010-05-27 | Analyzed By: AG
Prep Batch: 60365 | QC Preparation: 2010-05-27 | Prepared By: AG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0936 | mg/L | 1 | 0.100 | <0.000300 | 94 | 79.4 - 112.4 |
| Toluene | 0.0937 | mg/L | 1 | 0.100 | <0.000200 | 94 | 79.3 - 110 |
| Ethylbenzene | 0.0927 | mg/L | 1 | 0.100 | <0.000200 | 93 | 73.8 - 113.1 |
| Xylene | 0.279 | mg/L | 1 | 0.300 | <0.000900 | 93 | 73.9 - 113.6 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.101 | mg/L | 1 | 0.100 | <0.000300 | 101 | 79.4 - 112.4 | 8 | 20 |
| Toluene | 0.101 | mg/L | 1 | 0.100 | <0.000200 | 101 | 79.3 - 110 | 8 | 20 |
| Ethylbenzene | 0.0998 | mg/L | 1 | 0.100 | <0.000200 | 100 | 73.8 - 113.1 | 7 | 20 |
| Xylene | 0.301 | mg/L | 1 | 0.300 | <0.000900 | 100 | 73.9 - 113.6 | 8 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0924 | 0.101 | mg/L | 1 | 0.100 | 92 | 101 | 73.2 - 129.6 |
| 4-Bromofluorobenzene (4-BFB) | 0.0914 | 0.102 | mg/L | 1 | 0.100 | 91 | 102 | 77.9 - 119.8 |

**Matrix Spike (MS-1)** Spiked Sample: 232538

QC Batch: 70430 | Date Analyzed: 2010-05-26 | Analyzed By: AG
Prep Batch: 60311 | QC Preparation: 2010-05-26 | Prepared By: AG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 15.7 | mg/L | 50 | 5.00 | 11.4572 | 85 | 77.3 - 117.4 |
| Toluene | 4.66 | mg/L | 50 | 5.00 | <0.0100 | 93 | 75 - 111.8 |
| Ethylbenzene | 4.67 | mg/L | 50 | 5.00 | 0.1337 | 91 | 78.8 - 106.6 |
| Xylene | 13.7 | mg/L | 50 | 15.0 | <0.0450 | 91 | 68.9 - 114 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 16.0 | mg/L | 50 | 5.00 | 11.4572 | 91 | 77.3 - 117.4 | 2 | 20 |
| Toluene | 4.84 | mg/L | 50 | 5.00 | <0.0100 | 97 | 75 - 111.8 | 4 | 20 |
| Ethylbenzene | 4.86 | mg/L | 50 | 5.00 | 0.1337 | 94 | 78.8 - 106.6 | 4 | 20 |
| Xylene | 14.2 | mg/L | 50 | 15.0 | <0.0450 | 95 | 68.9 - 114 | 4 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 4.55 | 4.79 | mg/L | 50 | 5 | 91 | 96 | 76.3 - 129.8 |
| 4-Bromofluorobenzene (4-BFB) | 4.60 | 4.83 | mg/L | 50 | 5 | 92 | 97 | 75.2 - 112.8 |

**Matrix Spike (MS-1)** Spiked Sample: 232382

QC Batch: 70492 | Date Analyzed: 2010-05-27 | Analyzed By: AG
Prep Batch: 60365 | QC Preparation: 2010-05-27 | Prepared By: AG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0904 | mg/L | 1 | 0.100 | <0.000300 | 90 | 77.3 - 117.4 |
| Toluene | 0.0904 | mg/L | 1 | 0.100 | <0.000200 | 90 | 75 - 111.8 |
| Ethylbenzene | 0.0877 | mg/L | 1 | 0.100 | <0.000200 | 88 | 78.8 - 106.6 |
| Xylene | 0.264 | mg/L | 1 | 0.300 | <0.000900 | 88 | 68.9 - 114 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0952 | mg/L | 1 | 0.100 | <0.000300 | 95 | 77.3 - 117.4 | 5 | 20 |
| Toluene | 0.0954 | mg/L | 1 | 0.100 | <0.000200 | 95 | 75 - 111.8 | 5 | 20 |
| Ethylbenzene | 0.0925 | mg/L | 1 | 0.100 | <0.000200 | 92 | 78.8 - 106.6 | 5 | 20 |
| Xylene | 0.279 | mg/L | 1 | 0.300 | <0.000900 | 93 | 68.9 - 114 | 6 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0848 | 0.0836 | mg/L | 1 | 0.1 | 85 | 84 | 76.3 - 129.8 |

*continued ...*

*matrix spikes continued ...*

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (4-BFB) | 0.0864 | 0.0858 | mg/L | 1 | 0.1 | 86 | 86 | 75.2 - 112.8 |

**Standard (CCV-1)**

QC Batch: 70430 Date Analyzed: 2010-05-26 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.105 | 105 | 80 - 120 | 2010-05-26 |
| Toluene | | mg/L | 0.100 | 0.105 | 105 | 80 - 120 | 2010-05-26 |
| Ethylbenzene | | mg/L | 0.100 | 0.103 | 103 | 80 - 120 | 2010-05-26 |
| Xylene | | mg/L | 0.300 | 0.311 | 104 | 80 - 120 | 2010-05-26 |

**Standard (CCV-2)**

QC Batch: 70430 Date Analyzed: 2010-05-26 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0997 | 100 | 80 - 120 | 2010-05-26 |
| Toluene | | mg/L | 0.100 | 0.0993 | 99 | 80 - 120 | 2010-05-26 |
| Ethylbenzene | | mg/L | 0.100 | 0.0975 | 98 | 80 - 120 | 2010-05-26 |
| Xylene | | mg/L | 0.300 | 0.293 | 98 | 80 - 120 | 2010-05-26 |

**Standard (CCV-1)**

QC Batch: 70492 Date Analyzed: 2010-05-27 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0945 | 94 | 80 - 120 | 2010-05-27 |
| Toluene | | mg/L | 0.100 | 0.0954 | 95 | 80 - 120 | 2010-05-27 |
| Ethylbenzene | | mg/L | 0.100 | 0.0964 | 96 | 80 - 120 | 2010-05-27 |
| Xylene | | mg/L | 0.300 | 0.289 | 96 | 80 - 120 | 2010-05-27 |

**Standard (CCV-2)**

QC Batch: 70492 Date Analyzed: 2010-05-27 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0879 | 88 | 80 - 120 | 2010-05-27 |
| Toluene | | mg/L | 0.100 | 0.0884 | 88 | 80 - 120 | 2010-05-27 |
| Ethylbenzene | | mg/L | 0.100 | 0.0874 | 87 | 80 - 120 | 2010-05-27 |
| Xylene | | mg/L | 0.300 | 0.264 | 88 | 80 - 120 | 2010-05-27 |

**Standard (CCV-3)**

QC Batch: 70492 Date Analyzed: 2010-05-27 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0944 | 94 | 80 - 120 | 2010-05-27 |
| Toluene | | mg/L | 0.100 | 0.0932 | 93 | 80 - 120 | 2010-05-27 |
| Ethylbenzene | | mg/L | 0.100 | 0.0919 | 92 | 80 - 120 | 2010-05-27 |
| Xylene | | mg/L | 0.300 | 0.276 | 92 | 80 - 120 | 2010-05-27 |

LAB Order ID # 10052025



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Wah
Phone #: 520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron R.
E-mail:
Invoice to: (If different from above) Plains
Project #: TNM-LF-2000-7
Project Name: BOB Durham
Project Location (including state): N.M.
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 232370 | MW-14 | 3 | voa | X | | | | X | | | | X | | 5-18 | 1030 | | X | | | | | | | | | | | | | | | | | | | | |
| 371 | MW-24 | | | | | | | | | | | | | | 1100 | | | | | | | | | | | | | | | | | | | | | | |
| 372 | MW-26 | | | | | | | | | | | | | | 1130 | | | | | | | | | | | | | | | | | | | | | | |
| 373 | MW-31 | | | | | | | | | | | | | | 1200 | | | | | | | | | | | | | | | | | | | | | | |
| 374 | MW-33 | | | | | | | | | | | | | | 1230 | | | | | | | | | | | | | | | | | | | | | | |
| 375 | MW-9 | | | | | | | | | | | | | | 1300 | | | | | | | | | | | | | | | | | | | | | | |
| 376 | MW-15 | | | | | | | | | | | | | | 1330 | | | | | | | | | | | | | | | | | | | | | | |
| 377 | MW-10 | | | | | | | | | | | | | | 1400 | | | | | | | | | | | | | | | | | | | | | | |
| 378 | MW-7 | | | | | | | | | | | | | | 1450 | | | | | | | | | | | | | | | | | | | | | | |
| 379 | MW-32 | | | | | | | | | | | | | | 1500 | | | | | | | | | | | | | | | | | | | | | | |
| 380 | MW-37 | | | | | | | | | | | | | | 1530 | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | Wah | 5/20/10 | 1246 | [signature] | TRACE | 5/20/10 | 1246 | INST / OBS 4.0°C / COR °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST / OBS °C / COR °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST / OBS °C / COR °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-In-Review

**REMARKS:**
All tests Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Carrier

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

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LAB Order ID # 10052025



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Tel (972) 242-7750

Company Name: Nova
Phone #: 520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron R.
E-mail:
Invoice to: (If different from above) Plains
Project #: INM-LF-2000-7
Project Name: BOB Durham
Project Location (including state): N.M.
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 382381 | MW-8 | 3 | Non | X | | | | X | | | | X | | 5-19 | 930 | | X | | | | | | | | | | | | | | | | | | | | |
| 382 | MW-28 | | | | | | | | | | | | | | 1000 | | | | | | | | | | | | | | | | | | | | | | |
| 383 | MW-3 | | | | | | | | | | | | | | 1030 | | | | | | | | | | | | | | | | | | | | | | |
| 384 | MW-23 | | | | | | | | | | | | | | 1100 | | | | | | | | | | | | | | | | | | | | | | |
| 385 | MW-16 | | | | | | | | | | | | | | 1130 | | | | | | | | | | | | | | | | | | | | | | |
| 386 | MW-4 | | | | | | | | | | | | | | 1200 | | | | | | | | | | | | | | | | | | | | | | |
| 387 | MW-6 | | | | | | | | | | | | | | 1230 | | | | | | | | | | | | | | | | | | | | | | |
| 388 | MW-13 | | | | | | | | | | | | | | 1300 | | | | | | | | | | | | | | | | | | | | | | |
| 389 | MW-2 | | | | | | | | | | | | | | 1330 | | | | | | | | | | | | | | | | | | | | | | |
| 390 | MW-38 | | | | | | | | | | | | | | 1400 | | | | | | | | | | | | | | | | | | | | | | |
| 391 | MW-1 | | | | | | | | | | | | | | 1430 | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | NOVA | 5/20/10 | 1246 | [signature] | TRACE | 5/20/10 | 1246 | INST / OBS 4.0 °C / COR °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST / OBS °C / COR °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST / OBS °C / COR °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-In-Review

**REMARKS:**

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

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Carrier #

LAB Order ID # 10052025



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
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Tel (806) 794-1296
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Tel (972) 242-7750

Company Name: Nova
Phone #: 520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron R.
E-mail:
Invoice to: (If different from above) Plains
Project #: TWM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): N.M.
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 392 | MW-5 | 3 | Voa | X | | | | X | | | | X | | 5/19 (10') | 1500 | | X | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 5/20/10 | 1246 | [signature] | TRACE | 5/20/10 | 1246 | INST ___ OBS 4.0 °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |

**LAB USE ONLY**
Intact Y N
Headspace Y N NA
Log-in-Review ___

REMARKS:

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- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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Carrier # ___

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TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

## Certifications

**WBENC:** 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
**NCTRCA** WFWB38444Y0909

## NELAP Certifications

**Lubbock:** T104704219-08-TX LELAP-02003 Kansas E-10317
**El Paso:** T104704221-08-TX LELAP-02002
**Midland:** T104704392-08-TX

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: August 24, 2010

Work Order: 10082008

Project Location: West of Monument, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 241940 | MW-56 | water | 2010-08-18 | 08:00 | 2010-08-19 |
| 241941 | MW-31 | water | 2010-08-18 | 08:30 | 2010-08-19 |
| 241942 | MW-33 | water | 2010-08-18 | 09:00 | 2010-08-19 |
| 241943 | MW-15 | water | 2010-08-18 | 09:30 | 2010-08-19 |
| 241944 | MW-10 | water | 2010-08-18 | 10:00 | 2010-08-19 |
| 241945 | MW-7 | water | 2010-08-18 | 10:30 | 2010-08-19 |
| 241946 | MW-32 | water | 2010-08-18 | 11:00 | 2010-08-19 |
| 241947 | MW-37 | water | 2010-08-18 | 11:30 | 2010-08-19 |
| 241948 | MW-8 | water | 2010-08-18 | 12:00 | 2010-08-19 |
| 241949 | MW-28 | water | 2010-08-18 | 12:30 | 2010-08-19 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 241950 | MW-3 | water | 2010-08-18 | 13:00 | 2010-08-19 |
| 241951 | MW-23 | water | 2010-08-18 | 13:30 | 2010-08-19 |
| 241952 | MW-16 | water | 2010-08-18 | 14:00 | 2010-08-19 |
| 241953 | MW-4 | water | 2010-08-18 | 14:30 | 2010-08-19 |
| 241954 | MW-6 | water | 2010-08-18 | 15:00 | 2010-08-19 |
| 241955 | MW-2 | water | 2010-08-18 | 16:00 | 2010-08-19 |
| 241956 | MW-38 | water | 2010-08-18 | 16:30 | 2010-08-19 |
| 241957 | MW-1 | water | 2010-08-18 | 17:30 | 2010-08-19 |
| 241958 | MW-5 | water | 2010-08-18 | 18:30 | 2010-08-19 |
| 241959 | MW-13 | water | 2010-08-18 | 19:00 | 2010-08-19 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated ou a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2010-08-19 and assigned to work order 10082008. Samples for work order 10082008 were received intact without headspace and at a temperature of 4.0 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 62417 | 2010-08-20 at 16:18 | 72800 | 2010-08-20 at 16:18 |
| BTEX | S 8021B | 62418 | 2010-08-20 at 16:18 | 72801 | 2010-08-20 at 16:18 |
| BTEX | S 8021B | 62451 | 2010-08-23 at 14:48 | 72842 | 2010-08-23 at 14:48 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10082008 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 241940 - MW-56**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72800 | Date Analyzed: | 2010-08-20 | Analyzed By: | ER |
| Prep Batch: | 62417 | Sample Preparation: | 2010-08-20 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0948 | mg/L | 1 | 0.100 | 95 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0994 | mg/L | 1 | 0.100 | 99 | 74.5 - 112 |

**Sample: 241941 - MW-31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72800 | Date Analyzed: | 2010-08-20 | Analyzed By: | ER |
| Prep Batch: | 62417 | Sample Preparation: | 2010-08-20 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0937 | mg/L | 1 | 0.100 | 94 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0952 | mg/L | 1 | 0.100 | 95 | 74.5 - 112 |

**Sample: 241942 - MW-33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72800 | Date Analyzed: | 2010-08-20 | Analyzed By: | ER |
| Prep Batch: | 62417 | Sample Preparation: | 2010-08-20 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0950 | mg/L | 1 | 0.100 | 95 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0995 | mg/L | 1 | 0.100 | 100 | 74.5 - 112 |

**Sample: 241943 - MW-15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72800 | Date Analyzed: | 2010-08-20 | Analyzed By: | ER |
| Prep Batch: | 62417 | Sample Preparation: | 2010-08-20 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0921 | mg/L | 1 | 0.100 | 92 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0963 | mg/L | 1 | 0.100 | 96 | 74.5 - 112 |

**Sample: 241944 - MW-10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72842 | Date Analyzed: | 2010-08-23 | Analyzed By: | ER |
| Prep Batch: | 62451 | Sample Preparation: | 2010-08-23 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00750** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00470** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00320** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0976 | mg/L | 1 | 0.100 | 98 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | [1] | 0.118 | mg/L | 1 | 0.100 | 118 | 74.5 - 112 |

**Sample: 241945 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72842 | Date Analyzed: | 2010-08-23 | Analyzed By: | ER |
| Prep Batch: | 62451 | Sample Preparation: | 2010-08-23 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0981 | mg/L | 1 | 0.100 | 98 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.105 | mg/L | 1 | 0.100 | 105 | 74.5 - 112 |

**Sample: 241946 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72842 | Date Analyzed: | 2010-08-23 | Analyzed By: | ER |
| Prep Batch: | 62451 | Sample Preparation: | 2010-08-23 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00120** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00280** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0947 | mg/L | 1 | 0.100 | 95 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.103 | mg/L | 1 | 0.100 | 103 | 74.5 - 112 |

[1]High surrogate recovery due to peak interference.

**Sample: 241947 - MW-37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72800 | Date Analyzed: | 2010-08-20 | Analyzed By: | ER |
| Prep Batch: | 62417 | Sample Preparation: | 2010-08-20 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0927 | mg/L | 1 | 0.100 | 93 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0978 | mg/L | 1 | 0.100 | 98 | 74.5 - 112 |

**Sample: 241948 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72842 | Date Analyzed: | 2010-08-23 | Analyzed By: | ER |
| Prep Batch: | 62451 | Sample Preparation: | 2010-08-23 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00140** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00180** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0961 | mg/L | 1 | 0.100 | 96 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.105 | mg/L | 1 | 0.100 | 105 | 74.5 - 112 |

**Sample: 241949 - MW-28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72801 | Date Analyzed: | 2010-08-20 | Analyzed By: | ER |
| Prep Batch: | 62418 | Sample Preparation: | 2010-08-20 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0863 | mg/L | 1 | 0.100 | 86 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0879 | mg/L | 1 | 0.100 | 88 | 74.5 - 112 |

**Sample: 241950 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72801 | Date Analyzed: | 2010-08-20 | Analyzed By: | ER |
| Prep Batch: | 62418 | Sample Preparation: | 2010-08-20 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0833 | mg/L | 1 | 0.100 | 83 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0843 | mg/L | 1 | 0.100 | 84 | 74.5 - 112 |

**Sample: 241951 - MW-23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72801 | Date Analyzed: | 2010-08-20 | Analyzed By: | ER |
| Prep Batch: | 62418 | Sample Preparation: | 2010-08-20 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0916 | mg/L | 1 | 0.100 | 92 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0937 | mg/L | 1 | 0.100 | 94 | 74.5 - 112 |

**Sample: 241952 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72842 | Date Analyzed: | 2010-08-23 | Analyzed By: | ER |
| Prep Batch: | 62451 | Sample Preparation: | 2010-08-23 | Prepared By: | ER |

| Parameter | Flag | RL Resnlt | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00300** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00160** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00120** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amonnt | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.101 | mg/L | 1 | 0.100 | 101 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.110 | mg/L | 1 | 0.100 | 110 | 74.5 - 112 |

**Sample: 241953 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72842 | Date Analyzed: | 2010-08-23 | Analyzed By: | ER |
| Prep Batch: | 62451 | Sample Preparation: | 2010-08-23 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00120** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00460** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00230** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0999 | mg/L | 1 | 0.100 | 100 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 74.5 - 112 |

**Sample: 241954 - MW-6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72842 | Date Analyzed: | 2010-08-23 | Analyzed By: | ER |
| Prep Batch: | 62451 | Sample Preparation: | 2010-08-23 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0945 | mg/L | 1 | 0.100 | 94 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0997 | mg/L | 1 | 0.100 | 100 | 74.5 - 112 |

**Sample: 241955 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72842 | Date Analyzed: | 2010-08-23 | Analyzed By: | ER |
| Prep Batch: | 62451 | Sample Preparation: | 2010-08-23 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00190** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00330** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0993 | mg/L | 1 | 0.100 | 99 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | [2] | 0.115 | mg/L | 1 | 0.100 | 115 | 74.5 - 112 |

**Sample: 241956 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72842 | Date Analyzed: | 2010-08-23 | Analyzed By: | ER |
| Prep Batch: | 62451 | Sample Preparation: | 2010-08-23 | Prepared By: | ER |

[2]High surrogate recovery due to peak interference.

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0119** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00290** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00350** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0975 | mg/L | 1 | 0.100 | 98 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 74.5 - 112 |

**Sample: 241957 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72842 | Date Analyzed: | 2010-08-23 | Analyzed By: | ER |
| Prep Batch: | 62451 | Sample Preparation: | 2010-08-23 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00200** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00110** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00300** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0951 | mg/L | 1 | 0.100 | 95 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.100 | mg/L | 1 | 0.100 | 100 | 74.5 - 112 |

**Sample: 241958 - MW-5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72842 | Date Analyzed: | 2010-08-23 | Analyzed By: | ER |
| Prep Batch: | 62451 | Sample Preparation: | 2010-08-23 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.00620** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00350** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00380** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0870 | mg/L | 1 | 0.100 | 87 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.104 | mg/L | 1 | 0.100 | 104 | 74.5 - 112 |

**Sample: 241959 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 72842 | Date Analyzed: | 2010-08-23 | Analyzed By: | ER |
| Prep Batch: | 62451 | Sample Preparation: | 2010-08-23 | Prepared By: | ER |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0957 | mg/L | 1 | 0.100 | 96 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.104 | mg/L | 1 | 0.100 | 104 | 74.5 - 112 |

**Method Blank (1)** QC Batch: 72800

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 72800 | Date Analyzed: | 2010-08-20 | Analyzed By: | ER |
| Prep Batch: | 62417 | QC Preparation: | 2010-08-20 | Prepared By: | ER |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000403 | mg/L | 0.001 |
| Toluene | | <0.000627 | mg/L | 0.001 |
| Ethylbenzene | | <0.000488 | mg/L | 0.001 |
| Xylene | | <0.000622 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0898 | mg/L | 1 | 0.100 | 90 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0931 | mg/L | 1 | 0.100 | 93 | 74.5 - 112 |

**Method Blank (1)** QC Batch: 72801

QC Batch: 72801 Date Analyzed: 2010-08-20 Analyzed By: ER
Prep Batch: 62418 QC Preparation: 2010-08-20 Prepared By: ER

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000403 | mg/L | 0.001 |
| Toluene | | <0.000627 | mg/L | 0.001 |
| Ethylbenzene | | <0.000488 | mg/L | 0.001 |
| Xylene | | <0.000622 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0900 | mg/L | 1 | 0.100 | 90 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0909 | mg/L | 1 | 0.100 | 91 | 74.5 - 112 |

**Method Blank (1)** QC Batch: 72842

QC Batch: 72842 Date Analyzed: 2010-08-23 Analyzed By: ER
Prep Batch: 62451 QC Preparation: 2010-08-23 Prepared By: ER

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000403 | mg/L | 0.001 |
| Toluene | | <0.000627 | mg/L | 0.001 |
| Ethylbenzene | | <0.000488 | mg/L | 0.001 |
| Xylene | | <0.000622 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0954 | mg/L | 1 | 0.100 | 95 | 73.8 - 113 |
| 4-Bromofluorobenzene (4-BFB) | | 0.102 | mg/L | 1 | 0.100 | 102 | 74.5 - 112 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 72800 Date Analyzed: 2010-08-20 Analyzed By: ER
Prep Batch: 62417 QC Preparation: 2010-08-20 Prepared By: ER

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0970 | mg/L | 1 | 0.100 | <0.000403 | 97 | 75 - 117 |
| Toluene | 0.0950 | mg/L | 1 | 0.100 | <0.000627 | 95 | 73.5 - 118 |
| Ethylbenzene | 0.0965 | mg/L | 1 | 0.100 | <0.000488 | 96 | 74.9 - 113 |

*continued ...*

*control spikes continued . . .*

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Xylene | 0.292 | mg/L | 1 | 0.300 | <0.000622 | 97 | 75.5 - 115 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0959 | mg/L | 1 | 0.100 | <0.000403 | 96 | 75 - 117 | 1 | 20 |
| Toluene | 0.0933 | mg/L | 1 | 0.100 | <0.000627 | 93 | 73.5 - 118 | 2 | 20 |
| Ethylbenzene | 0.0950 | mg/L | 1 | 0.100 | <0.000488 | 95 | 74.9 - 113 | 2 | 20 |
| Xylene | 0.287 | mg/L | 1 | 0.300 | <0.000622 | 96 | 75.5 - 115 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Resnlt | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0909 | 0.0938 | mg/L | 1 | 0.100 | 91 | 94 | 74 - 114 |
| 4-Bromofluorobenzene (4-BFB) | 0.0963 | 0.0975 | mg/L | 1 | 0.100 | 96 | 98 | 75 - 114 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 72801 Date Analyzed: 2010-08-20 Analyzed By: ER
Prep Batch: 62418 QC Preparation: 2010-08-20 Prepared By: ER

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0960 | mg/L | 1 | 0.100 | <0.000403 | 96 | 75 - 117 |
| Toluene | 0.0931 | mg/L | 1 | 0.100 | <0.000627 | 93 | 73.5 - 118 |
| Ethylbenzene | 0.0958 | mg/L | 1 | 0.100 | <0.000488 | 96 | 74.9 - 113 |
| Xylene | 0.288 | mg/L | 1 | 0.300 | <0.000622 | 96 | 75.5 - 115 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0960 | mg/L | 1 | 0.100 | <0.000403 | 96 | 75 - 117 | 0 | 20 |
| Toluene | 0.0914 | mg/L | 1 | 0.100 | <0.000627 | 91 | 73.5 - 118 | 2 | 20 |
| Ethylbenzene | 0.0931 | mg/L | 1 | 0.100 | <0.000488 | 93 | 74.9 - 113 | 3 | 20 |
| Xylene | 0.282 | mg/L | 1 | 0.300 | <0.000622 | 94 | 75.5 - 115 | 2 | 20 |

Percent recovery is based on the spike resnlt. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0894 | 0.0899 | mg/L | 1 | 0.100 | 89 | 90 | 74 - 114 |
| 4-Bromofluorobenzene (4-BFB) | 0.0920 | 0.0920 | mg/L | 1 | 0.100 | 92 | 92 | 75 - 114 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 72842
Prep Batch: 62451

Date Analyzed: 2010-08-23
QC Preparation: 2010-08-23

Analyzed By: ER
Prepared By: ER

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.101 | mg/L | 1 | 0.100 | <0.000403 | 101 | 75 - 117 |
| Toluene | 0.0974 | mg/L | 1 | 0.100 | <0.000627 | 97 | 73.5 - 118 |
| Ethylbenzene | 0.0993 | mg/L | 1 | 0.100 | <0.000488 | 99 | 74.9 - 113 |
| Xylene | 0.300 | mg/L | 1 | 0.300 | <0.000622 | 100 | 75.5 - 115 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.102 | mg/L | 1 | 0.100 | <0.000403 | 102 | 75 - 117 | 1 | 20 |
| Toluene | 0.0989 | mg/L | 1 | 0.100 | <0.000627 | 99 | 73.5 - 118 | 2 | 20 |
| Ethylbenzene | 0.100 | mg/L | 1 | 0.100 | <0.000488 | 100 | 74.9 - 113 | 1 | 20 |
| Xylene | 0.303 | mg/L | 1 | 0.300 | <0.000622 | 101 | 75.5 - 115 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0996 | 0.101 | mg/L | 1 | 0.100 | 100 | 101 | 74 - 114 |
| 4-Bromofluorobenzene (4-BFB) | 0.108 | 0.106 | mg/L | 1 | 0.100 | 108 | 106 | 75 - 114 |

**Matrix Spike (MS-1)** Spiked Sample: 241921

QC Batch: 72800
Prep Batch: 62417

Date Analyzed: 2010-08-20
QC Preparation: 2010-08-20

Analyzed By: ER
Prepared By: ER

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0954 | mg/L | 1 | 0.100 | <0.000403 | 95 | 55.7 - 127 |
| Toluene | 0.0925 | mg/L | 1 | 0.100 | <0.000627 | 92 | 65.5 - 121 |
| Ethylbenzene | 0.0942 | mg/L | 1 | 0.100 | <0.000488 | 94 | 47.6 - 126 |
| Xylene | 0.282 | mg/L | 1 | 0.300 | <0.000622 | 94 | 51.2 - 126 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0919 | mg/L | 1 | 0.100 | <0.000403 | 92 | 55.7 - 127 | 4 | 20 |
| Toluene | 0.0901 | mg/L | 1 | 0.100 | <0.000627 | 90 | 65.5 - 121 | 3 | 20 |
| Ethylbenzene | 0.0925 | mg/L | 1 | 0.100 | <0.000488 | 92 | 47.6 - 126 | 2 | 20 |
| Xylene | 0.277 | mg/L | 1 | 0.300 | <0.000622 | 92 | 51.2 - 126 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0931 | 0.0910 | mg/L | 1 | 0.1 | 93 | 91 | 73.7 - 115 |
| 4-Bromofluorobenzene (4-BFB) | 0.0986 | 0.0933 | mg/L | 1 | 0.1 | 99 | 93 | 72 - 118 |

**Matrix Spike (MS-1)** Spiked Sample: 241933

QC Batch: 72801
Prep Batch: 62418

Date Analyzed: 2010-08-20
QC Preparation: 2010-08-20

Analyzed By: ER
Prepared By: ER

| Param | | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 0.0660 | mg/L | 1 | 0.100 | <0.000403 | 66 | 55.7 - 127 |
| Toluene | [3] | 0.0627 | mg/L | 1 | 0.100 | <0.000627 | 63 | 65.5 - 121 |
| Ethylbenzene | | 0.0640 | mg/L | 1 | 0.100 | <0.000488 | 64 | 47.6 - 126 |
| Xylene | | 0.191 | mg/L | 1 | 0.300 | <0.000622 | 64 | 51.2 - 126 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | [4] | 0.0462 | mg/L | 1 | 0.100 | <0.000403 | 46 | 55.7 - 127 | 35 | 20 |
| Toluene | [5] | 0.0422 | mg/L | 1 | 0.100 | <0.000627 | 42 | 65.5 - 121 | 39 | 20 |
| Ethylbenzene | [6] | 0.0428 | mg/L | 1 | 0.100 | <0.000488 | 43 | 47.6 - 126 | 40 | 20 |
| Xylene | [7] | 0.128 | mg/L | 1 | 0.300 | <0.000622 | 43 | 51.2 - 126 | 40 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0858 | 0.0904 | mg/L | 1 | 0.1 | 86 | 90 | 73.7 - 115 |
| 4-Bromofluorobenzene (4-BFB) | 0.0893 | 0.0936 | mg/L | 1 | 0.1 | 89 | 94 | 72 - 118 |

**Matrix Spike (MS-1)** Spiked Sample: 241831

QC Batch: 72842
Prep Batch: 62451

Date Analyzed: 2010-08-23
QC Preparation: 2010-08-23

Analyzed By: ER
Prepared By: ER

*continued ...*

[3]Matrix spike recovery out of control limits. Use LCS/LCSD to demonstrate analysis is under control.
[4]Matrix spike recovery and RPD out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[5]Matrix spike recovery and RPD out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[6]Matrix spike recovery and RPD out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[7]Matrix spike recovery and RPD out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

*matrix spikes continued ...*

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 9.78 | mg/L | 50 | 5.00 | 4.96 | 96 | 55.7 - 127 |
| Toluene | 30.4 | mg/L | 50 | 5.00 | 25.5 | 98 | 65.5 - 121 |
| Ethylbenzene | 8.86 | mg/L | 50 | 5.00 | 4.11 | 95 | 47.6 - 126 |
| Xylene | 27.7 | mg/L | 50 | 15.0 | 12.8 | 99 | 51.2 - 126 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 9.98 | mg/L | 50 | 5.00 | 4.96 | 100 | 55.7 - 127 | 2 | 20 |
| Toluene | 30.4 | mg/L | 50 | 5.00 | 25.5 | 98 | 65.5 - 121 | 0 | 20 |
| Ethylbenzene | 8.84 | mg/L | 50 | 5.00 | 4.11 | 95 | 47.6 - 126 | 0 | 20 |
| Xylene | 27.6 | mg/L | 50 | 15.0 | 12.8 | 99 | 51.2 - 126 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 4.86 | 4.97 | mg/L | 50 | 5 | 97 | 99 | 73.7 - 115 |
| 4-Bromofluorobenzene (4-BFB) | 5.37 | 5.35 | mg/L | 50 | 5 | 107 | 107 | 72 - 118 |

**Standard (CCV-2)**

QC Batch: 72800 Date Analyzed: 2010-08-20 Analyzed By: ER

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0947 | 95 | 80 - 120 | 2010-08-20 |
| Tolueue | | mg/L | 0.100 | 0.0924 | 92 | 80 - 120 | 2010-08-20 |
| Ethylbenzene | | mg/L | 0.100 | 0.0936 | 94 | 80 - 120 | 2010-08-20 |
| Xylene | | mg/L | 0.300 | 0.282 | 94 | 80 - 120 | 2010-08-20 |

**Standard (CCV-3)**

QC Batch: 72800 Date Analyzed: 2010-08-20 Analyzed By: ER

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0978 | 98 | 80 - 120 | 2010-08-20 |
| Toluene | | mg/L | 0.100 | 0.0949 | 95 | 80 - 120 | 2010-08-20 |

*continued ...*

*standard continued . . .*

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Ethylbenzene | | mg/L | 0.100 | 0.0975 | 98 | 80 - 120 | 2010-08-20 |
| Xylene | | mg/L | 0.300 | 0.295 | 98 | 80 - 120 | 2010-08-20 |

**Standard (CCV-1)**

QC Batch: 72801 Date Analyzed: 2010-08-20 Analyzed By: ER

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0937 | 94 | 80 - 120 | 2010-08-20 |
| Toluene | | mg/L | 0.100 | 0.0880 | 88 | 80 - 120 | 2010-08-20 |
| Ethylbenzene | | mg/L | 0.100 | 0.0928 | 93 | 80 - 120 | 2010-08-20 |
| Xylene | | mg/L | 0.300 | 0.282 | 94 | 80 - 120 | 2010-08-20 |

**Standard (CCV-2)**

QC Batch: 72801 Date Analyzed: 2010-08-20 Analyzed By: ER

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0966 | 97 | 80 - 120 | 2010-08-20 |
| Toluene | | mg/L | 0.100 | 0.0934 | 93 | 80 - 120 | 2010-08-20 |
| Ethylbenzene | | mg/L | 0.100 | 0.0950 | 95 | 80 - 120 | 2010-08-20 |
| Xylene | | mg/L | 0.300 | 0.287 | 96 | 80 - 120 | 2010-08-20 |

**Standard (CCV-1)**

QC Batch: 72842 Date Analyzed: 2010-08-23 Analyzed By: ER

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0980 | 98 | 80 - 120 | 2010-08-23 |
| Toluene | | mg/L | 0.100 | 0.0952 | 95 | 80 - 120 | 2010-08-23 |
| Ethylbenzene | | mg/L | 0.100 | 0.0976 | 98 | 80 - 120 | 2010-08-23 |
| Xylene | | mg/L | 0.300 | 0.295 | 98 | 80 - 120 | 2010-08-23 |

**Standard (CCV-2)**

QC Batch: 72842 Date Analyzed: 2010-08-23 Analyzed By: ER

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0996 | 100 | 80 - 120 | 2010-08-23 |
| Toluene | | mg/L | 0.100 | 0.0961 | 96 | 80 - 120 | 2010-08-23 |
| Ethylbenzene | | mg/L | 0.100 | 0.0962 | 96 | 80 - 120 | 2010-08-23 |
| Xylene | | mg/L | 0.300 | 0.291 | 97 | 80 - 120 | 2010-08-23 |

**Standard (CCV-3)**

QC Batch: 72842 Date Analyzed: 2010-08-23 Analyzed By: ER

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0927 | 93 | 80 - 120 | 2010-08-23 |
| Toluene | | mg/L | 0.100 | 0.0950 | 95 | 80 - 120 | 2010-08-23 |
| Ethylbenzene | | mg/L | 0.100 | 0.0948 | 95 | 80 - 120 | 2010-08-23 |
| Xylene | | mg/L | 0.300 | 0.283 | 94 | 80 - 120 | 2010-08-23 |

LAB Order ID # 10082008



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
**Lubbock, Texas 79424**
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
**Midland, Texas 79703**
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
**El Paso, Texas 79922**
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
**Carrollton, Texas 75006**
Tel (972) 242-7750

Company Name: Uva
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce Midland TX 79703
Fax #: 432-520-7701
Contact Person: Ron R.
E-mail:
Invoice to:
(If different from above)
Project #: TUM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): New Mexico
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 241940 | MW-56 | 3 | 40ml | X | | | | X | | | | X | | 8-18 | 8:00 | | X | | | | | | | | | | | | | | | | | | | | |
| 941 | MW-31 | | | | | | | | | | | | | | 8:30 | | | | | | | | | | | | | | | | | | | | | | |
| 942 | MW-33 | | | | | | | | | | | | | | 9:00 | | | | | | | | | | | | | | | | | | | | | | |
| 943 | MW-15 | | | | | | | | | | | | | | 9:30 | | | | | | | | | | | | | | | | | | | | | | |
| 944 | MW-10 | | | | | | | | | | | | | | 10:00 | | | | | | | | | | | | | | | | | | | | | | |
| 945 | MW-7 | | | | | | | | | | | | | | 10:30 | | | | | | | | | | | | | | | | | | | | | | |
| 946 | MW-32 | | | | | | | | | | | | | | 11:00 | | | | | | | | | | | | | | | | | | | | | | |
| 947 | MW-37 | | | | | | | | | | | | | | 11:30 | | | | | | | | | | | | | | | | | | | | | | |
| 948 | MW-8 | | | | | | | | | | | | | | 12:00 | | | | | | | | | | | | | | | | | | | | | | |
| 949 | MW-28 | | | | | | | | | | | | | | 12:30 | | | | | | | | | | | | | | | | | | | | | | |
| 950 | MW-3 | | | | | | | | | | | | | | 13:00 | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | | 8/19/10 | 1154 | [signature] | TA | 8-19-10 | 1154 | INST ___ OBS ___ °C COR ___ °C |
| [signature] | TA | 8-19-10 | 1154 | Carol Fox | Trace Lab | 8-20-10 | 9:05 Am | INST IR OBS 4.0 °C COR 4.4 °C |
| | | | | | | | | INST ___ OBS ___ °C COR ___ °C |

**LAB USE ONLY**
Intact (Y) N
Headspace Y (N) NA
4°C
Log-In-Review [initials]

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # LS 21.5454116

LAB Order ID # 10082008



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Nova
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce Midland TX 79703
Fax #: 432-520-7701
Contact Person: Ron R
E-mail:
Invoice to:
(If different from above)
Project #: TNM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): New Mexico
Sampler Signature:

ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 241951 | mw-23 | 3 | voa | X | | | | X | | | | X | | 8-18 | 13:30 | | X | | | | | | | | | | | | | | | | | | | | |
| 952 | mw-16 | | | | | | | | | | | | | | 14:00 | | | | | | | | | | | | | | | | | | | | | | |
| 953 | mw-4 | | | | | | | | | | | | | | 14:30 | | | | | | | | | | | | | | | | | | | | | | |
| 954 | mw-6 | | | | | | | | | | | | | | 15:00 | | | | | | | | | | | | | | | | | | | | | | |
| 955 | mw-2 | | | | | | | | | | | | | | 16:00 | | | | | | | | | | | | | | | | | | | | | | |
| 956 | mw-38 | | | | | | | | | | | | | | 16:30 | | | | | | | | | | | | | | | | | | | | | | |
| 957 | mw-1 | | | | | | | | | | | | | | 17:30 | | | | | | | | | | | | | | | | | | | | | | |
| 958 | mw-5 | | | | | | | | | | | | | | 18:30 | | | | | | | | | | | | | | | | | | | | | | |
| 959 | mw-13 | | | | | | | | | | | | | | 19:00 | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | | 8/19/10 | 1154 | [signature] | TA | 8.19.10 | 1157 | INST ___ OBS ___ °C COR ___ °C |
| [signature] | TA | 8.19.10 | 1157 | Carol Fox | Trace Lbk | 8.20.10 | 9:05 Am | INST JSR OBS 4.0 °C COR 4.4 °C |
| | | | | | | | | INST ___ OBS ___ °C COR ___ °C |

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
4°C
Log-in-Review

REMARKS:

- Dry Weight Basis Required
- TRRP Report Required
- Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # LS 26545416

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
5015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

## Certifications

**WBENC:** 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
**NCTRCA** WFWB38444Y0909

## NELAP Certifications

**Lubbock:** T104704219-08-TX
LELAP-02003
Kansas E-10317

**El Paso:** T104704221-08-TX
LELAP-02002

**Midland:** T104704392-08-TX

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: December 15, 2010

Work Order: 10111714

Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-07

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 250658 | MW-11 | water | 2010-11-15 | 09:30 | 2010-11-17 |
| 250659 | MW-20 | water | 2010-11-15 | 10:00 | 2010-11-17 |
| 250660 | MW-21 | water | 2010-11-15 | 10:30 | 2010-11-17 |
| 250661 | MW-25 | water | 2010-11-15 | 11:00 | 2010-11-17 |
| 250662 | MW-30 | water | 2010-11-15 | 11:30 | 2010-11-17 |
| 250663 | MW-24 | water | 2010-11-15 | 12:00 | 2010-11-17 |
| 250664 | MW-27 | water | 2010-11-15 | 12:30 | 2010-11-17 |
| 250665 | MW-56 | water | 2010-11-15 | 13:00 | 2010-11-17 |
| 250666 | MW-31 | water | 2010-11-15 | 13:30 | 2010-11-17 |
| 250667 | MW-33 | water | 2010-11-15 | 14:00 | 2010-11-17 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 250668 | MW-15 | water | 2010-11-15 | 14:30 | 2010-11-17 |
| 250669 | MW-7 | water | 2010-11-15 | 15:00 | 2010-11-17 |
| 250670 | MW-32 | water | 2010-11-15 | 15:30 | 2010-11-17 |
| 250671 | MW-37 | water | 2010-11-15 | 16:00 | 2010-11-17 |
| 250672 | MW-8 | water | 2010-11-15 | 16:30 | 2010-11-17 |
| 250673 | MW-28 | water | 2010-11-15 | 17:00 | 2010-11-17 |
| 250674 | MW-23 | water | 2010-11-15 | 17:30 | 2010-11-17 |
| 250675 | MW-6 | water | 2010-11-16 | 07:30 | 2010-11-17 |
| 250676 | MW-13 | water | 2010-11-16 | 08:00 | 2010-11-17 |
| 250677 | MW-2 | water | 2010-11-16 | 08:30 | 2010-11-17 |
| 250678 | MW-4 | water | 2010-11-16 | 09:00 | 2010-11-17 |
| 250679 | MW-1 | water | 2010-11-16 | 10:00 | 2010-11-17 |
| 250680 | MW-16 | water | 2010-11-16 | 11:00 | 2010-11-17 |
| 250681 | MW-5 | water | 2010-11-16 | 12:00 | 2010-11-17 |
| 250682 | MW-10 | water | 2010-11-16 | 13:00 | 2010-11-17 |
| 250683 | MW-38 | water | 2010-11-16 | 13:30 | 2010-11-17 |
| 250684 | MW-3 | water | 2010-11-16 | 15:00 | 2010-11-17 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Michael Abel

Dr. Blair Leftwich, Director
Dr. Micbael Abel, Project Manager

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project Bob Durham were received hy TraceAnalysis, Inc. on 2010-11-17 and assigned to work order 10111714. Samples for work order 10111714 were received intact without headspace and at a temperature of 2.0 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 64752 | 2010-11-18 at 09:00 | 75494 | 2010-11-18 at 10:14 |
| BTEX | S 8021B | 64793 | 2010-11-19 at 09:00 | 75536 | 2010-11-19 at 09:45 |
| BTEX | S 8021B | 64793 | 2010-11-19 at 09:00 | 75537 | 2010-11-20 at 03:56 |
| PAH | S 8270D | 65172 | 2010-11-19 at 15:00 | 75984 | 2010-12-09 at 10:33 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10111714 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 250658 - MW-11**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75494 | Date Analyzed: | 2010-11-18 | Analyzed By: | AG |
| Prep Batch: | 64752 | Sample Preparation: | 2010-11-18 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.110 | mg/L | 1 | 0.100 | 110 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.113 | mg/L | 1 | 0.100 | 113 | 51.1 - 128 |

**Sample: 250659 - MW-20**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.103 | mg/L | 1 | 0.100 | 103 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 51.1 - 128 |

**Sample: 250660 - MW-21**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Triflnorotoluene (TFT) | | 0.103 | mg/L | 1 | 0.100 | 103 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.104 | mg/L | 1 | 0.100 | 104 | 51.1 - 128 |

**Sample: 250661 - MW-25**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 51.1 - 128 |

**Sample: 250662 - MW-30**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.109 | mg/L | 1 | 0.100 | 109 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.109 | mg/L | 1 | 0.100 | 109 | 51.1 - 128 |

**Sample: 250663 - MW-24**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 51.1 - 128 |

**Sample: 250664 - MW-27**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 51.1 - 128 |

**Sample: 250665 - MW-56**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 51.1 - 128 |

**Sample: 250666 - MW-31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.102 | mg/L | 1 | 0.100 | 102 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.102 | mg/L | 1 | 0.100 | 102 | 51.1 - 128 |

**Sample: 250667 - MW-33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.103 | mg/L | 1 | 0.100 | 103 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.105 | mg/L | 1 | 0.100 | 105 | 51.1 - 128 |

**Sample: 250668 - MW-15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.105 | mg/L | 1 | 0.100 | 105 | 51.1 - 128 |

**Sample: 250669 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.107 | mg/L | 1 | 0.100 | 107 | 51.1 - 128 |

**Sample: 250670 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.100 | mg/L | 1 | 0.100 | 100 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.100 | mg/L | 1 | 0.100 | 100 | 51.1 - 128 |

**Sample: 250671 - MW-37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 51.1 - 128 |

**Sample: 250672 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.103 | mg/L | 1 | 0.100 | 103 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 51.1 - 128 |

**Sample: 250673 - MW-28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.102 | mg/L | 1 | 0.100 | 102 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.104 | mg/L | 1 | 0.100 | 104 | 51.1 - 128 |

**Sample: 250674 - MW-23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.107 | mg/L | 1 | 0.100 | 107 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.107 | mg/L | 1 | 0.100 | 107 | 51.1 - 128 |

**Sample: 250675 - MW-6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.104 | mg/L | 1 | 0.100 | 104 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 51.1 - 128 |

**Sample: 250676 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75536 | Date Analyzed: | 2010-11-19 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.113 | mg/L | 1 | 0.100 | 113 | 51.1 - 128 |

**Sample: 250677 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75537 | Date Analyzed: | 2010-11-20 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.127 | mg/L | 1 | 0.100 | 127 | 51.1 - 128 |

**Sample: 250678 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75537 | Date Analyzed: | 2010-11-20 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.100 | mg/L | 1 | 0.100 | 100 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.107 | mg/L | 1 | 0.100 | 107 | 51.1 - 128 |

**Sample: 250679 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75537 | Date Analyzed: | 2010-11-20 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0103** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00530** | mg/L | 1 | 0.00100 |
| Xylene | | **0.0109** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.112 | mg/L | 1 | 0.100 | 112 | 51.1 - 128 |

**Sample: 250679 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270D | Prep Method: | S 3510C |
| QC Batch: | 75984 | Date Analyzed: | 2010-12-09 | Analyzed By: | MN |
| Prep Batch: | 65172 | Sample Preparation: | 2010-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.000404** | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | **0.000268** | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | **0.00103** | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | **0.000452** | mg/L | 0.922 | 0.000200 |
| Fluorene | | **0.000465** | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |

*continued ...*

*sample 250679 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0433 | mg/L | 0.922 | 0.0800 | 54 | 10 - 111 |
| 2-Fluorobiphenyl | | 0.0466 | mg/L | 0.922 | 0.0800 | 58 | 10 - 92.7 |
| Terphenyl-d14 | | 0.0436 | mg/L | 0.922 | 0.0800 | 54 | 35.9 - 107 |

**Sample: 250680 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75537 | Date Analyzed: | 2010-11-20 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0838 | mg/L | 1 | 0.100 | 84 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0902 | mg/L | 1 | 0.100 | 90 | 51.1 - 128 |

**Sample: 250681 - MW-5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75537 | Date Analyzed: | 2010-11-20 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0355** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | **0.00770** | mg/L | 1 | 0.00100 |
| Xylene | | **0.00850** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.100 | mg/L | 1 | 0.100 | 100 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.118 | mg/L | 1 | 0.100 | 118 | 51.1 - 128 |

**Sample: 250681 - MW-5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270D | Prep Method: | S 3510C |
| QC Batch: | 75984 | Date Analyzed: | 2010-12-09 | Analyzed By: | MN |
| Prep Batch: | 65172 | Sample Preparation: | 2010-11-19 | Prepared By: | MN |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Naphthalene | | **0.00532** | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | **0.00626** | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | **0.00962** | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | **0.000806** | mg/L | 0.922 | 0.000200 |
| Fluorene | | **0.00132** | mg/L | 0.922 | 0.000200 |
| Anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | **0.000798** | mg/L | 0.922 | 0.000200 |
| Fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)perylene | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0253 | mg/L | 0.922 | 0.0800 | 32 | 10 - 111 |
| 2-Fluorobiphenyl | | 0.0371 | mg/L | 0.922 | 0.0800 | 46 | 10 - 92.7 |
| Terphenyl-d14 | | 0.0421 | mg/L | 0.922 | 0.0800 | 53 | 35.9 - 107 |

**Sample: 250682 - MW-10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75537 | Date Analyzed: | 2010-11-20 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.105 | mg/L | 1 | 0.100 | 105 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 51.1 - 128 |

**Sample: 250683 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75537 | Date Analyzed: | 2010-11-20 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0141** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.101 | mg/L | 1 | 0.100 | 101 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.113 | mg/L | 1 | 0.100 | 113 | 51.1 - 128 |

**Sample: 250684 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 75537 | Date Analyzed: | 2010-11-20 | Analyzed By: | AG |
| Prep Batch: | 64793 | Sample Preparation: | 2010-11-19 | Prepared By: | AG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0999 | mg/L | 1 | 0.100 | 100 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0998 | mg/L | 1 | 0.100 | 100 | 51.1 - 128 |

**Method Blank (1)** QC Batch: 75494

QC Batch: 75494 Date Analyzed: 2010-11-18 Analyzed By: AG
Prep Batch: 64752 QC Preparation: 2010-11-18 Prepared By: AG

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000600 | mg/L | 0.001 |
| Toluene | | <0.000600 | mg/L | 0.001 |
| Ethylbenzeue | | <0.000800 | mg/L | 0.001 |
| Xylene | | <0.000767 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70.2 - 118 |
| 4-Bromofluorobenzene (4-BFB) | | 0.104 | mg/L | 1 | 0.100 | 104 | 47.3 - 116 |

**Method Blank (1)** QC Batch: 75536

QC Batch: 75536 Date Analyzed: 2010-11-19 Analyzed By: AG
Prep Batch: 64793 QC Preparation: 2010-11-19 Prepared By: AG

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000600 | mg/L | 0.001 |
| Toluene | | <0.000600 | mg/L | 0.001 |
| Ethylbenzene | | <0.000800 | mg/L | 0.001 |
| Xylene | | <0.000767 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 70.2 - 118 |
| 4-Bromofluorobenzene (4-BFB) | | 0.104 | mg/L | 1 | 0.100 | 104 | 47.3 - 116 |

**Method Blank (1)** QC Batch: 75537

QC Batch: 75537
Prep Batch: 64793

Date Analyzed: 2010-11-20
QC Preparation: 2010-11-19

Analyzed By: AG
Prepared By: AG

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000600 | mg/L | 0.001 |
| Toluene | | <0.000600 | mg/L | 0.001 |
| Ethylbenzene | | <0.000800 | mg/L | 0.001 |
| Xylene | | <0.000767 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0986 | mg/L | 1 | 0.100 | 99 | 70.2 - 118 |
| 4-Bromofluorobenzene (4-BFB) | | 0.101 | mg/L | 1 | 0.100 | 101 | 47.3 - 116 |

**Method Blank (1)** QC Batch: 75984

QC Batch: 75984
Prep Batch: 65172

Date Analyzed: 2010-12-09
QC Preparation: 2010-11-19

Analyzed By: MN
Prepared By: MN

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Naphthalene | | <0.0000784 | mg/L | 0.0002 |
| 2-Methylnaphthalene | | <0.0000747 | mg/L | 0.0002 |
| 1-Methylnaphthalene | | <0.0000575 | mg/L | 0.0002 |
| Acenaphthylene | | <0.0000963 | mg/L | 0.0002 |
| Acenaphthene | | <0.0000617 | mg/L | 0.0002 |
| Dibenzofuran | | <0.0000952 | mg/L | 0.0002 |
| Fluorene | | <0.000134 | mg/L | 0.0002 |
| Anthracene | | <0.000441 | mg/L | 0.0002 |
| Phenanthrene | | <0.000435 | mg/L | 0.0002 |
| Fluoranthene | | <0.000476 | mg/L | 0.0002 |
| Pyrene | | <0.000590 | mg/L | 0.0002 |
| Benzo(a)anthracene | | <0.000118 | mg/L | 0.0002 |
| Chrysene | | <0.0000766 | mg/L | 0.0002 |
| Benzo(b)fluoranthene | | <0.000146 | mg/L | 0.0002 |
| Benzo(k)fluoranthene | | <0.000141 | mg/L | 0.0002 |
| Benzo(a)pyrene | | <0.000132 | mg/L | 0.0002 |
| Indeno(1,2,3-cd)pyrene | | <0.0000702 | mg/L | 0.0002 |
| Dibenzo(a,h)anthracene | | <0.0000534 | mg/L | 0.0002 |
| Benzo(g,h,i)perylene | | <0.0000473 | mg/L | 0.0002 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 0.0345 | mg/L | 1 | 0.0800 | 43 | 10 - 111 |
| 2-Fluorobiphenyl | | 0.0405 | mg/L | 1 | 0.0800 | 51 | 10 - 92.7 |
| Terphenyl-d14 | | 0.0424 | mg/L | 1 | 0.0800 | 53 | 35.9 - 107 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 75494 Date Analyzed: 2010-11-18 Analyzed By: AG
Prep Batch: 64752 QC Preparation: 2010-11-18 Prepared By: AG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0911 | mg/L | 1 | 0.100 | <0.000600 | 91 | 82.9 - 118 |
| Toluene | 0.0921 | mg/L | 1 | 0.100 | <0.000600 | 92 | 82.7 - 117 |
| Ethylbenzene | 0.0946 | mg/L | 1 | 0.100 | <0.000800 | 95 | 78.8 - 116 |
| Xylene | 0.286 | mg/L | 1 | 0.300 | <0.000767 | 95 | 79.3 - 116 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0941 | mg/L | 1 | 0.100 | <0.000600 | 94 | 82.9 - 118 | 3 | 20 |
| Toluene | 0.0945 | mg/L | 1 | 0.100 | <0.000600 | 94 | 82.7 - 117 | 3 | 20 |
| Ethylbenzene | 0.0956 | mg/L | 1 | 0.100 | <0.000800 | 96 | 78.8 - 116 | 1 | 20 |
| Xylene | 0.292 | mg/L | 1 | 0.300 | <0.000767 | 97 | 79.3 - 116 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.102 | 0.0995 | mg/L | 1 | 0.100 | 102 | 100 | 67.3 - 113 |
| 4-Bromofluorobenzene (4-BFB) | 0.106 | 0.104 | mg/L | 1 | 0.100 | 106 | 104 | 68.2 - 134 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 75536 Date Analyzed: 2010-11-19 Analyzed By: AG
Prep Batch: 64793 QC Preparation: 2010-11-19 Prepared By: AG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0875 | mg/L | 1 | 0.100 | <0.000600 | 88 | 82.9 - 118 |
| Toluene | 0.0875 | mg/L | 1 | 0.100 | <0.000600 | 88 | 82.7 - 117 |
| Ethylbenzene | 0.0902 | mg/L | 1 | 0.100 | <0.000800 | 90 | 78.8 - 116 |
| Xylene | 0.273 | mg/L | 1 | 0.300 | <0.000767 | 91 | 79.3 - 116 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0894 | mg/L | 1 | 0.100 | <0.000600 | 89 | 82.9 - 118 | 2 | 20 |
| Toluene | 0.0893 | mg/L | 1 | 0.100 | <0.000600 | 89 | 82.7 - 117 | 2 | 20 |
| Ethylbenzene | 0.0930 | mg/L | 1 | 0.100 | <0.000800 | 93 | 78.8 - 116 | 3 | 20 |
| Xylene | 0.282 | mg/L | 1 | 0.300 | <0.000767 | 94 | 79.3 - 116 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.101 | 0.108 | mg/L | 1 | 0.100 | 101 | 108 | 67.3 - 113 |
| 4-Bromofluorobenzene (4-BFB) | 0.104 | 0.111 | mg/L | 1 | 0.100 | 104 | 111 | 68.2 - 134 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 75537
Prep Batch: 64793

Date Analyzed: 2010-11-20
QC Preparation: 2010-11-19

Analyzed By: AG
Prepared By: AG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0944 | mg/L | 1 | 0.100 | <0.000600 | 94 | 82.9 - 118 |
| Toluene | 0.0939 | mg/L | 1 | 0.100 | <0.000600 | 94 | 82.7 - 117 |
| Ethylbenzene | 0.0947 | mg/L | 1 | 0.100 | <0.000800 | 95 | 78.8 - 116 |
| Xylene | 0.289 | mg/L | 1 | 0.300 | <0.000767 | 96 | 79.3 - 116 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0929 | mg/L | 1 | 0.100 | <0.000600 | 93 | 82.9 - 118 | 2 | 20 |
| Toluene | 0.0921 | mg/L | 1 | 0.100 | <0.000600 | 92 | 82.7 - 117 | 2 | 20 |
| Ethylbenzene | 0.0950 | mg/L | 1 | 0.100 | <0.000800 | 95 | 78.8 - 116 | 0 | 20 |
| Xylene | 0.287 | mg/L | 1 | 0.300 | <0.000767 | 96 | 79.3 - 116 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0878 | 0.0892 | mg/L | 1 | 0.100 | 88 | 89 | 67.3 - 113 |
| 4-Bromofluorobenzene (4-BFB) | 0.0932 | 0.0939 | mg/L | 1 | 0.100 | 93 | 94 | 68.2 - 134 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 75984
Prep Batch: 65172

Date Analyzed: 2010-12-09
QC Preparation: 2010-11-19

Analyzed By: MN
Prepared By: MN

| Param | | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Naphthalene | | 0.0338 | mg/L | 1 | 0.0800 | <0.0000784 | 42 | 32.2 - 80.3 |
| 2-Methylnaphthalene | | 0.0346 | mg/L | 1 | 0.0800 | <0.0000747 | 43 | 34.8 - 87 |
| 1-Methylnaphthalene | | 0.0353 | mg/L | 1 | 0.0800 | <0.0000575 | 44 | 36.9 - 89.6 |
| Acenaphthylene | | 0.0468 | mg/L | 1 | 0.0800 | <0.0000963 | 58 | 35 - 93.2 |
| Acenaphthene | | 0.0446 | mg/L | 1 | 0.0800 | <0.0000617 | 56 | 35.8 - 92.9 |
| Dibenzofuran | | 0.0418 | mg/L | 1 | 0.0800 | <0.0000952 | 52 | 35.3 - 85.1 |
| Fluorene | | 0.0546 | mg/L | 1 | 0.0800 | <0.000134 | 68 | 43.4 - 101 |
| Anthracene | | 0.0530 | mg/L | 1 | 0.0800 | <0.000441 | 66 | 44.8 - 92.4 |
| Phenanthrene | | 0.0575 | mg/L | 1 | 0.0800 | <0.000435 | 72 | 44 - 93.7 |
| Fluoranthene | | 0.0682 | mg/L | 1 | 0.0800 | <0.000476 | 85 | 52.7 - 104 |
| Pyrene | | 0.0456 | mg/L | 1 | 0.0800 | <0.000590 | 57 | 42.2 - 93.8 |
| Benzo(a)anthracene | | 0.0524 | mg/L | 1 | 0.0800 | <0.000118 | 66 | 40.4 - 91.9 |
| Chrysene | | 0.0777 | mg/L | 1 | 0.0800 | <0.0000766 | 97 | 44.4 - 107 |
| Benzo(b)fluoranthene | | 0.0370 | mg/L | 1 | 0.0800 | <0.000146 | 46 | 34.8 - 105 |
| Benzo(k)fluoranthene | [1] | 0.0324 | mg/L | 1 | 0.0800 | <0.000141 | 40 | 50.2 - 158 |
| Benzo(a)pyrene | [2] | 0.0395 | mg/L | 1 | 0.0800 | <0.000132 | 49 | 51.3 - 151 |
| Indeno(1,2,3-cd)pyrene | | 0.0397 | mg/L | 1 | 0.0800 | <0.0000702 | 50 | 43.2 - 115 |
| Dibenzo(a,h)anthracene | | 0.0550 | mg/L | 1 | 0.0800 | <0.0000534 | 69 | 43.9 - 115 |
| Benzo(g,h,i)perylene | | 0.0387 | mg/L | 1 | 0.0800 | <0.0000473 | 48 | 45.1 - 115 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | | 0.0347 | mg/L | 1 | 0.0800 | <0.0000784 | 43 | 32.2 - 80.3 | 3 | 20 |
| 2-Methylnaphthalene | | 0.0349 | mg/L | 1 | 0.0800 | <0.0000747 | 44 | 34.8 - 87 | 1 | 20 |
| 1-Methylnaphthalene | | 0.0353 | mg/L | 1 | 0.0800 | <0.0000575 | 44 | 36.9 - 89.6 | 0 | 20 |
| Acenaphthylene | | 0.0482 | mg/L | 1 | 0.0800 | <0.0000963 | 60 | 35 - 93.2 | 3 | 20 |
| Acenaphthene | | 0.0462 | mg/L | 1 | 0.0800 | <0.0000617 | 58 | 35.8 - 92.9 | 4 | 20 |
| Dibenzofuran | | 0.0430 | mg/L | 1 | 0.0800 | <0.0000952 | 54 | 35.3 - 85.1 | 3 | 20 |
| Fluorene | | 0.0568 | mg/L | 1 | 0.0800 | <0.000134 | 71 | 43.4 - 101 | 4 | 20 |
| Anthracene | | 0.0518 | mg/L | 1 | 0.0800 | <0.000441 | 65 | 44.8 - 92.4 | 2 | 20 |
| Phenanthrene | | 0.0563 | mg/L | 1 | 0.0800 | <0.000435 | 70 | 44 - 93.7 | 2 | 20 |
| Fluoranthene | | 0.0669 | mg/L | 1 | 0.0800 | <0.000476 | 84 | 52.7 - 104 | 2 | 20 |
| Pyrene | | 0.0459 | mg/L | 1 | 0.0800 | <0.000590 | 57 | 42.2 - 93.8 | 1 | 20 |
| Benzo(a)anthracene | | 0.0544 | mg/L | 1 | 0.0800 | <0.000118 | 68 | 40.4 - 91.9 | 4 | 20 |
| Chrysene | | 0.0801 | mg/L | 1 | 0.0800 | <0.0000766 | 100 | 44.4 - 107 | 3 | 20 |
| Benzo(b)fluoranthene | | 0.0389 | mg/L | 1 | 0.0800 | <0.000146 | 49 | 34.8 - 105 | 5 | 20 |
| Benzo(k)fluoranthene | [3] | 0.0331 | mg/L | 1 | 0.0800 | <0.000141 | 41 | 50.2 - 158 | 2 | 20 |
| Benzo(a)pyrene | [4] | 0.0400 | mg/L | 1 | 0.0800 | <0.000132 | 50 | 51.3 - 151 | 1 | 20 |
| Indeno(1,2,3-cd)pyrene | | 0.0414 | mg/L | 1 | 0.0800 | <0.0000702 | 52 | 43.2 - 115 | 4 | 20 |
| Dibenzo(a,h)anthracene | | 0.0556 | mg/L | 1 | 0.0800 | <0.0000534 | 70 | 43.9 - 115 | 1 | 20 |

*continued ...*

[1]Spike analyte out of control limits. Results biased low. •
[2]Spike analyte out of control limits. Results biased low. •
[3]Spike analyte out of control limits. Results biased low. •
[4]Spike analyte out of control limits. Results biased low. •

*control spikes continued ...*

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | 0.0396 | mg/L | 1 | 0.0800 | <0.0000473 | 50 | 45.1 - 115 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 0.0401 | 0.0412 | mg/L | 1 | 0.0800 | 50 | 52 | 10 - 111 |
| 2-Fluorobiphenyl | 0.0450 | 0.0473 | mg/L | 1 | 0.0800 | 56 | 59 | 10 - 92.7 |
| Terphenyl-d14 | 0.0583 | 0.0600 | mg/L | 1 | 0.0800 | 73 | 75 | 35.9 - 107 |

**Matrix Spike (MS-1)** Spiked Sample: 250621

QC Batch: 75494 | Date Analyzed: 2010-11-18 | Analyzed By: AG
Prep Batch: 64752 | QC Preparation: 2010-11-18 | Prepared By: AG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.432 | mg/L | 1 | 0.500 | 0.0196 | 82 | 77.9 - 114 |
| Toluene | 0.455 | mg/L | 1 | 0.500 | <0.000600 | 91 | 78.3 - 111 |
| Ethylbenzene | 0.459 | mg/L | 1 | 0.500 | <0.000800 | 92 | 75.3 - 110 |
| Xylene | 1.42 | mg/L | 1 | 1.50 | 0.042 | 92 | 75.7 - 109 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.427 | mg/L | 1 | 0.500 | 0.0196 | 81 | 77.9 - 114 | 1 | 20 |
| Toluene | 0.454 | mg/L | 1 | 0.500 | <0.000600 | 91 | 78.3 - 111 | 0 | 20 |
| Ethylbenzene | 0.460 | mg/L | 1 | 0.500 | <0.000800 | 92 | 75.3 - 110 | 0 | 20 |
| Xylene | 1.42 | mg/L | 1 | 1.50 | 0.042 | 92 | 75.7 - 109 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.491 | 0.477 | mg/L | 1 | 0.5 | 98 | 95 | 68.3 - 107 |
| 4-Bromofluorobenzene (4-BFB) | 0.524 | 0.509 | mg/L | 1 | 0.5 | 105 | 102 | 60.1 - 135 |

**Matrix Spike (MS-1)** Spiked Sample: 250620

QC Batch: 75536 | Date Analyzed: 2010-11-19 | Analyzed By: AG
Prep Batch: 64793 | QC Preparation: 2010-11-19 | Prepared By: AG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 6.45 | mg/L | 20 | 2.00 | 4.6697 | 89 | 77.9 - 114 |
| Toluene | 3.92 | mg/L | 20 | 2.00 | 2.151 | 88 | 78.3 - 111 |
| Ethylbenzene | 2.62 | mg/L | 20 | 2.00 | 0.8029 | 91 | 75.3 - 110 |
| Xylene | 6.16 | mg/L | 20 | 6.00 | 0.7581 | 90 | 75.7 - 109 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 6.49 | mg/L | 20 | 2.00 | 4.6697 | 91 | 77.9 - 114 | 1 | 20 |
| Toluene | 4.00 | mg/L | 20 | 2.00 | 2.151 | 92 | 78.3 - 111 | 2 | 20 |
| Ethylbenzene | 2.72 | mg/L | 20 | 2.00 | 0.8029 | 96 | 75.3 - 110 | 4 | 20 |
| Xylene | 6.41 | mg/L | 20 | 6.00 | 0.7581 | 94 | 75.7 - 109 | 4 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 1.93 | 1.98 | mg/L | 20 | 2 | 96 | 99 | 68.3 - 107 |
| 4-Bromofluorobenzene (4-BFB) | 2.04 | 2.14 | mg/L | 20 | 2 | 102 | 107 | 60.1 - 135 |

**Matrix Spike (MS-1)** Spiked Sample: 250683

QC Batch: 75537
Prep Batch: 64793

Date Analyzed: 2010-11-20
QC Preparation: 2010-11-19

Analyzed By: AG
Prepared By: AG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.109 | mg/L | 1 | 0.100 | 0.0141 | 95 | 77.9 - 114 |
| Toluene | 0.0951 | mg/L | 1 | 0.100 | <0.000600 | 95 | 78.3 - 111 |
| Ethylbenzene | 0.0922 | mg/L | 1 | 0.100 | <0.000800 | 92 | 75.3 - 110 |
| Xylene | 0.275 | mg/L | 1 | 0.300 | <0.000767 | 92 | 75.7 - 109 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.110 | mg/L | 1 | 0.100 | 0.0141 | 96 | 77.9 - 114 | 1 | 20 |
| Toluene | 0.0960 | mg/L | 1 | 0.100 | <0.000600 | 96 | 78.3 - 111 | 1 | 20 |
| Ethylbenzene | 0.0929 | mg/L | 1 | 0.100 | <0.000800 | 93 | 75.3 - 110 | 1 | 20 |
| Xylene | 0.278 | mg/L | 1 | 0.300 | <0.000767 | 93 | 75.7 - 109 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0996 | 0.0971 | mg/L | 1 | 0.1 | 100 | 97 | 68.3 - 107 |

*continued . . .*

*matrix spikes continued ...*

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (4-BFB) | 0.115 | 0.112 | mg/L | 1 | 0.1 | 115 | 112 | 60.1 - 135 |

**Standard (CCV-1)**

QC Batch: 75494 Date Analyzed: 2010-11-18 Analyzed By: AG

| Param | Flag | Uuits | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0928 | 93 | 80 - 120 | 2010-11-18 |
| Toluene | | mg/L | 0.100 | 0.0936 | 94 | 80 - 120 | 2010-11-18 |
| Ethylbenzene | | mg/L | 0.100 | 0.0971 | 97 | 80 - 120 | 2010-11-18 |
| Xylene | | mg/L | 0.300 | 0.296 | 99 | 80 - 120 | 2010-11-18 |

**Standard (CCV-2)**

QC Batch: 75494 Date Analyzed: 2010-11-18 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0940 | 94 | 80 - 120 | 2010-11-18 |
| Toluene | | mg/L | 0.100 | 0.0943 | 94 | 80 - 120 | 2010-11-18 |
| Ethylbenzene | | mg/L | 0.100 | 0.0977 | 98 | 80 - 120 | 2010-11-18 |
| Xylene | | mg/L | 0.300 | 0.295 | 98 | 80 - 120 | 2010-11-18 |

**Standard (CCV-1)**

QC Batch: 75536 Date Analyzed: 2010-11-19 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0924 | 92 | 80 - 120 | 2010-11-19 |
| Toluene | | mg/L | 0.100 | 0.0908 | 91 | 80 - 120 | 2010-11-19 |
| Ethylbenzene | | mg/L | 0.100 | 0.0931 | 93 | 80 - 120 | 2010-11-19 |
| Xylene | | mg/L | 0.300 | 0.282 | 94 | 80 - 120 | 2010-11-19 |

**Standard (CCV-2)**

QC Batch: 75536 Date Analyzed: 2010-11-19 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0917 | 92 | 80 - 120 | 2010-11-19 |
| Toluene | | mg/L | 0.100 | 0.0907 | 91 | 80 - 120 | 2010-11-19 |
| Ethylbenzene | | mg/L | 0.100 | 0.0933 | 93 | 80 - 120 | 2010-11-19 |
| Xylene | | mg/L | 0.300 | 0.282 | 94 | 80 - 120 | 2010-11-19 |

**Standard (CCV-3)**

QC Batch: 75536 Date Analyzed: 2010-11-19 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0876 | 88 | 80 - 120 | 2010-11-19 |
| Toluene | | mg/L | 0.100 | 0.0872 | 87 | 80 - 120 | 2010-11-19 |
| Ethylbenzene | | mg/L | 0.100 | 0.0894 | 89 | 80 - 120 | 2010-11-19 |
| Xylene | | mg/L | 0.300 | 0.270 | 90 | 80 - 120 | 2010-11-19 |

**Standard (CCV-1)**

QC Batch: 75537 Date Analyzed: 2010-11-20 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0890 | 89 | 80 - 120 | 2010-11-20 |
| Toluene | | mg/L | 0.100 | 0.0884 | 88 | 80 - 120 | 2010-11-20 |
| Ethylbenzene | | mg/L | 0.100 | 0.0892 | 89 | 80 - 120 | 2010-11-20 |
| Xylene | | mg/L | 0.300 | 0.273 | 91 | 80 - 120 | 2010-11-20 |

**Standard (CCV-2)**

QC Batch: 75537 Date Analyzed: 2010-11-20 Analyzed By: AG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0938 | 94 | 80 - 120 | 2010-11-20 |
| Toluene | | mg/L | 0.100 | 0.0935 | 94 | 80 - 120 | 2010-11-20 |
| Ethylbenzene | | mg/L | 0.100 | 0.0947 | 95 | 80 - 120 | 2010-11-20 |
| Xylene | | mg/L | 0.300 | 0.288 | 96 | 80 - 120 | 2010-11-20 |

**Standard (CCV-1)**

QC Batch: 75984 Date Analyzed: 2010-12-09 Analyzed By: MN

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Naphthalene | | mg/L | 60.0 | 50.8 | 85 | 80 - 120 | 2010-12-09 |
| 2-Methylnaphthalene | | mg/L | 60.0 | 51.2 | 85 | 80 - 120 | 2010-12-09 |
| 1-Methylnaphthalene | | mg/L | 60.0 | 48.8 | 81 | 80 - 120 | 2010-12-09 |
| Acenaphthylene | | mg/L | 60.0 | 50.8 | 85 | 80 - 120 | 2010-12-09 |
| Acenaphthene | | mg/L | 60.0 | 50.6 | 84 | 80 - 120 | 2010-12-09 |
| Dibenzofuran | | mg/L | 60.0 | 55.0 | 92 | 80 - 120 | 2010-12-09 |
| Fluorene | | mg/L | 60.0 | 55.9 | 93 | 80 - 120 | 2010-12-09 |
| Anthracene | | mg/L | 60.0 | 49.1 | 82 | 80 - 120 | 2010-12-09 |
| Phenanthrene | | mg/L | 60.0 | 51.9 | 86 | 80 - 120 | 2010-12-09 |
| Fluoranthene | | mg/L | 60.0 | 49.3 | 82 | 80 - 120 | 2010-12-09 |
| Pyrene | | mg/L | 60.0 | 54.4 | 91 | 80 - 120 | 2010-12-09 |
| Benzo(a)anthracene | | mg/L | 60.0 | 53.5 | 89 | 80 - 120 | 2010-12-09 |
| Chrysene | | mg/L | 60.0 | 49.2 | 82 | 80 - 120 | 2010-12-09 |
| Benzo(b)fluoranthene | | mg/L | 60.0 | 52.7 | 88 | 80 - 120 | 2010-12-09 |
| Benzo(k)fluoranthene | | mg/L | 60.0 | 49.2 | 82 | 80 - 120 | 2010-12-09 |
| Benzo(a)pyrene | | mg/L | 60.0 | 54.0 | 90 | 80 - 120 | 2010-12-09 |
| Indeno(1,2,3-cd)pyrene | | mg/L | 60.0 | 51.0 | 85 | 80 - 120 | 2010-12-09 |
| Dibenzo(a,h)anthracene | | mg/L | 60.0 | 51.3 | 86 | 80 - 120 | 2010-12-09 |
| Benzo(g,h,i)perylene | | mg/L | 60.0 | 52.2 | 87 | 80 - 120 | 2010-12-09 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | 64.0 | mg/L | 1 | 60.0 | 107 | 80 - 120 |
| 2-Fluorobiphenyl | | 52.3 | mg/L | 1 | 60.0 | 87 | 80 - 120 |
| Terphenyl-d14 | | 57.4 | mg/L | 1 | 60.0 | 96 | 80 - 120 |

LAB Order ID # 10111714



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
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Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce Midland TX 79703
Fax #: 432-520-7701
Contact Person: Ron R.
E-mail:
Invoice to:
(If different from above)
Project #: TWM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): New Mexico
Sampler Signature:

ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 250658 | MW-11 | 3 | VOA | X | | | | X | | | | X | | 11-16 | 9:30 | | X | | | | | | | | | | | | | | | | | | | | |
| 659 | MW-20 | | | | | | | | | | | | | | 10:00 | | | | | | | | | | | | | | | | | | | | | | |
| 660 | MW-21 | | | | | | | | | | | | | | 10:30 | | | | | | | | | | | | | | | | | | | | | | |
| 661 | MW-25 | | | | | | | | | | | | | | 11:00 | | | | | | | | | | | | | | | | | | | | | | |
| 662 | MW-30 | | | | | | | | | | | | | | 11:30 | | | | | | | | | | | | | | | | | | | | | | |
| 663 | MW-24 | | | | | | | | | | | | | | 12:00 | | | | | | | | | | | | | | | | | | | | | | |
| 664 | MW-27 | | | | | | | | | | | | | | 12:30 | | | | | | | | | | | | | | | | | | | | | | |
| 665 | MW-56 | | | | | | | | | | | | | | 13:00 | | | | | | | | | | | | | | | | | | | | | | |
| 666 | MW-31 | | | | | | | | | | | | | | 13:30 | | | | | | | | | | | | | | | | | | | | | | |
| 667 | MW-33 | | | | | | | | | | | | | | 14:00 | | | | | | | | | | | | | | | | | | | | | | |
| 668 | MW-15 | | | | | | | | | | | | | | 14:30 | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | NOVA | 11-17 | 8:15 | [signature] | TRACE | 11-17-10 | 8:15 | INST ___ OBS 2.0 °C COR 2.0 °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
| [signature] | TA | 11-17-10 | 17:00 | | | | | INST ___ OBS ___ °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
| | | | | | | | | INST ___ OBS ___ °C COR ___ °C |

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review ___

REMARKS:
Btex
Midland - ~~[illegible]~~
Lubbock - PAH

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # carry in

ORIGINAL COPY

LAB Order ID # 1011174



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
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BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: IDC
Phone #: 432-620-7720
Address: (Street, City, Zip) 2057 Commerce Midland TX 79703
Fax #: 432-520-7701
Contact Person: Ron R.
E-mail:
Invoice to: (If different from above)
Project #: TNM-LF-2000-7
Project Name: Bob Dinnham
Project Location (including state): New Mexico
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 250669 | mw-7 | 3 | voa | X | | | | X | | | | X | | 11-15 | 15:00 | | | | | | | | | | | | | | | | | | | | | |
| 670 | mw-32 | | | | | | | | | | | | | | 15:30 | | | | | | | | | | | | | | | | | | | | | |
| 671 | mw-37 | | | | | | | | | | | | | | 16:00 | | | | | | | | | | | | | | | | | | | | | |
| 672 | mw-8 | | | | | | | | | | | | | | 16:30 | | | | | | | | | | | | | | | | | | | | | |
| 673 | mw-28 | | | | | | | | | | | | | | 17:00 | | | | | | | | | | | | | | | | | | | | | |
| 674 | mw-23 | | | | | | | | | | | | | | 17:30 | | | | | | | | | | | | | | | | | | | | | |
| 675 | mw-6 | | | | | | | | | | | | | 11-16 | 7:30 | | | | | | | | | | | | | | | | | | | | | |
| 676 | mw-13 | | | | | | | | | | | | | | 8:00 | | | | | | | | | | | | | | | | | | | | | |
| 677 | mw-2 | | | | | | | | | | | | | | 8:30 | | | | | | | | | | | | | | | | | | | | | |
| 678 | mw-4 | | | | | | | | | | | | | | 9:00 | | | | | | | | | | | | | | | | | | | | | |
| 679 | mw-1 | 4 | | | | | | | | | | | | | 10:00 | | | | X | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST / OBS / COR |
|---|---|---|---|---|---|---|---|---|
| [signature] | IDC | 11-17 | 8:15 | [signature] | TA | 11-17-10 | 8:15 | INST / OBS 2.0 °C / COR 2.0 °C |
| [signature] | TA | 11-17-10 | 17:00 | | | | | INST / OBS °C / COR °C |
| | | | | | | | | INST / OBS °C / COR °C |

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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Carrier # [illegible]

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LAB Order ID # 1011714



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BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce Midland TX 79703
Fax #: 432-520-7701
Contact Person: Ben R.
E-mail:
Invoice to: (If different from above)
Project #: TNY-LF-2000-7
Project Name: Bob Durham
Project Location (including state): New Mexico
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 250680 | MW-16 | 3 | VOA | X | | | | | X | | | | X | | | 11-16 | 11:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 681 | MW-5 | 4 | | | | | | | | | | | | | | | 12:00 | | | | | X | | | | | | | | | | | | | | | | | | | | |
| 682 | MW-10 | 3 | | | | | | | | | | | | | | | 13:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 683 | MW-38 | | | | | | | | | | | | | | | | 13:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 684 | MW-3 | | | | | | | | | | | | | | | | 15:00 | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST / OBS / COR |
|---|---|---|---|---|---|---|---|---|
| [signature] | NOVA | 11-17 | 8:15 | [signature] | TA | 11-17-10 | 8:15 | INST / OBS 2.0 °C / COR 2.0 °C |
| [signature] | TA | 11-17-10 | 17:00 | | | | | INST / OBS °C / COR °C |
| | | | | | | | | INST / OBS °C / COR °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-in-Review

**REMARKS:**

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Carry in

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LAB Order ID # 10111714



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Tel (972) 242-7750

**Company Name:** Nova
**Phone #:** 432-520-7720
**Address:** (Street, City, Zip) 2057 Commerce Midland TX 79703
**Fax #:** 432-520-7701
**Contact Person:** Ron R.
**E-mail:**
**Invoice to:**
**(If different from above)**
**Project #:** TNM-LF-2000-7
**Project Name:** Bob Durham
**Project Location (including state):** New Mexico
**Sampler Signature:**

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25658 | mw-11 | 3 | VOA | X | | | | X | | | | X | | 11-15 | 9:50 | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 659 | mw-20 | | | | | | | | | | | | | | 10:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 660 | mw-21 | | | | | | | | | | | | | | 10:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 661 | mw-25 | | | | | | | | | | | | | | 11:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 662 | mw-30 | | | | | | | | | | | | | | 11:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 663 | mw-24 | | | | | | | | | | | | | | 12:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 664 | mw-27 | | | | | | | | | | | | | | 12:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 665 | mw-56 | | | | | | | | | | | | | | 13:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 666 | mw-31 | | | | | | | | | | | | | | 13:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 667 | mw-33 | | | | | | | | | | | | | | 14:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 668 | mw-15 | | | | | | | | | | | | | | 14:30 | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| | Nova | 11-17 | 8:15 | | TRACE | 11-17-10 | 8:15 | INST ___ OBS 2.0 °C COR 2.0 °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
| | TA | 11-17-10 | 17:00 | Cawl Fox | Trace Lbk | 11-18-10 | 9:20 | INST ___ OBS 0.9 °C COR 0.8 °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
| | | | | | | | | INST ___ OBS ___ °C COR ___ °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-in-Review

**REMARKS:**
BTEX
Midland - ~~[illegible]~~
Lubbock - PHH

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Carrier # (LS ZK702635)

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LAB Order ID # 1011174



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Contact Person: Ron R.
E-mail:
Invoice to: (If different from above)
Project #: TNM-LF-2000-7
Project Name: Bob Dinnham
Project Location (including state): New Mexico
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 250669 | mw-7 | 3 | voa | X | | | | X | | | | X | | 11-15 | 15:00 | | | | | | | | | | | | | | | | | | | | | | |
| 670 | mw-32 | | | | | | | | | | | | | | 15:30 | | | | | | | | | | | | | | | | | | | | | | |
| 671 | mw-37 | | | | | | | | | | | | | | 16:00 | | | | | | | | | | | | | | | | | | | | | | |
| 672 | mw-8 | | | | | | | | | | | | | | 16:30 | | | | | | | | | | | | | | | | | | | | | | |
| 673 | mw-28 | | | | | | | | | | | | | | 17:00 | | | | | | | | | | | | | | | | | | | | | | |
| 674 | mw-23 | | | | | | | | | | | | | | 17:30 | | | | | | | | | | | | | | | | | | | | | | |
| 675 | mw-6 | | | | | | | | | | | | | 11-16 | 7:30 | | | | | | | | | | | | | | | | | | | | | | |
| 676 | mw-13 | | | | | | | | | | | | | | 8:00 | | | | | | | | | | | | | | | | | | | | | | |
| 677 | mw-2 | | | | | | | | | | | | | | 8:30 | | | | | | | | | | | | | | | | | | | | | | |
| 678 | mw-4 | | | | | | | | | | | | | | 9:00 | | | | | | | | | | | | | | | | | | | | | | |
| 679 | mw-1 | 4 | | | | | | | | | | | | | 10:00 | | | | X | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | IDXG | 11-17 | 8:15 | [signature] | TA | 11-17-10 | 8:15 | INST ___ OBS 2.0 °C COR 2.0 °C |
| [signature] | TA | 11-17-10 | 17:00 | Carol Fox | Trace Lab | 11-18-10 | 9:20 | INST IR OBS 0.9 °C COR 0.8 °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |

**LAB USE ONLY**
Intact (Y) / N
Headspace Y (N) NA
Log-in-Review A

REMARKS:

☐ Dry Weight Basis Required
☐ TRRP Report Required
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Carrier # ___

LAB Order ID # 1011714



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**Phone #:** 432-520-7720

**Address:** (Street, City, Zip) 2057 Commerce Midland TX 79703

**Fax #:** 432-520-7701

**Contact Person:** Ron R.

**E-mail:**

**Invoice to:** (If different from above)

**Project #:** TNM-LF-2000-7

**Project Name:** Bob Durham

**Project Location (including state):** New Mexico

**Sampler Signature:**

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 250680 | MW-16 | 3 | VOA | X | | | | X | | | | X | | 11-16 | 11:00 | | | | | | | | | | | | | | | | | | | | | |
| 681 | MW-5 | 4 | | | | | | | | | | | | | 12:00 | | | | | X | | | | | | | | | | | | | | | | |
| 682 | MW-10 | 3 | | | | | | | | | | | | | 13:00 | | | | | | | | | | | | | | | | | | | | | |
| 683 | MW-38 | | | | | | | | | | | | | | 13:30 | | | | | | | | | | | | | | | | | | | | | |
| 684 | MW-3 | | | | | | | | | | | | | | 15:00 | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST / OBS / COR |
|---|---|---|---|---|---|---|---|---|
| | NOVA | 11-17 | 8:15 | | TA | 11-17-10 | 8:15 | OBS 2.0 °C, COR 2.0 °C |
| | TA | 11-17-10 | 17:00 | Carol Fox | Trace Lab | 11-18-10 | 9:20 | INST JR, OBS 0.9 °C, COR 1.8 °C |
| | | | | | | | | INST ____, OBS ____ °C, COR ____ °C |

**LAB USE ONLY**

Intact Y / N

Headspace Y / N / NA

Log-in-Review

**REMARKS:**

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier #

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

## Certifications

**WBENC:** 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
**NCTRCA** WFWB38444Y0909

## NELAP Certifications

**Lubbock:** T104704219-08-TX
LELAP-02003
Kansas E-10317

**El Paso:** T104704221-08-TX
LELAP-02002

**Midland:** T104704392-08-TX

# Analytical and Quality Control Report

Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: March 14, 2011

Work Order: 11022811

Project Location: West of Monument, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 258963 | MW-31 | water | 2011-02-24 | 08:00 | 2011-02-28 |
| 258964 | MW-33 | water | 2011-02-24 | 08:30 | 2011-02-28 |
| 258965 | MW-15 | water | 2011-02-24 | 09:00 | 2011-02-28 |
| 258966 | MW-10 | water | 2011-02-24 | 09:30 | 2011-02-28 |
| 258967 | MW-7 | water | 2011-02-24 | 10:00 | 2011-02-28 |
| 258968 | MW-32 | water | 2011-02-24 | 10:30 | 2011-02-28 |
| 258969 | MW-37 | water | 2011-02-24 | 11:00 | 2011-02-28 |
| 258970 | MW-8 | water | 2011-02-24 | 11:30 | 2011-02-28 |
| 258971 | MW-28 | water | 2011-02-24 | 12:00 | 2011-02-28 |
| 258972 | MW-3 | water | 2011-02-24 | 12:30 | 2011-02-28 |
| 258973 | MW-23 | water | 2011-02-24 | 13:00 | 2011-02-28 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 258974 | MW-16 | water | 2011-02-24 | 14:00 | 2011-02-28 |
| 258975 | MW-4 | water | 2011-02-24 | 14:30 | 2011-02-28 |
| 258976 | MW-6 | water | 2011-02-24 | 15:00 | 2011-02-28 |
| 258977 | MW-2 | water | 2011-02-24 | 16:00 | 2011-02-28 |
| 258978 | MW-13 | water | 2011-02-24 | 16:30 | 2011-02-28 |
| 258979 | MW-1 | water | 2011-02-24 | 17:30 | 2011-02-28 |
| 258980 | MW-38 | water | 2011-02-24 | 18:36 | 2011-02-28 |
| 258981 | MW-5 | water | 2011-02-24 | 19:00 | 2011-02-28 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 16 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2011-02-28 and assigned to work order 11022811. Samples for work order 11022811 were received intact without headspace and at a temperature of 2.1 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 67064 | 2011-03-03 at 09:20 | 79030 | 2011-03-03 at 09:20 |
| BTEX | S 8021B | 67068 | 2011-03-04 at 08:44 | 79032 | 2011-03-04 at 08:44 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11022811 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 258963 - MW-31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79030 | Date Analyzed: | 2011-03-03 | Analyzed By: | ME |
| Prep Batch: | 67064 | Sample Preparation: | 2011-03-03 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0978 | mg/L | 1 | 0.100 | 98 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.101 | mg/L | 1 | 0.100 | 101 | 51.1 - 128 |

**Sample: 258964 - MW-33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79030 | Date Analyzed: | 2011-03-03 | Analyzed By: | ME |
| Prep Batch: | 67064 | Sample Preparation: | 2011-03-03 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0973 | mg/L | 1 | 0.100 | 97 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.103 | mg/L | 1 | 0.100 | 103 | 51.1 - 128 |

**Sample: 258965 - MW-15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79030 | Date Analyzed: | 2011-03-03 | Analyzed By: | ME |
| Prep Batch: | 67064 | Sample Preparation: | 2011-03-03 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0981 | mg/L | 1 | 0.100 | 98 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.105 | mg/L | 1 | 0.100 | 105 | 51.1 - 128 |

**Sample: 258966 - MW-10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79030 | Date Analyzed: | 2011-03-03 | Analyzed By: | ME |
| Prep Batch: | 67064 | Sample Preparation: | 2011-03-03 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0956 | mg/L | 1 | 0.100 | 96 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.105 | mg/L | 1 | 0.100 | 105 | 51.1 - 128 |

**Sample: 258967 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79030 | Date Analyzed: | 2011-03-03 | Analyzed By: | ME |
| Prep Batch: | 67064 | Sample Preparation: | 2011-03-03 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0883 | mg/L | 1 | 0.100 | 88 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.103 | mg/L | 1 | 0.100 | 103 | 51.1 - 128 |

**Sample: 258968 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79030 | Date Analyzed: | 2011-03-03 | Analyzed By: | ME |
| Prep Batch: | 67064 | Sample Preparation: | 2011-03-03 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0885 | mg/L | 1 | 0.100 | 88 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.104 | mg/L | 1 | 0.100 | 104 | 51.1 - 128 |

**Sample: 258969 - MW-37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79030 | Date Analyzed: | 2011-03-03 | Analyzed By: | ME |
| Prep Batch: | 67064 | Sample Preparation: | 2011-03-03 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.101 | mg/L | 1 | 0.100 | 101 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.120 | mg/L | 1 | 0.100 | 120 | 51.1 - 128 |

**Sample: 258970 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79030 | Date Analyzed: | 2011-03-03 | Analyzed By: | ME |
| Prep Batch: | 67064 | Sample Preparation: | 2011-03-03 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0923 | mg/L | 1 | 0.100 | 92 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 51.1 - 128 |

**Sample: 258971 - MW-28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79030 | Date Analyzed: | 2011-03-03 | Analyzed By: | ME |
| Prep Batch: | 67064 | Sample Preparation: | 2011-03-03 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0957 | mg/L | 1 | 0.100 | 96 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.116 | mg/L | 1 | 0.100 | 116 | 51.1 - 128 |

**Sample: 258972 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79032 | Date Analyzed: | 2011-03-04 | Analyzed By: | ME |
| Prep Batch: | 67068 | Sample Preparation: | 2011-03-04 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.108 | mg/L | 1 | 0.100 | 108 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.106 | mg/L | 1 | 0.100 | 106 | 51.1 - 128 |

**Sample: 258973 - MW-23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79032 | Date Analyzed: | 2011-03-04 | Analyzed By: | ME |
| Prep Batch: | 67068 | Sample Preparation: | 2011-03-04 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.106 | mg/L | 1 | 0.100 | 106 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.103 | mg/L | 1 | 0.100 | 103 | 51.1 - 128 |

**Sample: 258974 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79032 | Date Analyzed: | 2011-03-04 | Analyzed By: | ME |
| Prep Batch: | 67068 | Sample Preparation: | 2011-03-04 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0973 | mg/L | 1 | 0.100 | 97 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0961 | mg/L | 1 | 0.100 | 96 | 51.1 - 128 |

**Sample: 258975 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79032 | Date Analyzed: | 2011-03-04 | Analyzed By: | ME |
| Prep Batch: | 67068 | Sample Preparation: | 2011-03-04 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.102 | mg/L | 1 | 0.100 | 102 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0991 | mg/L | 1 | 0.100 | 99 | 51.1 - 128 |

**Sample: 258976 - MW-6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79032 | Date Analyzed: | 2011-03-04 | Analyzed By: | ME |
| Prep Batch: | 67068 | Sample Preparation: | 2011-03-04 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.102 | mg/L | 1 | 0.100 | 102 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0985 | mg/L | 1 | 0.100 | 98 | 51.1 - 128 |

**Sample: 258977 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79032 | Date Analyzed: | 2011-03-04 | Analyzed By: | ME |
| Prep Batch: | 67068 | Sample Preparation: | 2011-03-04 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0983 | mg/L | 1 | 0.100 | 98 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0964 | mg/L | 1 | 0.100 | 96 | 51.1 - 128 |

**Sample: 258978 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79032 | Date Analyzed: | 2011-03-04 | Analyzed By: | ME |
| Prep Batch: | 67068 | Sample Preparation: | 2011-03-04 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.102 | mg/L | 1 | 0.100 | 102 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.108 | mg/L | 1 | 0.100 | 108 | 51.1 - 128 |

**Sample: 258979 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79032 | Date Analyzed: | 2011-03-04 | Analyzed By: | ME |
| Prep Batch: | 67068 | Sample Preparation: | 2011-03-04 | Prepared By: | ME |

| Parameter | Flag | RL Result | Uuits | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0980 | mg/L | 1 | 0.100 | 98 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0939 | mg/L | 1 | 0.100 | 94 | 51.1 - 128 |

**Sample: 258980 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79032 | Date Analyzed: | 2011-03-04 | Analyzed By: | ME |
| Prep Batch: | 67068 | Sample Preparation: | 2011-03-04 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0982 | mg/L | 1 | 0.100 | 98 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0950 | mg/L | 1 | 0.100 | 95 | 51.1 - 128 |

**Sample: 258981 - MW-5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 79032 | Date Aualyzed: | 2011-03-04 | Analyzed By: | ME |
| Prep Batch: | 67068 | Sample Preparation: | 2011-03-04 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0105** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilutiou | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0967 | mg/L | 1 | 0.100 | 97 | 67.8 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0989 | mg/L | 1 | 0.100 | 99 | 51.1 - 128 |

**Method Blank (1)** QC Batch: 79030

QC Batch: 79030 Date Analyzed: 2011-03-03 Analyzed By: ME
Prep Batch: 67064 QC Preparation: 2011-03-03 Prepared By: ME

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000400 | mg/L | 0.001 |
| Toluene | | <0.000300 | mg/L | 0.001 |
| Ethylbenzene | | <0.000300 | mg/L | 0.001 |
| Xylene | | <0.000333 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0923 | mg/L | 1 | 0.100 | 92 | 70.2 - 118 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0931 | mg/L | 1 | 0.100 | 93 | 47.3 - 116 |

**Method Blank (1)** QC Batch: 79032

QC Batch: 79032 Date Analyzed: 2011-03-04 Analyzed By: ME
Prep Batch: 67068 QC Preparation: 2011-03-04 Prepared By: ME

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000400 | mg/L | 0.001 |
| Toluene | | <0.000300 | mg/L | 0.001 |
| Ethylbenzene | | <0.000300 | mg/L | 0.001 |
| Xylene | | <0.000333 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0880 | mg/L | 1 | 0.100 | 88 | 70.2 - 118 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0857 | mg/L | 1 | 0.100 | 86 | 47.3 - 116 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 79030 Date Analyzed: 2011-03-03 Analyzed By: ME
Prep Batch: 67064 QC Preparation: 2011-03-03 Prepared By: ME

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0936 | mg/L | 1 | 0.100 | <0.000400 | 94 | 82.9 - 108 |
| Toluene | 0.0937 | mg/L | 1 | 0.100 | <0.000300 | 94 | 82.7 - 107 |
| Ethylbenzene | 0.0901 | mg/L | 1 | 0.100 | <0.000300 | 90 | 78.8 - 106 |
| Xylene | 0.273 | mg/L | 1 | 0.300 | <0.000333 | 91 | 79.3 - 106 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0960 | mg/L | 1 | 0.100 | <0.000400 | 96 | 82.9 - 108 | 2 | 20 |
| Toluene | 0.0961 | mg/L | 1 | 0.100 | <0.000300 | 96 | 82.7 - 107 | 2 | 20 |
| Ethylbenzene | 0.0929 | mg/L | 1 | 0.100 | <0.000300 | 93 | 78.8 - 106 | 3 | 20 |
| Xylene | 0.280 | mg/L | 1 | 0.300 | <0.000333 | 93 | 79.3 - 106 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0946 | 0.0929 | mg/L | 1 | 0.100 | 95 | 93 | 67.3 - 113 |
| 4-Bromofluorobenzene (4-BFB) | 0.100 | 0.0977 | mg/L | 1 | 0.100 | 100 | 98 | 68.2 - 124 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 79032 | Date Analyzed: 2011-03-04 | Analyzed By: ME
Prep Batch: 67068 | QC Preparation: 2011-03-04 | Prepared By: ME

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0946 | mg/L | 1 | 0.100 | <0.000400 | 95 | 82.9 - 108 |
| Toluene | 0.0938 | mg/L | 1 | 0.100 | <0.000300 | 94 | 82.7 - 107 |
| Ethylbenzene | 0.0916 | mg/L | 1 | 0.100 | <0.000300 | 92 | 78.8 - 106 |
| Xylene | 0.277 | mg/L | 1 | 0.300 | <0.000333 | 92 | 79.3 - 106 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.0935 | mg/L | 1 | 0.100 | <0.000400 | 94 | 82.9 - 108 | 1 | 20 |
| Toluene | 0.0922 | mg/L | 1 | 0.100 | <0.000300 | 92 | 82.7 - 107 | 2 | 20 |
| Ethylbenzene | 0.0904 | mg/L | 1 | 0.100 | <0.000300 | 90 | 78.8 - 106 | 1 | 20 |
| Xylene | 0.276 | mg/L | 1 | 0.300 | <0.000333 | 92 | 79.3 - 106 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0931 | 0.0912 | mg/L | 1 | 0.100 | 93 | 91 | 67.3 - 113 |

*continued ...*

*control spikes continued ...*

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (4-BFB) | 0.0938 | 0.0956 | mg/L | 1 | 0.100 | 94 | 96 | 68.2 - 124 |

**Matrix Spike (MS-1)** Spiked Sample: 258719

QC Batch: 79030 Date Analyzed: 2011-03-03 Analyzed By: ME
Prep Batch: 67064 QC Preparation: 2011-03-03 Prepared By: ME

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 2.41 | mg/L | 20 | 2.00 | 0.5671 | 92 | 77.9 - 114 |
| Toluene | 1.97 | mg/L | 20 | 2.00 | 0.1741 | 90 | 78.3 - 111 |
| Ethylbenzene | 1.91 | mg/L | 20 | 2.00 | <0.00600 | 96 | 75.3 - 110 |
| Xylene | 5.75 | mg/L | 20 | 6.00 | 0.4576 | 88 | 75.7 - 109 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 2.37 | mg/L | 20 | 2.00 | 0.5671 | 90 | 77.9 - 114 | 2 | 20 |
| Toluene | 1.95 | mg/L | 20 | 2.00 | 0.1741 | 89 | 78.3 - 111 | 1 | 20 |
| Ethylbenzene | 1.88 | mg/L | 20 | 2.00 | <0.00600 | 94 | 75.3 - 110 | 2 | 20 |
| Xylene | 5.73 | mg/L | 20 | 6.00 | 0.4576 | 88 | 75.7 - 109 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 1.78 | 1.83 | mg/L | 20 | 2 | 89 | 92 | 68.3 - 107 |
| 4-Bromofluorobenzene (4-BFB) | 2.19 | 2.24 | mg/L | 20 | 2 | 110 | 112 | 60.1 - 135 |

**Matrix Spike (MS-1)** Spiked Sample: 259115

QC Batch: 79032 Date Analyzed: 2011-03-04 Analyzed By: ME
Prep Batch: 67068 QC Preparation: 2011-03-04 Prepared By: ME

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 2.61 | mg/L | 5 | 0.500 | 2.1558 | 91 | 77.9 - 114 |
| Toluene | 0.447 | mg/L | 5 | 0.500 | <0.00150 | 89 | 78.3 - 111 |
| Ethylbenzene | 0.444 | mg/L | 5 | 0.500 | 0.0426 | 80 | 75.3 - 110 |
| Xylene | 1.30 | mg/L | 5 | 1.50 | <0.00166 | 87 | 75.7 - 109 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 2.67 | mg/L | 5 | 0.500 | 2.1558 | 103 | 77.9 - 114 | 2 | 20 |
| Toluene | 0.462 | mg/L | 5 | 0.500 | <0.00150 | 92 | 78.3 - 111 | 3 | 20 |
| Ethylbenzene | 0.462 | mg/L | 5 | 0.500 | 0.0426 | 84 | 75.3 - 110 | 4 | 20 |
| Xylene | 1.36 | mg/L | 5 | 1.50 | <0.00166 | 91 | 75.7 - 109 | 4 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.466 | 0.487 | mg/L | 5 | 0.5 | 93 | 97 | 68.3 - 107 |
| 4-Bromofluorobenzene (4-BFB) | 0.500 | 0.520 | mg/L | 5 | 0.5 | 100 | 104 | 60.1 - 135 |

**Standard (CCV-1)**

QC Batch: 79030 | Date Analyzed: 2011-03-03 | Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0922 | 92 | 80 - 120 | 2011-03-03 |
| Toluene | | mg/L | 0.100 | 0.0911 | 91 | 80 - 120 | 2011-03-03 |
| Ethylbenzene | | mg/L | 0.100 | 0.0877 | 88 | 80 - 120 | 2011-03-03 |
| Xylene | | mg/L | 0.300 | 0.267 | 89 | 80 - 120 | 2011-03-03 |

**Standard (CCV-2)**

QC Batch: 79030 | Date Analyzed: 2011-03-03 | Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0917 | 92 | 80 - 120 | 2011-03-03 |
| Toluene | | mg/L | 0.100 | 0.0908 | 91 | 80 - 120 | 2011-03-03 |
| Ethylbenzene | | mg/L | 0.100 | 0.0860 | 86 | 80 - 120 | 2011-03-03 |
| Xylene | | mg/L | 0.300 | 0.261 | 87 | 80 - 120 | 2011-03-03 |

**Standard (CCV-3)**

QC Batch: 79030 | Date Analyzed: 2011-03-03 | Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0966 | 97 | 80 - 120 | 2011-03-03 |

*continued ...*

*standard continued ...*

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Toluene | | mg/L | 0.100 | 0.0950 | 95 | 80 - 120 | 2011-03-03 |
| Ethylbenzene | | mg/L | 0.100 | 0.0913 | 91 | 80 - 120 | 2011-03-03 |
| Xylene | | mg/L | 0.300 | 0.275 | 92 | 80 - 120 | 2011-03-03 |

**Standard (CCV-1)**

QC Batch: 79032 Date Analyzed: 2011-03-04 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0876 | 88 | 80 - 120 | 2011-03-04 |
| Toluene | | mg/L | 0.100 | 0.0856 | 86 | 80 - 120 | 2011-03-04 |
| Ethylbenzene | | mg/L | 0.100 | 0.0822 | 82 | 80 - 120 | 2011-03-04 |
| Xylene | | mg/L | 0.300 | 0.248 | 83 | 80 - 120 | 2011-03-04 |

**Standard (CCV-2)**

QC Batch: 79032 Date Analyzed: 2011-03-04 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0928 | 93 | 80 - 120 | 2011-03-04 |
| Toluene | | mg/L | 0.100 | 0.0909 | 91 | 80 - 120 | 2011-03-04 |
| Ethylbenzene | | mg/L | 0.100 | 0.0875 | 88 | 80 - 120 | 2011-03-04 |
| Xylene | | mg/L | 0.300 | 0.266 | 89 | 80 - 120 | 2011-03-04 |

**Standard (CCV-3)**

QC Batch: 79032 Date Analyzed: 2011-03-04 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0948 | 95 | 80 - 120 | 2011-03-04 |
| Toluene | | mg/L | 0.100 | 0.0933 | 93 | 80 - 120 | 2011-03-04 |
| Ethylbenzene | | mg/L | 0.100 | 0.0902 | 90 | 80 - 120 | 2011-03-04 |
| Xylene | | mg/L | 0.300 | 0.272 | 91 | 80 - 120 | 2011-03-04 |

LAB Order ID # 1102281 1



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Ivona
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce Midland TX 79703
Fax #: 432-520-7701
Contact Person: Ron R.
E-mail:
Invoice to: (If different from above)
Project #: TNM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): New Mexico
Sampler Signature:

**ANALYSIS REQUEST (Circle or Specify Method No.)**

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 258963 | mw-31 | 3 | 40ml | X | | | | X | | | | X | | 2-24 | 8:00 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 964 | mw-33 | | | | | | | | | | | | | | 8:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| 965 | mw-15 | | | | | | | | | | | | | | 9:00 | | | | | | | | | | | | | | | | | | | | | | | | |
| 966 | mw-10 | | | | | | | | | | | | | | 9:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| 967 | mw-7 | | | | | | | | | | | | | | 10:00 | | | | | | | | | | | | | | | | | | | | | | | | |
| 968 | mw-32 | | | | | | | | | | | | | | 10:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| 969 | mw-37 | | | | | | | | | | | | | | 11:00 | | | | | | | | | | | | | | | | | | | | | | | | |
| 970 | mw-8 | | | | | | | | | | | | | | 11:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| 971 | mw-28 | | | | | | | | | | | | | | 12:00 | | | | | | | | | | | | | | | | | | | | | | | | |
| 972 | mw-3 | | | | | | | | | | | | | | 12:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| 973 | mw-23 | | | | | | | | | | | | | | 13:00 | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | IVONA | 2-28 | 8:00 | [signature] | TA | 2-28-11 | 8:00 | INST ___ OBS 2.1 °C COR 2.1 °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |

**LAB USE ONLY**
Intact Y N
Headspace Y N NA
Log-in-Review ___

REMARKS:
all tests - Midland

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # ___

ORIGINAL COPY

LAB Order ID # 11022811



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Lova
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce Midland TX 79703
Fax #: 432-520-7701
Contact Person: Dan R.
E-mail:
Invoice to: (If different from above)
Project #: TWM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): New Mexico
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | MATRIX: SOIL | MATRIX: AIR | MATRIX: SLUDGE | PRESERVATIVE METHOD: HCl | PRESERVATIVE METHOD: $HNO_3$ | PRESERVATIVE METHOD: $H_2SO_4$ | PRESERVATIVE METHOD: NaOH | PRESERVATIVE METHOD: ICE | PRESERVATIVE METHOD: NONE | SAMPLING: DATE | SAMPLING: TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 208974 | MW-16 | 3 | 1000 | X | | | | X | | | | X | | 2-24 | 1400 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 975 | MW-4 | | | | | | | | | | | | | | 14:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| 976 | MW-6 | | | | | | | | | | | | | | 15:00 | | | | | | | | | | | | | | | | | | | | | | | | |
| 977 | MW-2 | | | | | | | | | | | | | | 16:00 | | | | | | | | | | | | | | | | | | | | | | | | |
| 978 | MW-13 | | | | | | | | | | | | | | 16:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| 979 | MW-1 | | | | | | | | | | | | | | 17:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| 980 | MW-38 | | | | | | | | | | | | | | 18:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| 981 | MW-5 | | | | | | | | | | | | | | 19:00 | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | Lova | 2-28 | 8:00 | [signature] | TA | 2.28.11 | 9:00 | INST ___ OBS 2.1 °C COR 2.1 °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-in-Review ___

**REMARKS:**

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Carry in

ORIGINAL COPY

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 | Lubbock, Texas 79424 | 800•378•1296 | 806•794•1296 | FAX 806•794•1298
200 East Sunset Road, Suite E | El Paso, Texas 79922 | 888•588•3443 | 915•585•3443 | FAX 915•585•4944
5002 Basin Street, Suite A1 | Midland, Texas 79703 | 432•689•6301 | FAX 432•689•6313
6015 Harris Parkway, Suite 110 | Ft. Worth, Texas 76132 | 817•201•5260
E-Mail: lab@traceanalysis.com

# Certifications

**WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025**

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: May 26, 2011

Work Order: 11052513

Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-07

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 267304 | MW-24 | water | 2011-05-24 | 07:00 | 2011-05-25 |
| 267305 | MW-27 | water | 2011-05-24 | 07:30 | 2011-05-25 |
| 267306 | MW-31 | water | 2011-05-24 | 08:00 | 2011-05-25 |
| 267307 | MW-33 | water | 2011-05-24 | 08:30 | 2011-05-25 |
| 267308 | MW-56 | water | 2011-05-24 | 09:00 | 2011-05-25 |
| 267309 | MW-15 | water | 2011-05-24 | 09:30 | 2011-05-25 |
| 267310 | MW-10 | water | 2011-05-24 | 10:00 | 2011-05-25 |
| 267311 | MW-7 | water | 2011-05-24 | 10:30 | 2011-05-25 |
| 267312 | MW-32 | water | 2011-05-24 | 11:00 | 2011-05-25 |
| 267313 | MW-37 | water | 2011-05-24 | 11:30 | 2011-05-25 |
| 267314 | MW-8 | water | 2011-05-24 | 12:00 | 2011-05-25 |
| 267315 | MW-28 | water | 2011-05-24 | 12:30 | 2011-05-25 |
| 267316 | MW-3 | water | 2011-05-24 | 13:00 | 2011-05-25 |
| 267317 | MW-23 | water | 2011-05-24 | 13:30 | 2011-05-25 |
| 267318 | MW-16 | water | 2011-05-24 | 14:00 | 2011-05-25 |
| 267319 | MW-4 | water | 2011-05-24 | 14:30 | 2011-05-25 |
| 267320 | MW-6 | water | 2011-05-24 | 15:00 | 2011-05-25 |
| 267321 | MW-13 | water | 2011-05-24 | 15:30 | 2011-05-25 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 267322 | MW-2 | water | 2011-05-24 | 16:00 | 2011-05-25 |
| 267323 | MW-38 | water | 2011-05-24 | 16:30 | 2011-05-25 |
| 267324 | MW-1 | water | 2011-05-24 | 17:15 | 2011-05-25 |
| 267325 | MW-5 | water | 2011-05-24 | 18:00 | 2011-05-25 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

# Report Contents

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2011-05-25 and assigned to work order 11052513. Samples for work order 11052513 were received intact without headspace and at a temperature of 16.1 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 69317 | 2011-05-25 at 10:27 | 81631 | 2011-05-25 at 10:27 |
| BTEX | S 8021B | 69319 | 2011-05-25 at 12:15 | 81632 | 2011-05-26 at 01:01 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11052513 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

Samples on ice.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 267304 - MW-24**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0937 | mg/L | 1 | 0.100 | 94 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0887 | mg/L | 1 | 0.100 | 89 | 51.1 - 128 |

**Sample: 267305 - MW-27**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0966 | mg/L | 1 | 0.100 | 97 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0907 | mg/L | 1 | 0.100 | 91 | 51.1 - 128 |

**Sample: 267306 - MW-31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0923 | mg/L | 1 | 0.100 | 92 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0811 | mg/L | 1 | 0.100 | 81 | 51.1 - 128 |

**Sample: 267307 - MW-33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0946 | mg/L | 1 | 0.100 | 95 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0886 | mg/L | 1 | 0.100 | 89 | 51.1 - 128 |

**Sample: 267308 - MW-56**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0944 | mg/L | 1 | 0.100 | 94 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0875 | mg/L | 1 | 0.100 | 88 | 51.1 - 128 |

**Sample: 267309 - MW-15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0954 | mg/L | 1 | 0.100 | 95 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0873 | mg/L | 1 | 0.100 | 87 | 51.1 - 128 |

**Sample: 267310 - MW-10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0922 | mg/L | 1 | 0.100 | 92 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0859 | mg/L | 1 | 0.100 | 86 | 51.1 - 128 |

**Sample: 267311 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0945 | mg/L | 1 | 0.100 | 94 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0855 | mg/L | 1 | 0.100 | 86 | 51.1 - 128 |

**Sample: 267312 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0933 | mg/L | 1 | 0.100 | 93 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0854 | mg/L | 1 | 0.100 | 85 | 51.1 - 128 |

**Sample: 267313 - MW-37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0911 | mg/L | 1 | 0.100 | 91 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0839 | mg/L | 1 | 0.100 | 84 | 51.1 - 128 |

**Sample: 267314 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0896 | mg/L | 1 | 0.100 | 90 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0869 | mg/L | 1 | 0.100 | 87 | 51.1 - 128 |

**Sample: 267315 - MW-28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0855 | mg/L | 1 | 0.100 | 86 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0810 | mg/L | 1 | 0.100 | 81 | 51.1 - 128 |

**Sample: 267316 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0894 | mg/L | 1 | 0.100 | 89 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0826 | mg/L | 1 | 0.100 | 83 | 51.1 - 128 |

**Sample: 267317 - MW-23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0894 | mg/L | 1 | 0.100 | 89 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0816 | mg/L | 1 | 0.100 | 82 | 51.1 - 128 |

**Sample: 267318 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0882 | mg/L | 1 | 0.100 | 88 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0927 | mg/L | 1 | 0.100 | 93 | 51.1 - 128 |

**Sample: 267319 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0882 | mg/L | 1 | 0.100 | 88 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0826 | mg/L | 1 | 0.100 | 83 | 51.1 - 128 |

**Sample: 267320 - MW-6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0900 | mg/L | 1 | 0.100 | 90 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0819 | mg/L | 1 | 0.100 | 82 | 51.1 - 128 |

**Sample: 267321 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0889 | mg/L | 1 | 0.100 | 89 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0855 | mg/L | 1 | 0.100 | 86 | 51.1 - 128 |

**Sample: 267322 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0907 | mg/L | 1 | 0.100 | 91 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.100 | mg/L | 1 | 0.100 | 100 | 51.1 - 128 |

**Sample: 267323 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | **0.00960** | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0870 | mg/L | 1 | 0.100 | 87 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0816 | mg/L | 1 | 0.100 | 82 | 51.1 - 128 |

**Sample: 267324 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81632 | Date Analyzed: | 2011-05-26 | Analyzed By: | ME |
| Prep Batch: | 69319 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | **0.0215** | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | **0.00830** | mg/L | 1 | 0.00100 |
| Xylene | | 1 | **0.0205** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0870 | mg/L | 1 | 0.100 | 87 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0850 | mg/L | 1 | 0.100 | 85 | 51.1 - 128 |

**Sample: 267325 - MW-5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81632 | Date Analyzed: | 2011-05-26 | Analyzed By: | ME |
| Prep Batch: | 69319 | Sample Preparation: | 2011-05-25 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | **0.0283** | mg/L | 1 | 0.00100 |
| Toluene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | **0.00660** | mg/L | 1 | 0.00100 |
| Xylene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0916 | mg/L | 1 | 0.100 | 92 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.102 | mg/L | 1 | 0.100 | 102 | 51.1 - 128 |

# Method Blanks

**Method Blank (1)** QC Batch: 81631

QC Batch: 81631
Prep Batch: 69317

Date Analyzed: 2011-05-25
QC Preparation: 2011-05-25

Analyzed By: ME
Prepared By: AG

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000400 | mg/L | 0.001 |
| Toluene | | 1 | <0.000300 | mg/L | 0.001 |
| Ethylbenzene | | 1 | <0.000300 | mg/L | 0.001 |
| Xylene | | 1 | <0.000333 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0953 | mg/L | 1 | 0.100 | 95 | 70.2 - 118 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0895 | mg/L | 1 | 0.100 | 90 | 47.3 - 116 |

**Method Blank (1)** QC Batch: 81632

QC Batch: 81632
Prep Batch: 69319

Date Analyzed: 2011-05-26
QC Preparation: 2011-05-25

Analyzed By: ME
Prepared By: AG

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000400 | mg/L | 0.001 |
| Toluene | | 1 | <0.000300 | mg/L | 0.001 |
| Ethylbenzene | | 1 | <0.000300 | mg/L | 0.001 |
| Xylene | | 1 | <0.000333 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0865 | mg/L | 1 | 0.100 | 86 | 70.2 - 118 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0791 | mg/L | 1 | 0.100 | 79 | 47.3 - 116 |

# Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 81631
Prep Batch: 69317

Date Analyzed: 2011-05-25
QC Preparation: 2011-05-25

Analyzed By: ME
Prepared By: AG

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.109 | mg/L | 1 | 0.100 | <0.000400 | 109 | 76.8 - 110 |
| Toluene | | 1 | 0.114 | mg/L | 1 | 0.100 | <0.000300 | 114 | 81 - 118 |
| Ethylbenzene | | 1 | 0.0966 | mg/L | 1 | 0.100 | <0.000300 | 97 | 78.8 - 118 |
| Xylene | | 1 | 0.288 | mg/L | 1 | 0.300 | <0.000333 | 96 | 80.3 - 119 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.110 | mg/L | 1 | 0.100 | <0.000400 | 110 | 76.8 - 110 | 1 | 20 |
| Toluene | | 1 | 0.115 | mg/L | 1 | 0.100 | <0.000300 | 115 | 81 - 118 | 1 | 20 |
| Ethylbenzene | | 1 | 0.0972 | mg/L | 1 | 0.100 | <0.000300 | 97 | 78.8 - 118 | 1 | 20 |
| Xylene | | 1 | 0.291 | mg/L | 1 | 0.300 | <0.000333 | 97 | 80.3 - 119 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0923 | 0.0918 | mg/L | 1 | 0.100 | 92 | 92 | 66.6 - 114 |
| 4-Bromofluorobenzene (4-BFB) | 0.0941 | 0.0911 | mg/L | 1 | 0.100 | 94 | 91 | 68.2 - 124 |

### Laboratory Control Spike (LCS-1)

QC Batch: 81632
Prep Batch: 69319

Date Analyzed: 2011-05-26
QC Preparation: 2011-05-25

Analyzed By: ME
Prepared By: AG

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.105 | mg/L | 1 | 0.100 | <0.000400 | 105 | 76.8 - 110 |
| Toluene | | 1 | 0.110 | mg/L | 1 | 0.100 | <0.000300 | 110 | 81 - 118 |
| Ethylbenzene | | 1 | 0.0925 | mg/L | 1 | 0.100 | <0.000300 | 92 | 78.8 - 118 |
| Xylene | | 1 | 0.276 | mg/L | 1 | 0.300 | <0.000333 | 92 | 80.3 - 119 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amouut | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.102 | mg/L | 1 | 0.100 | <0.000400 | 102 | 76.8 - 110 | 3 | 20 |
| Toluene | | 1 | 0.106 | mg/L | 1 | 0.100 | <0.000300 | 106 | 81 - 118 | 4 | 20 |
| Ethylbenzene | | 1 | 0.0904 | mg/L | 1 | 0.100 | <0.000300 | 90 | 78.8 - 118 | 2 | 20 |
| Xylene | | 1 | 0.268 | mg/L | 1 | 0.300 | <0.000333 | 89 | 80.3 - 119 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0894 | 0.0918 | mg/L | 1 | 0.100 | 89 | 92 | 66.6 - 114 |
| 4-Bromofluorobenzene (4-BFB) | 0.0870 | 0.0856 | mg/L | 1 | 0.100 | 87 | 86 | 68.2 - 124 |

**Matrix Spike (MS-1)** Spiked Sample: 267323

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 81631 | Date Analyzed: | 2011-05-25 | Analyzed By: | ME |
| Prep Batch: | 69317 | QC Preparation: | 2011-05-25 | Prepared By: | AG |

| Param | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.103 | mg/L | 1 | 0.100 | 0.0096 | 93 | 77.9 - 114 |
| Toluene | | 1 | 0.103 | mg/L | 1 | 0.100 | <0.000300 | 103 | 78.3 - 111 |
| Ethylbenzene | | 1 | 0.0856 | mg/L | 1 | 0.100 | <0.000300 | 86 | 75.3 - 110 |
| Xylene | | 1 | 0.255 | mg/L | 1 | 0.300 | <0.000333 | 85 | 75.7 - 109 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.104 | mg/L | 1 | 0.100 | 0.0096 | 94 | 77.9 - 114 | 1 | 20 |
| Toluene | | 1 | 0.107 | mg/L | 1 | 0.100 | <0.000300 | 107 | 78.3 - 111 | 4 | 20 |
| Ethylbenzene | | 1 | 0.0864 | mg/L | 1 | 0.100 | <0.000300 | 86 | 75.3 - 110 | 1 | 20 |
| Xylene | | 1 | 0.261 | mg/L | 1 | 0.300 | <0.000333 | 87 | 75.7 - 109 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0855 | 0.0864 | mg/L | 1 | 0.1 | 86 | 86 | 68.3 - 107 |
| 4-Bromofluorobenzene (4-BFB) | 0.0851 | 0.0850 | mg/L | 1 | 0.1 | 85 | 85 | 60.1 - 135 |

**Matrix Spike (MS-1)** Spiked Sample: 267325

QC Batch: 81632
Prep Batch: 69319

Date Analyzed: 2011-05-26
QC Preparation: 2011-05-25

Analyzed By: ME
Prepared By: AG

| Param | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.122 | mg/L | 1 | 0.100 | 0.0283 | 94 | 77.9 - 114 |
| Toluene | | 1 | 0.105 | mg/L | 1 | 0.100 | <0.000300 | 105 | 78.3 - 111 |
| Ethylbenzene | | 1 | 0.0894 | mg/L | 1 | 0.100 | 0.0066 | 83 | 75.3 - 110 |
| Xylene | | 1 | 0.263 | mg/L | 1 | 0.300 | <0.000333 | 88 | 75.7 - 109 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.125 | mg/L | 1 | 0.100 | 0.0283 | 97 | 77.9 - 114 | 2 | 20 |
| Toluene | | 1 | 0.110 | mg/L | 1 | 0.100 | <0.000300 | 110 | 78.3 - 111 | 5 | 20 |
| Ethylbenzene | | 1 | 0.0946 | mg/L | 1 | 0.100 | 0.0066 | 88 | 75.3 - 110 | 6 | 20 |
| Xylene | | 1 | 0.278 | mg/L | 1 | 0.300 | <0.000333 | 93 | 75.7 - 109 | 6 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0950 | 0.0923 | mg/L | 1 | 0.1 | 95 | 92 | 68.3 - 107 |
| 4-Bromofluorobenzene (4-BFB) | 0.110 | 0.104 | mg/L | 1 | 0.1 | 110 | 104 | 60.1 - 135 |

# Calibration Standards

### Standard (CCV-1)

QC Batch: 81631 Date Analyzed: 2011-05-25 Analyzed By: ME

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.108 | 108 | 80 - 120 | 2011-05-25 |
| Toluene | | 1 | mg/L | 0.100 | 0.111 | 111 | 80 - 120 | 2011-05-25 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0918 | 92 | 80 - 120 | 2011-05-25 |
| Xylene | | 1 | mg/L | 0.300 | 0.274 | 91 | 80 - 120 | 2011-05-25 |

### Standard (CCV-2)

QC Batch: 81631 Date Analyzed: 2011-05-25 Analyzed By: ME

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.102 | 102 | 80 - 120 | 2011-05-25 |
| Toluene | | 1 | mg/L | 0.100 | 0.107 | 107 | 80 - 120 | 2011-05-25 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0900 | 90 | 80 - 120 | 2011-05-25 |
| Xylene | | 1 | mg/L | 0.300 | 0.268 | 89 | 80 - 120 | 2011-05-25 |

### Standard (CCV-3)

QC Batch: 81631 Date Analyzed: 2011-05-25 Analyzed By: ME

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.106 | 106 | 80 - 120 | 2011-05-25 |
| Toluene | | 1 | mg/L | 0.100 | 0.110 | 110 | 80 - 120 | 2011-05-25 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0926 | 93 | 80 - 120 | 2011-05-25 |
| Xylene | | 1 | mg/L | 0.300 | 0.277 | 92 | 80 - 120 | 2011-05-25 |

**Standard (CCV-1)**

QC Batch: 81632 Date Analyzed: 2011-05-26 Analyzed By: ME

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.108 | 108 | 80 - 120 | 2011-05-26 |
| Toluene | | 1 | mg/L | 0.100 | 0.114 | 114 | 80 - 120 | 2011-05-26 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0959 | 96 | 80 - 120 | 2011-05-26 |
| Xylene | | 1 | mg/L | 0.300 | 0.286 | 95 | 80 - 120 | 2011-05-26 |

**Standard (CCV-2)**

QC Batch: 81632 Date Analyzed: 2011-05-26 Analyzed By: ME

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.104 | 104 | 80 - 120 | 2011-05-26 |
| Toluene | | 1 | mg/L | 0.100 | 0.108 | 108 | 80 - 120 | 2011-05-26 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0894 | 89 | 80 - 120 | 2011-05-26 |
| Xylene | | 1 | mg/L | 0.300 | 0.270 | 90 | 80 - 120 | 2011-05-26 |

# Appendix

## Laboratory Certifications

| C | Certifying Authority | Certification Number | Laboratory Location |
|---|---|---|---|
| - | NCTRCA | WFWB384444Y0909 | TraceAnalysis |
| - | DBE | VN 20657 | TraceAnalysis |
| - | HUB | 1752439743100-86536 | TraceAnalysis |
| - | WBE | 237019 | TraceAnalysis |
| 1 | NELAP | T104704392-10-TX | Midland |

## Standard Flags

| F | Description |
|---|---|
| B | Analyte detected in the corresponding method blank above the method detection limit |
| H | Analyzed out of hold time |
| J | Estimated concentration |
| Jb | The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL. |
| Je | Estimated concentration exceeding calibration range. |
| Qc | Calibration check outside of laboratory limits. |
| Qr | RPD outside of laboratory limits |
| Qs | Spike recovery outside of laboratory limits. |
| Qsr | Surrogate recovery outside of laboratory limits. |
| U | The analyte is not detected above the SDL |

## Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 11052513



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Nova
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce Midland TX 79703
Fax #: 432-520-7701
Contact Person: Ron D.
E-mail:
Invoice to:
(If different from above)
Project #: TWM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): New Mexico
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, SO4, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 267304 | mw-24 | 3 | voa | X | | | | X | | | | X | | 5-24 | 7:00 | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 305 | mw-27 | | | | | | | | | | | | | | 7:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 306 | mw-31 | | | | | | | | | | | | | | 8:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 307 | mw-33 | | | | | | | | | | | | | | 8:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 308 | mw-56 | | | | | | | | | | | | | | 9:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 309 | mw-15 | | | | | | | | | | | | | | 9:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 310 | mw-10 | | | | | | | | | | | | | | 10:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 311 | mw-7 | | | | | | | | | | | | | | 10:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 312 | mw-32 | | | | | | | | | | | | | | 11:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 313 | mw-37 | | | | | | | | | | | | | | 11:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 314 | mw-8 | | | | | | | | | | | | | | 12:00 | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST / OBS / COR |
|---|---|---|---|---|---|---|---|---|
| [signature] | Nova | 5-25 | 8:55 | [signature] | T/A | 5/25/11 | 8:55 | INST ___ OBS 16.1°C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |

**LAB USE ONLY**
Intact Y N
Headspace Y N NA
Log-in-Review ___

REMARKS:
* All tests - Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Carry

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

LAB Order ID # 11052513



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: DDCI
Address: (Street, City, Zip) 2057 Commerce Midland TX 79703
Contact Person: Ron R.
Phone #: 432-520-7720
Fax #: 432-520-7701
E-mail:
Invoice to: (If different from above)
Project #: TNM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): New Mexico
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 267315 | mw-28 | 3 | 40ml | X | | | | X | | | | X | | 5-24 | 12:30 | | X | | | | | | | | | | | | | | | | | | | | |
| 316 | mw-3 | | | | | | | | | | | | | | 13:00 | | | | | | | | | | | | | | | | | | | | | | |
| 317 | mw-23 | | | | | | | | | | | | | | 13:30 | | | | | | | | | | | | | | | | | | | | | | |
| 318 | mw-16 | | | | | | | | | | | | | | 14:00 | | | | | | | | | | | | | | | | | | | | | | |
| 319 | mw-4 | | | | | | | | | | | | | | 14:30 | | | | | | | | | | | | | | | | | | | | | | |
| 320 | mw-6 | | | | | | | | | | | | | | 15:00 | | | | | | | | | | | | | | | | | | | | | | |
| 321 | mw-13 | | | | | | | | | | | | | | 15:30 | | | | | | | | | | | | | | | | | | | | | | |
| 322 | mw-2 | | | | | | | | | | | | | | 16:00 | | | | | | | | | | | | | | | | | | | | | | |
| 323 | mw-38 | | | | | | | | | | | | | | 16:30 | | | | | | | | | | | | | | | | | | | | | | |
| 324 | mw-1 | | | | | | | | | | | | | | 17:15 | | | | | | | | | | | | | | | | | | | | | | |
| 325 | mw-5 | | | | | | | | | | | | | | 18:00 | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | DDCI | 5-25 | 6:50 | [signature] | T/A | 5/25/11 | 8:55 | INST 16.1°C OBS ___°C COR ___°C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___°C OBS ___°C COR ___°C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___°C OBS ___°C COR ___°C |

**LAB USE ONLY**
Intact: Y N
Headspace: Y / N NA
Log-in-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Carry

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

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TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

# Certifications

**WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025**

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: September 2, 2011

Work Order: 11082603

Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-07

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 275632 | MW-56 | water | 2011-08-24 | 10:45 | 2011-08-26 |
| 275633 | MW-31 | water | 2011-08-24 | 11:30 | 2011-08-26 |
| 275634 | MW-33 | water | 2011-08-24 | 12:15 | 2011-08-26 |
| 275635 | MW-15 | water | 2011-08-24 | 13:00 | 2011-08-26 |
| 275636 | MW-10 | water | 2011-08-24 | 13:45 | 2011-08-26 |
| 275637 | MW-7 | water | 2011-08-24 | 14:30 | 2011-08-26 |
| 275638 | MW-32 | water | 2011-08-24 | 15:15 | 2011-08-26 |
| 275639 | MW-37 | water | 2011-08-24 | 16:00 | 2011-08-26 |
| 275640 | MW-8 | water | 2011-08-24 | 16:45 | 2011-08-26 |
| 275641 | MW-28 | water | 2011-08-24 | 17:30 | 2011-08-26 |
| 275642 | MW-3 | water | 2011-08-25 | 10:00 | 2011-08-26 |
| 275643 | MW-23 | water | 2011-08-25 | 10:45 | 2011-08-26 |
| 275644 | MW-16 | water | 2011-08-25 | 11:45 | 2011-08-26 |
| 275645 | MW-4 | water | 2011-08-25 | 12:30 | 2011-08-26 |
| 275646 | MW-6 | water | 2011-08-25 | 13:15 | 2011-08-26 |
| 275647 | MW-13 | water | 2011-08-25 | 14:00 | 2011-08-26 |
| 275648 | MW-2 | water | 2011-08-25 | 15:00 | 2011-08-26 |
| 275649 | MW-38 | water | 2011-08-25 | 15:45 | 2011-08-26 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 275650 | MW-1 | water | 2011-08-25 | 16:45 | 2011-08-26 |
| 275651 | MW-5 | water | 2011-08-25 | 17:45 | 2011-08-26 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

# Report Contents

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2011-08-26 and assigned to work order 11082603. Samples for work order 11082603 were received intact without headspace and at a temperature of 2.8 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 71576 | 2011-08-26 at 13:31 | 84288 | 2011-08-26 at 23:45 |
| BTEX | S 8021B | 71714 | 2011-09-01 at 08:30 | 84450 | 2011-09-01 at 15:51 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11082603 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 275632 - MW-56**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.110 | mg/L | 1 | 0.100 | 110 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.101 | mg/L | 1 | 0.100 | 101 | 67.5 - 140.8 |

**Sample: 275633 - MW-31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.110 | mg/L | 1 | 0.100 | 110 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.101 | mg/L | 1 | 0.100 | 101 | 67.5 - 140.8 |

**Sample: 275634 - MW-33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.108 | mg/L | 1 | 0.100 | 108 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0948 | mg/L | 1 | 0.100 | 95 | 67.5 - 140.8 |

**Sample: 275635 - MW-15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0989 | mg/L | 1 | 0.100 | 99 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0893 | mg/L | 1 | 0.100 | 89 | 67.5 - 140.8 |

**Sample: 275636 - MW-10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.102 | mg/L | 1 | 0.100 | 102 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0937 | mg/L | 1 | 0.100 | 94 | 67.5 - 140.8 |

**Sample: 275637 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.101 | mg/L | 1 | 0.100 | 101 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0898 | mg/L | 1 | 0.100 | 90 | 67.5 - 140.8 |

**Sample: 275638 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.106 | mg/L | 1 | 0.100 | 106 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0976 | mg/L | 1 | 0.100 | 98 | 67.5 - 140.8 |

**Sample: 275639 - MW-37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.100 | mg/L | 1 | 0.100 | 100 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0926 | mg/L | 1 | 0.100 | 93 | 67.5 - 140.8 |

**Sample: 275640 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.107 | mg/L | 1 | 0.100 | 107 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0985 | mg/L | 1 | 0.100 | 98 | 67.5 - 140.8 |

**Sample: 275641 - MW-28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.108 | mg/L | 1 | 0.100 | 108 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0992 | mg/L | 1 | 0.100 | 99 | 67.5 - 140.8 |

**Sample: 275642 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.108 | mg/L | 1 | 0.100 | 108 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0968 | mg/L | 1 | 0.100 | 97 | 67.5 - 140.8 |

**Sample: 275643 - MW-23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.111 | mg/L | 1 | 0.100 | 111 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0984 | mg/L | 1 | 0.100 | 98 | 67.5 - 140.8 |

**Sample: 275644 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Resnlt | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.107 | mg/L | 1 | 0.100 | 107 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.108 | mg/L | 1 | 0.100 | 108 | 67.5 - 140.8 |

**Sample: 275645 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.106 | mg/L | 1 | 0.100 | 106 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0950 | mg/L | 1 | 0.100 | 95 | 67.5 - 140.8 |

**Sample: 275646 - MW-6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.104 | mg/L | 1 | 0.100 | 104 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0929 | mg/L | 1 | 0.100 | 93 | 67.5 - 140.8 |

**Sample: 275647 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0958 | mg/L | 1 | 0.100 | 96 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0889 | mg/L | 1 | 0.100 | 89 | 67.5 - 140.8 |

**Sample: 275648 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | **0.00680** | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.106 | mg/L | 1 | 0.100 | 106 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.110 | mg/L | 1 | 0.100 | 110 | 67.5 - 140.8 |

**Sample: 275649 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | **0.0129** | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0996 | mg/L | 1 | 0.100 | 100 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.101 | mg/L | 1 | 0.100 | 101 | 67.5 - 140.8 |

**Sample: 275650 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84288 | Date Analyzed: | 2011-08-26 | Analyzed By: | ME |
| Prep Batch: | 71576 | Sample Preparation: | 2011-08-26 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | **0.0185** | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | 1 | **0.0103** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.105 | mg/L | 1 | 0.100 | 105 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.104 | mg/L | 1 | 0.100 | 104 | 67.5 - 140.8 |

**Sample: 275651 - MW-5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 84450 | Date Analyzed: | 2011-09-01 | Analyzed By: | ME |
| Prep Batch: | 71714 | Sample Preparation: | 2011-09-01 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | **0.0513** | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | Qs,U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.110 | mg/L | 1 | 0.100 | 110 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.127 | mg/L | 1 | 0.100 | 127 | 67.5 - 140.8 |

# Method Blanks

**Method Blank (1)** QC Batch: 84288

QC Batch: 84288 | Date Analyzed: 2011-08-26 | Analyzed By: ME
Prep Batch: 71576 | QC Preparation: 2011-08-26 | Prepared By: ME

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000400 | mg/L | 0.001 |
| Toluene | | 1 | <0.000300 | mg/L | 0.001 |
| Ethylbenzene | | 1 | <0.000300 | mg/L | 0.001 |
| Xylene | | 1 | <0.000333 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0937 | mg/L | 1 | 0.100 | 94 | 61.1 - 118.4 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0864 | mg/L | 1 | 0.100 | 86 | 45.9 - 126.4 |

**Method Blank (1)** QC Batch: 84450

QC Batch: 84450 | Date Analyzed: 2011-09-01 | Analyzed By: ME
Prep Batch: 71714 | QC Preparation: 2011-09-01 | Prepared By: ME

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000400 | mg/L | 0.001 |
| Toluene | | 1 | <0.000300 | mg/L | 0.001 |
| Ethylbenzene | | 1 | <0.000300 | mg/L | 0.001 |
| Xylene | | 1 | <0.000333 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0889 | mg/L | 1 | 0.100 | 89 | 61.1 - 118.4 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0789 | mg/L | 1 | 0.100 | 79 | 45.9 - 126.4 |

# Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 84288
Prep Batch: 71576

Date Analyzed: 2011-08-26
QC Preparation: 2011-08-26

Analyzed By: ME
Prepared By: ME

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0940 | mg/L | 1 | 0.100 | <0.000400 | 94 | 76.8 - 110.3 |
| Toluene | | 1 | 0.100 | mg/L | 1 | 0.100 | <0.000300 | 100 | 90.9 - 122.2 |
| Ethylbenzene | | 1 | 0.102 | mg/L | 1 | 0.100 | <0.000300 | 102 | 72.7 - 120.2 |
| Xylene | | 1 | 0.306 | mg/L | 1 | 0.300 | <0.000333 | 102 | 72.1 - 121.5 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0903 | mg/L | 1 | 0.100 | <0.000400 | 90 | 76.8 - 110.3 | 4 | 20 |
| Toluene | | 1 | 0.0974 | mg/L | 1 | 0.100 | <0.000300 | 97 | 90.9 - 122.2 | 3 | 20 |
| Ethylbenzene | | 1 | 0.0985 | mg/L | 1 | 0.100 | <0.000300 | 98 | 72.7 - 120.2 | 4 | 20 |
| Xylene | | 1 | 0.296 | mg/L | 1 | 0.300 | <0.000333 | 99 | 72.1 - 121.5 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.104 | 0.0992 | mg/L | 1 | 0.100 | 104 | 99 | 61.9 - 119.2 |
| 4-Bromofluorobenzene (4-BFB) | 0.101 | 0.0968 | mg/L | 1 | 0.100 | 101 | 97 | 56.4 - 127.9 |

### Laboratory Control Spike (LCS-1)

QC Batch: 84450
Prep Batch: 71714

Date Analyzed: 2011-09-01
QC Preparation: 2011-09-01

Analyzed By: ME
Prepared By: ME

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0903 | mg/L | 1 | 0.100 | <0.000400 | 90 | 76.8 - 110.3 |
| Toluene | | 1 | 0.0979 | mg/L | 1 | 0.100 | <0.000300 | 98 | 90.9 - 122.2 |
| Ethylbenzene | | 1 | 0.111 | mg/L | 1 | 0.100 | <0.000300 | 111 | 72.7 - 120.2 |
| Xylene | | 1 | 0.336 | mg/L | 1 | 0.300 | <0.000333 | 112 | 72.1 - 121.5 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0954 | mg/L | 1 | 0.100 | <0.000400 | 95 | 76.8 - 110.3 | 6 | 20 |
| Toluene | | 1 | 0.105 | mg/L | 1 | 0.100 | <0.000300 | 105 | 90.9 - 122.2 | 7 | 20 |
| Ethylbenzene | | 1 | 0.120 | mg/L | 1 | 0.100 | <0.000300 | 120 | 72.7 - 120.2 | 8 | 20 |
| Xylene | | 1 | 0.363 | mg/L | 1 | 0.300 | <0.000333 | 121 | 72.1 - 121.5 | 8 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0964 | 0.0921 | mg/L | 1 | 0.100 | 96 | 92 | 61.9 - 119.2 |
| 4-Bromofluorobenzene (4-BFB) | 0.103 | 0.0985 | mg/L | 1 | 0.100 | 103 | 98 | 56.4 - 127.9 |

**Matrix Spike (MS-1)** Spiked Sample: 275650

QC Batch: 84288
Prep Batch: 71576

Date Analyzed: 2011-08-26
QC Preparation: 2011-08-26

Analyzed By: ME
Prepared By: ME

| Param | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.109 | mg/L | 1 | 0.100 | 0.0185 | 90 | 66.9 - 128.2 |
| Toluene | | 1 | 0.103 | mg/L | 1 | 0.100 | <0.000300 | 103 | 81.6 - 122.9 |
| Ethylbenzene | | 1 | 0.105 | mg/L | 1 | 0.100 | <0.000300 | 105 | 62.7 - 117.9 |
| Xylene | | 1 | 0.315 | mg/L | 1 | 0.300 | 0.0103 | 102 | 62.9 - 118.2 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.110 | mg/L | 1 | 0.100 | 0.0185 | 92 | 66.9 - 128.2 | 1 | 20 |
| Toluene | | 1 | 0.103 | mg/L | 1 | 0.100 | <0.000300 | 103 | 81.6 - 122.9 | 0 | 20 |
| Ethylbenzene | | 1 | 0.104 | mg/L | 1 | 0.100 | <0.000300 | 104 | 62.7 - 117.9 | 1 | 20 |
| Xylene | | 1 | 0.315 | mg/L | 1 | 0.300 | 0.0103 | 102 | 62.9 - 118.2 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.111 | 0.109 | mg/L | 1 | 0.1 | 111 | 109 | 58.6 - 119.7 |
| 4-Bromofluorobenzene (4-BFB) | 0.116 | 0.114 | mg/L | 1 | 0.1 | 116 | 114 | 52.2 - 135.8 |

**Matrix Spike (MS-1)** Spiked Sample: 275980

QC Batch: 84450
Prep Batch: 71714

Date Analyzed: 2011-09-01
QC Preparation: 2011-09-01

Analyzed By: ME
Prepared By: ME

| Param | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0945 | mg/L | 1 | 0.100 | <0.000400 | 94 | 66.9 - 128.2 |
| Toluene | | 1 | 0.104 | mg/L | 1 | 0.100 | <0.000300 | 104 | 81.6 - 122.9 |
| Ethylbenzene | | 1 | 0.117 | mg/L | 1 | 0.100 | <0.000300 | 117 | 62.7 - 117.9 |
| Xylene | Qs | 1 | 0.356 | mg/L | 1 | 0.300 | <0.000333 | 119 | 62.9 - 118.2 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0826 | mg/L | 1 | 0.100 | <0.000400 | 83 | 66.9 - 128.2 | 13 | 20 |
| Toluene | | 1 | 0.0921 | mg/L | 1 | 0.100 | <0.000300 | 92 | 81.6 - 122.9 | 12 | 20 |
| Ethylbenzene | | 1 | 0.101 | mg/L | 1 | 0.100 | <0.000300 | 101 | 62.7 - 117.9 | 15 | 20 |
| Xylene | | 1 | 0.311 | mg/L | 1 | 0.300 | <0.000333 | 104 | 62.9 - 118.2 | 14 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.104 | 0.104 | mg/L | 1 | 0.1 | 104 | 104 | 58.6 - 119.7 |
| 4-Bromofluorobenzene (4-BFB) | 0.105 | 0.103 | mg/L | 1 | 0.1 | 105 | 103 | 52.2 - 135.8 |

# Calibration Standards

### Standard (CCV-1)

QC Batch: 84288 Date Analyzed: 2011-08-26 Analyzed By: ME

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0948 | 95 | 80 - 120 | 2011-08-26 |
| Toluene | | 1 | mg/L | 0.100 | 0.101 | 101 | 80 - 120 | 2011-08-26 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.102 | 102 | 80 - 120 | 2011-08-26 |
| Xylene | | 1 | mg/L | 0.300 | 0.306 | 102 | 80 - 120 | 2011-08-26 |

### Standard (CCV-2)

QC Batch: 84288 Date Analyzed: 2011-08-26 Analyzed By: ME

| Param | Flag | Cert | Units | CCVs Trne Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0956 | 96 | 80 - 120 | 2011-08-26 |
| Toluene | | 1 | mg/L | 0.100 | 0.102 | 102 | 80 - 120 | 2011-08-26 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.103 | 103 | 80 - 120 | 2011-08-26 |
| Xylene | | 1 | mg/L | 0.300 | 0.309 | 103 | 80 - 120 | 2011-08-26 |

### Standard (CCV-3)

QC Batch: 84288 Date Analyzed: 2011-08-26 Analyzed By: ME

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0925 | 92 | 80 - 120 | 2011-08-26 |
| Toluene | | 1 | mg/L | 0.100 | 0.0990 | 99 | 80 - 120 | 2011-08-26 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0985 | 98 | 80 - 120 | 2011-08-26 |
| Xylene | | 1 | mg/L | 0.300 | 0.297 | 99 | 80 - 120 | 2011-08-26 |

**Standard (CCV-1)**

QC Batch: 84450 Date Analyzed: 2011-09-01 Analyzed By: ME

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.102 | 102 | 80 - 120 | 2011-09-01 |
| Toluene | | 1 | mg/L | 0.100 | 0.101 | 101 | 80 - 120 | 2011-09-01 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0979 | 98 | 80 - 120 | 2011-09-01 |
| Xylene | | 1 | mg/L | 0.300 | 0.296 | 99 | 80 - 120 | 2011-09-01 |

**Standard (CCV-2)**

QC Batch: 84450 Date Analyzed: 2011-09-01 Analyzed By: ME

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0901 | 90 | 80 - 120 | 2011-09-01 |
| Toluene | | 1 | mg/L | 0.100 | 0.0983 | 98 | 80 - 120 | 2011-09-01 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.109 | 109 | 80 - 120 | 2011-09-01 |
| Xylene | | 1 | mg/L | 0.300 | 0.332 | 111 | 80 - 120 | 2011-09-01 |

# Appendix

## Laboratory Certifications

| C | Certifying Authority | Certification Number | Laboratory Location |
|---|---|---|---|
| - | NCTRCA | WFWB384444Y0909 | TraceAnalysis |
| - | DBE | VN 20657 | TraceAnalysis |
| - | HUB | 1752439743100-86536 | TraceAnalysis |
| - | WBE | 237019 | TraceAnalysis |
| 1 | NELAP | T104704392-10-TX | Midland |

## Standard Flags

| F | Description |
|---|---|
| B | Analyte detected in the corresponding method blank above the method detection limit |
| H | Analyzed out of hold time |
| J | Estimated concentration |
| Jb | The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL. |
| Je | Estimated concentration exceeding calibration range. |
| Qc | Calibration check outside of laboratory limits. |
| Qr | RPD outside of laboratory limits |
| Qs | Spike recovery outside of laboratory limits. |
| Qsr | Surrogate recovery outside of laboratory limits. |
| U | The analyte is not detected above the SDL |

## Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 11082603



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Nova
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce Midland TX 79703
Fax #: 432-520-7701
Contact Person: Ron R.
E-mail:
Invoice to:
(If different from above)
Project #: TNM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): New Mexico
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, SO4, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 276632 | MW-56 | 3 | voa | X | | | | X | | | | X | | 8-24 | 10:45 | | X | | | | | | | | | | | | | | | | | | | | | | |
| 633 | MW-31 | | | | | | | | | | | | | | 11:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| 634 | MW-33 | | | | | | | | | | | | | | 12:15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 635 | MW-15 | | | | | | | | | | | | | | 13:00 | | | | | | | | | | | | | | | | | | | | | | | | |
| 636 | MW-10 | | | | | | | | | | | | | | 13:45 | | | | | | | | | | | | | | | | | | | | | | | | |
| 637 | MW-7 | | | | | | | | | | | | | | 14:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| 638 | MW-32 | | | | | | | | | | | | | | 15:15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 639 | MW-37 | | | | | | | | | | | | | | 16:00 | | | | | | | | | | | | | | | | | | | | | | | | |
| 640 | MW-8 | | | | | | | | | | | | | | 16:45 | | | | | | | | | | | | | | | | | | | | | | | | |
| 641 | MW-28 | | | | | | | | | | | | | | 17:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| 642 | MW-3 | | | | | | | | | | | | | 8-25 | 10:00 | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| | Nova | 8-26 | 9:05 | | T/A | 8/26/1 | 9:05 | INST OBS 2.8 °C COR °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST OBS °C COR °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST OBS °C COR °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N NA
Log-In-Review

REMARKS:
*All tests Midland

- Dry Weight Basis Required
- TRRP Report Required
- Check If Special Reporting Limits Are Needed

Carrier # Lang

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

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LAB Order ID # 11082603



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce Midland TX 79703
Fax #: 432-520-7701
Contact Person: Ron R.
E-mail:
Invoice to:
(If different from above)
Project #: TWM-LF-2000-7
Project Name: Bob Durham
Project Location (including state): New Mexico
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27643 | MW-23 | 3 | VOCL | X | | | | X | | | | X | | 8-25 | 10:45 | | X | | | | | | | | | | | | | | | | | | | | |
| 644 | MW-16 | | | | | | | | | | | | | | 11:45 | | | | | | | | | | | | | | | | | | | | | | |
| 645 | MW-4 | | | | | | | | | | | | | | 12:30 | | | | | | | | | | | | | | | | | | | | | | |
| 646 | MW-6 | | | | | | | | | | | | | | 13:15 | | | | | | | | | | | | | | | | | | | | | | |
| 647 | MW-13 | | | | | | | | | | | | | | 14:00 | | | | | | | | | | | | | | | | | | | | | | |
| 648 | MW-2 | | | | | | | | | | | | | | 15:00 | | | | | | | | | | | | | | | | | | | | | | |
| 649 | MW-38 | | | | | | | | | | | | | | 15:45 | | | | | | | | | | | | | | | | | | | | | | |
| 650 | MW-1 | | | | | | | | | | | | | | 16:45 | | | | | | | | | | | | | | | | | | | | | | |
| 651 | MW-5 | | | | | | | | | | | | | | 17:45 | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| [signature] | NOVA | 8-26 | 9:05 | [signature] | T/A | 8/26/11 | 9:05 | INST OBS 2.8 °C COR °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST OBS °C COR °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST OBS °C COR °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-In-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Carry

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 | Lubbock, Texas 79424 | 800•378•1296 | 806•794•1296 | FAX 806•794•1298
200 East Sunset Road, Suite E | El Paso, Texas 79922 | 888•588•3443 | 915•585•3443 | FAX 915•585•4944
5002 Basin Street, Suite A1 | Midland, Texas 79703 | 432•689•6301 | FAX 432•689•6313
6015 Harris Parkway, Suite 110 | Ft. Worth, Texas 76132 | 817•201•5260
E-Mail: lab@traceanalysis.com

# Certifications

**WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025**

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: November 14, 2011

Work Order: 11110804

Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-07

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 281800 | MW 21 | water | 2011-11-03 | 12:00 | 2011-11-08 |
| 281801 | MW 24 | water | 2011-11-03 | 12:05 | 2011-11-08 |
| 281802 | MW 20 | water | 2011-11-03 | 12:15 | 2011-11-08 |
| 281803 | MW 4 | water | 2011-11-03 | 12:30 | 2011-11-08 |
| 281804 | MW 3 | water | 2011-11-03 | 13:00 | 2011-11-08 |
| 281805 | MW 6 | water | 2011-11-03 | 12:55 | 2011-11-08 |
| 281806 | MW 23 | water | 2011-11-03 | 12:25 | 2011-11-08 |
| 281807 | MW 5 | water | 2011-11-03 | 13:15 | 2011-11-08 |
| 281808 | MW 2 | water | 2011-11-03 | 13:05 | 2011-11-08 |
| 281809 | MW 7 | water | 2011-11-03 | 12:35 | 2011-11-08 |
| 281810 | MW 25 | water | 2011-11-03 | 12:45 | 2011-11-08 |
| 281811 | MW 8 | water | 2011-11-03 | 13:35 | 2011-11-08 |
| 281812 | MW 1 | water | 2011-11-03 | 13:40 | 2011-11-08 |
| 281813 | MW 16 | water | 2011-11-03 | 13:25 | 2011-11-08 |
| 281814 | MW 15 | water | 2011-11-04 | 11:30 | 2011-11-08 |
| 281815 | MW 11 | water | 2011-11-04 | 11:35 | 2011-11-08 |
| 281816 | MW 13 | water | 2011-11-04 | 11:15 | 2011-11-08 |
| 281817 | MW 10 | water | 2011-11-04 | 11:20 | 2011-11-08 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 281818 | MW 33 | water | 2011-11-04 | 11:10 | 2011-11-08 |
| 281819 | MW 32 | water | 2011-11-04 | 11:05 | 2011-11-08 |
| 281820 | MW 37 | water | 2011-11-04 | 10:50 | 2011-11-08 |
| 281821 | MW 38 | water | 2011-11-04 | 10:40 | 2011-11-08 |
| 281822 | MW 56 | water | 2011-11-04 | 10:45 | 2011-11-08 |
| 281823 | MW 31 | water | 2011-11-04 | 10:30 | 2011-11-08 |
| 281824 | MW 30 | water | 2011-11-04 | 10:25 | 2011-11-08 |
| 281825 | MW 28 | water | 2011-11-04 | 10:15 | 2011-11-08 |
| 281826 | MW 27 | water | 2011-11-07 | 14:20 | 2011-11-08 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

# Report Contents

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2011-11-08 and assigned to work order 11110804. Samples for work order 11110804 were received iutact without headspace and at a temperature of 9.9 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 73338 | 2011-11-11 at 14:00 | 86362 | 2011-11-11 at 23:02 |
| BTEX | S 8021B | 73338 | 2011-11-11 at 14:00 | 86365 | 2011-11-12 at 13:07 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11110804 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

Samples were received on ice.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 281800 - MW 21**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0951 | mg/L | 1 | 0.100 | 95 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0886 | mg/L | 1 | 0.100 | 89 | 67.5 - 140.8 |

**Sample: 281801 - MW 24**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0940 | mg/L | 1 | 0.100 | 94 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0891 | mg/L | 1 | 0.100 | 89 | 67.5 - 140.8 |

**Sample: 281802 - MW 20**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0961 | mg/L | 1 | 0.100 | 96 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0872 | mg/L | 1 | 0.100 | 87 | 67.5 - 140.8 |

**Sample: 281803 - MW 4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0948 | mg/L | 1 | 0.100 | 95 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0939 | mg/L | 1 | 0.100 | 94 | 67.5 - 140.8 |

**Sample: 281804 - MW 3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0929 | mg/L | 1 | 0.100 | 93 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0900 | mg/L | 1 | 0.100 | 90 | 67.5 - 140.8 |

**Sample: 281805 - MW 6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0951 | mg/L | 1 | 0.100 | 95 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0922 | mg/L | 1 | 0.100 | 92 | 67.5 - 140.8 |

**Sample: 281806 - MW 23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0943 | mg/L | 1 | 0.100 | 94 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0883 | mg/L | 1 | 0.100 | 88 | 67.5 - 140.8 |

**Sample: 281807 - MW 5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | | | 1 | **0.0150** | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0969 | mg/L | 1 | 0.100 | 97 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.106 | mg/L | 1 | 0.100 | 106 | 67.5 - 140.8 |

**Sample: 281808 - MW 2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | | | 1 | **0.00350** | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0979 | mg/L | 1 | 0.100 | 98 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.110 | mg/L | 1 | 0.100 | 110 | 67.5 - 140.8 |

**Sample: 281809 - MW 7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0969 | mg/L | 1 | 0.100 | 97 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0964 | mg/L | 1 | 0.100 | 96 | 67.5 - 140.8 |

**Sample: 281810 - MW 25**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0941 | mg/L | 1 | 0.100 | 94 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0875 | mg/L | 1 | 0.100 | 88 | 67.5 - 140.8 |

**Sample: 281811 - MW 8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilutiou | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0963 | mg/L | 1 | 0.100 | 96 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0905 | mg/L | 1 | 0.100 | 90 | 67.5 - 140.8 |

**Sample: 281812 - MW 1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | | | 1 | **0.00330** | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | | 1 | **0.00290** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0968 | mg/L | 1 | 0.100 | 97 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0979 | mg/L | 1 | 0.100 | 98 | 67.5 - 140.8 |

**Sample: 281813 - MW 16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Resnlt | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0988 | mg/L | 1 | 0.100 | 99 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.110 | mg/L | 1 | 0.100 | 110 | 67.5 - 140.8 |

**Sample: 281814 - MW 15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0950 | mg/L | 1 | 0.100 | 95 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0925 | mg/L | 1 | 0.100 | 92 | 67.5 - 140.8 |

**Sample: 281815 - MW 11**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0974 | mg/L | 1 | 0.100 | 97 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0901 | mg/L | 1 | 0.100 | 90 | 67.5 - 140.8 |

**Sample: 281816 - MW 13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | | | 1 | **0.00840** | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0984 | mg/L | 1 | 0.100 | 98 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.112 | mg/L | 1 | 0.100 | 112 | 67.5 - 140.8 |

**Sample: 281817 - MW 10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86365 | Date Analyzed: | 2011-11-12 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0943 | mg/L | 1 | 0.100 | 94 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0844 | mg/L | 1 | 0.100 | 84 | 67.5 - 140.8 |

**Sample: 281818 - MW 33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86365 | Date Analyzed: | 2011-11-12 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0948 | mg/L | 1 | 0.100 | 95 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0835 | mg/L | 1 | 0.100 | 84 | 67.5 - 140.8 |

**Sample: 281819 - MW 32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86365 | Date Analyzed: | 2011-11-12 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0948 | mg/L | 1 | 0.100 | 95 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0888 | mg/L | 1 | 0.100 | 89 | 67.5 - 140.8 |

**Sample: 281820 - MW 37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86365 | Date Analyzed: | 2011-11-12 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0952 | mg/L | 1 | 0.100 | 95 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0855 | mg/L | 1 | 0.100 | 86 | 67.5 - 140.8 |

**Sample: 281821 - MW 38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86365 | Date Analyzed: | 2011-11-12 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | | | 1 | **0.00370** | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | | 1 | **0.00330** | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0945 | mg/L | 1 | 0.100 | 94 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0926 | mg/L | 1 | 0.100 | 93 | 67.5 - 140.8 |

**Sample: 281822 - MW 56**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86365 | Date Analyzed: | 2011-11-12 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0945 | mg/L | 1 | 0.100 | 94 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0849 | mg/L | 1 | 0.100 | 85 | 67.5 - 140.8 |

**Sample: 281823 - MW 31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86365 | Date Analyzed: | 2011-11-12 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | | | 1 | **0.00160** | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0954 | mg/L | 1 | 0.100 | 95 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0858 | mg/L | 1 | 0.100 | 86 | 67.5 - 140.8 |

**Sample: 281824 - MW 30**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86365 | Date Analyzed: | 2011-11-12 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0945 | mg/L | 1 | 0.100 | 94 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0809 | mg/L | 1 | 0.100 | 81 | 67.5 - 140.8 |

**Sample: 281825 - MW 28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86365 | Date Analyzed: | 2011-11-12 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0952 | mg/L | 1 | 0.100 | 95 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0818 | mg/L | 1 | 0.100 | 82 | 67.5 - 140.8 |

**Sample: 281826 - MW 27**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86365 | Date Analyzed: | 2011-11-12 | Analyzed By: | AG |
| Prep Batch: | 73338 | Sample Preparation: | 2011-11-11 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0959 | mg/L | 1 | 0.100 | 96 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0815 | mg/L | 1 | 0.100 | 82 | 67.5 - 140.8 |

# Method Blanks

**Method Blank (1)** QC Batch: 86362

QC Batch: 86362 | Date Analyzed: 2011-11-11 | Analyzed By: AG
Prep Batch: 73338 | QC Preparation: 2011-11-11 | Prepared By: AG

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000400 | mg/L | 0.001 |
| Toluene | | 1 | <0.000300 | mg/L | 0.001 |
| Ethylbenzene | | 1 | <0.000300 | mg/L | 0.001 |
| Xylene | | 1 | <0.000333 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0958 | mg/L | 1 | 0.100 | 96 | 61.1 - 118.4 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0895 | mg/L | 1 | 0.100 | 90 | 45.9 - 126.4 |

**Method Blank (1)** QC Batch: 86365

QC Batch: 86365 | Date Analyzed: 2011-11-12 | Analyzed By: AG
Prep Batch: 73338 | QC Preparation: 2011-11-11 | Prepared By: AG

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000400 | mg/L | 0.001 |
| Toluene | | 1 | <0.000300 | mg/L | 0.001 |
| Ethylbenzene | | 1 | <0.000300 | mg/L | 0.001 |
| Xylene | | 1 | <0.000333 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0950 | mg/L | 1 | 0.100 | 95 | 61.1 - 118.4 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0873 | mg/L | 1 | 0.100 | 87 | 45.9 - 126.4 |

# Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 86362
Prep Batch: 73338

Date Analyzed: 2011-11-11
QC Preparation: 2011-11-11

Analyzed By: AG
Prepared By: AG

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.104 | mg/L | 1 | 0.100 | <0.000400 | 104 | 76.8 - 120.3 |
| Toluene | | 1 | 0.0995 | mg/L | 1 | 0.100 | <0.000300 | 100 | 80.9 - 122.2 |
| Ethylbenzene | | 1 | 0.0948 | mg/L | 1 | 0.100 | <0.000300 | 95 | 72.7 - 120.2 |
| Xylene | | 1 | 0.288 | mg/L | 1 | 0.300 | <0.000333 | 96 | 72.1 - 121.5 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.107 | mg/L | 1 | 0.100 | <0.000400 | 107 | 76.8 - 120.3 | 3 | 20 |
| Toluene | | 1 | 0.102 | mg/L | 1 | 0.100 | <0.000300 | 102 | 80.9 - 122.2 | 2 | 20 |
| Ethylbenzene | | 1 | 0.0967 | mg/L | 1 | 0.100 | <0.000300 | 97 | 72.7 - 120.2 | 2 | 20 |
| Xylene | | 1 | 0.294 | mg/L | 1 | 0.300 | <0.000333 | 98 | 72.1 - 121.5 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0949 | 0.0950 | mg/L | 1 | 0.100 | 95 | 95 | 61.9 - 119.2 |
| 4-Bromofluorobenzene (4-BFB) | 0.0990 | 0.0976 | mg/L | 1 | 0.100 | 99 | 98 | 56.4 - 127.9 |

### Laboratory Control Spike (LCS-1)

QC Batch: 86365
Prep Batch: 73338

Date Analyzed: 2011-11-12
QC Preparation: 2011-11-11

Analyzed By: AG
Prepared By: AG

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.103 | mg/L | 1 | 0.100 | <0.000400 | 103 | 76.8 - 120.3 |
| Toluene | | 1 | 0.0991 | mg/L | 1 | 0.100 | <0.000300 | 99 | 80.9 - 122.2 |
| Ethylbenzene | | 1 | 0.0965 | mg/L | 1 | 0.100 | <0.000300 | 96 | 72.7 - 120.2 |
| Xylene | | 1 | 0.291 | mg/L | 1 | 0.300 | <0.000333 | 97 | 72.1 - 121.5 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0988 | mg/L | 1 | 0.100 | <0.000400 | 99 | 76.8 - 120.3 | 4 | 20 |
| Toluene | | 1 | 0.0942 | mg/L | 1 | 0.100 | <0.000300 | 94 | 80.9 - 122.2 | 5 | 20 |
| Ethylbenzene | | 1 | 0.0909 | mg/L | 1 | 0.100 | <0.000300 | 91 | 72.7 - 120.2 | 6 | 20 |
| Xylene | | 1 | 0.274 | mg/L | 1 | 0.300 | <0.000333 | 91 | 72.1 - 121.5 | 6 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Resnlt | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0954 | 0.0973 | mg/L | 1 | 0.100 | 95 | 97 | 61.9 - 119.2 |
| 4-Bromofluorobenzene (4-BFB) | 0.0980 | 0.0969 | mg/L | 1 | 0.100 | 98 | 97 | 56.4 - 127.9 |

**Matrix Spike (MS-1)** Spiked Sample: 281676

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 86362 | Date Analyzed: | 2011-11-11 | Analyzed By: | AG |
| Prep Batch: | 73338 | QC Preparation: | 2011-11-11 | Prepared By: | AG |

| Param | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 14.4 | mg/L | 50 | 5.00 | 8.7117 | 114 | 66.9 - 128.2 |
| Toluene | | 1 | 4.87 | mg/L | 50 | 5.00 | <0.0150 | 97 | 81.6 - 122.9 |
| Ethylbenzene | | 1 | 4.82 | mg/L | 50 | 5.00 | 0.0966 | 94 | 62.7 - 117.9 |
| Xylene | | 1 | 15.3 | mg/L | 50 | 15.0 | 0.8195 | 96 | 62.9 - 118.2 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD Resnlt | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 14.0 | mg/L | 50 | 5.00 | 8.7117 | 106 | 66.9 - 128.2 | 3 | 20 |
| Toluene | | 1 | 4.73 | mg/L | 50 | 5.00 | <0.0150 | 95 | 81.6 - 122.9 | 3 | 20 |
| Ethylbenzene | | 1 | 4.58 | mg/L | 50 | 5.00 | 0.0966 | 90 | 62.7 - 117.9 | 5 | 20 |
| Xylene | | 1 | 14.7 | mg/L | 50 | 15.0 | 0.8195 | 92 | 62.9 - 118.2 | 4 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 4.78 | 4.69 | mg/L | 50 | 5 | 96 | 94 | 58.6 - 119.7 |
| 4-Bromofluorobenzene (4-BFB) | 4.88 | 4.83 | mg/L | 50 | 5 | 98 | 97 | 52.2 - 135.8 |

**Matrix Spike (MS-1)** Spiked Sample: 282044

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 86365 | Date Analyzed: | 2011-11-12 | Analyzed By: | AG |
| Prep Batch: | 73338 | QC Preparation: | 2011-11-11 | Prepared By: | AG |

| Param | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.104 | mg/L | 1 | 0.100 | <0.000400 | 104 | 66.9 - 128.2 |
| Toluene | | 1 | 0.0950 | mg/L | 1 | 0.100 | <0.000300 | 95 | 81.6 - 122.9 |
| Ethylbenzene | | 1 | 0.0898 | mg/L | 1 | 0.100 | <0.000300 | 90 | 62.7 - 117.9 |
| Xylene | | 1 | 0.269 | mg/L | 1 | 0.300 | <0.000333 | 90 | 62.9 - 118.2 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.105 | mg/L | 1 | 0.100 | <0.000400 | 105 | 66.9 - 128.2 | 1 | 20 |
| Toluene | | 1 | 0.100 | mg/L | 1 | 0.100 | <0.000300 | 100 | 81.6 - 122.9 | 5 | 20 |
| Ethylbenzene | | 1 | 0.0961 | mg/L | 1 | 0.100 | <0.000300 | 96 | 62.7 - 117.9 | 7 | 20 |
| Xylene | | 1 | 0.289 | mg/L | 1 | 0.300 | <0.000333 | 96 | 62.9 - 118.2 | 7 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0946 | 0.0924 | mg/L | 1 | 0.1 | 95 | 92 | 58.6 - 119.7 |
| 4-Bromofluorobenzene (4-BFB) | 0.0934 | 0.0935 | mg/L | 1 | 0.1 | 93 | 94 | 52.2 - 135.8 |

# Calibration Standards

### Standard (CCV-1)

QC Batch: 86362 Date Analyzed: 2011-11-11 Analyzed By: AG

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.103 | 103 | 80 - 120 | 2011-11-11 |
| Toluene | | 1 | mg/L | 0.100 | 0.100 | 100 | 80 - 120 | 2011-11-11 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0948 | 95 | 80 - 120 | 2011-11-11 |
| Xylene | | 1 | mg/L | 0.300 | 0.288 | 96 | 80 - 120 | 2011-11-11 |

### Standard (CCV-2)

QC Batch: 86362 Date Analyzed: 2011-11-11 Analyzed By: AG

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.102 | 102 | 80 - 120 | 2011-11-11 |
| Toluene | | 1 | mg/L | 0.100 | 0.0963 | 96 | 80 - 120 | 2011-11-11 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0907 | 91 | 80 - 120 | 2011-11-11 |
| Xylene | | 1 | mg/L | 0.300 | 0.275 | 92 | 80 - 120 | 2011-11-11 |

### Standard (CCV-3)

QC Batch: 86362 Date Analyzed: 2011-11-11 Analyzed By: AG

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.102 | 102 | 80 - 120 | 2011-11-11 |
| Toluene | | 1 | mg/L | 0.100 | 0.0978 | 98 | 80 - 120 | 2011-11-11 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0942 | 94 | 80 - 120 | 2011-11-11 |
| Xylene | | 1 | mg/L | 0.300 | 0.286 | 95 | 80 - 120 | 2011-11-11 |

**Standard (CCV-1)**

QC Batch: 86365 Date Analyzed: 2011-11-12 Analyzed By: AG

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.101 | 101 | 80 - 120 | 2011-11-12 |
| Toluene | | 1 | mg/L | 0.100 | 0.0979 | 98 | 80 - 120 | 2011-11-12 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0957 | 96 | 80 - 120 | 2011-11-12 |
| Xylene | | 1 | mg/L | 0.300 | 0.289 | 96 | 80 - 120 | 2011-11-12 |

**Standard (CCV-2)**

QC Batch: 86365 Date Analyzed: 2011-11-12 Analyzed By: AG

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.104 | 104 | 80 - 120 | 2011-11-12 |
| Toluene | | 1 | mg/L | 0.100 | 0.0969 | 97 | 80 - 120 | 2011-11-12 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0927 | 93 | 80 - 120 | 2011-11-12 |
| Xylene | | 1 | mg/L | 0.300 | 0.280 | 93 | 80 - 120 | 2011-11-12 |

# Limits of Detection (LOD)

```
select
    t.test,
    t.name as test_name,
    me.method,
    me.name as method_name,
    m.matrix,
    m.composition as matrix_name,
    x.qc_set,
    p.param,
    p.name as param_name,
    tp.sort,
    x.spike_amount,
    x.pass,
    x.sig_fig
from
    tests t,
    matricies m,
    methods me,
    params p,
    test_params tp,
    (
        select distinct
            st.test,
            st.method,
            s.matrix,
            qqs.qc_set,
            sr.param,
            qqs.qc_set,
            lod.spike_amount,
            lod.pass,
            tql.sig_fig
        from
            samples s,
            sample_tests st,
            sample_results sr,
            qcbatch_qc_sets qqs,
            test_qc_lod lod,
            test_qc_limits tql
        where
            s.sample=st.sample
            and s.sample=sr.sample
            and st.sample=sr.sample
```

```
                    and st.test=sr.test
                    and st.test=qqs.test
                    and sr.test=qqs.test

                    and s.matrix=qqs.matrix
                    and st.method=qqs.method
                    and sr.qcbatch=qqs.qcbatch

                    and qqs.qc_set=lod.qc_set
                    and qqs.qc_set=tql.qc_set
                    and lod.qc_set=tql.qc_set

                    and sr.param=lod.param
                    and sr.param=tql.param
                    and lod.param=tql.param

                    and tql.qctype=0

            and (
(s.sample=281826 and st.test=122)
 or (s.sample=281804 and st.test=122)
 or (s.sample=281821 and st.test=122)
 or (s.sample=281813 and st.test=122)
 or (s.sample=281800 and st.test=122)
 or (s.sample=281822 and st.test=122)
 or (s.sample=281803 and st.test=122)
 or (s.sample=281805 and st.test=122)
 or (s.sample=281802 and st.test=122)
 or (s.sample=281815 and st.test=122)
 or (s.sample=281808 and st.test=122)
 or (s.sample=281819 and st.test=122)
 or (s.sample=281811 and st.test=122)
 or (s.sample=281818 and st.test=122)
 or (s.sample=281810 and st.test=122)
 or (s.sample=281816 and st.test=122)
 or (s.sample=281817 and st.test=122)
 or (s.sample=281807 and st.test=122)
 or (s.sample=281823 and st.test=122)
 or (s.sample=281801 and st.test=122)
 or (s.sample=281820 and st.test=122)
 or (s.sample=281825 and st.test=122)
 or (s.sample=281812 and st.test=122)
 or (s.sample=281806 and st.test=122)
 or (s.sample=281824 and st.test=122)
 or (s.sample=281809 and st.test=122)
 or (s.sample=281814 and st.test=122))
       ) x
```

```
        where
            t.test=x.test
            and t.test=tp.test
            and x.test=tp.test

            and m.matrix=x.matrix
            and m.matrix=tp.matrix
            and x.matrix=tp.matrix

            and me.method=x.method

            and p.param=x.param
            and p.param=tp.param
            and x.param=tp.param

            and tp.qctype=0
            and tp.report is true
            and tp.surrogate is false
        order by
            t.name,
            me.name,
            m.name,
            x.qc_set,
            tp.sort

$lod_list
```

# Appendix

## Report Definitions

| Name | Definition |
|---|---|
| MDL | Method Detection Limit |
| MQL | Minimum Quantitation Limit |
| SDL | Sample Detection Limit |

## Laboratory Certifications

| C | Certifying Authority | Certification Number | Laboratory Location |
|---|---|---|---|
| - | NCTRCA | WFWB384444Y0909 | TraceAnalysis |
| - | DBE | VN 20657 | TraceAnalysis |
| - | HUB | 1752439743100-86536 | TraceAnalysis |
| - | WBE | 237019 | TraceAnalysis |
| 1 | NELAP | T104704392-10-TX | Midland |

## Standard Flags

| F | Description |
|---|---|
| B | Analyte detected in the corresponding method blank above the method detection limit |
| H | Analyzed out of hold time |
| J | Estimated concentration |
| Jb | The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL. |
| Je | Estimated concentration exceeding calibration range. |
| Qc | Calibration check outside of laboratory limits. |
| Qr | RPD outside of laboratory limits |
| Qs | Spike recovery outside of laboratory limits. |
| Qsr | Surrogate recovery outside of laboratory limits. |
| U | The analyte is not detected above the SDL |

## Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 11110804



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA Safety + Environmental
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce Dr. Midland
Fax #:
Contact Person: ~~Brythe Lee~~ Ron Rousseville
E-mail:
Invoice to:
(If different from above)
Project #:
Project Name: TNM-LF-2000-7
Project Location (including state): Monument NM
Sampler Signature:

ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 281800 | MW 21 | 3 | VOA | ✓ | | | | ✓ | | | | ✓ | | 11/3 | 1200 | | X | X | | | | | | | | | | | | | | | | | | | |
| 801 | MW 24 | | | | | | | | | | | | | | 1205 | | | | | | | | | | | | | | | | | | | | | | |
| 802 | MW 20 | | | | | | | | | | | | | | 1215 | | | | | | | | | | | | | | | | | | | | | | |
| 803 | MW 4 | | | | | | | | | | | | | | 1230 | | | | | | | | | | | | | | | | | | | | | | |
| 804 | MW 3 | | | | | | | | | | | | | | 1360 | | | | | | | | | | | | | | | | | | | | | | |
| 805 | MW 6 | | | | | | | | | | | | | | 1255 | | | | | | | | | | | | | | | | | | | | | | |
| 806 | MW 23 | | | | | | | | | | | | | | 1225 | | | | | | | | | | | | | | | | | | | | | | |
| 807 | MW 5 | | | | | | | | | | | | | | 1315 | | | | | | | | | | | | | | | | | | | | | | |
| 808 | MW 2 | | | | | | | | | | | | | | 1305 | | | | | | | | | | | | | | | | | | | | | | |
| 809 | MW 7 | | | | | | | | | | | | | | 1235 | | | | | | | | | | | | | | | | | | | | | | |
| 810 | MW 25 | | | | | | | | | | | | | | 1215 | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| Brythe Lee | NOVA | 11/8/11 | 800 | | Nova | 11/8/11 | 0852 | INST ___ OBS ___ °C COR ___ °C |
| | Nova | 11/8/11 | 0852 | | TA | 11/8/11 | 8:50 | INST ___ OBS 9.9 °C COR ___ °C |
| | | | | | | | | INST ___ OBS ___ °C COR ___ °C |

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS:
All tests - Midland

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier #

ORIGINAL COPY

LAB Order ID # 11110804



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA Safety & Environmental
Phone #: 520-2270
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron Rousaville
E-mail:
Invoice to: (If different from above)
Project #:
Project Name: TNM-LF-2000-7
Project Location (including state): Monument NM
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 281811 | MW 8 | 3 | Voa | ✓ | | | | ✓ | | | | ✓ | | 11/3 | 1335 | | X | | | | | | | | | | | | | | | | | | | | |
| 812 | MW 1 | | | | | | | | | | | | | 11/3 | 1340 | | | | | | | | | | | | | | | | | | | | | | |
| 813 | MW 16 | | | | | | | | | | | | | 11/3 | 1325 | | | | | | | | | | | | | | | | | | | | | | |
| 814 | MW 15 | | | | | | | | | | | | | 11/4 | 1130 | | | | | | | | | | | | | | | | | | | | | | |
| 815 | MW 11 | | | | | | | | | | | | | | 1135 | | | | | | | | | | | | | | | | | | | | | | |
| | ~~MW 12~~ | | | | | | | | | | | | | | ~~1145~~ | | | | | | | | | | | | | | | | | | | | | | |
| 816 | MW 13 | | | | | | | | | | | | | | 1115 | | | | | | | | | | | | | | | | | | | | | | |
| 817 | MW 10 | | | | | | | | | | | | | | 1120 | | | | | | | | | | | | | | | | | | | | | | |
| 818 | MW 33 | | | | | | | | | | | | | | 1110 | | | | | | | | | | | | | | | | | | | | | | |
| 819 | MW 32 | | | | | | | | | | | | | | 1105 | | | | | | | | | | | | | | | | | | | | | | |
| 820 | MW 37 | | | | | | | | | | | | | ✓ | 1050 | | ✓ | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: |
|---|---|---|---|---|---|---|---|
| Brythe Lee | NOVA | 11/8/11 | 0900 | [signature] | Nova | 11/8/11 | 850 |
| [signature] | Nova | 11/8/11 | 0950 | [signature] | TA | 11/8/11 | 8:50 |
| | | | | | | | |

INST ____ OBS ____ °C COR ____ °C
INST ____ OBS 9.9 °C COR ____ °C
INST ____ OBS ____ °C COR ____ °C

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-in-Review ____

REMARKS:

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Courier

ORIGINAL COPY

LAB Order ID # 11110804



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA Safety + Environmental
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: ~~Brythe Lee~~ Ron Romsaville
E-mail:
Invoice to:
(If different from above)
Project #:
Project Name: TNM-LF-2000-7
Project Location (including state): Monument, NM
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 (TX1005 Ext(C35)) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 281821 | MW 38 | 3 | VOA | ✓ | | | | ✓ | | | | ✓ | | | 1040 | | ✓ | ✓ | | | | | | | | | | | | | | | | | | | |
| 822 | MW 56 | ↑ | ↑ | ↑ | | | | ↑ | | | | ↑ | | | 1045 | | ↑ | ↑ | | | | | | | | | | | | | | | | | | | |
| 823 | MW 31 | ↑ | ↑ | ↑ | | | | ↑ | | | | ↑ | | | 1030 | | ↑ | ↑ | | | | | | | | | | | | | | | | | | | |
| 824 | MW 30 | ↑ | ↑ | ↑ | | | | ↑ | | | | ↑ | | | 1025 | | ↑ | ↑ | | | | | | | | | | | | | | | | | | | |
| 825 | MW 28 | ↑ | ↑ | ↑ | | | | ↑ | | | | ↑ | | | 1015 | | ↑ | ↑ | | | | | | | | | | | | | | | | | | | |
| 826 | MW 27 | | ↑ | ↑ | | | | ↑ | | | | ↑ | | 11/7 | 1420 | | ↑ | ↑ | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| Brythe Lee | NOVA | 11/8/11 | 0800 | | Nova | 11/8/11 | 0852 | INST ___ OBS ___ °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
| | Nova | 8/11/11 | 0852 | | T/A | 11/8/11 | 8:00 | INST ___ OBS 9.9 °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
| | | | | | | | | INST ___ OBS ___ °C COR ___ °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-In-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier #

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TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
309 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
5015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

# Certifications

**WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025**

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: December 23, 2011

Work Order: 11121911

Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-07

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 284750 | MW-2 | water | 2011-12-15 | 14:05 | 2011-12-16 |
| 284751 | MW-4 | water | 2011-12-15 | 13:25 | 2011-12-16 |
| 284752 | MW-5 | water | 2011-12-15 | 13:50 | 2011-12-16 |
| 284753 | MW-7 | water | 2011-12-15 | 13:35 | 2011-12-16 |
| 284754 | MW-8 | water | 2011-12-15 | 14:30 | 2011-12-16 |
| 284755 | MW-13 | water | 2011-12-15 | 15:10 | 2011-12-16 |
| 284756 | MW-16 | water | 2011-12-15 | 14:15 | 2011-12-16 |
| 284757 | MW-32 | water | 2011-12-15 | 15:30 | 2011-12-16 |
| 284758 | MW-38 | water | 2011-12-15 | 15:45 | 2011-12-16 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

# Report Contents

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2011-12-16 and assigned to work order 11121911. Samples for work order 11121911 were received intact at a temperature of 11.3 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| PAH | S 8270D | 74197 | 2011-12-20 at 15:00 | 87378 | 2011-12-22 at 11:26 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11121911 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 284750 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270D | Prep Method: | S 3510C |
| QC Batch: | 87378 | Date Analyzed: | 2011-12-22 | Analyzed By: | MN |
| Prep Batch: | 74197 | Sample Preparation: | 2011-12-20 | Prepared By: | MN |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Naphthalene | | | 1 | **0.00381** | mg/L | 0.913 | 0.000200 |
| 2-Methylnaphthalene | | | 1 | **0.00308** | mg/L | 0.913 | 0.000200 |
| 1-Methylnaphthalene | | | | **0.00711** | mg/L | 0.913 | 0.000200 |
| Acenaphthylene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Acenaphthene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzofuran | | | 1 | **0.00231** | mg/L | 0.913 | 0.000200 |
| Fluorene | Qc,U | Qc,U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Anthracene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Phenanthrene | | | | **0.000772** | mg/L | 0.913 | 0.000200 |
| Fluoranthene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)anthracene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Chrysene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(b)fluoranthene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(k)fluoranthene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzo(a,h)anthracene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(g,h,i)perylene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 0.0637 | mg/L | 0.913 | 0.0800 | 80 | 10 - 117 |
| 2-Fluorobiphenyl | | | 0.0609 | mg/L | 0.913 | 0.0800 | 76 | 10 - 99 |
| Terphenyl-d14 | | | 0.0668 | mg/L | 0.913 | 0.0800 | 84 | 22.6 - 115 |

**Sample: 284751 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270D | Prep Method: | S 3510C |
| QC Batch: | 87378 | Date Analyzed: | 2011-12-22 | Analyzed By: | MN |
| Prep Batch: | 74197 | Sample Preparation: | 2011-12-20 | Prepared By: | MN |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Naphthalene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | | 1 | **0.000590** | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | | | **0.00115** | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofuran | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluorene | Qc,U | Qc,U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Anthracene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | U | U | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Fluoranthene | U | U | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | U | U | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | U | U | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | U | U | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 0.0735 | mg/L | 0.917 | 0.0800 | 92 | 10 - 117 |
| 2-Fluorobiphenyl | | | 0.0663 | mg/L | 0.917 | 0.0800 | 83 | 10 - 99 |
| Terphenyl-d14 | | | 0.0748 | mg/L | 0.917 | 0.0800 | 94 | 22.6 - 115 |

**Sample: 284752 - MW-5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270D | Prep Method: | S 3510C |
| QC Batch: | 87378 | Date Analyzed: | 2011-12-22 | Analyzed By: | MN |
| Prep Batch: | 74197 | Sample Preparation: | 2011-12-20 | Prepared By: | MN |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Naphthalene | | 1 | **0.0134** | mg/L | 0.913 | 0.000200 |

*continued . . .*

*sample 284752 continued ...*

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| 2-Methylnaphthalene | | | 1 | **0.0210** | mg/L | 0.913 | 0.000200 |
| 1-Methylnaphthalene | | | | **0.0321** | mg/L | 0.913 | 0.000200 |
| Acenaphthylene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Acenaphthene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzofuran | | | 1 | **0.00379** | mg/L | 0.913 | 0.000200 |
| Fluorene | Qc,U | Qc,U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Anthracene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Phenanthrene | | | | **0.00590** | mg/L | 0.913 | 0.000200 |
| Fluoranthene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)anthracene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Chrysene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(b)fluoranthene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(k)fluoranthene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzo(a,h)anthracene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(g,h,i)perylene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 0.0592 | mg/L | 0.913 | 0.0800 | 74 | 10 - 117 |
| 2-Fluorobiphenyl | | | 0.0462 | mg/L | 0.913 | 0.0800 | 58 | 10 - 99 |
| Terphenyl-d14 | | | 0.0588 | mg/L | 0.913 | 0.0800 | 74 | 22.6 - 115 |

**Sample: 284753 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270D | Prep Method: | S 3510C |
| QC Batch: | 87378 | Date Analyzed: | 2011-12-22 | Analyzed By: | MN |
| Prep Batch: | 74197 | Sample Preparation: | 2011-12-20 | Prepared By: | MN |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Naphthalene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| 2-Methylnaphthalene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| 1-Methylnaphthalene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Acenaphthylene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Acenaphthene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzofuran | | | 1 | **0.000809** | mg/L | 0.913 | 0.000200 |

*continued ...*

*sample 284753 continued ...*

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Fluorene | Qc,U | Qc,U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Anthracene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Phenanthrene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Fluorantbene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)anthracene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Chrysene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(b)fluoranthene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(k)fluoranthene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzo(a,h)anthracene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(g,h,i)perylene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 0.0382 | mg/L | 0.913 | 0.0800 | 48 | 10 - 117 |
| 2-Fluorobiphenyl | | | 0.0389 | mg/L | 0.913 | 0.0800 | 49 | 10 - 99 |
| Terphenyl-d14 | | | 0.0487 | mg/L | 0.913 | 0.0800 | 61 | 22.6 - 115 |

**Sample: 284754 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270D | Prep Method: | S 3510C |
| QC Batch: | 87378 | Date Analyzed: | 2011-12-22 | Analyzed By: | MN |
| Prep Batch: | 74197 | Sample Preparation: | 2011-12-20 | Prepared By: | MN |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Naphthalene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| 2-Methylnaphthalene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| 1-Methylnaphthalene | | | | **0.000260** | mg/L | 0.913 | 0.000200 |
| Acenaphthylene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Acenaphthene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzofuran | | | 1 | **0.00102** | mg/L | 0.913 | 0.000200 |
| Fluorene | Qc | Qc | 1 | **0.00167** | mg/L | 0.913 | 0.000200 |
| Anthracene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Phenanthrene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Fluoranthene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |

*continued ...*

*sample 284754 continued ...*

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzo(a)anthracene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Chrysene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(b)fluoranthene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(k)fluoranthene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzo(a,h)anthracene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(g,h,i)perylene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 0.0432 | mg/L | 0.913 | 0.0800 | 54 | 10 - 117 |
| 2-Fluorobiphenyl | | | 0.0455 | mg/L | 0.913 | 0.0800 | 57 | 10 - 99 |
| Terphenyl-d14 | | | 0.0559 | mg/L | 0.913 | 0.0800 | 70 | 22.6 - 115 |

**Sample: 284755 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270D | Prep Method: | S 3510C |
| QC Batch: | 87378 | Date Analyzed: | 2011-12-22 | Analyzed By: | MN |
| Prep Batch: | 74197 | Sample Preparation: | 2011-12-20 | Prepared By: | MN |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Naphthalene | | | 1 | **0.00400** | mg/L | 0.913 | 0.000200 |
| 2-Methylnaphthalene | | | 1 | **0.00387** | mg/L | 0.913 | 0.000200 |
| 1-Methylnaphthalene | | | | **0.00851** | mg/L | 0.913 | 0.000200 |
| Acenaphthylene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Acenaphthene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzofuran | | | 1 | **0.00169** | mg/L | 0.913 | 0.000200 |
| Fluorene | Qc | Qc | 1 | **0.00126** | mg/L | 0.913 | 0.000200 |
| Anthracene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Phenanthrene | | | | **0.000590** | mg/L | 0.913 | 0.000200 |
| Fluoranthene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)anthracene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Chrysene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(b)fluoranthene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(k)fluoranthene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |

*continued ...*

*sample 284755 continued ...*

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Indeno(1,2,3-cd)pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzo(a,h)anthracene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(g,h,i)perylene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 0.0522 | mg/L | 0.913 | 0.0800 | 65 | 10 - 117 |
| 2-Fluorobiphenyl | | | 0.0499 | mg/L | 0.913 | 0.0800 | 62 | 10 - 99 |
| Terphenyl-d14 | | | 0.0580 | mg/L | 0.913 | 0.0800 | 72 | 22.6 - 115 |

**Sample: 284756 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270D | Prep Method: | S 3510C |
| QC Batch: | 87378 | Date Analyzed: | 2011-12-22 | Analyzed By: | MN |
| Prep Batch: | 74197 | Sample Preparation: | 2011-12-20 | Prepared By: | MN |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Naphthalene | | | 1 | **0.00104** | mg/L | 0.917 | 0.000200 |
| 2-Methylnaphthalene | | | 1 | **0.00117** | mg/L | 0.917 | 0.000200 |
| 1-Methylnaphthalene | | | | **0.00500** | mg/L | 0.917 | 0.000200 |
| Acenaphthylene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Acenaphthene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzofnran | | | 1 | **0.00210** | mg/L | 0.917 | 0.000200 |
| Fluorene | Qc | Qc | 1 | **0.00246** | mg/L | 0.917 | 0.000200 |
| Anthracene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Phenanthrene | | | | **0.000927** | mg/L | 0.917 | 0.000200 |
| Fluoranthene | U | U | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Pyrene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)anthracene | U | U | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Chrysene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(b)fluoranthene | U | U | | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(k)fluoranthene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(a)pyrene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Dibenzo(a,h)anthracene | U | U | 1 | <0.000183 | mg/L | 0.917 | 0.000200 |
| Benzo(g,h,i)perylene | U | U | | <0.000183 | mg/L | 0.917 | 0.000200 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 0.0535 | mg/L | 0.917 | 0.0800 | 67 | 10 - 117 |
| 2-Fluorobiphenyl | | | 0.0553 | mg/L | 0.917 | 0.0800 | 69 | 10 - 99 |
| Terphenyl-d14 | | | 0.0626 | mg/L | 0.917 | 0.0800 | 78 | 22.6 - 115 |

**Sample: 284757 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270D | Prep Method: | S 3510C |
| QC Batch: | 87378 | Date Analyzed: | 2011-12-22 | Analyzed By: | MN |
| Prep Batch: | 74197 | Sample Preparation: | 2011-12-20 | Prepared By: | MN |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Naphthalene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| 2-Methylnaphthalene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| 1-Methylnaphthalene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Acenaphthylene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Acenaphthene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzofuran | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Fluorene | Qc,U | Qc,U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Anthracene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Phenanthrene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Fluoranthene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)anthracene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Chrysene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(b)fluoranthene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(k)fluoranthene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzo(a,h)anthracene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(g,h,i)perylene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 0.0739 | mg/L | 0.913 | 0.0800 | 92 | 10 - 117 |
| 2-Fluorobiphenyl | | | 0.0688 | mg/L | 0.913 | 0.0800 | 86 | 10 - 99 |
| Terphenyl-d14 | | | 0.0887 | mg/L | 0.913 | 0.0800 | 111 | 22.6 - 115 |

**Sample: 284758 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270D | Prep Method: | S 3510C |
| QC Batch: | 87378 | Date Analyzed: | 2011-12-22 | Analyzed By: | MN |
| Prep Batch: | 74197 | Sample Preparation: | 2011-12-20 | Prepared By: | MN |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Naphthalene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| 2-Methylnaphthalene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| 1-Methylnaphthalene | | | | **0.00187** | mg/L | 0.913 | 0.000200 |
| Acenaphthylene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Acenaphthene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzofuran | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Fluorene | Qc,U | Qc,U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Anthracene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Phenanthrene | | | | **0.00221** | mg/L | 0.913 | 0.000200 |
| Fluoranthene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)anthracene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Chrysene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(b)fluoranthene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(k)fluoranthene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzo(a,h)anthracene | U | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(g,h,i)perylene | U | U | | <0.000183 | mg/L | 0.913 | 0.000200 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 0.0341 | mg/L | 0.913 | 0.0800 | 43 | 10 - 117 |
| 2-Fluorobiphenyl | | | 0.0287 | mg/L | 0.913 | 0.0800 | 36 | 10 - 99 |
| Terphenyl-d14 | | | 0.0382 | mg/L | 0.913 | 0.0800 | 48 | 22.6 - 115 |

# Method Blanks

**Method Blank (1)** QC Batch: 87378

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 87378 | Date Analyzed: | 2011-12-22 | Analyzed By: | MN |
| Prep Batch: | 74197 | QC Preparation: | 2011-12-20 | Prepared By: | MN |

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Naphthalene | | 1 | <0.0000904 | mg/L | 0.0002 |
| 2-Methylnaphthalene | | 1 | <0.000184 | mg/L | 0.0002 |
| 1-Methylnaphthalene | | | <0.000120 | mg/L | 0.0002 |
| Acenaphthylene | | 1 | <0.000101 | mg/L | 0.0002 |
| Acenaphthene | | 1 | <0.000122 | mg/L | 0.0002 |
| Dibenzofuran | | 1 | <0.000119 | mg/L | 0.0002 |
| Fluorene | | 1 | <0.000198 | mg/L | 0.0002 |
| Anthracene | | 1 | <0.000190 | mg/L | 0.0002 |
| Phenanthrene | | | <0.000190 | mg/L | 0.0002 |
| Fluoranthene | | | <0.000122 | mg/L | 0.0002 |
| Pyrene | | 1 | <0.000142 | mg/L | 0.0002 |
| Benzo(a)anthracene | | | <0.000138 | mg/L | 0.0002 |
| Chrysene | | 1 | <0.000155 | mg/L | 0.0002 |
| Benzo(b)fluoranthene | | | <0.000179 | mg/L | 0.0002 |
| Benzo(k)fluoranthene | | 1 | <0.000185 | mg/L | 0.0002 |
| Benzo(a)pyrene | | 1 | <0.000169 | mg/L | 0.0002 |
| Indeno(1,2,3-cd)pyrene | | 1 | <0.000139 | mg/L | 0.0002 |
| Dibenzo(a,h)anthracene | | 1 | <0.000107 | mg/L | 0.0002 |
| Benzo(g,h,i)perylene | | | <0.000143 | mg/L | 0.0002 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 0.0351 | mg/L | 1 | 0.0800 | 44 | 10 - 117 |
| 2-Fluorobiphenyl | | | 0.0252 | mg/L | 1 | 0.0800 | 32 | 10 - 99 |
| Terphenyl-d14 | | | 0.0493 | mg/L | 1 | 0.0800 | 62 | 22.6 - 115 |

# Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 87378
Prep Batch: 74197

Date Analyzed: 2011-12-22
QC Preparation: 2011-12-20

Analyzed By: MN
Prepared By: MN

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | | 1 | 0.0369 | mg/L | 1 | 0.0800 | <0.0000904 | 46 | 10 - 89.9 |
| 2-Methylnaphthalene | | 1 | 0.0427 | mg/L | 1 | 0.0800 | <0.000184 | 53 | 13.8 - 98.4 |
| 1-Methylnaphthalene | | | 0.0486 | mg/L | 1 | 0.0800 | <0.000120 | 61 | 13.1 - 103 |
| Acenaphthylene | | 1 | 0.0485 | mg/L | 1 | 0.0800 | <0.000101 | 61 | 20 - 104 |
| Acenaphthene | | 1 | 0.0461 | mg/L | 1 | 0.0800 | <0.000122 | 58 | 21.6 - 94.6 |
| Dibenzofuran | | 1 | 0.0413 | mg/L | 1 | 0.0800 | <0.000119 | 52 | 22.9 - 74.9 |
| Fluorene | | 1 | 0.0492 | mg/L | 1 | 0.0800 | <0.000198 | 62 | 30.8 - 109 |
| Anthracene | | 1 | 0.0623 | mg/L | 1 | 0.0800 | <0.000190 | 78 | 37.6 - 96.4 |
| Phenanthrene | | | 0.0628 | mg/L | 1 | 0.0800 | <0.000190 | 78 | 42.4 - 99.8 |
| Fluoranthene | | | 0.0579 | mg/L | 1 | 0.0800 | <0.000122 | 72 | 48 - 118 |
| Pyrene | | 1 | 0.0566 | mg/L | 1 | 0.0800 | <0.000142 | 71 | 45.3 - 109 |
| Benzo(a)anthracene | | | 0.0702 | mg/L | 1 | 0.0800 | <0.000138 | 88 | 48 - 113 |
| Chrysene | | 1 | 0.0770 | mg/L | 1 | 0.0800 | <0.000155 | 96 | 35.2 - 175 |
| Benzo(b)fluoranthene | | | 0.0497 | mg/L | 1 | 0.0800 | <0.000179 | 62 | 16.6 - 106 |
| Benzo(k)fluoranthene | | 1 | 0.0523 | mg/L | 1 | 0.0800 | <0.000185 | 65 | 36.8 - 99.4 |
| Benzo(a)pyrene | | 1 | 0.0500 | mg/L | 1 | 0.0800 | <0.000169 | 62 | 32.3 - 99.7 |
| Indeno(1,2,3-cd)pyrene | | 1 | 0.0502 | mg/L | 1 | 0.0800 | <0.000139 | 63 | 34.1 - 106 |
| Dibenzo(a,h)anthracene | | 1 | 0.0430 | mg/L | 1 | 0.0800 | <0.000107 | 54 | 47.1 - 103 |
| Benzo(g,h,i)perylene | | | 0.0522 | mg/L | 1 | 0.0800 | <0.000143 | 65 | 21.9 - 112 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | | 1 | 0.0368 | mg/L | 1 | 0.0800 | <0.0000904 | 46 | 10 - 89.9 | 0 | 20 |
| 2-Methylnaphthalene | | 1 | 0.0428 | mg/L | 1 | 0.0800 | <0.000184 | 54 | 13.8 - 98.4 | 0 | 20 |
| 1-Methylnaphthalene | | | 0.0484 | mg/L | 1 | 0.0800 | <0.000120 | 60 | 13.1 - 103 | 0 | 20 |
| Acenaphthylene | | 1 | 0.0491 | mg/L | 1 | 0.0800 | <0.000101 | 61 | 20 - 104 | 1 | 20 |
| Acenaphthene | | 1 | 0.0463 | mg/L | 1 | 0.0800 | <0.000122 | 58 | 21.6 - 94.6 | 0 | 20 |
| Dibenzofuran | | 1 | 0.0412 | mg/L | 1 | 0.0800 | <0.000119 | 52 | 22.9 - 74.9 | 0 | 20 |
| Fluorene | | 1 | 0.0494 | mg/L | 1 | 0.0800 | <0.000198 | 62 | 30.8 - 109 | 0 | 20 |
| Anthracene | | 1 | 0.0638 | mg/L | 1 | 0.0800 | <0.000190 | 80 | 37.6 - 96.4 | 2 | 20 |
| Phenanthrene | | | 0.0635 | mg/L | 1 | 0.0800 | <0.000190 | 79 | 42.4 - 99.8 | 1 | 20 |
| Fluoranthene | | | 0.0600 | mg/L | 1 | 0.0800 | <0.000122 | 75 | 48 - 118 | 4 | 20 |
| Pyrene | | 1 | 0.0576 | mg/L | 1 | 0.0800 | <0.000142 | 72 | 45.3 - 109 | 2 | 20 |

*continued ...*

*control spikes continued ...*

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzo(a)anthracene | | | 0.0708 | mg/L | 1 | 0.0800 | <0.000138 | 88 | 48 - 113 | 1 | 20 |
| Chrysene | | 1 | 0.0770 | mg/L | 1 | 0.0800 | <0.000155 | 96 | 35.2 - 175 | 0 | 20 |
| Benzo(b)fluoranthene | | | 0.0505 | mg/L | 1 | 0.0800 | <0.000179 | 63 | 16.6 - 106 | 2 | 20 |
| Benzo(k)fluoranthene | | 1 | 0.0498 | mg/L | 1 | 0.0800 | <0.000185 | 62 | 36.8 - 99.4 | 5 | 20 |
| Benzo(a)pyrene | | 1 | 0.0511 | mg/L | 1 | 0.0800 | <0.000169 | 64 | 32.3 - 99.7 | 2 | 20 |
| Indeno(1,2,3-cd)pyrene | | 1 | 0.0516 | mg/L | 1 | 0.0800 | <0.000139 | 64 | 34.1 - 106 | 3 | 20 |
| Dibenzo(a,h)anthracene | | 1 | 0.0443 | mg/L | 1 | 0.0800 | <0.000107 | 55 | 47.1 - 103 | 3 | 20 |
| Benzo(g,h,i)perylene | | | 0.0529 | mg/L | 1 | 0.0800 | <0.000143 | 66 | 21.9 - 112 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 0.0420 | 0.0418 | mg/L | 1 | 0.0800 | 52 | 52 | 10 - 117 |
| 2-Fluorobiphenyl | 0.0364 | 0.0367 | mg/L | 1 | 0.0800 | 46 | 46 | 10 - 99 |
| Terphenyl-d14 | 0.0543 | 0.0558 | mg/L | 1 | 0.0800 | 68 | 70 | 22.6 - 115 |

# Calibration Standards

### Standard (CCV-1)

QC Batch: 87378 Date Analyzed: 2011-12-22 Analyzed By: MN

| Param | | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | | | 1 | mg/L | 60.0 | 50.7 | 84 | 80 - 120 | 2011-12-22 |
| 2-Methylnaphthalene | | | 1 | mg/L | 60.0 | 50.0 | 83 | 80 - 120 | 2011-12-22 |
| 1-Methylnaphthalene | | | | mg/L | 60.0 | 58.9 | 98 | 80 - 120 | 2011-12-22 |
| Acenaphthylene | | | 1 | mg/L | 60.0 | 51.1 | 85 | 80 - 120 | 2011-12-22 |
| Acenaphthene | | | 1 | mg/L | 60.0 | 50.6 | 84 | 80 - 120 | 2011-12-22 |
| Dibenzofuran | | | 1 | mg/L | 60.0 | 49.1 | 82 | 80 - 120 | 2011-12-22 |
| Fluorene | Qc | Qc | 1 | mg/L | 60.0 | 47.9 | 80 | 80 - 120 | 2011-12-22 |
| Anthracene | | | 1 | mg/L | 60.0 | 59.0 | 98 | 80 - 120 | 2011-12-22 |
| Phenanthrene | | | | mg/L | 60.0 | 58.6 | 98 | 80 - 120 | 2011-12-22 |
| Fluoranthene | | | | mg/L | 60.0 | 59.2 | 99 | 80 - 120 | 2011-12-22 |
| Pyrene | | | 1 | mg/L | 60.0 | 54.2 | 90 | 80 - 120 | 2011-12-22 |
| Benzo(a)anthracene | | | | mg/L | 60.0 | 60.3 | 100 | 80 - 120 | 2011-12-22 |
| Chrysene | | | 1 | mg/L | 60.0 | 52.5 | 88 | 80 - 120 | 2011-12-22 |
| Benzo(b)fluoranthene | | | | mg/L | 60.0 | 50.6 | 84 | 80 - 120 | 2011-12-22 |
| Benzo(k)fluoranthene | | | 1 | mg/L | 60.0 | 49.7 | 83 | 80 - 120 | 2011-12-22 |
| Benzo(a)pyrene | | | 1 | mg/L | 60.0 | 53.3 | 89 | 80 - 120 | 2011-12-22 |
| Indeno(1,2,3-cd)pyrene | | | 1 | mg/L | 60.0 | 53.6 | 89 | 80 - 120 | 2011-12-22 |
| Dibenzo(a,h)anthracene | | | 1 | mg/L | 60.0 | 54.8 | 91 | 80 - 120 | 2011-12-22 |
| Benzo(g,h,i)perylene | | | | mg/L | 60.0 | 52.3 | 87 | 80 - 120 | 2011-12-22 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 58.4 | mg/L | 1 | 60.0 | 97 | - |
| 2-Fluorobiphenyl | | | 53.8 | mg/L | 1 | 60.0 | 90 | - |
| Terphenyl-d14 | | | 58.2 | mg/L | 1 | 60.0 | 97 | - |

### Standard (CCV-2)

QC Batch: 87378 Date Analyzed: 2011-12-22 Analyzed By: MN

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Naphthalene | | 1 | mg/L | 60.0 | 50.8 | 85 | 80 - 120 | 2011-12-22 |

*continued ...*

*standard continued . . .*

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| 2-Methylnaphthalene | | 1 | mg/L | 60.0 | 49.0 | 82 | 80 - 120 | 2011-12-22 |
| 1-Methylnaphthalene | | | mg/L | 60.0 | 56.9 | 95 | 80 - 120 | 2011-12-22 |
| Acenaphthylene | | 1 | mg/L | 60.0 | 52.0 | 87 | 80 - 120 | 2011-12-22 |
| Acenaphthene | | 1 | mg/L | 60.0 | 50.8 | 85 | 80 - 120 | 2011-12-22 |
| Dibenzofuran | | 1 | mg/L | 60.0 | 49.5 | 82 | 80 - 120 | 2011-12-22 |
| Fluorene | | 1 | mg/L | 60.0 | 48.1 | 80 | 80 - 120 | 2011-12-22 |
| Anthracene | | 1 | mg/L | 60.0 | 59.3 | 99 | 80 - 120 | 2011-12-22 |
| Phenanthrene | | | mg/L | 60.0 | 58.8 | 98 | 80 - 120 | 2011-12-22 |
| Fluoranthene | | | mg/L | 60.0 | 61.4 | 102 | 80 - 120 | 2011-12-22 |
| Pyrene | | 1 | mg/L | 60.0 | 57.8 | 96 | 80 - 120 | 2011-12-22 |
| Benzo(a)anthracene | | | mg/L | 60.0 | 59.9 | 100 | 80 - 120 | 2011-12-22 |
| Chrysene | | 1 | mg/L | 60.0 | 52.4 | 87 | 80 - 120 | 2011-12-22 |
| Benzo(b)fluoranthene | | | mg/L | 60.0 | 50.8 | 85 | 80 - 120 | 2011-12-22 |
| Benzo(k)fluoranthene | | 1 | mg/L | 60.0 | 50.3 | 84 | 80 - 120 | 2011-12-22 |
| Benzo(a)pyrene | | 1 | mg/L | 60.0 | 51.4 | 86 | 80 - 120 | 2011-12-22 |
| Indeno(1,2,3-cd)pyrene | | 1 | mg/L | 60.0 | 52.7 | 88 | 80 - 120 | 2011-12-22 |
| Dibenzo(a,h)anthracene | | 1 | mg/L | 60.0 | 55.0 | 92 | 80 - 120 | 2011-12-22 |
| Benzo(g,h,i)perylene | | | mg/L | 60.0 | 51.7 | 86 | 80 - 120 | 2011-12-22 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 60.2 | mg/L | 1 | 60.0 | 100 | - |
| 2-Fluorobiphenyl | | | 56.9 | mg/L | 1 | 60.0 | 95 | - |
| Terphenyl-d14 | | | 61.6 | mg/L | 1 | 60.0 | 103 | - |

# Appendix

## Report Definitions

| Name | Definition |
|---|---|
| MDL | Method Detection Limit |
| MQL | Minimum Quantitation Limit |
| SDL | Sample Detection Limit |

## Laboratory Certifications

| C | Certifying Authority | Certification Number | Laboratory Location |
|---|---|---|---|
| - | NCTRCA | WFWB384444Y0909 | TraceAnalysis |
| - | DBE | VN 20657 | TraceAnalysis |
| - | HUB | 1752439743100-86536 | TraceAnalysis |
| - | WBE | 237019 | TraceAnalysis |
| 1 | NELAP | T104704219-11-5 | Lubbock |

## Standard Flags

| F | Description |
|---|---|
| B | Analyte detected in the corresponding method blank above the method detection limit |
| H | Analyzed out of hold time |
| J | Estimated concentration |
| Jb | The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL. |
| Je | Estimated concentration exceeding calibration range. |
| Qc | Calibration check outside of laboratory limits. |
| Qr | RPD outside of laboratory limits |
| Qs | Spike recovery outside of laboratory limits. |
| Qsr | Surrogate recovery outside of laboratory limits. |
| U | The analyte is not detected above the SDL |

## Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 1112191



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA

Phone #:

Address: (Street, City, Zip)

Fax #:

Contact Person: Ron Rounsaville

E-mail:

Invoice to:
(If different from above)

Project #: TNM - LF - 2000 - 7

Project Name: BOB DURHAM

Project Location (including state):

Sampler Signature: David Fletcher

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 284750 | mw2 | 1 | 1L Amber | X | | | | | | | | | X | 12/15/11 | 1405 | | | | | X | | | | | | | | | | | | | | | | | | | | |
| 751 | mw4 | | | | | | | | | | | | | | 1325 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 752 | mw5 | | | | | | | | | | | | | | 1350 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 753 | mw7 | | | | | | | | | | | | | | 1335 ~~1130~~ | | | | | | | | | | | | | | | | | | | | | | | | | |
| 754 | mw8 | | | | | | | | | | | | | | 1430 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 755 | mw13 | | | | | | | | | | | | | | 1510 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 756 | mw16 | | | | | | | | | | | | | | 1415 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 757 | mw32 | | | | | | | | | | | | | | 1530 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 758 | mw38 | | | | | | | | | | | | | | 1545 | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| David Fletcher | NOVA | 12/16/11 | 8:42 | [signature] | TA | 12/16/11 | 8:42 | INST ___ OBS 1.3°C COR ___°C |
| [signature] | TA | 12/16/11 | 10:05 | | | | | INST ___ OBS ___°C COR ___°C |
| | | | | [signature] | TA | 12/17/11 | 11:00 | INST FR OBS 3.4°C COR 3.5°C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-in-Review

**REMARKS:**
Lubbock
Sat. delivery

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Courier LS 8173090

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

## Certifications

**WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025**

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: January 5, 2012

Work Order: 11122015

Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-07

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 284936 | MW-1 | water | 2011-12-16 | 13:25 | 2011-12-19 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

# Report Contents

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2011-12-19 and assigned to work order 11122015. Samples for work order 11122015 were received intact at a temperatnre of 7.1 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| PAH | S 8270D | 74399 | 2012-12-22 at 15:00 | 87624 | 2012-01-05 at 11:26 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11122015 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These qnality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 284936 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270D | Prep Method: | S 3510C |
| QC Batch: | 87624 | Date Analyzed: | 2012-01-05 | Analyzed By: | MN |
| Prep Batch: | 74399 | Sample Preparation: | 2012-12-22 | Prepared By: | MN |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Naphthalene | | 1 | **0.00319** | mg/L | 0.922 | 0.000200 |
| 2-Methylnaphthalene | | 1 | **0.00561** | mg/L | 0.922 | 0.000200 |
| 1-Methylnaphthalene | | | **0.00754** | mg/L | 0.922 | 0.000200 |
| Acenaphthylene | U | 1 | <0.000184 | mg/L | 0.922 | 0.000200 |
| Acenaphthene | U | 1 | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzofuran | | 1 | **0.000830** | mg/L | 0.922 | 0.000200 |
| Fluorene | | 1 | **0.00101** | mg/L | 0.922 | 0.000200 |
| Anthracene | U | 1 | <0.000184 | mg/L | 0.922 | 0.000200 |
| Phenanthrene | | | **0.00106** | mg/L | 0.922 | 0.000200 |
| Fluoranthene | U | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Pyrene | U | 1 | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)anthracene | U | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Chrysene | U | 1 | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(b)fluoranthene | U | | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(k)fluoranthene | Qr,U | 1 | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(a)pyrene | U | 1 | <0.000184 | mg/L | 0.922 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | U | 1 | <0.000184 | mg/L | 0.922 | 0.000200 |
| Dibenzo(a,h)anthracene | U | 1 | <0.000184 | mg/L | 0.922 | 0.000200 |
| Benzo(g,h,i)peryleue | U | | <0.000184 | mg/L | 0.922 | 0.000200 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 0.0286 | mg/L | 0.922 | 0.0800 | 36 | 10 - 117 |
| 2-Fluorobiphenyl | | | 0.0371 | mg/L | 0.922 | 0.0800 | 46 | 10 - 99 |
| Terphenyl-d14 | | | 0.0421 | mg/L | 0.922 | 0.0800 | 53 | 22.6 - 115 |

# Method Blanks

**Method Blank (1)** QC Batch: 87624

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 87624 | Date Analyzed: | 2012-01-05 | Analyzed By: | MN |
| Prep Batch: | 74399 | QC Preparation: | 2012-12-22 | Prepared By: | MN |

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Naphthalene | | 1 | <0.0000904 | mg/L | 0.0002 |
| 2-Methylnaphthalene | | 1 | <0.000184 | mg/L | 0.0002 |
| 1-Methylnaphthalene | | | <0.000120 | mg/L | 0.0002 |
| Acenaphthylene | | 1 | <0.000101 | mg/L | 0.0002 |
| Acenaphthene | | 1 | <0.000122 | mg/L | 0.0002 |
| Dibenzofuran | | 1 | <0.000119 | mg/L | 0.0002 |
| Fluorene | | 1 | <0.000198 | mg/L | 0.0002 |
| Anthracene | | 1 | <0.000190 | mg/L | 0.0002 |
| Phenanthrene | | | <0.000190 | mg/L | 0.0002 |
| Fluoranthene | | | <0.000122 | mg/L | 0.0002 |
| Pyrene | | 1 | <0.000142 | mg/L | 0.0002 |
| Benzo(a)anthracene | | | <0.000138 | mg/L | 0.0002 |
| Chrysene | | 1 | <0.000155 | mg/L | 0.0002 |
| Benzo(b)fluoranthene | | | <0.000179 | mg/L | 0.0002 |
| Benzo(k)fluoranthene | | 1 | <0.000185 | mg/L | 0.0002 |
| Benzo(a)pyrene | | 1 | <0.000169 | mg/L | 0.0002 |
| Indeno(1,2,3-cd)pyrene | | 1 | <0.000139 | mg/L | 0.0002 |
| Dibenzo(a,h)anthracene | | 1 | <0.000107 | mg/L | 0.0002 |
| Benzo(g,h,i)perylene | | | <0.000143 | mg/L | 0.0002 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 0.0369 | mg/L | 1 | 0.0800 | 46 | 10 - 117 |
| 2-Fluorobiphenyl | | | 0.0323 | mg/L | 1 | 0.0800 | 40 | 10 - 99 |
| Terphenyl-d14 | | | 0.0357 | mg/L | 1 | 0.0800 | 45 | 22.6 - 115 |

# Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 87624
Prep Batch: 74399

Date Analyzed: 2012-01-05
QC Preparation: 2012-12-22

Analyzed By: MN
Prepared By: MN

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | | 1 | 0.0281 | mg/L | 1 | 0.0800 | <0.0000904 | 35 | 10 - 89.9 |
| 2-Methylnaphthalene | | 1 | 0.0325 | mg/L | 1 | 0.0800 | <0.000184 | 41 | 13.8 - 98.4 |
| 1-Methylnaphthalene | | | 0.0312 | mg/L | 1 | 0.0800 | <0.000120 | 39 | 13.1 - 103 |
| Acenaphthylene | | 1 | 0.0370 | mg/L | 1 | 0.0800 | <0.000101 | 46 | 20 - 104 |
| Acenaphthene | | 1 | 0.0357 | mg/L | 1 | 0.0800 | <0.000122 | 45 | 21.6 - 94.6 |
| Dibenzofuran | | 1 | 0.0392 | mg/L | 1 | 0.0800 | <0.000119 | 49 | 22.9 - 74.9 |
| Fluorene | | 1 | 0.0396 | mg/L | 1 | 0.0800 | <0.000198 | 50 | 30.8 - 109 |
| Anthracene | | 1 | 0.0426 | mg/L | 1 | 0.0800 | <0.000190 | 53 | 37.6 - 96.4 |
| Phenanthrene | | | 0.0430 | mg/L | 1 | 0.0800 | <0.000190 | 54 | 42.4 - 99.8 |
| Fluoranthene | | | 0.0469 | mg/L | 1 | 0.0800 | <0.000122 | 59 | 48 - 118 |
| Pyrene | | 1 | 0.0457 | mg/L | 1 | 0.0800 | <0.000142 | 57 | 45.3 - 109 |
| Benzo(a)anthracene | | | 0.0548 | mg/L | 1 | 0.0800 | <0.000138 | 68 | 48 - 113 |
| Chrysene | | 1 | 0.0619 | mg/L | 1 | 0.0800 | <0.000155 | 77 | 35.2 - 175 |
| Benzo(b)fluoranthene | | | 0.0384 | mg/L | 1 | 0.0800 | <0.000179 | 48 | 16.6 - 106 |
| Benzo(k)fluoranthene | | 1 | 0.0367 | mg/L | 1 | 0.0800 | <0.000185 | 46 | 36.8 - 99.4 |
| Benzo(a)pyrene | | 1 | 0.0384 | mg/L | 1 | 0.0800 | <0.000169 | 48 | 32.3 - 99.7 |
| Indeno(1,2,3-cd)pyrene | | 1 | 0.0420 | mg/L | 1 | 0.0800 | <0.000139 | 52 | 34.1 - 106 |
| Dibenzo(a,h)anthracene | | 1 | 0.0559 | mg/L | 1 | 0.0800 | <0.000107 | 70 | 47.1 - 103 |
| Benzo(g,h,i)perylene | | | 0.0407 | mg/L | 1 | 0.0800 | <0.000143 | 51 | 21.9 - 112 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | | 1 | 0.0317 | mg/L | 1 | 0.0800 | <0.0000904 | 40 | 10 - 89.9 | 12 | 20 |
| 2-Methylnaphthalene | | 1 | 0.0374 | mg/L | 1 | 0.0800 | <0.000184 | 47 | 13.8 - 98.4 | 14 | 20 |
| 1-Methylnaphthalene | | | 0.0358 | mg/L | 1 | 0.0800 | <0.000120 | 45 | 13.1 - 103 | 14 | 20 |
| Acenaphthylene | | 1 | 0.0410 | mg/L | 1 | 0.0800 | <0.000101 | 51 | 20 - 104 | 10 | 20 |
| Acenaphthene | | 1 | 0.0398 | mg/L | 1 | 0.0800 | <0.000122 | 50 | 21.6 - 94.6 | 11 | 20 |
| Dibenzofuran | | 1 | 0.0434 | mg/L | 1 | 0.0800 | <0.000119 | 54 | 22.9 - 74.9 | 10 | 20 |
| Fluorene | | 1 | 0.0426 | mg/L | 1 | 0.0800 | <0.000198 | 53 | 30.8 - 109 | 7 | 20 |
| Anthracene | | 1 | 0.0475 | mg/L | 1 | 0.0800 | <0.000190 | 59 | 37.6 - 96.4 | 11 | 20 |
| Phenanthrene | | | 0.0484 | mg/L | 1 | 0.0800 | <0.000190 | 60 | 42.4 - 99.8 | 12 | 20 |
| Fluoranthene | | | 0.0516 | mg/L | 1 | 0.0800 | <0.000122 | 64 | 48 - 118 | 10 | 20 |
| Pyrene | | 1 | 0.0488 | mg/L | 1 | 0.0800 | <0.000142 | 61 | 45.3 - 109 | 7 | 20 |

*continued ...*

*control spikes continued ...*

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzo(a)anthracene | | | 0.0608 | mg/L | 1 | 0.0800 | <0.000138 | 76 | 48 - 113 | 10 | 20 |
| Chrysene | | 1 | 0.0687 | mg/L | 1 | 0.0800 | <0.000155 | 86 | 35.2 - 175 | 10 | 20 |
| Benzo(b)fluoranthene | | | 0.0390 | mg/L | 1 | 0.0800 | <0.000179 | 49 | 16.6 - 106 | 2 | 20 |
| Benzo(k)fluoranthene | Qr | Qr 1 | 0.0458 | mg/L | 1 | 0.0800 | <0.000185 | 57 | 36.8 - 99.4 | 22 | 20 |
| Benzo(a)pyrene | | 1 | 0.0434 | mg/L | 1 | 0.0800 | <0.000169 | 54 | 32.3 - 99.7 | 12 | 20 |
| Indeno(1,2,3-cd)pyrene | | 1 | 0.0470 | mg/L | 1 | 0.0800 | <0.000139 | 59 | 34.1 - 106 | 11 | 20 |
| Dibenzo(a,h)anthracene | | 1 | 0.0627 | mg/L | 1 | 0.0800 | <0.000107 | 78 | 47.1 - 103 | 12 | 20 |
| Benzo(g,h,i)perylene | | | 0.0454 | mg/L | 1 | 0.0800 | <0.000143 | 57 | 21.9 - 112 | 11 | 20 |

Percent recovery is based on tbe spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 0.0368 | 0.0403 | mg/L | 1 | 0.0800 | 46 | 50 | 10 - 117 |
| 2-Fluorobiphenyl | 0.0358 | 0.0402 | mg/L | 1 | 0.0800 | 45 | 50 | 10 - 99 |
| Terphenyl-d14 | 0.0525 | 0.0562 | mg/L | 1 | 0.0800 | 66 | 70 | 22.6 - 115 |

# Calibration Standards

**Standard (CCV-3)**

QC Batch: 87624 Date Analyzed: 2012-01-05 Analyzed By: MN

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Naphthalene | | 1 | mg/L | 60.0 | 55.9 | 93 | 80 - 120 | 2012-01-05 |
| 2-Methylnaphthalene | | 1 | mg/L | 60.0 | 55.4 | 92 | 80 - 120 | 2012-01-05 |
| 1-Methylnaphthalene | | | mg/L | 60.0 | 55.7 | 93 | 80 - 120 | 2012-01-05 |
| Acenaphthylene | | 1 | mg/L | 60.0 | 55.5 | 92 | 80 - 120 | 2012-01-05 |
| Acenaphthene | | 1 | mg/L | 60.0 | 56.2 | 94 | 80 - 120 | 2012-01-05 |
| Dibenzofuran | | 1 | mg/L | 60.0 | 54.2 | 90 | 80 - 120 | 2012-01-05 |
| Fluorene | | 1 | mg/L | 60.0 | 52.7 | 88 | 80 - 120 | 2012-01-05 |
| Anthracene | | 1 | mg/L | 60.0 | 53.3 | 89 | 80 - 120 | 2012-01-05 |
| Phenanthrene | | | mg/L | 60.0 | 54.0 | 90 | 80 - 120 | 2012-01-05 |
| Fluoranthene | | | mg/L | 60.0 | 59.4 | 99 | 80 - 120 | 2012-01-05 |
| Pyrene | | 1 | mg/L | 60.0 | 55.2 | 92 | 80 - 120 | 2012-01-05 |
| Benzo(a)anthracene | | | mg/L | 60.0 | 58.8 | 98 | 80 - 120 | 2012-01-05 |
| Chrysene | | 1 | mg/L | 60.0 | 56.0 | 93 | 80 - 120 | 2012-01-05 |
| Benzo(b)fluoranthene | | | mg/L | 60.0 | 48.6 | 81 | 80 - 120 | 2012-01-05 |
| Benzo(k)fluoranthene | | 1 | mg/L | 60.0 | 52.6 | 88 | 80 - 120 | 2012-01-05 |
| Benzo(a)pyrene | | 1 | mg/L | 60.0 | 50.7 | 84 | 80 - 120 | 2012-01-05 |
| Indeno(1,2,3-cd)pyrene | | 1 | mg/L | 60.0 | 53.3 | 89 | 80 - 120 | 2012-01-05 |
| Dibenzo(a,h)anthracene | | 1 | mg/L | 60.0 | 53.8 | 90 | 80 - 120 | 2012-01-05 |
| Benzo(g,h,i)perylene | | | mg/L | 60.0 | 52.7 | 88 | 80 - 120 | 2012-01-05 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 55.8 | mg/L | 1 | 60.0 | 93 | - |
| 2-Fluorobiphenyl | | | 57.5 | mg/L | 1 | 60.0 | 96 | - |
| Terphenyl-d14 | | | 55.7 | mg/L | 1 | 60.0 | 93 | - |

# Appendix

## Report Definitions

| Name | Definition |
|---|---|
| MDL | Method Detection Limit |
| MQL | Minimum Quantitation Limit |
| SDL | Sample Detection Limit |

## Laboratory Certifications

| C | Certifying Authority | Certification Number | Laboratory Location |
|---|---|---|---|
| - | NCTRCA | WFWB384444Y0909 | TraceAnalysis |
| - | DBE | VN 20657 | TraceAnalysis |
| - | HUB | 1752439743100-86536 | TraceAnalysis |
| - | WBE | 237019 | TraceAnalysis |
| 1 | NELAP | T104704219-11-5 | Lubbock |

## Standard Flags

| F | Description |
|---|---|
| B | Analyte detected in the corresponding method blank above the method detection limit |
| H | Analyzed out of hold time |
| J | Estimated concentration |
| Jb | The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL. |
| Je | Estimated concentration exceeding calibration range. |
| Qc | Calibration check outside of laboratory limits. |
| Qr | RPD outside of laboratory limits |
| Qs | Spike recovery outside of laboratory limits. |
| Qsr | Surrogate recovery outside of laboratory limits. |
| U | The analyte is not detected above the SDL |

## Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 1112204615



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
**Lubbock, Texas 79424**
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
**Midland, Texas 79703**
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
**El Paso, Texas 79922**
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
**Carrollton, Texas 75006**
Tel (972) 242-7750

**Company Name:** NOVA

**Phone #:**

**Address:** (Street, City, Zip)

**Fax #:**

**Contact Person:** Ron Bounsville

**E-mail:**

**Invoice to:**
(If different from above)

**Project #:**

**Project Name:** BOB DURHAM

**Project Location (including state):**

**Sampler Signature:** David Fletcher

## ANALYSIS REQUEST
## (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | MATRIX: SOIL | MATRIX: AIR | MATRIX: SLUDGE | PRESERVATIVE METHOD: HCl | PRESERVATIVE METHOD: $HNO_3$ | PRESERVATIVE METHOD: $H_2SO_4$ | PRESERVATIVE METHOD: NaOH | PRESERVATIVE METHOD: ICE | PRESERVATIVE METHOD: NONE | SAMPLING: DATE | SAMPLING: TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 284934 | MW1 | 1 | 1L Amber | X | | | | | | | | | X | 12/16/11 | 1325 | | | | | X | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| David Fletcher | NOVA | 12/19/11 | 1048 | [signature] | TA | 12/19/11 | 1048 | INST ___ OBS 7.1 °C COR ___ °C |
| | | | | | | | | INST ___ OBS ___ °C COR ___ °C |
| | | | | Brenda Leland | Trace Lubbock | 12/20/11 | 9:20 | INST I.R. OBS 3.1 °C COR 3.2 °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-In-Review

**REMARKS:**
Lubbock
- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # [illegible] 2N17H141

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

# Summary Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX 79703

Report Date: March 13, 2012

Work Order: 12030216

Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-07

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 290380 | MW 56 | water | 2012-03-01 | 13:26 | 2012-03-02 |
| 290381 | MW 6 | water | 2012-03-01 | 13:42 | 2012-03-02 |
| 290382 | MW 33 | water | 2012-03-01 | 13:49 | 2012-03-02 |
| 290383 | MW 15 | water | 2012-03-01 | 13:57 | 2012-03-02 |
| 290384 | MW 10 | water | 2012-03-01 | 14:03 | 2012-03-02 |
| 290385 | MW 7 | water | 2012-03-01 | 14:15 | 2012-03-02 |
| 290386 | MW 32 | water | 2012-03-01 | 14:25 | 2012-03-02 |
| 290387 | MW 37 | water | 2012-03-01 | 14:32 | 2012-03-02 |
| 290388 | MW 8 | water | 2012-03-01 | 14:43 | 2012-03-02 |
| 290389 | MW 28 | water | 2012-03-01 | 14:49 | 2012-03-02 |
| 290390 | MW 3 | water | 2012-03-01 | 15:00 | 2012-03-02 |
| 290391 | MW 23 | water | 2012-03-01 | 15:04 | 2012-03-02 |
| 290392 | MW 16 | water | 2012-03-01 | 15:20 | 2012-03-02 |
| 290393 | MW 4 | water | 2012-03-01 | 15:28 | 2012-03-02 |
| 290394 | MW 31 | water | 2012-03-01 | 15:32 | 2012-03-02 |
| 290395 | MW 1 | water | 2012-03-01 | 15:40 | 2012-03-02 |
| 290396 | MW 2 | water | 2012-03-01 | 15:46 | 2012-03-02 |
| 290397 | MW 38 | water | 2012-03-01 | 16:00 | 2012-03-02 |
| 290398 | MW 13 | water | 2012-03-01 | 16:15 | 2012-03-02 |
| 290399 | MW 5 | water | 2012-03-01 | 16:25 | 2012-03-02 |

| | BTEX | | | |
|---|---|---|---|---|
| Sample - Field Code | Benzene (mg/L) | Toluene (mg/L) | Ethylbenzene (mg/L) | Xylene (mg/L) |
| **290380 - MW 56** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **290381 - MW 6** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **290382 - MW 33** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **290383 - MW 15** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **290384 - MW 10** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |

*continued ...*

*... continued*

| Sample - Field Code | BTEX | | | |
|---|---|---|---|---|
| | Benzene (mg/L) | Toluene (mg/L) | Ethylbenzene (mg/L) | Xylene (mg/L) |
| **290385 - MW 7** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **290386 - MW 32** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **290387 - MW 37** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **290388 - MW 8** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **290389 - MW 28** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **290390 - MW 3** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **290391 - MW 23** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **290392 - MW 16** | **0.00770** | <0.00100 | <0.00100 | <0.00100 |
| **290393 - MW 4** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **290394 - MW 31** | **0.00730** | <0.00100 | <0.00100 | <0.00100 |
| **290395 - MW 1** | **0.0146** Qr,Qs | <0.00100 Qr,Qs | **0.00870** Qr,Qs | **0.0234** Qr,Qs |
| **290396 - MW 2** | **0.0107** Qr,Qs | <0.00100 Qr,Qs | <0.00100 Qr,Qs | <0.00100 Qr,Qs |
| **290397 - MW 38** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **290398 - MW 13** | **0.0120** Qr,Qs | <0.00100 Qr,Qs | <0.00100 Qr,Qs | <0.00100 Qr,Qs |
| **290399 - MW 5** | **0.0227** | <0.00100 | <0.00100 | <0.00100 |

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298
200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: March 13, 2012

Work Order: 12030216

Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-07

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 290380 | MW 56 | water | 2012-03-01 | 13:26 | 2012-03-02 |
| 290381 | MW 6 | water | 2012-03-01 | 13:42 | 2012-03-02 |
| 290382 | MW 33 | water | 2012-03-01 | 13:49 | 2012-03-02 |
| 290383 | MW 15 | water | 2012-03-01 | 13:57 | 2012-03-02 |
| 290384 | MW 10 | water | 2012-03-01 | 14:03 | 2012-03-02 |
| 290385 | MW 7 | water | 2012-03-01 | 14:15 | 2012-03-02 |
| 290386 | MW 32 | water | 2012-03-01 | 14:25 | 2012-03-02 |
| 290387 | MW 37 | water | 2012-03-01 | 14:32 | 2012-03-02 |
| 290388 | MW 8 | water | 2012-03-01 | 14:43 | 2012-03-02 |
| 290389 | MW 28 | water | 2012-03-01 | 14:49 | 2012-03-02 |
| 290390 | MW 3 | water | 2012-03-01 | 15:00 | 2012-03-02 |
| 290391 | MW 23 | water | 2012-03-01 | 15:04 | 2012-03-02 |
| 290392 | MW 16 | water | 2012-03-01 | 15:20 | 2012-03-02 |
| 290393 | MW 4 | water | 2012-03-01 | 15:28 | 2012-03-02 |
| 290394 | MW 31 | water | 2012-03-01 | 15:32 | 2012-03-02 |
| 290395 | MW 1 | water | 2012-03-01 | 15:40 | 2012-03-02 |
| 290396 | MW 2 | water | 2012-03-01 | 15:46 | 2012-03-02 |
| 290397 | MW 38 | water | 2012-03-01 | 16:00 | 2012-03-02 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 290398 | MW 13 | water | 2012-03-01 | 16:15 | 2012-03-02 |
| 290399 | MW 5 | water | 2012-03-01 | 16:25 | 2012-03-02 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Blair Leftwich

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

# Report Contents

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2012-03-02 and assigned to work order 12030216. Samples for work order 12030216 were received intact without headspace and at a temperature of 5.3 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 75731 | 2012-03-07 at 10:54 | 89199 | 2012-03-07 at 12:06 |
| BTEX | S 8021B | 75760 | 2012-03-08 at 09:08 | 89240 | 2012-03-08 at 09:23 |
| BTEX | S 8021B | 75795 | 2012-03-09 at 09:09 | 89278 | 2012-03-09 at 09:25 |
| BTEX | S 8021B | 75806 | 2012-03-11 at 17:00 | 89295 | 2012-03-11 at 18:05 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12030216 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 290380 - MW 56**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89240 | Date Analyzed: | 2012-03-08 | Analyzed By: | tc |
| Prep Batch: | 75760 | Sample Preparation: | 2012-03-08 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 1 Qsr | Qsr | | 0.0362 | mg/L | 1 | 0.100 | 36 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | 2 Qsr | Qsr | | 0.0250 | mg/L | 1 | 0.100 | 25 | 51.1 - 122.9 |

**Sample: 290381 - MW 6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89240 | Date Analyzed: | 2012-03-08 | Analyzed By: | tc |
| Prep Batch: | 75760 | Sample Preparation: | 2012-03-08 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 3 Qsr | Qsr | | 0.0654 | mg/L | 1 | 0.100 | 65 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | 4 Qsr | Qsr | | 0.0492 | mg/L | 1 | 0.100 | 49 | 51.1 - 122.9 |

**Sample: 290382 - MW 33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89240 | Date Analyzed: | 2012-03-08 | Analyzed By: | tc |
| Prep Batch: | 75760 | Sample Preparation: | 2012-03-08 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 5 Qsr | Qsr | | 0.0511 | mg/L | 1 | 0.100 | 51 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | 6 Qsr | Qsr | | 0.0348 | mg/L | 1 | 0.100 | 35 | 51.1 - 122.9 |

**Sample: 290383 - MW 15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89199 | Date Analyzed: | 2012-03-07 | Analyzed By: | tc |
| Prep Batch: | 75731 | Sample Preparation: | 2012-03-07 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | Qsr | Qsr | | 0.0698 | mg/L | 1 | 0.100 | 70 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | | | | 0.0564 | mg/L | 1 | 0.100 | 56 | 51.1 - 122.9 |

**Sample: 290384 - MW 10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89240 | Date Analyzed: | 2012-03-08 | Analyzed By: | tc |
| Prep Batch: | 75760 | Sample Preparation: | 2012-03-08 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.103 | mg/L | 1 | 0.100 | 103 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0753 | mg/L | 1 | 0.100 | 75 | 51.1 - 122.9 |

**Sample: 290385 - MW 7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89240 | Date Analyzed: | 2012-03-08 | Analyzed By: | tc |
| Prep Batch: | 75760 | Sample Preparation: | 2012-03-08 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 7 Qsr | Qsr | | 0.0431 | mg/L | 1 | 0.100 | 43 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | 8 Qsr | Qsr | | 0.0356 | mg/L | 1 | 0.100 | 36 | 51.1 - 122.9 |

**Sample: 290386 - MW 32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89240 | Date Analyzed: | 2012-03-08 | Analyzed By: | tc |
| Prep Batch: | 75760 | Sample Preparation: | 2012-03-08 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.104 | mg/L | 1 | 0.100 | 104 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0795 | mg/L | 1 | 0.100 | 80 | 51.1 - 122.9 |

**Sample: 290387 - MW 37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89240 | Date Analyzed: | 2012-03-08 | Analyzed By: | tc |
| Prep Batch: | 75760 | Sample Preparation: | 2012-03-08 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 9 Qsr | Qsr | | 0.0421 | mg/L | 1 | 0.100 | 42 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | 10 Qsr | Qsr | | 0.0309 | mg/L | 1 | 0.100 | 31 | 51.1 - 122.9 |

**Sample: 290388 - MW 8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89240 | Date Analyzed: | 2012-03-08 | Analyzed By: | tc |
| Prep Batch: | 75760 | Sample Preparation: | 2012-03-08 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 11 Qsr | Qsr | | 0.0603 | mg/L | 1 | 0.100 | 60 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | 12 Qsr | Qsr | | 0.0464 | mg/L | 1 | 0.100 | 46 | 51.1 - 122.9 |

**Sample: 290389 - MW 28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89240 | Date Analyzed: | 2012-03-08 | Analyzed By: | tc |
| Prep Batch: | 75760 | Sample Preparation: | 2012-03-08 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 13 Qsr | Qsr | | 0.0446 | mg/L | 1 | 0.100 | 45 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | 14 Qsr | Qsr | | 0.0298 | mg/L | 1 | 0.100 | 30 | 51.1 - 122.9 |

**Sample: 290390 - MW 3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89240 | Date Analyzed: | 2012-03-08 | Analyzed By: | tc |
| Prep Batch: | 75760 | Sample Preparation: | 2012-03-08 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 15 Qsr | Qsr | | 0.0486 | mg/L | 1 | 0.100 | 49 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | 16 Qsr | Qsr | | 0.0329 | mg/L | 1 | 0.100 | 33 | 51.1 - 122.9 |

**Sample: 290391 - MW 23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89240 | Date Analyzed: | 2012-03-08 | Analyzed By: | tc |
| Prep Batch: | 75760 | Sample Preparation: | 2012-03-08 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 17 Qsr | Qsr | | 0.0497 | mg/L | 1 | 0.100 | 50 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | 18 Qsr | Qsr | | 0.0348 | mg/L | 1 | 0.100 | 35 | 51.1 - 122.9 |

**Sample: 290392 - MW 16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89240 | Date Analyzed: | 2012-03-08 | Analyzed By: | tc |
| Prep Batch: | 75760 | Sample Preparation: | 2012-03-08 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | **0.00770** | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0870 | mg/L | 1 | 0.100 | 87 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0796 | mg/L | 1 | 0.100 | 80 | 51.1 - 122.9 |

**Sample: 290393 - MW 4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89240 | Date Analyzed: | 2012-03-08 | Analyzed By: | tc |
| Prep Batch: | 75760 | Sample Preparation: | 2012-03-08 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 19 Qsr | Qsr | | 0.0578 | mg/L | 1 | 0.100 | 58 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | 20 Qsr | Qsr | | 0.0477 | mg/L | 1 | 0.100 | 48 | 51.1 - 122.9 |

**Sample: 290394 - MW 31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89240 | Date Analyzed: | 2012-03-08 | Analyzed By: | tc |
| Prep Batch: | 75760 | Sample Preparation: | 2012-03-08 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | **0.00730** | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0816 | mg/L | 1 | 0.100 | 82 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0619 | mg/L | 1 | 0.100 | 62 | 51.1 - 122.9 |

**Sample: 290395 - MW 1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89278 | Date Analyzed: | 2012-03-09 | Analyzed By: | tc |
| Prep Batch: | 75795 | Sample Preparation: | 2012-03-09 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | Qr,Qs | 1 | **0.0146** | mg/L | 1 | 0.00100 |
| Toluene | Qr,Qs,U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | Qr,Qs | 1 | **0.00870** | mg/L | 1 | 0.00100 |
| Xylene | Qr,Qs | 1 | **0.0234** | mg/L | 1 | 0.00100 |

| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | Qsr | Qsr | | 0.0678 | mg/L | 1 | 0.100 | 68 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | | | | 0.0691 | mg/L | 1 | 0.100 | 69 | 51.1 - 122.9 |

**Sample: 290396 - MW 2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89278 | Date Analyzed: | 2012-03-09 | Analyzed By: | tc |
| Prep Batch: | 75795 | Sample Preparation: | 2012-03-09 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | Qr,Qs | 1 | **0.0107** | mg/L | 1 | 0.00100 |
| Toluene | Qr,Qs,U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | Qr,Qs,U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | Qr,Qs,U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.101 | mg/L | 1 | 0.100 | 101 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.112 | mg/L | 1 | 0.100 | 112 | 51.1 - 122.9 |

**Sample: 290397 - MW 38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89295 | Date Analyzed: | 2012-03-11 | Analyzed By: | tc |
| Prep Batch: | 75806 | Sample Preparation: | 2012-03-11 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.118 | mg/L | 1 | 0.100 | 118 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0893 | mg/L | 1 | 0.100 | 89 | 51.1 - 122.9 |

**Sample: 290398 - MW 13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89278 | Date Analyzed: | 2012-03-09 | Analyzed By: | tc |
| Prep Batch: | 75795 | Sample Preparation: | 2012-03-09 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | Qr,Qs | 1 | **0.0120** | mg/L | 1 | 0.00100 |
| Toluene | Qr,Qs,U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | Qr,Qs,U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | Qr,Qs,U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | Qsr | Qsr | | 0.0352 | mg/L | 1 | 0.100 | 35 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | | | | 0.0533 | mg/L | 1 | 0.100 | 53 | 51.1 - 122.9 |

**Sample: 290399 - MW 5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 89295 | Date Analyzed: | 2012-03-11 | Analyzed By: | tc |
| Prep Batch: | 75806 | Sample Preparation: | 2012-03-11 | Prepared By: | tc |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | **0.0227** | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.112 | mg/L | 1 | 0.100 | 112 | 73.5 - 123.1 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.101 | mg/L | 1 | 0.100 | 101 | 51.1 - 122.9 |

# Method Blanks

**Method Blank (1)** QC Batch: 89199

QC Batch: 89199 | Date Analyzed: 2012-03-07 | Analyzed By: tc
Prep Batch: 75731 | QC Preparation: 2012-03-07 | Prepared By: tc

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000600 | mg/L | 0.001 |
| Toluene | | 1 | <0.000400 | mg/L | 0.001 |
| Ethylbenzene | | 1 | <0.000600 | mg/L | 0.001 |
| Xylene | | 1 | <0.00130 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.109 | mg/L | 1 | 0.100 | 109 | 74.2 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0888 | mg/L | 1 | 0.100 | 89 | 54.3 - 124.6 |

**Method Blank (1)** QC Batch: 89240

QC Batch: 89240 | Date Analyzed: 2012-03-08 | Analyzed By: tc
Prep Batch: 75760 | QC Preparation: 2012-03-08 | Prepared By: tc

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000600 | mg/L | 0.001 |
| Toluene | | 1 | <0.000400 | mg/L | 0.001 |
| Ethylbenzene | | 1 | <0.000600 | mg/L | 0.001 |
| Xylene | | 1 | <0.00130 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.100 | mg/L | 1 | 0.100 | 100 | 74.2 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0739 | mg/L | 1 | 0.100 | 74 | 54.3 - 124.6 |

**Method Blank (1)** QC Batch: 89278

QC Batch: 89278 | Date Analyzed: 2012-03-09 | Analyzed By: tc
Prep Batch: 75795 | QC Preparation: 2012-03-09 | Prepared By: tc

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000600 | mg/L | 0.001 |
| Toluene | | 1 | <0.000400 | mg/L | 0.001 |
| Ethylbenzene | | 1 | <0.000600 | mg/L | 0.001 |
| Xylene | | 1 | <0.00130 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.106 | mg/L | 1 | 0.100 | 106 | 74.2 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0688 | mg/L | 1 | 0.100 | 69 | 54.3 - 124.6 |

**Method Blank (1)** QC Batch: 89295

QC Batch: 89295 Date Analyzed: 2012-03-11 Analyzed By: tc
Prep Batch: 75806 QC Preparation: 2012-03-11 Prepared By: tc

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000600 | mg/L | 0.001 |
| Toluene | | 1 | <0.000400 | mg/L | 0.001 |
| Ethylbenzene | | 1 | <0.000600 | mg/L | 0.001 |
| Xylene | | 1 | <0.00130 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.119 | mg/L | 1 | 0.100 | 119 | 74.2 - 126 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0981 | mg/L | 1 | 0.100 | 98 | 54.3 - 124.6 |

# Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 89199
Prep Batch: 75731

Date Analyzed: 2012-03-07
QC Preparation: 2012-03-07

Analyzed By: tc
Prepared By: tc

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.102 | mg/L | 1 | 0.100 | <0.000600 | 102 | 79.7 - 117.6 |
| Toluene | | 1 | 0.103 | mg/L | 1 | 0.100 | <0.000400 | 103 | 73.9 - 123.9 |
| Ethylbenzene | | 1 | 0.100 | mg/L | 1 | 0.100 | <0.000600 | 100 | 76.8 - 120.8 |
| Xylene | | 1 | 0.301 | mg/L | 1 | 0.300 | <0.00130 | 100 | 76.2 - 120.5 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0988 | mg/L | 1 | 0.100 | <0.000600 | 99 | 79.7 - 117.6 | 3 | 20 |
| Toluene | | 1 | 0.0993 | mg/L | 1 | 0.100 | <0.000400 | 99 | 73.9 - 123.9 | 4 | 20 |
| Ethylbenzene | | 1 | 0.0975 | mg/L | 1 | 0.100 | <0.000600 | 98 | 76.8 - 120.8 | 2 | 20 |
| Xylene | | 1 | 0.293 | mg/L | 1 | 0.300 | <0.00130 | 98 | 76.2 - 120.5 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.103 | 0.112 | mg/L | 1 | 0.100 | 103 | 112 | 72.5 - 117 |
| 4-Bromofluorobenzene (4-BFB) | 0.108 | 0.113 | mg/L | 1 | 0.100 | 108 | 113 | 69.4 - 124 |

### Laboratory Control Spike (LCS-1)

QC Batch: 89240
Prep Batch: 75760

Date Analyzed: 2012-03-08
QC Preparation: 2012-03-08

Analyzed By: tc
Prepared By: tc

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0983 | mg/L | 1 | 0.100 | <0.000600 | 98 | 79.7 - 117.6 |
| Toluene | | 1 | 0.0972 | mg/L | 1 | 0.100 | <0.000400 | 97 | 73.9 - 123.9 |
| Ethylbenzene | | 1 | 0.0940 | mg/L | 1 | 0.100 | <0.000600 | 94 | 76.8 - 120.8 |
| Xylene | | 1 | 0.282 | mg/L | 1 | 0.300 | <0.00130 | 94 | 76.2 - 120.5 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Uuits | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0956 | mg/L | 1 | 0.100 | <0.000600 | 96 | 79.7 - 117.6 | 3 | 20 |
| Toluene | | 1 | 0.0953 | mg/L | 1 | 0.100 | <0.000400 | 95 | 73.9 - 123.9 | 2 | 20 |
| Ethylbenzene | | 1 | 0.0926 | mg/L | 1 | 0.100 | <0.000600 | 93 | 76.8 - 120.8 | 2 | 20 |
| Xylene | | 1 | 0.276 | mg/L | 1 | 0.300 | <0.00130 | 92 | 76.2 - 120.5 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0973 | 0.0981 | mg/L | 1 | 0.100 | 97 | 98 | 72.5 - 117 |
| 4-Bromofluorobenzene (4-BFB) | 0.0937 | 0.0944 | mg/L | 1 | 0.100 | 94 | 94 | 69.4 - 124 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 89278 | Date Analyzed: 2012-03-09 | Analyzed By: tc
Prep Batch: 75795 | QC Preparation: 2012-03-09 | Prepared By: tc

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0934 | mg/L | 1 | 0.100 | <0.000600 | 93 | 79.7 - 117.6 |
| Toluene | | 1 | 0.0944 | mg/L | 1 | 0.100 | <0.000400 | 94 | 73.9 - 123.9 |
| Ethylbenzene | | 1 | 0.0928 | mg/L | 1 | 0.100 | <0.000600 | 93 | 76.8 - 120.8 |
| Xylene | | 1 | 0.277 | mg/L | 1 | 0.300 | <0.00130 | 92 | 76.2 - 120.5 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0948 | mg/L | 1 | 0.100 | <0.000600 | 95 | 79.7 - 117.6 | 2 | 20 |
| Toluene | | 1 | 0.0953 | mg/L | 1 | 0.100 | <0.000400 | 95 | 73.9 - 123.9 | 1 | 20 |
| Ethylbenzene | | 1 | 0.0934 | mg/L | 1 | 0.100 | <0.000600 | 93 | 76.8 - 120.8 | 1 | 20 |
| Xylene | | 1 | 0.280 | mg/L | 1 | 0.300 | <0.00130 | 93 | 76.2 - 120.5 | 1 | 20 |

Perceut recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.103 | 0.112 | mg/L | 1 | 0.100 | 103 | 112 | 72.5 - 117 |
| 4-Bromofluorohenzene (4-BFB) | 0.0958 | 0.104 | mg/L | 1 | 0.100 | 96 | 104 | 69.4 - 124 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 89295 | Date Analyzed: 2012-03-11 | Analyzed By: tc
Prep Batch: 75806 | QC Preparation: 2012-03-11 | Prepared By: tc

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0939 | mg/L | 1 | 0.100 | <0.000600 | 94 | 79.7 - 117.6 |
| Toluene | | 1 | 0.0995 | mg/L | 1 | 0.100 | <0.000400 | 100 | 73.9 - 123.9 |
| Ethylbenzene | | 1 | 0.0974 | mg/L | 1 | 0.100 | <0.000600 | 97 | 76.8 - 120.8 |
| Xylene | | 1 | 0.294 | mg/L | 1 | 0.300 | <0.00130 | 98 | 76.2 - 120.5 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0895 | mg/L | 1 | 0.100 | <0.000600 | 90 | 79.7 - 117.6 | 5 | 20 |
| Toluene | | 1 | 0.0957 | mg/L | 1 | 0.100 | <0.000400 | 96 | 73.9 - 123.9 | 4 | 20 |
| Ethylbenzene | | 1 | 0.0960 | mg/L | 1 | 0.100 | <0.000600 | 96 | 76.8 - 120.8 | 1 | 20 |
| Xylene | | 1 | 0.282 | mg/L | 1 | 0.300 | <0.00130 | 94 | 76.2 - 120.5 | 4 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.112 | 0.110 | mg/L | 1 | 0.100 | 112 | 110 | 72.5 - 117 |
| 4-Bromofluorobenzene (4-BFB) | 0.110 | 0.106 | mg/L | 1 | 0.100 | 110 | 106 | 69.4 - 124 |

**Matrix Spike (MS-1)** Spiked Sample: 290206

QC Batch: 89199 | Date Analyzed: 2012-03-07 | Analyzed By: tc
Prep Batch: 75731 | QC Preparation: 2012-03-07 | Prepared By: tc

| Param | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 1.94 | mg/L | 10 | 1.00 | 0.9982 | 94 | 86.6 - 130.3 |
| Toluene | | 1 | 0.957 | mg/L | 10 | 1.00 | <0.00400 | 96 | 82.2 - 120.1 |
| Ethylbenzene | | 1 | 0.951 | mg/L | 10 | 1.00 | <0.00600 | 95 | 66.8 - 119.2 |
| Xylene | | 1 | 2.78 | mg/L | 10 | 3.00 | <0.0130 | 93 | 66.5 - 118.4 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 1.92 | mg/L | 10 | 1.00 | 0.9982 | 92 | 86.6 - 130.3 | 1 | 20 |
| Toluene | | 1 | 0.963 | mg/L | 10 | 1.00 | <0.00400 | 96 | 82.2 - 120.1 | 1 | 20 |

*continued ...*

*matrix spikes continued ...*

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | | 1 | 0.961 | mg/L | 10 | 1.00 | <0.00600 | 96 | 66.8 - 119.2 | 1 | 20 |
| Xylene | | 1 | 2.83 | mg/L | 10 | 3.00 | <0.0130 | 94 | 66.5 - 118.4 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.898 | 0.971 | mg/L | 10 | 1 | 90 | 97 | 73.2 - 116.6 |
| 4-Bromofluorobenzene (4-BFB) | 0.930 | 1.04 | mg/L | 10 | 1 | 93 | 104 | 64.8 - 125.7 |

**Matrix Spike (MS-1)** Spiked Sample: 290478

QC Batch: 89240
Prep Batch: 75760

Date Analyzed: 2012-03-08
QC Preparation: 2012-03-08

Analyzed By: tc
Prepared By: tc

| Param | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.464 | mg/L | 5 | 0.500 | <0.00300 | 93 | 86.6 - 130.3 |
| Toluene | | 1 | 0.463 | mg/L | 5 | 0.500 | <0.00200 | 93 | 82.2 - 120.1 |
| Ethylbenzene | | 1 | 0.435 | mg/L | 5 | 0.500 | <0.00300 | 87 | 66.8 - 119.2 |
| Xylene | | 1 | 1.30 | mg/L | 5 | 1.50 | <0.00650 | 87 | 66.5 - 118.4 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.485 | mg/L | 5 | 0.500 | <0.00300 | 97 | 86.6 - 130.3 | 4 | 20 |
| Toluene | | 1 | 0.474 | mg/L | 5 | 0.500 | <0.00200 | 95 | 82.2 - 120.1 | 2 | 20 |
| Ethylbenzene | | 1 | 0.444 | mg/L | 5 | 0.500 | <0.00300 | 89 | 66.8 - 119.2 | 2 | 20 |
| Xylene | | 1 | 1.34 | mg/L | 5 | 1.50 | <0.00650 | 89 | 66.5 - 118.4 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.501 | 0.474 | mg/L | 5 | 0.5 | 100 | 95 | 73.2 - 116.6 |
| 4-Bromofluorobenzene (4-BFB) | 21 | 0.474 | 0.435 | mg/L | 5 | 0.5 | 95 | 87 | 64.8 - 125.7 |

**Matrix Spike (MS-1)** Spiked Sample: 290479

QC Batch: 89278
Prep Batch: 75795

Date Analyzed: 2012-03-09
QC Preparation: 2012-03-09

Analyzed By: tc
Prepared By: tc

| Param | | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | Qs | Qs | 1 | 0.220 | mg/L | 5 | 0.500 | <0.00300 | 44 | 86.6 - 130.3 |
| Toluene | Qs | Qs | 1 | 0.217 | mg/L | 5 | 0.500 | <0.00200 | 43 | 82.2 - 120.1 |
| Ethylbenzene | Qs | Qs | 1 | 0.209 | mg/L | 5 | 0.500 | <0.00300 | 42 | 66.8 - 119.2 |
| Xylene | Qs | Qs | 1 | 0.620 | mg/L | 5 | 1.50 | <0.00650 | 41 | 66.5 - 118.4 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | Qr,Qs | Qr,Qs | 1 | 0.410 | mg/L | 5 | 0.500 | <0.00300 | 82 | 86.6 - 130.3 | 60 | 20 |
| Toluene | Qr | Qr | 1 | 0.422 | mg/L | 5 | 0.500 | <0.00200 | 84 | 82.2 - 120.1 | 64 | 20 |
| Ethylbenzene | Qr | Qr | 1 | 0.422 | mg/L | 5 | 0.500 | <0.00300 | 84 | 66.8 - 119.2 | 68 | 20 |
| Xylene | Qr | Qr | 1 | 1.26 | mg/L | 5 | 1.50 | <0.00650 | 84 | 66.5 - 118.4 | 68 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | | | | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | Qsr | Qsr | 0.156 | 0.437 | mg/L | 5 | 0.5 | 31 | 87 | 73.2 - 116.6 |
| 4-Bromofluorobenzene (4-BFB) | 22 | Qsr | Qsr | 0.159 | 0.422 | mg/L | 5 | 0.5 | 32 | 84 | 64.8 - 125.7 |

**Matrix Spike (MS-1)** Spiked Sample: 290662

QC Batch: 89295
Prep Batch: 75806

Date Analyzed: 2012-03-11
QC Preparation: 2012-03-11

Analyzed By: tc
Prepared By: tc

| Param | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.467 | mg/L | 5 | 0.500 | <0.00300 | 93 | 86.6 - 130.3 |
| Toluene | | 1 | 0.486 | mg/L | 5 | 0.500 | <0.00200 | 97 | 82.2 - 120.1 |
| Ethylbenzene | | 1 | 0.485 | mg/L | 5 | 0.500 | <0.00300 | 97 | 66.8 - 119.2 |
| Xylene | | 1 | 1.44 | mg/L | 5 | 1.50 | <0.00650 | 96 | 66.5 - 118.4 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.470 | mg/L | 5 | 0.500 | <0.00300 | 94 | 86.6 - 130.3 | 1 | 20 |
| Toluene | | 1 | 0.489 | mg/L | 5 | 0.500 | <0.00200 | 98 | 82.2 - 120.1 | 1 | 20 |
| Ethylbenzene | | 1 | 0.484 | mg/L | 5 | 0.500 | <0.00300 | 97 | 66.8 - 119.2 | 0 | 20 |
| Xylene | | 1 | 1.43 | mg/L | 5 | 1.50 | <0.00650 | 95 | 66.5 - 118.4 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

*continued ...*

*matrix spikes continued ...*

| Surrogate | | | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Surrogate | | | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
| Trifluorotoluene (TFT) | Qsr | Qsr | 0.586 | 0.580 | mg/L | 5 | 0.5 | 117 | 116 | 73.2 - 116.6 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.544 | 0.529 | mg/L | 5 | 0.5 | 109 | 106 | 64.8 - 125.7 |

# Calibration Standards

### Standard (CCV-1)

QC Batch: 89199 Date Analyzed: 2012-03-07 Analyzed By: tc

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0971 | 97 | 80 - 120 | 2012-03-07 |
| Toluene | | 1 | mg/L | 0.100 | 0.0974 | 97 | 80 - 120 | 2012-03-07 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0932 | 93 | 80 - 120 | 2012-03-07 |
| Xylene | | 1 | mg/L | 0.300 | 0.283 | 94 | 80 - 120 | 2012-03-07 |

### Standard (CCV-2)

QC Batch: 89199 Date Analyzed: 2012-03-07 Analyzed By: tc

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0964 | 96 | 80 - 120 | 2012-03-07 |
| Toluene | | 1 | mg/L | 0.100 | 0.0947 | 95 | 80 - 120 | 2012-03-07 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0909 | 91 | 80 - 120 | 2012-03-07 |
| Xylene | | 1 | mg/L | 0.300 | 0.273 | 91 | 80 - 120 | 2012-03-07 |

### Standard (CCV-1)

QC Batch: 89240 Date Analyzed: 2012-03-08 Analyzed By: tc

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0958 | 96 | 80 - 120 | 2012-03-08 |
| Toluene | | 1 | mg/L | 0.100 | 0.0937 | 94 | 80 - 120 | 2012-03-08 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0899 | 90 | 80 - 120 | 2012-03-08 |
| Xylene | | 1 | mg/L | 0.300 | 0.269 | 90 | 80 - 120 | 2012-03-08 |

**Standard (CCV-2)**

QC Batch: 89240 Date Analyzed: 2012-03-08 Analyzed By: tc

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0983 | 98 | 80 - 120 | 2012-03-08 |
| Toluene | | 1 | mg/L | 0.100 | 0.0970 | 97 | 80 - 120 | 2012-03-08 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0940 | 94 | 80 - 120 | 2012-03-08 |
| Xylene | | 1 | mg/L | 0.300 | 0.279 | 93 | 80 - 120 | 2012-03-08 |

**Standard (CCV-3)**

QC Batch: 89240 Date Analyzed: 2012-03-08 Analyzed By: tc

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0981 | 98 | 80 - 120 | 2012-03-08 |
| Toluene | | 1 | mg/L | 0.100 | 0.0967 | 97 | 80 - 120 | 2012-03-08 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0916 | 92 | 80 - 120 | 2012-03-08 |
| Xylene | | 1 | mg/L | 0.300 | 0.276 | 92 | 80 - 120 | 2012-03-08 |

**Standard (CCV-1)**

QC Batch: 89278 Date Analyzed: 2012-03-09 Analyzed By: tc

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0937 | 94 | 80 - 120 | 2012-03-09 |
| Toluene | | 1 | mg/L | 0.100 | 0.0923 | 92 | 80 - 120 | 2012-03-09 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0904 | 90 | 80 - 120 | 2012-03-09 |
| Xylene | | 1 | mg/L | 0.300 | 0.268 | 89 | 80 - 120 | 2012-03-09 |

**Standard (CCV-2)**

QC Batch: 89278 Date Analyzed: 2012-03-09 Analyzed By: tc

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0923 | 92 | 80 - 120 | 2012-03-09 |
| Toluene | | 1 | mg/L | 0.100 | 0.0958 | 96 | 80 - 120 | 2012-03-09 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0965 | 96 | 80 - 120 | 2012-03-09 |
| Xylene | | 1 | mg/L | 0.300 | 0.290 | 97 | 80 - 120 | 2012-03-09 |

**Standard (CCV-1)**

QC Batch: 89295 Date Analyzed: 2012-03-11 Analyzed By: tc

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0810 | 81 | 80 - 120 | 2012-03-11 |
| Toluene | | 1 | mg/L | 0.100 | 0.0838 | 84 | 80 - 120 | 2012-03-11 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0851 | 85 | 80 - 120 | 2012-03-11 |
| Xylene | | 1 | mg/L | 0.300 | 0.258 | 86 | 80 - 120 | 2012-03-11 |

**Standard (CCV-2)**

QC Batch: 89295 Date Analyzed: 2012-03-11 Analyzed By: tc

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0933 | 93 | 80 - 120 | 2012-03-11 |
| Toluene | | 1 | mg/L | 0.100 | 0.0961 | 96 | 80 - 120 | 2012-03-11 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0946 | 95 | 80 - 120 | 2012-03-11 |
| Xylene | | 1 | mg/L | 0.300 | 0.281 | 94 | 80 - 120 | 2012-03-11 |

# Appendix

## Report Definitions

| Name | Definition |
|---|---|
| MDL | Method Detection Limit |
| MQL | Minimum Quantitation Limit |
| SDL | Sample Detection Limit |

## Laboratory Certifications

| C | Certifying Authority | Certification Number | Laboratory Location |
|---|---|---|---|
| - | NCTRCA | WFWB384444Y0909 | TraceAnalysis |
| - | DBE | VN 20657 | TraceAnalysis |
| - | HUB | 1752439743100-86536 | TraceAnalysis |
| - | WBE | 237019 | TraceAnalysis |
| 1 | NELAP | T104704392-11-3 | Midland |

## Standard Flags

| F | Description |
|---|---|
| B | Analyte detected in the corresponding method blank above the method detection limit |
| H | Analyzed out of hold time |
| J | Estimated concentration |
| Jb | The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL. |
| Je | Estimated concentration exceeding calibration range. |
| Qc | Calibration check outside of laboratory limits. |
| Qr | RPD outside of laboratory limits |
| Qs | Spike recovery outside of laboratory limits. |
| Qsr | Surrogate recovery outside of laboratory limits. |
| U | The analyte is not detected above the SDL |

## Result Comments

1 Matrix Effect.
2 Matrix Effect.
3 Matrix Effect.
4 Matrix Effect.
5 Matrix Effect.

6 Matrix Effect.
7 Matrix Effect.
8 Matrix Effect.
9 Matrix Effect.
10 Matrix Effect.
11 Matrix Effect.
12 Matrix Effect.
13 Matrix Effect.
14 Matrix Effect.
15 Matrix Effect.
16 Matrix Effect.
17 Matrix Effect.
18 Matrix Effect.
19 Matrix Effect.
20 Matrix Effect.
21 Dilution due to surfactants.
22 Dilution due to Surfactants.

## Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 12030216



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Nova Safety and Environmental
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 Commerce
Fax #:
Contact Person: Ron Rounsaville
E-mail:
Invoice to: (If different from above)
Project #: TNM LF 2000-07
Project Name: Bob Durham
Project Location (including state): Monument, N.M.
Sampler Signature:

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 210380 | MW56 | 3 | VOA | x | | | | x | | | | x | | 3/1/12 | 1326 | | x | | | | | | | | | | | | | | | | | | | |
| 381 | MW6 | | | | | | | | | | | | | | 1342 | | | | | | | | | | | | | | | | | | | | | |
| 382 | MW33 | | | | | | | | | | | | | | 1349 | | | | | | | | | | | | | | | | | | | | | |
| 383 | MW15 | | | | | | | | | | | | | | 1357 | | | | | | | | | | | | | | | | | | | | | |
| 384 | MW10 | | | | | | | | | | | | | | 1403 | | | | | | | | | | | | | | | | | | | | | |
| 385 | MW7 | | | | | | | | | | | | | | 1415 | | | | | | | | | | | | | | | | | | | | | |
| 386 | MW32 | | | | | | | | | | | | | | 1425 | | | | | | | | | | | | | | | | | | | | | |
| 387 | MW37 | | | | | | | | | | | | | | 1432 | | | | | | | | | | | | | | | | | | | | | |
| 388 | MW8 | | | | | | | | | | | | | | 1443 | | | | | | | | | | | | | | | | | | | | | |
| 389 | MW28 | | | | | | | | | | | | | | 1449 | | | | | | | | | | | | | | | | | | | | | |
| 390 | MW3 | | | | | | | | | | | | | | 1500 | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| Jorge Gomez | | 3/2/12 | 08:22 | | TA | 3/2/12 | 08:22 | INST R / OBS 53 °C / COR °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST / OBS °C / COR °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST / OBS °C / COR °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-in-Review

**REMARKS:**
All tests Midland

- Dry Weight Basis Required
- TRRP Report Required
- Check If Special Reporting Limits Are Needed

Carrier # Carrier

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

LAB Order ID # 1203021 6



# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
**Lubbock, Texas 79424**
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
**Midland, Texas 79703**
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
**El Paso, Texas 79922**
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
**Carrollton, Texas 75006**
Tel (972) 242-7750

**Company Name:** Nova Safety and Environmental
**Phone #:** 432-520-7720
**Address:** (Street, City, Zip) 2057 Commerce Drive
**Fax #:**
**Contact Person:** Ron Reunsaville
**E-mail:**
**Invoice to:** (If different from above)
**Project #:** TNM LF 2007-07
**Project Name:** Bob Durham
**Project Location (including state):** Monument, N.M
**Sampler Signature:** Carl Van

## ANALYSIS REQUEST
(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 391 | MW23 | 3 | VOA | X | | | | | X | | | | X | | | 3/1/12 | 1504 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 392 | MW16 | | | | | | | | | | | | | | | | 1520 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 393 | MW4 | | | | | | | | | | | | | | | | 1528 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 394 | MW31 | | | | | | | | | | | | | | | | 1532 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 395 | MW1 | | | | | | | | | | | | | | | | 1540 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 396 | MW2 | | | | | | | | | | | | | | | | 1546 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 397 | MW38 | | | | | | | | | | | | | | | | 1600 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 398 | MW13 | | | | | | | | | | | | | | | | 1615 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 399 | MW5 | | | | | | | | | | | | | | | | 1625 | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| Larry Hamf | | 3/2/12 | 08:22 | [illegible] | TA | 3/2/12 | 822 | INST R-1 OBS 5.9 °C COR °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST OBS °C COR °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST OBS °C COR °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-in-Review

**REMARKS:**

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Carry

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

# Summary Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX 79703

Report Date: June 11, 2012

Work Order: 12060102

Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-07

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 299617 | MW-24 | water | 2012-05-31 | 14:20 | 2012-06-01 |
| 299618 | MW-27 | water | 2012-05-31 | 14:55 | 2012-06-01 |
| 299619 | MW-31 | water | 2012-05-31 | 11:50 | 2012-06-01 |
| 299620 | MW-33 | water | 2012-05-31 | 11:20 | 2012-06-01 |
| 299621 | MW-56 | water | 2012-05-31 | 11:30 | 2012-06-01 |
| 299622 | MW-15 | water | 2012-05-31 | 11:15 | 2012-06-01 |
| 299623 | MW-10 | water | 2012-05-31 | 10:50 | 2012-06-01 |
| 299624 | MW-7 | water | 2012-05-31 | 13:30 | 2012-06-01 |
| 299625 | MW-32 | water | 2012-05-31 | 11:20 | 2012-06-01 |
| 299626 | MW-37 | water | 2012-05-31 | 11:30 | 2012-06-01 |
| 299627 | MW-8 | water | 2012-05-31 | 13:00 | 2012-06-01 |
| 299628 | MW-28 | water | 2012-05-31 | 12:10 | 2012-06-01 |
| 299629 | MW-3 | water | 2012-05-31 | 13:40 | 2012-06-01 |
| 299630 | MW-23 | water | 2012-05-31 | 14:10 | 2012-06-01 |
| 299631 | MW-16 | water | 2012-05-31 | 13:30 | 2012-06-01 |
| 299632 | MW-4 | water | 2012-05-31 | 14:10 | 2012-06-01 |
| 299633 | MW-6 | water | 2012-05-31 | 13:00 | 2012-06-01 |
| 299634 | MW-38 | water | 2012-05-31 | 11:50 | 2012-06-01 |
| 299635 | MW-2 | water | 2012-05-31 | 12:50 | 2012-06-01 |
| 299636 | MW-13 | water | 2012-05-31 | 10:50 | 2012-06-01 |
| 299637 | MW-1 | water | 2012-05-31 | 12:50 | 2012-06-01 |
| 299638 | MW-5 | water | 2012-05-31 | 13:40 | 2012-06-01 |

| | BTEX | | | |
|---|---|---|---|---|
| Sample - Field Code | Benzene (mg/L) | Toluene (mg/L) | Ethylbenzene (mg/L) | Xylene (mg/L) |
| **299617 - MW-24** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299618 - MW-27** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299619 - MW-31** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |

*continued ...*

*... continued*

| Sample - Field Code | BTEX | | | |
|---|---|---|---|---|
| | Benzene (mg/L) | Toluene (mg/L) | Ethylbenzene (mg/L) | Xylene (mg/L) |
| **299620 - MW-33** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299621 - MW-56** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299622 - MW-15** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299623 - MW-10** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299624 - MW-7** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299625 - MW-32** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299626 - MW-37** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299627 - MW-8** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299628 - MW-28** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299629 - MW-3** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299630 - MW-23** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299631 - MW-16** | **0.00360** | <0.00100 | **0.00120** | <0.00100 |
| **299632 - MW-4** | <0.00100 | <0.00100 | <0.00100 | **0.00100** |
| **299633 - MW-6** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299634 - MW-38** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299635 - MW-2** | <0.00100 | <0.00100 | <0.00100 | **0.00140** |
| **299636 - MW-13** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299637 - MW-1** | <0.00100 | <0.00100 | <0.00100 | <0.00100 |
| **299638 - MW-5** | <0.00100 | <0.00100 | **0.00110** | **0.00170** |

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972•242•7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: June 11, 2012

Work Order: 12060102

Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM-LF-2000-07

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 299617 | MW-24 | water | 2012-05-31 | 14:20 | 2012-06-01 |
| 299618 | MW-27 | water | 2012-05-31 | 14:55 | 2012-06-01 |
| 299619 | MW-31 | water | 2012-05-31 | 11:50 | 2012-06-01 |
| 299620 | MW-33 | water | 2012-05-31 | 11:20 | 2012-06-01 |
| 299621 | MW-56 | water | 2012-05-31 | 11:30 | 2012-06-01 |
| 299622 | MW-15 | water | 2012-05-31 | 11:15 | 2012-06-01 |
| 299623 | MW-10 | water | 2012-05-31 | 10:50 | 2012-06-01 |
| 299624 | MW-7 | water | 2012-05-31 | 13:30 | 2012-06-01 |
| 299625 | MW-32 | water | 2012-05-31 | 11:20 | 2012-06-01 |
| 299626 | MW-37 | water | 2012-05-31 | 11:30 | 2012-06-01 |
| 299627 | MW-8 | water | 2012-05-31 | 13:00 | 2012-06-01 |
| 299628 | MW-28 | water | 2012-05-31 | 12:10 | 2012-06-01 |
| 299629 | MW-3 | water | 2012-05-31 | 13:40 | 2012-06-01 |
| 299630 | MW-23 | water | 2012-05-31 | 14:10 | 2012-06-01 |
| 299631 | MW-16 | water | 2012-05-31 | 13:30 | 2012-06-01 |
| 299632 | MW-4 | water | 2012-05-31 | 14:10 | 2012-06-01 |
| 299633 | MW-6 | water | 2012-05-31 | 13:00 | 2012-06-01 |
| 299634 | MW-38 | water | 2012-05-31 | 11:50 | 2012-06-01 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 299635 | MW-2 | water | 2012-05-31 | 12:50 | 2012-06-01 |
| 299636 | MW-13 | water | 2012-05-31 | 10:50 | 2012-06-01 |
| 299637 | MW-1 | water | 2012-05-31 | 12:50 | 2012-06-01 |
| 299638 | MW-5 | water | 2012-05-31 | 13:40 | 2012-06-01 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Blair Leftwich

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

# Report Contents

# Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2012-06-01 and assigned to work order 12060102. Samples for work order 12060102 were received intact without headspace and at a temperature of 8.1 C. Samples were received on ice.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 77955 | 2012-06-06 at 13:53 | 91876 | 2012-06-06 at 13:53 |
| BTEX | S 8021B | 77985 | 2012-06-07 at 15:56 | 91921 | 2012-06-07 at 15:56 |
| BTEX | S 8021B | 78023 | 2012-06-08 at 16:11 | 91967 | 2012-06-08 at 16:11 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12060102 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 299617 - MW-24**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91876 | Date Analyzed: | 2012-06-06 | Analyzed By: | ZLM |
| Prep Batch: | 77955 | Sample Preparation: | 2012-06-06 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzeue | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0907 | mg/L | 1 | 0.100 | 91 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0958 | mg/L | 1 | 0.100 | 96 | 70 - 130 |

**Sample: 299618 - MW-27**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91876 | Date Analyzed: | 2012-06-06 | Analyzed By: | ZLM |
| Prep Batch: | 77955 | Sample Preparation: | 2012-06-06 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0903 | mg/L | 1 | 0.100 | 90 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0956 | mg/L | 1 | 0.100 | 96 | 70 - 130 |

**Sample: 299619 - MW-31**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91876 | Date Analyzed: | 2012-06-06 | Analyzed By: | ZLM |
| Prep Batch: | 77955 | Sample Preparation: | 2012-06-06 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0897 | mg/L | 1 | 0.100 | 90 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0952 | mg/L | 1 | 0.100 | 95 | 70 - 130 |

**Sample: 299620 - MW-33**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91876 | Date Analyzed: | 2012-06-06 | Analyzed By: | ZLM |
| Prep Batch: | 77955 | Sample Preparation: | 2012-06-06 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0900 | mg/L | 1 | 0.100 | 90 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0949 | mg/L | 1 | 0.100 | 95 | 70 - 130 |

**Sample: 299621 - MW-56**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91876 | Date Analyzed: | 2012-06-06 | Analyzed By: | ZLM |
| Prep Batch: | 77955 | Sample Preparation: | 2012-06-06 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0890 | mg/L | 1 | 0.100 | 89 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0949 | mg/L | 1 | 0.100 | 95 | 70 - 130 |

**Sample: 299622 - MW-15**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91876 | Date Analyzed: | 2012-06-06 | Analyzed By: | ZLM |
| Prep Batch: | 77955 | Sample Preparation: | 2012-06-06 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | Jb | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | Jb | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0904 | mg/L | 1 | 0.100 | 90 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0961 | mg/L | 1 | 0.100 | 96 | 70 - 130 |

**Sample: 299623 - MW-10**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91876 | Date Analyzed: | 2012-06-06 | Analyzed By: | ZLM |
| Prep Batch: | 77955 | Sample Preparation: | 2012-06-06 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | Jb | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0904 | mg/L | 1 | 0.100 | 90 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0966 | mg/L | 1 | 0.100 | 97 | 70 - 130 |

**Sample: 299624 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91967 | Date Analyzed: | 2012-06-08 | Analyzed By: | MT |
| Prep Batch: | 78023 | Sample Preparation: | 2012-06-08 | Prepared By: | MT |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.104 | mg/L | 1 | 0.100 | 104 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0978 | mg/L | 1 | 0.100 | 98 | 70 - 130 |

**Sample: 299625 - MW-32**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91876 | Date Analyzed: | 2012-06-06 | Analyzed By: | ZLM |
| Prep Batch: | 77955 | Sample Preparation: | 2012-06-06 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0903 | mg/L | 1 | 0.100 | 90 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0962 | mg/L | 1 | 0.100 | 96 | 70 - 130 |

**Sample: 299626 - MW-37**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91876 | Date Analyzed: | 2012-06-06 | Analyzed By: | ZLM |
| Prep Batch: | 77955 | Sample Preparation: | 2012-06-06 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0899 | mg/L | 1 | 0.100 | 90 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0961 | mg/L | 1 | 0.100 | 96 | 70 - 130 |

**Sample: 299627 - MW-8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91967 | Date Analyzed: | 2012-06-08 | Analyzed By: | MT |
| Prep Batch: | 78023 | Sample Preparation: | 2012-06-08 | Prepared By: | MT |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.102 | mg/L | 1 | 0.100 | 102 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0980 | mg/L | 1 | 0.100 | 98 | 70 - 130 |

**Sample: 299628 - MW-28**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91876 | Date Analyzed: | 2012-06-06 | Analyzed By: | ZLM |
| Prep Batch: | 77955 | Sample Preparation: | 2012-06-06 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0858 | mg/L | 1 | 0.100 | 86 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0913 | mg/L | 1 | 0.100 | 91 | 70 - 130 |

**Sample: 299629 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91967 | Date Analyzed: | 2012-06-08 | Analyzed By: | MT |
| Prep Batch: | 78023 | Sample Preparation: | 2012-06-08 | Prepared By: | MT |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.103 | mg/L | 1 | 0.100 | 103 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0975 | mg/L | 1 | 0.100 | 98 | 70 - 130 |

**Sample: 299630 - MW-23**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91876 | Date Analyzed: | 2012-06-06 | Analyzed By: | ZLM |
| Prep Batch: | 77955 | Sample Preparation: | 2012-06-06 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0869 | mg/L | 1 | 0.100 | 87 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0929 | mg/L | 1 | 0.100 | 93 | 70 - 130 |

**Sample: 299631 - MW-16**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91967 | Date Analyzed: | 2012-06-08 | Analyzed By: | MT |
| Prep Batch: | 78023 | Sample Preparation: | 2012-06-08 | Prepared By: | MT |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | **0.00360** | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | **0.00120** | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.108 | mg/L | 1 | 0.100 | 108 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.114 | mg/L | 1 | 0.100 | 114 | 70 - 130 |

**Sample: 299632 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91921 | Date Analyzed: | 2012-06-07 | Analyzed By: | ZLM |
| Prep Batch: | 77985 | Sample Preparation: | 2012-06-07 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | B | 1 | **0.00100** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0890 | mg/L | 1 | 0.100 | 89 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0959 | mg/L | 1 | 0.100 | 96 | 70 - 130 |

**Sample: 299633 - MW-6**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91921 | Date Analyzed: | 2012-06-07 | Analyzed By: | ZLM |
| Prep Batch: | 77985 | Sample Preparation: | 2012-06-07 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0883 | mg/L | 1 | 0.100 | 88 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0946 | mg/L | 1 | 0.100 | 95 | 70 - 130 |

**Sample: 299634 - MW-38**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91921 | Date Analyzed: | 2012-06-07 | Analyzed By: | ZLM |
| Prep Batch: | 77985 | Sample Preparation: | 2012-06-07 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | Jb | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0881 | mg/L | 1 | 0.100 | 88 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0956 | mg/L | 1 | 0.100 | 96 | 70 - 130 |

**Sample: 299635 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91921 | Date Analyzed: | 2012-06-07 | Analyzed By: | ZLM |
| Prep Batch: | 77985 | Sample Preparation: | 2012-06-07 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | Jb | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | B | 1 | **0.00140** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0934 | mg/L | 1 | 0.100 | 93 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.106 | mg/L | 1 | 0.100 | 106 | 70 - 130 |

**Sample: 299636 - MW-13**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91921 | Date Analyzed: | 2012-06-07 | Analyzed By: | ZLM |
| Prep Batch: | 77985 | Sample Preparation: | 2012-06-07 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | Jb | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0876 | mg/L | 1 | 0.100 | 88 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.111 | mg/L | 1 | 0.100 | 111 | 70 - 130 |

**Sample: 299637 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91921 | Date Analyzed: | 2012-06-07 | Analyzed By: | ZLM |
| Prep Batch: | 77985 | Sample Preparation: | 2012-06-07 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | Jb | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0866 | mg/L | 1 | 0.100 | 87 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0993 | mg/L | 1 | 0.100 | 99 | 70 - 130 |

**Sample: 299638 - MW-5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 91921 | Date Analyzed: | 2012-06-07 | Analyzed By: | ZLM |
| Prep Batch: | 77985 | Sample Preparation: | 2012-06-07 | Prepared By: | ZLM |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | B | 1 | **0.00110** | mg/L | 1 | 0.00100 |
| Xylene | B | 1 | **0.00170** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0958 | mg/L | 1 | 0.100 | 96 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.105 | mg/L | 1 | 0.100 | 105 | 70 - 130 |

# Method Blanks

**Method Blank (1)** QC Batch: 91876

QC Batch: 91876 | Date Analyzed: 2012-06-06 | Analyzed By: ZLM
Prep Batch: 77955 | QC Preparation: 2012-06-06 | Prepared By: ZLM

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000310 | mg/L | 0.001 |
| Toluene | | 1 | <0.000259 | mg/L | 0.001 |
| Ethylbenzene | | 1 | 0.000300 | mg/L | 0.001 |
| Xylene | | 1 | 0.000900 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0897 | mg/L | 1 | 0.100 | 90 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0958 | mg/L | 1 | 0.100 | 96 | 70 - 130 |

**Method Blank (1)** QC Batch: 91921

QC Batch: 91921 | Date Analyzed: 2012-06-07 | Analyzed By: ZLM
Prep Batch: 77985 | QC Preparation: 2012-06-07 | Prepared By: ZLM

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000310 | mg/L | 0.001 |
| Toluene | | 1 | <0.000259 | mg/L | 0.001 |
| Ethylbenzene | | 1 | 0.000400 | mg/L | 0.001 |
| Xylene | | 1 | 0.00100 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0878 | mg/L | 1 | 0.100 | 88 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0945 | mg/L | 1 | 0.100 | 94 | 70 - 130 |

**Method Blank (1)** QC Batch: 91967

QC Batch: 91967 | Date Analyzed: 2012-06-08 | Analyzed By: MT
Prep Batch: 78023 | QC Preparation: 2012-06-08 | Prepared By: MT

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000371 | mg/L | 0.001 |
| Toluene | | 1 | <0.000347 | mg/L | 0.001 |
| Ethylbenzene | | 1 | <0.000326 | mg/L | 0.001 |
| Xylene | | 1 | <0.000357 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.102 | mg/L | 1 | 0.100 | 102 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0979 | mg/L | 1 | 0.100 | 98 | 70 - 130 |

# Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 91876
Prep Batch: 77955

Date Analyzed: 2012-06-06
QC Preparation: 2012-06-06

Analyzed By: ZLM
Prepared By: ZLM

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0980 | mg/L | 1 | 0.100 | <0.000310 | 98 | 74.2 - 120 |
| Toluene | | 1 | 0.100 | mg/L | 1 | 0.100 | <0.000259 | 100 | 75.8 - 120 |
| Ethylbenzene | | 1 | 0.0977 | mg/L | 1 | 0.100 | 0.0003 | 97 | 71.8 - 120 |
| Xylene | | 1 | 0.297 | mg/L | 1 | 0.300 | 0.0009 | 99 | 73.8 - 120 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0969 | mg/L | 1 | 0.100 | <0.000310 | 97 | 74.2 - 120 | 1 | 20 |
| Toluene | | 1 | 0.101 | mg/L | 1 | 0.100 | <0.000259 | 101 | 75.8 - 120 | 1 | 20 |
| Ethylbenzene | | 1 | 0.0975 | mg/L | 1 | 0.100 | 0.0003 | 97 | 71.8 - 120 | 0 | 20 |
| Xylene | | 1 | 0.296 | mg/L | 1 | 0.300 | 0.0009 | 98 | 73.8 - 120 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0928 | 0.0927 | mg/L | 1 | 0.100 | 93 | 93 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 0.0991 | 0.0989 | mg/L | 1 | 0.100 | 99 | 99 | 70 - 130 |

### Laboratory Control Spike (LCS-1)

QC Batch: 91921
Prep Batch: 77985

Date Analyzed: 2012-06-07
QC Preparation: 2012-06-07

Analyzed By: ZLM
Prepared By: ZLM

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0951 | mg/L | 1 | 0.100 | <0.000310 | 95 | 74.2 - 120 |
| Toluene | | 1 | 0.0994 | mg/L | 1 | 0.100 | <0.000259 | 99 | 75.8 - 120 |
| Ethylbenzene | | 1 | 0.0967 | mg/L | 1 | 0.100 | 0.0004 | 96 | 71.8 - 120 |
| Xylene | | 1 | 0.294 | mg/L | 1 | 0.300 | 0.001 | 98 | 73.8 - 120 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0930 | mg/L | 1 | 0.100 | <0.000310 | 93 | 74.2 - 120 | 2 | 20 |
| Toluene | | 1 | 0.0966 | mg/L | 1 | 0.100 | <0.000259 | 97 | 75.8 - 120 | 3 | 20 |
| Ethylbenzene | | 1 | 0.0940 | mg/L | 1 | 0.100 | 0.0004 | 94 | 71.8 - 120 | 3 | 20 |
| Xylene | | 1 | 0.286 | mg/L | 1 | 0.300 | 0.001 | 95 | 73.8 - 120 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0901 | 0.0893 | mg/L | 1 | 0.100 | 90 | 89 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 0.0986 | 0.0970 | mg/L | 1 | 0.100 | 99 | 97 | 70 - 130 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 91967 | Date Analyzed: 2012-06-08 | Analyzed By: MT
Prep Batch: 78023 | QC Preparation: 2012-06-08 | Prepared By: MT

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0967 | mg/L | 1 | 0.100 | <0.000371 | 97 | 78.6 - 120 |
| Toluene | | 1 | 0.0963 | mg/L | 1 | 0.100 | <0.000347 | 96 | 79.6 - 120 |
| Ethylbenzene | | 1 | 0.0991 | mg/L | 1 | 0.100 | <0.000326 | 99 | 80 - 120 |
| Xylene | | 1 | 0.287 | mg/L | 1 | 0.300 | <0.000357 | 96 | 79.3 - 120 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0960 | mg/L | 1 | 0.100 | <0.000371 | 96 | 78.6 - 120 | 1 | 20 |
| Toluene | | 1 | 0.0952 | mg/L | 1 | 0.100 | <0.000347 | 95 | 79.6 - 120 | 1 | 20 |
| Ethylbenzene | | 1 | 0.0980 | mg/L | 1 | 0.100 | <0.000326 | 98 | 80 - 120 | 1 | 20 |
| Xylene | | 1 | 0.285 | mg/L | 1 | 0.300 | <0.000357 | 95 | 79.3 - 120 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0963 | 0.0961 | mg/L | 1 | 0.100 | 96 | 96 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 0.0896 | 0.0914 | mg/L | 1 | 0.100 | 90 | 91 | 70 - 130 |

**Matrix Spike (MS-1)** Spiked Sample: 299584

QC Batch: 91876
Prep Batch: 77955

Date Analyzed: 2012-06-06
QC Preparation: 2012-06-06

Analyzed By: ZLM
Prepared By: ZLM

| Param | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0964 | mg/L | 1 | 0.100 | <0.000310 | 96 | 47 - 131 |
| Toluene | | 1 | 0.0980 | mg/L | 1 | 0.100 | <0.000259 | 98 | 52.2 - 128 |
| Ethylbenzene | | 1 | 0.0957 | mg/L | 1 | 0.100 | <0.000291 | 96 | 26.5 - 154 |
| Xylene | | 1 | 0.290 | mg/L | 1 | 0.300 | <0.000268 | 97 | 50.1 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0961 | mg/L | 1 | 0.100 | <0.000310 | 96 | 47 - 131 | 0 | 20 |
| Toluene | | 1 | 0.0993 | mg/L | 1 | 0.100 | <0.000259 | 99 | 52.2 - 128 | 1 | 20 |
| Ethylbenzene | | 1 | 0.0959 | mg/L | 1 | 0.100 | <0.000291 | 96 | 26.5 - 154 | 0 | 20 |
| Xylene | | 1 | 0.291 | mg/L | 1 | 0.300 | <0.000268 | 97 | 50.1 - 130 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0926 | 0.0925 | mg/L | 1 | 0.1 | 93 | 92 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 0.0990 | 0.100 | mg/L | 1 | 0.1 | 99 | 100 | 70 - 130 |

**Matrix Spike (MS-1)** Spiked Sample: 300057

QC Batch: 91921
Prep Batch: 77985

Date Analyzed: 2012-06-07
QC Preparation: 2012-06-07

Analyzed By: ZLM
Prepared By: ZLM

| Param | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 1.61 | mg/L | 10 | 1.00 | 0.6 | 101 | 47 - 131 |
| Toluene | | 1 | 1.06 | mg/L | 10 | 1.00 | 0.0888 | 97 | 52.2 - 128 |
| Ethylbenzene | | 1 | 0.957 | mg/L | 10 | 1.00 | 0.0197 | 94 | 26.5 - 154 |
| Xylene | | 1 | 3.13 | mg/L | 10 | 3.00 | 0.23 | 97 | 50.1 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 1.54 | mg/L | 10 | 1.00 | 0.6 | 94 | 47 - 131 | 4 | 20 |
| Toluene | | 1 | 1.04 | mg/L | 10 | 1.00 | 0.0888 | 95 | 52.2 - 128 | 2 | 20 |

*continued . . .*

*matrix spikes continued ...*

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | | 1 | 0.940 | mg/L | 10 | 1.00 | 0.0197 | 92 | 26.5 - 154 | 2 | 20 |
| Xylene | | 1 | 3.06 | mg/L | 10 | 3.00 | 0.23 | 94 | 50.1 - 130 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.926 | 0.914 | mg/L | 10 | 1 | 93 | 91 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 0.968 | 0.974 | mg/L | 10 | 1 | 97 | 97 | 70 - 130 |

**Matrix Spike (MS-1)** Spiked Sample: 300274

QC Batch: 91967 | Date Analyzed: 2012-06-08 | Analyzed By: MT
Prep Batch: 78023 | QC Preparation: 2012-06-08 | Prepared By: MT

| Param | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0791 | mg/L | 1 | 0.100 | 0.0036 | 76 | 42.2 - 136 |
| Toluene | | 1 | 0.0754 | mg/L | 1 | 0.100 | 0.0005 | 75 | 44.3 - 133 |
| Ethylbenzene | | 1 | 0.0760 | mg/L | 1 | 0.100 | 0.0012 | 75 | 45.6 - 132 |
| Xylene | | 1 | 0.218 | mg/L | 1 | 0.300 | 0.0014 | 72 | 44.7 - 128 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0723 | mg/L | 1 | 0.100 | 0.0036 | 69 | 42.2 - 136 | 9 | 20 |
| Toluene | | 1 | 0.0680 | mg/L | 1 | 0.100 | 0.0005 | 68 | 44.3 - 133 | 10 | 20 |
| Ethylbenzene | | 1 | 0.0685 | mg/L | 1 | 0.100 | 0.0012 | 67 | 45.6 - 132 | 10 | 20 |
| Xylene | | 1 | 0.196 | mg/L | 1 | 0.300 | 0.0014 | 65 | 44.7 - 128 | 11 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0995 | 0.101 | mg/L | 1 | 0.1 | 100 | 101 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 0.0909 | 0.0922 | mg/L | 1 | 0.1 | 91 | 92 | 70 - 130 |

# Calibration Standards

### Standard (CCV-1)

QC Batch: 91876 Date Analyzed: 2012-06-06 Analyzed By: ZLM

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0968 | 97 | 80 - 120 | 2012-06-06 |
| Toluene | | 1 | mg/L | 0.100 | 0.100 | 100 | 80 - 120 | 2012-06-06 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0968 | 97 | 80 - 120 | 2012-06-06 |
| Xylene | | 1 | mg/L | 0.300 | 0.294 | 98 | 80 - 120 | 2012-06-06 |

### Standard (CCV-2)

QC Batch: 91876 Date Analyzed: 2012-06-06 Analyzed By: ZLM

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0957 | 96 | 80 - 120 | 2012-06-06 |
| Toluene | | 1 | mg/L | 0.100 | 0.0989 | 99 | 80 - 120 | 2012-06-06 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0952 | 95 | 80 - 120 | 2012-06-06 |
| Xylene | | 1 | mg/L | 0.300 | 0.289 | 96 | 80 - 120 | 2012-06-06 |

### Standard (CCV-3)

QC Batch: 91876 Date Analyzed: 2012-06-06 Analyzed By: ZLM

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0946 | 95 | 80 - 120 | 2012-06-06 |
| Toluene | | 1 | mg/L | 0.100 | 0.0978 | 98 | 80 - 120 | 2012-06-06 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0940 | 94 | 80 - 120 | 2012-06-06 |
| Xylene | | 1 | mg/L | 0.300 | 0.286 | 95 | 80 - 120 | 2012-06-06 |

**Standard (CCV-1)**

QC Batch: 91921 Date Analyzed: 2012-06-07 Analyzed By: ZLM

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0935 | 94 | 80 - 120 | 2012-06-07 |
| Toluene | | 1 | mg/L | 0.100 | 0.0956 | 96 | 80 - 120 | 2012-06-07 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0937 | 94 | 80 - 120 | 2012-06-07 |
| Xylene | | 1 | mg/L | 0.300 | 0.285 | 95 | 80 - 120 | 2012-06-07 |

**Standard (CCV-2)**

QC Batch: 91921 Date Analyzed: 2012-06-07 Analyzed By: ZLM

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0925 | 92 | 80 - 120 | 2012-06-07 |
| Toluene | | 1 | mg/L | 0.100 | 0.0939 | 94 | 80 - 120 | 2012-06-07 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0922 | 92 | 80 - 120 | 2012-06-07 |
| Xylene | | 1 | mg/L | 0.300 | 0.280 | 93 | 80 - 120 | 2012-06-07 |

**Standard (CCV-1)**

QC Batch: 91967 Date Analyzed: 2012-06-08 Analyzed By: MT

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0970 | 97 | 80 - 120 | 2012-06-08 |
| Toluene | | 1 | mg/L | 0.100 | 0.0972 | 97 | 80 - 120 | 2012-06-08 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.100 | 100 | 80 - 120 | 2012-06-08 |
| Xylene | | 1 | mg/L | 0.300 | 0.290 | 97 | 80 - 120 | 2012-06-08 |

**Standard (CCV-2)**

QC Batch: 91967 Date Analyzed: 2012-06-08 Analyzed By: MT

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0983 | 98 | 80 - 120 | 2012-06-08 |
| Toluene | | 1 | mg/L | 0.100 | 0.0980 | 98 | 80 - 120 | 2012-06-08 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0994 | 99 | 80 - 120 | 2012-06-08 |
| Xylene | | 1 | mg/L | 0.300 | 0.288 | 96 | 80 - 120 | 2012-06-08 |

# Appendix

## Report Definitions

| Name | Definition |
|---|---|
| MDL | Method Detection Limit |
| MQL | Minimum Quantitation Limit |
| SDL | Sample Detection Limit |

## Laboratory Certifications

| C | Certifying Authority | Certification Number | Laboratory Location |
|---|---|---|---|
| - | NCTRCA | WFWB384444Y0909 | TraceAnalysis |
| - | DBE | VN 20657 | TraceAnalysis |
| - | HUB | 1752439743100-86536 | TraceAnalysis |
| - | WBE | 237019 | TraceAnalysis |
| 1 | NELAP | T104704219-12-8 | Lubbock |

## Standard Flags

| F | Description |
|---|---|
| B | Analyte detected in the corresponding method blank above the method detection limit |
| H | Analyzed out of hold time |
| J | Estimated concentration |
| Jb | The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL. |
| Je | Estimated concentration exceeding calibration range. |
| Qc | Calibration check outside of laboratory limits. |
| Qr | RPD outside of laboratory limits |
| Qs | Spike recovery outside of laboratory limits. |
| Qsr | Surrogate recovery outside of laboratory limits. |
| U | The analyte is not detected above the SDL |

## Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.