# National Atmospheric Deposition Program

## Mercury Deposition Network

Mercury Analytical Laboratory
2006 Annual Quality Assurance Report

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# Definitions of Acronyms and Abbreviations

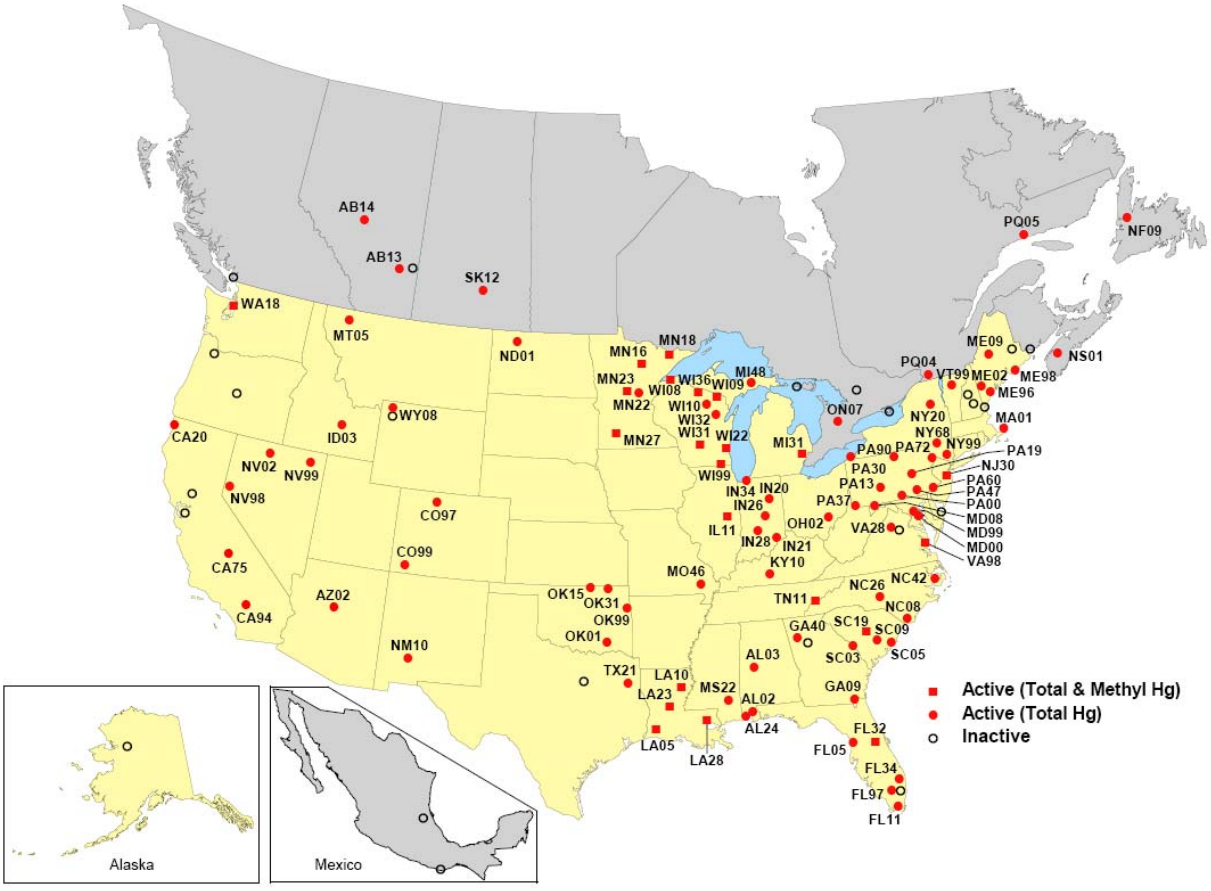
| | |
|---|---|
| **CAL** | Central Analytical Lab |
| **CCB** | Continued Calibration Blank |
| **CCV** | Continued Calibration Verification |
| **COC** | Chain of Custody |
| **CRM** | Certified Reference Material |
| **CVAFS** | Cold Vapor Atomic Fluorescence Spectrometry |
| **DQO** | Data Quality Objectives |
| **EMOF** | Electronic Mercury Observer Form |
| **HAL** | Mercury (Hg) Analytical Lab |
| **ICB** | Initial Calibration Blank |
| **ICV** | Initial Calibration Verification |
| **MD** | Matrix Duplicate |
| **MDL** | Method Detection Limit |
| **MDN** | Mercury Deposition Network |
| **MOF** | Mercury Observer Form |
| **MS** | Matrix Spike |
| **MSD** | Matrix Spike Duplicate |
| **NADP** | National Atmospheric Deposition Program |
| **NED** | Network Equipment Depot |
| **OPR** | Ongoing Precision and Recovery |
| **PB** | Preparation Blanks |
| **PE** | Performance Evaluation |
| **PT** | Proficiency Test |
| **QA/QC** | Quality Assurance/Quality Control |
| **QAP** | Quality Assurance Plan |
| **QR** | Quality Rating Code |
| **RL** | Reporting Limit |
| **RPD** | Relative Percent Difference |
| **SOP** | Standard Operating Procedure |
| **SRM** | Standard Reference Materia |

# 1. Introduction

Since January 1996, Frontier GeoSciences Inc. (FGS) has served as the Mercury Analytical Laboratory (HAL) and Site Liaison Center for the Mercury Deposition Network (MDN). MDN, coordinated through the National Atmospheric Deposition Program (NADP), was designed with the primary objective of quantifying the wet deposition of mercury in North America to determine long-term geographic and temporal distributions. MDN has grown to incorporate over 97 sites in the United States and Canada. In 2007, MDN is expected to incorporate 10-15 additional new sites.

As the HAL, FGS receives weekly precipitation samples to be analyzed for total mercury. HAL also analyzes samples for methylmercury from selected sites participating in the methylmercury program. The analytical technique — Modified EPA Method 1631 Revision B — was developed by Nicolas S. Bloom, one of FGS' founders. FGS also served as the referee lab for the Method 1631 final validation study.

Robert Brunette, Principle Investigator and HAL Director, oversees FGS's involvement in MDN. He serves as the HAL contact for the multiple agencies currently sponsoring MDN. His multiple roles require him to provide guidance and direction to all HAL staff and to maintain proficiency in all aspects of HAL activities, including MDN site selection and equipment installation, MDN equipment troubleshooting, field and laboratory training, analysis and report writing, as well as research on new MDN initiatives including Trace Metals (in addition to mercury) in Wet Deposition.



Mr. Brunette is assisted by Gerard Van der Jagt - the MDN Project Manager, and an analytical laboratory staff skilled in processing incoming samples, analyzing sample sets, cleaning glassware, shipping weekly field equipment, and entering data. Senior Research Scientist, Eric M. Prestbo, serves as a Science Advisor for HAL, and helps support MDN related research initiatives. The HAL Director also works closely with FGS' Laboratory Manager, Patrick Strickland and FGS' Quality Assurance Officer, Shelly Fank, to ensure that all Quality Control (QC) parameters are consistently maintained, and that FGS' standards of professional and scientific quality are met.

FGS continued to maintain and demonstrate acceptable quality control in 2006. Due to the addition of new MDN sites, the number of quality control points increased from about 1,600 in 2005, to more than 1,750 quality control measurements in 2006. FGS demonstrated consistency and reproducibility in bottle blanks, preparation blanks, certified reference materials, matrix duplicates, and matrix spikes. All of these parameters are plotted in control charts in this report.

**Outlook**

The MDN continues to gain attention as the largest and longest-running national mercury wet deposition network in North America. Feedback from sponsors and other interested organizations indicates that MDN will experience significant growth in 2007-2008. With this growth, HAL will continue to look for ways to improve the program to ensure the highest quality. The following are goals HAL has set to maintain and improve quality throughout 2007-2008:

HAL will continue to improve our database in 2007.

HAL will continue trace metals in wet deposition research in 2007. There is a strong indication that there are many sponsors that will want to participate in a combined mercury and trace metals program. In 2006, five MDN sites were collecting samples for trace metals following HAL's retrofit and trace metal standard operating procedures.

HAL research in dry deposition of mercury and trace metals in sites in the southern U.S. will continue, likely through 2007. HAL expects this research to lay the groundwork for a potential non-NADP product for interested MDN sponsors.

# 2. Quality Assurance

## 2.1. Philosophy and Objectives

Frontier GeoSciences Inc. (FGS) is committed to a rigorous quality assurance program and philosophy. Quality control begins at the bench level. Process improvements are continuously solicited from laboratory technicians and analysts. Management is active in evaluating and implementing feasible improvements. The Quality Assurance program is a system for ensuring that all information, data, and interpretation resulting from an analytical procedure are technically sound, statistically valid, and appropriately documented.

HAL data quality is assessed against FGS' Data Quality Objectives (DQO). Our DQOs consist of five components: precision, accuracy, representativeness, comparability, and completeness.

- *Precision* is a measure of data reproducibility. HAL assesses analytical precision using matrix duplicates. The acceptance criterion for matrix duplicates is ≤ 25 RPD.
- *Accuracy* is a measure of how close experimental data is to a "true" value. HAL assesses accuracy using certified reference materials and matrix spikes. The acceptance criterion for reference materials and matrix spikes is 75-125% recovery.
- *Representativeness* is a measure of how typical a sample is compared to the sample population. It is achieved by accurate, artifact-free sampling procedures and appropriate sample homogenization.
- *Comparability* is a measure of how variable one set of data is to another. Control charts enable HAL to assess comparability over the course of an ongoing monitoring project such as MDN.
- *Completeness* is measured by the number of usable data points compared to the number of possible data points. The HAL DQO for the MDN project is at least 95% completeness.

## 2.2. Method Detection Limits

Method detection limit (MDL) studies are maintained for most matrix/analyte combinations available at FGS. Studies are performed using the protocols in 40 CFR, Section 136, Appendix B. Specifically; seven or more low-level, matrix-specific spikes are processed according to preparation and analytical method protocols. MDL is determined as t*SD of the replicates (where t is the Student's T-value for the number of replicates and SD is the standard deviation). The HAL updates MDL studies periodically for the MDN project. See Appendix A for the latest MDL study results.

## 2.3. Accreditations

FGS currently holds certifications through departments in eight states: the California Department of Health, the Florida Department of Health, the Louisiana Department of Environmental Quality, the Minnesota Department of Health, the New Jersey Department of Environmental Protection, the New York Department of Health, the Washington Department of Ecology, and the Wisconsin Department of Natural Resources. The Florida Department of Health acts as FGS' primary accreditor under the National Environmental Laboratory Accreditation Program (NELAP).

# 3. Quality Control

Quality Control (QC) samples each have an expected target value that can be used to objectively assess preparation and analytical method performance. If performance on these known samples is acceptable, client sample results and other *unknowns* are assumed to be acceptable, as well. Conversely, unacceptable QC results require immediate troubleshooting and re-assessment of affected sample results. The HAL utilizes nine types of QC samples for the MDN project: laboratory bottle blanks, preparation blanks, ongoing calibration standards, ongoing calibration blanks, matrix duplicates, matrix spikes, certified reference materials, field blanks, and system blanks.

## 3.1. Laboratory Bottle Blanks

### 3.1.1. Description

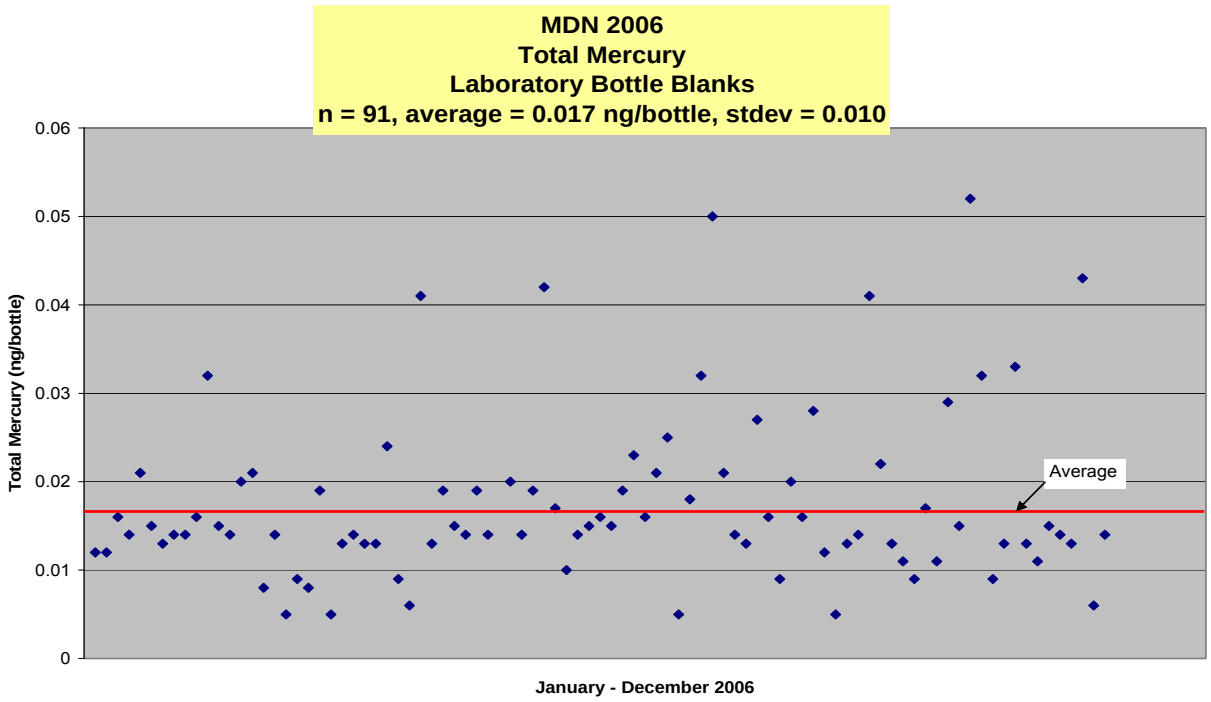
Following cleaning, HAL bottles are charged with 20mL of 1% hydrochloric acid. A random selection of these bottles is then analyzed for total mercury.

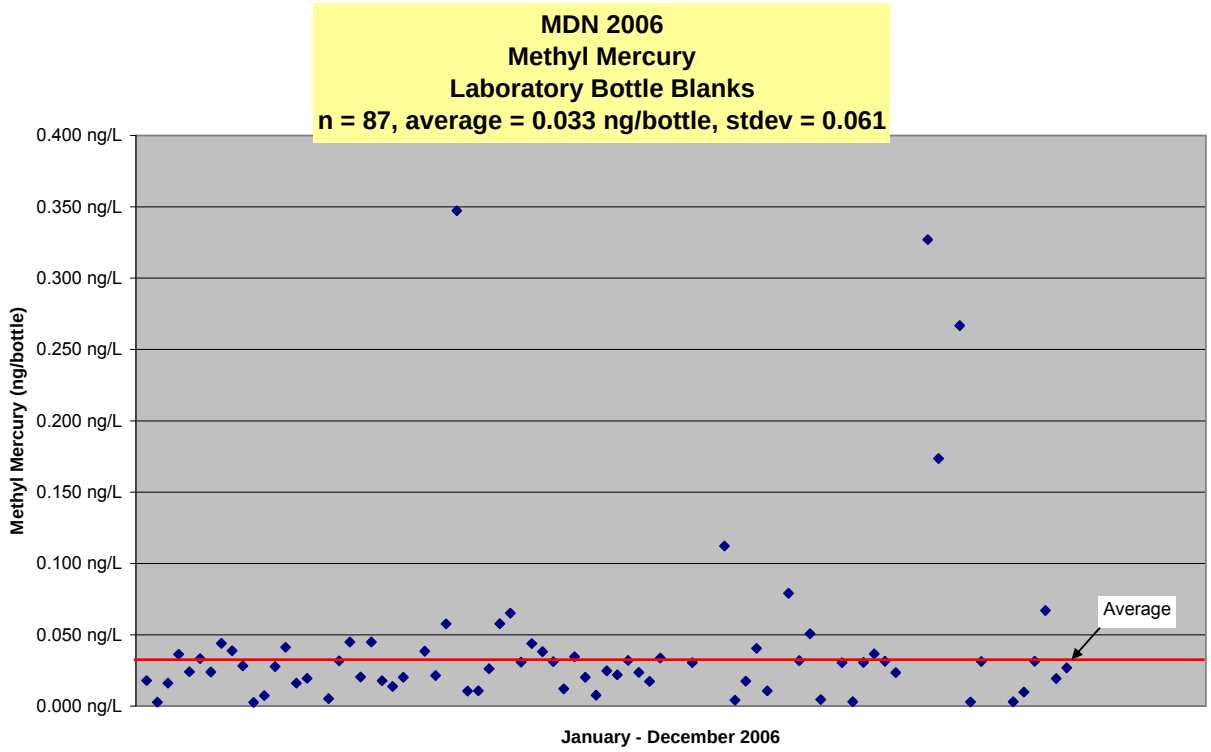
### 3.1.2. Purpose

Even in an ultra-clean laboratory, mercury exposure is inherent to the handling of MDN sample bottles. Because such contamination is inevitable, it must be analyzed and quantified so that it can be objectively subtracted from final sample results.

### 3.1.3. Discussion

In 2006, the mean of 91 laboratory bottle blanks was 0.017ng/bottle with a standard deviation of 0.010ng/bottle. In 2006, no laboratory bottle blank was higher than the total mercury MDL. The current MDL for total mercury is 0.13ng/L. In 2006, the mean of 87 laboratory blanks for methylmercury was 0.033ng/bottle with a standard deviation of 0.061ng/bottle. In 2006 there were several laboratory bottle blanks that were above the MDL for methyl mercury.The current MDL for methylmercury is 0.025ng/L. Laboratory bottle blanks are expected to be at or near MDL. In cases where the blanks are significantly higher, the situation is investigated. Possible contamination sources are researched and identified. Once the contamination has been isolated and corrected, the run is continued.


MDN 2006
Total Mercury
Laboratory Bottle Blanks
n = 91, average = 0.017 ng/bottle, stdev = 0.010
0.06
0.05
0.04
0.03
0.02
0.01
0
Total Mercury (ng/bottle)
Average
January - December 2006


MDN 2006
Methyl Mercury
Laboratory Bottle Blanks
n = 87, average = 0.033 ng/bottle, stdev = 0.061
0.400 ng/L
0.350 ng/L
0.300 ng/L
0.250 ng/L
0.200 ng/L
0.150 ng/L
0.100 ng/L
0.050 ng/L
0.000 ng/L
Methyl Mercury (ng/bottle)
Average
January - December 2006

## 3.2. Preparation Blanks

### 3.2.1. Description

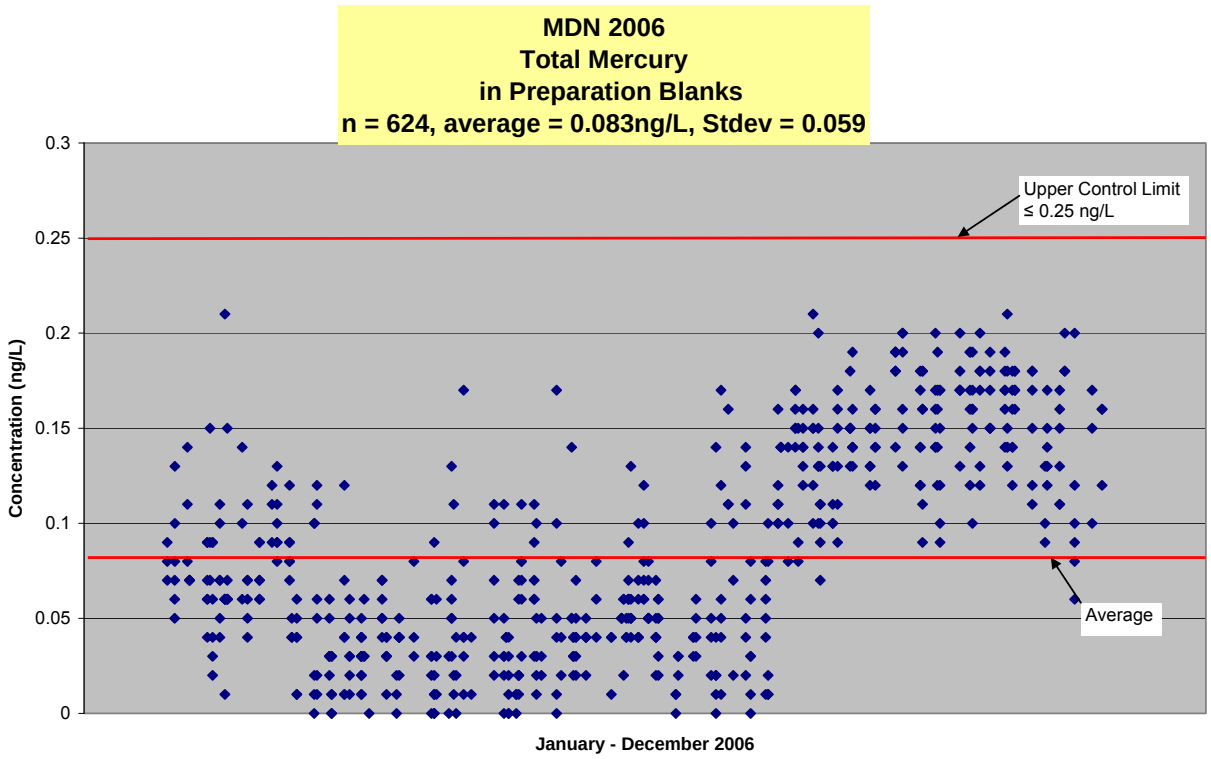
Preparation blanks for total mercury consist of bromine monochloride (BrCl), hydroxylamine hydrochloride, and stannous chloride in 100mL of reagent water. Preparation blanks for methylmercury consist of hydrochloric acid, ammonium pyrrolidine dithiocarbamate (APDC) solution, ethylating agent, acetate buffer, and reagent water. The MDN control limit for total mercury is currently set at 0.25ng/L. This control limit is lower than the US EPA method 1631 method blank, which is set at 0.5 ng/L. The MDN control limit for methyl mercury is currently set at 0.025 ng/L. US EPA method 1630 states that the mean of the three method blanks should be less than 0.045ng/L and the varialbility should be less than 0.015 ng/L.

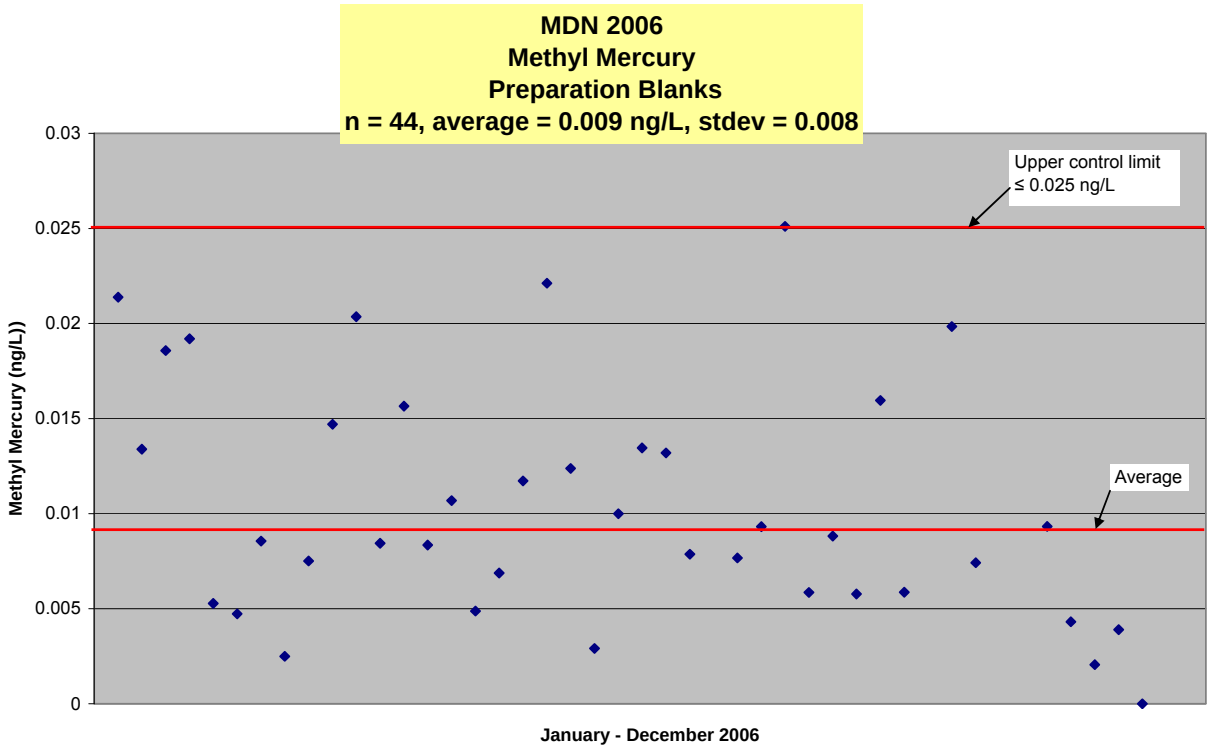
### 3.2.2. Purpose

Mercury content is inherent even in FGS' preparatory and analytical reagents. All reagents are tested low in THg prior to use. Preparation blanks are a measure of how much of each sample result can be attributed to these necessary reagents. Preparation Blanks also help when investigating possible sources of contamination.

### 3.2.3. Discussion

In 2006, the mean for total mercury preparation blanks for 208 total Hg runs (3 preparation blanks per run x 208 total Hg runs = 624 preparation blanks) was 0.083ng/L with a standard deviation of 0.059ng/L. In 2006, no preparation blanks for total mercury were above the control limit of 0.25ng/L. There was an increase in the 4$^{th}$ Quarter 2006 in preparation blank Hg concentration that was observed. Although no preparation blanks exceeded Frontier's control limits, Frontier analytical staff, investigated this increase by checking the reagent split bottles and the BrCl bench working solution bottle. It was observed that the bench working solution bottle was higher than normal and potentially elevating the BrCl preparation blanks. The bottle was replaced and no further action was required, since all preparation blanks were still within the established control limits. In 2006, the mean for methylmercury preparation blanks for 44 analytical runs was 0.009ng/L with a standard deviation of 0.008ng/L. In 2006, the mean of the preparation blanks for methylmercury were all below the control limit of 0.025ng/L.


MDN 2006
Total Mercury
in Preparation Blanks
n = 624, average = 0.083ng/L, Stdev = 0.059
Concentration (ng/L)
0.3
0.25
0.2
0.15
0.1
0.05
0
Upper Control Limit
≤ 0.25 ng/L
Average
January - December 2006


MDN 2006
Methyl Mercury
Preparation Blanks
n = 44, average = 0.009 ng/L, stdev = 0.008
Methyl Mercury (ng/L))
0.03
0.025
0.02
0.015
0.01
0.005
0
Upper control limit
≤ 0.025 ng/L
Average
January - December 2006

## 3.3. Ongoing Calibration Standards

### 3.3.1. Description

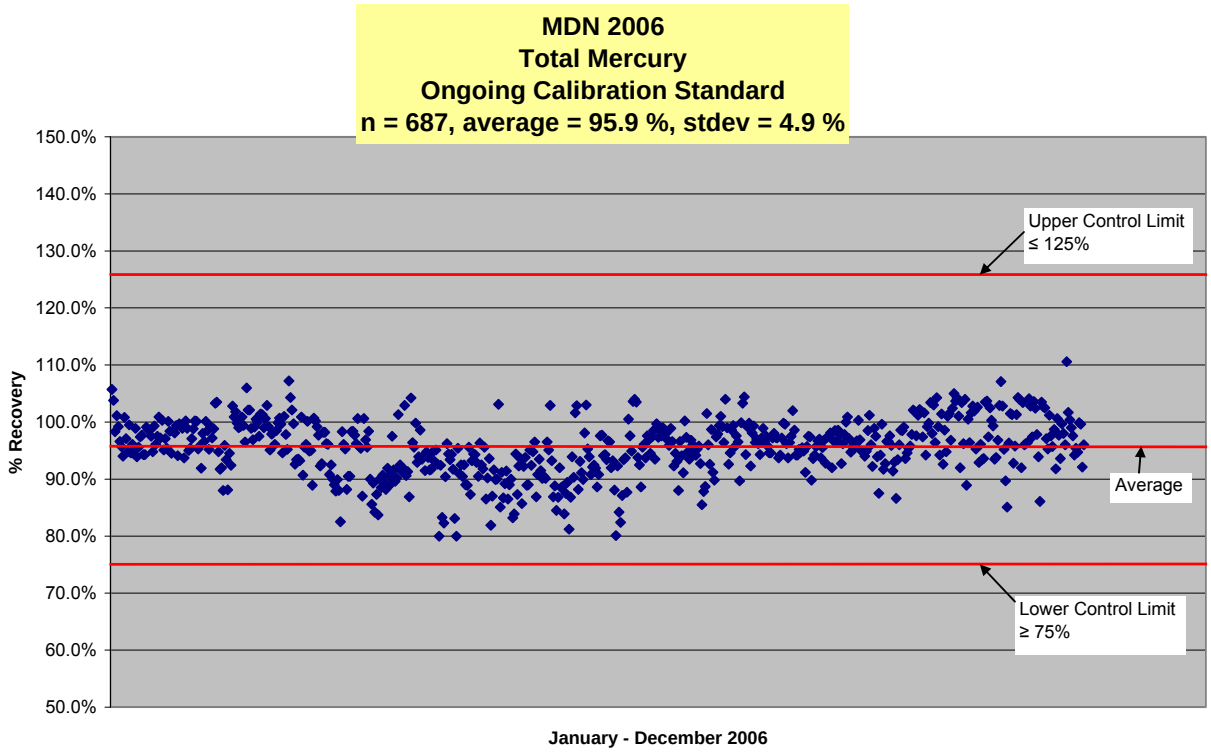
Ongoing calibration standards are continuously analyzed during the course of sample analysis, typically after a suite of ten samples and at the end of each analytical day. A 1.0ng standard for total mercury and a 0.1ng standard for methylmercury are typically analyzed as an ongoing calibration standard. The MDN control limits for total mercury are currently set at 75-125%. The control limits for US EPA method 1631, Ongoing Precision and Recovery (OPR) are currently set at 77-123%. The MDN control limits for methyl mercury are currently set at 75-125%. US EPA method 1630 has the OPR levels set at 67-133%.

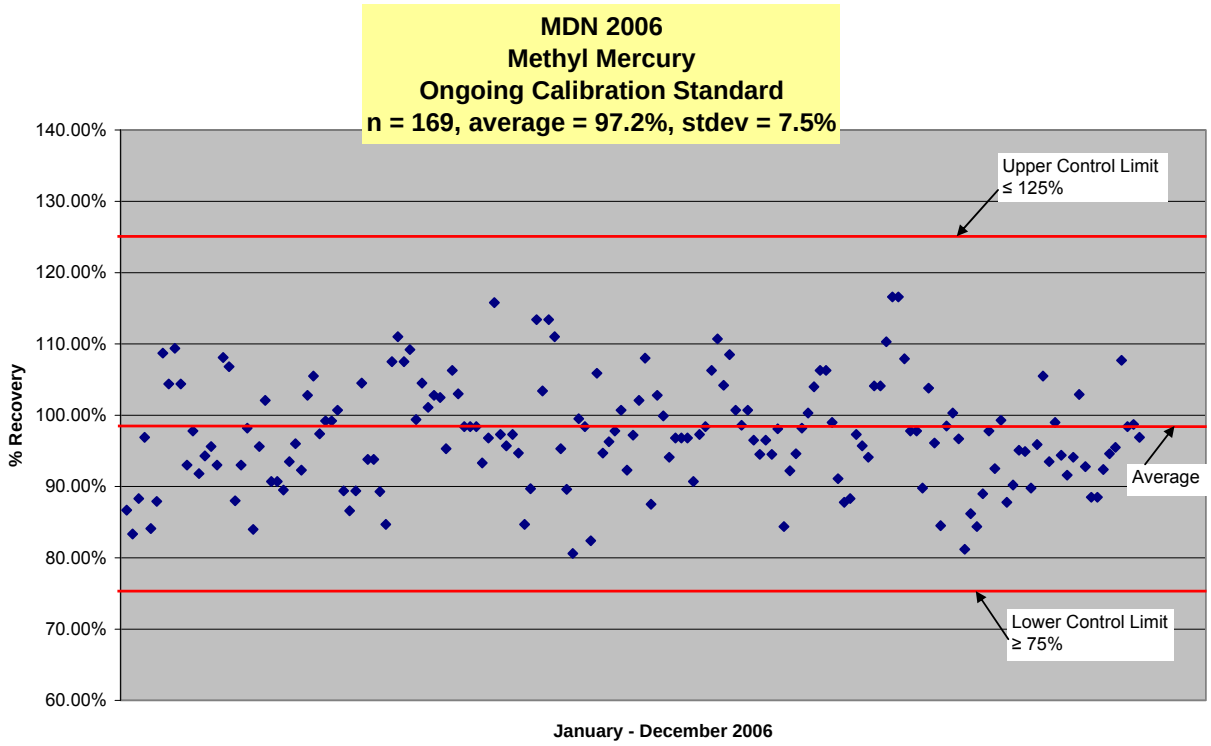
### 3.3.2. Purpose

Ongoing calibration standards verify that the analytical system is in control. All total mercury standard solutions are traceable to certified standards or manufacturer lot number. Currently there is no commercially available methylmercury standard. FGS produced its own methyl mercury standard. All raw data references a unique laboratory ID number for associated standards. This ID may then be traced through the standards logbooks to the original shipment, container, and certification.

### 3.3.3. Discussion

In 2006, the mean of 687 ongoing calibration standard recoveries for total mercury was 95.9% with a standard deviation of 4.9%. In 2006, no ongoing calibration standards were out of statistical control. In 2006, the mean of 169 ongoing calibration standard recoveries for methylmercury was 97.2% with a standard deviation of 7.5 %. There were no ongoing calibration standard recoveries for the MDN project in 2006 that were out of statistical control.






## 3.4. Ongoing Calibration Blanks

### 3.4.1. Description

Ongoing calibration blanks are continuously analyzed during the course of sample analysis, typically after a suite of ten samples and at the end of each analytical day. The MDN control limit for total mercury is currently set at 0.25ng/L, which is also the control limit for US EPA method 1631. The MDN control limit for methyl mercury is currently set at 0.025 ng/L. US EPA method 1630 has no set ongoing calibration blank level.

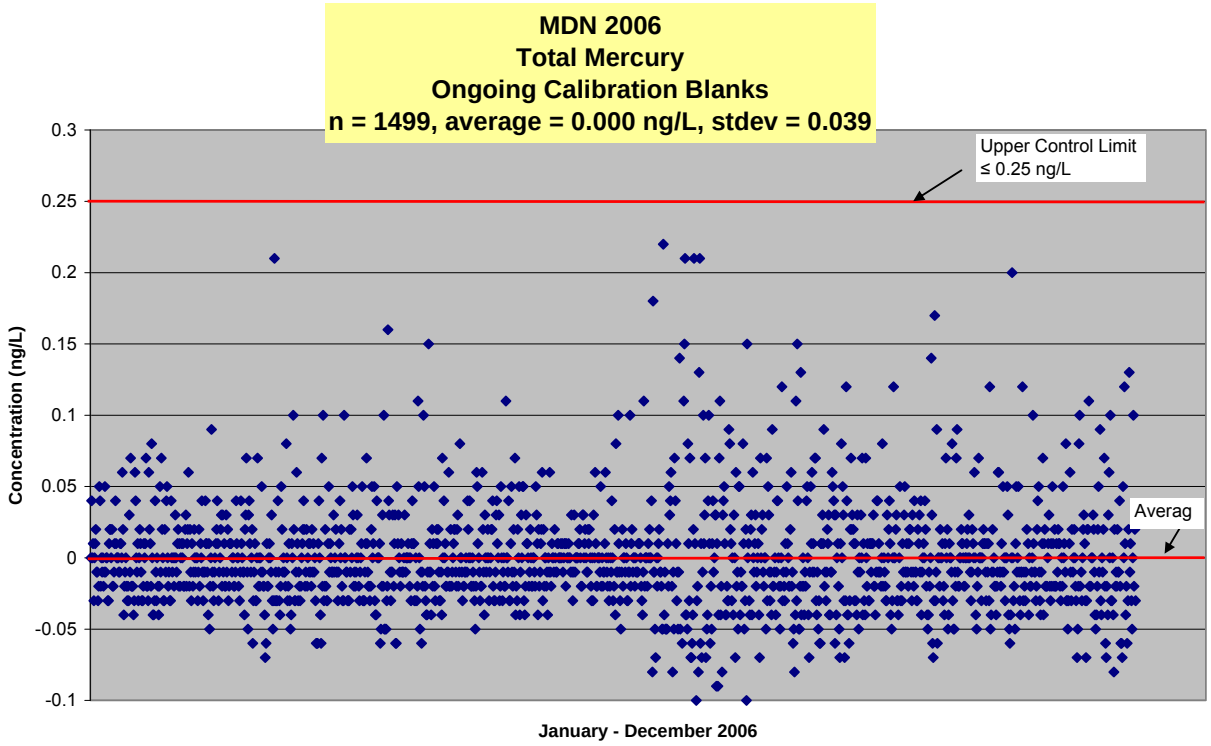
### 3.4.2. Purpose

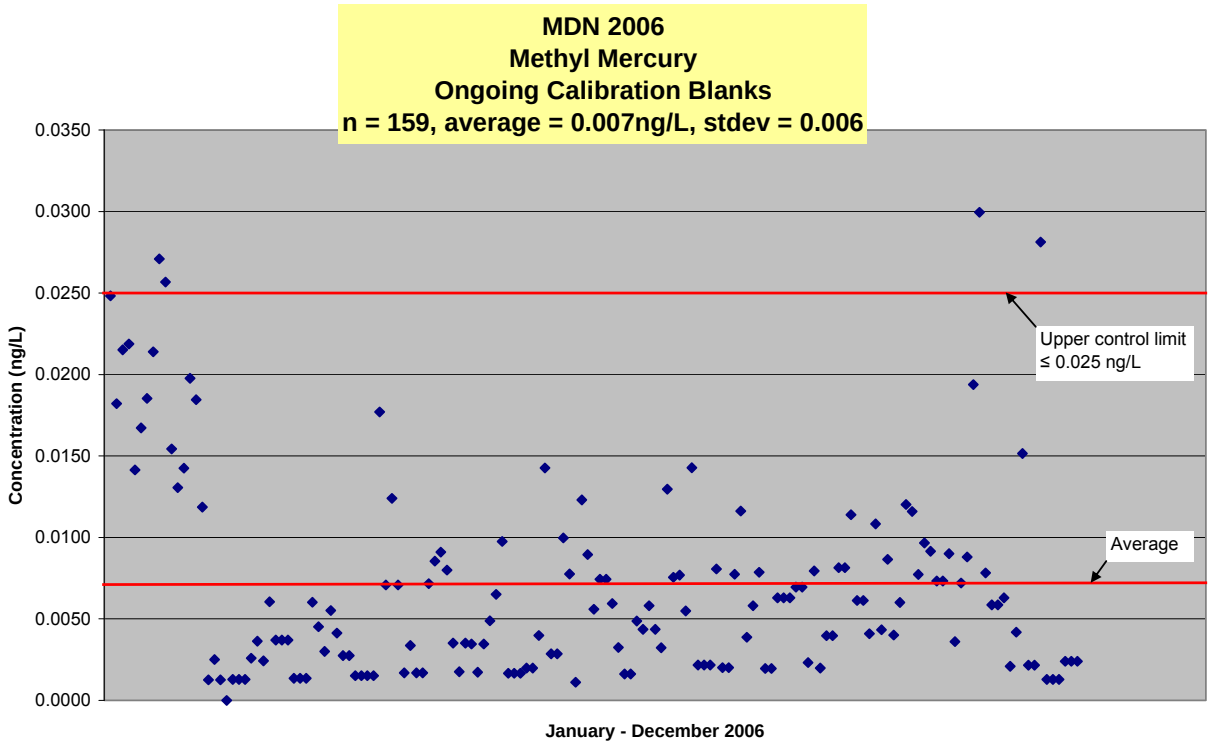
Instrument Ongoing calibration blanks are used to demonstrate freedom from system contamination, carryover, and to monitor baseline drift.

### 3.4.3. Discussion

In 2006, the mean concentration of 1499 ongoing calibration blanks for total mercury was 0.000ng/L with a standard deviation of 0.039. There were no ongoing calibration blanks for the MDN project in 2006 that were above the upper control limit (0.25ng/L). In 2006, the mean concentration of 159 ongoing calibration blanks for methylmercury was 0.007ng/L with a standard deviation of 0.007. There were four ongoing calibration blanks for methylmercury that were above the upper control limit (0.025ng/L).

Ongoing calibration blanks are expected to be at or near MDL. In cases where the blanks are significantly higher, the situation is investigated. Possible contamination sources are researched and identified. Once the contamination has been isolated and corrected, the run is continued.


MDN 2006
Total Mercury
Ongoing Calibration Blanks
n = 1499, average = 0.000 ng/L, stdev = 0.039
Upper Control Limit
≤ 0.25 ng/L
Averag
Concentration (ng/L)
0.3
0.25
0.2
0.15
0.1
0.05
0
-0.05
-0.1
January - December 2006




## 3.5. Matrix Duplicates

### 3.5.1. Description

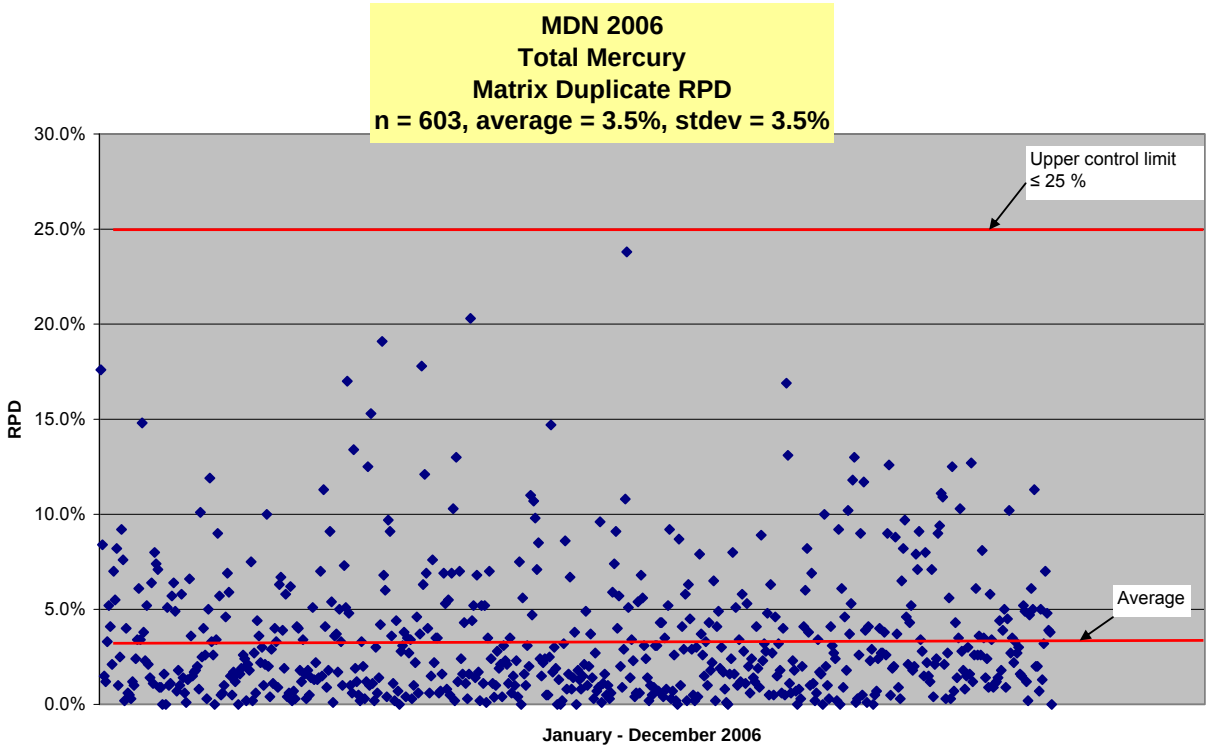
Matrix duplicates are created when an existing sample is split into two portions that can then be compared analytically. The MDN control limits for the matrix duplicates is currently set at 25%. US EPA methods 1630 and 1631 do not require a matrix duplicate.

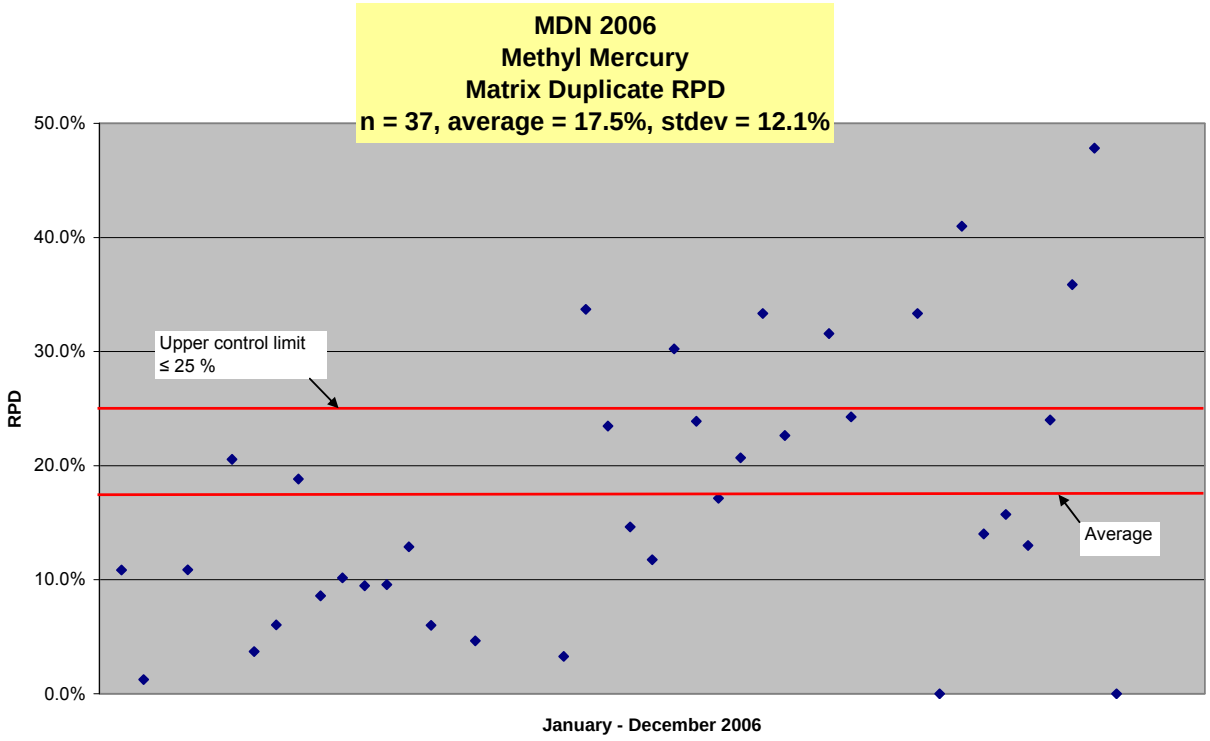
### 3.5.2. Purpose

As there is no theoretical difference between a pair of matrix duplicates, their relative percent difference (RPD) is expected to be less than 25%. Out of control results are indicative of a heterogeneous sample matrix and/or poor analytical precision.

### 3.5.3. Discussion

In 2006, the mean RPD of 603 matrix duplicate pairs for total mercury was 3.5% with a standard deviation of 3.5%. This low mean reflects the homogeneous nature of the MDN sample matrix, as well as the analytical precision of HAL. In 2006, the mean RPD of 37 matrix duplicate pairs for methylmercury was 17.5 % with a standard deviation of 12.1%. Several RPDs were above the 25% RPD acceptance level. However, all of these matrix duplicates concentrations were less than or equal to five times the MDL. At such low concentrations, variability is expected to increase. Therefore, the larger RPD values at low concentrations are not of concern. No corrective action was taken.


MDN 2006
Total Mercury
Matrix Duplicate RPD
n = 603, average = 3.5%, stdev = 3.5%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
RPD
Upper control limit
≤ 25 %
Average
January - December 2006


MDN 2006
Methyl Mercury
Matrix Duplicate RPD
n = 37, average = 17.5%, stdev = 12.1%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
RPD
Upper control limit
≤ 25 %
Average
January - December 2006

## 3.6. Matrix Spikes

### 3.6.1. Description

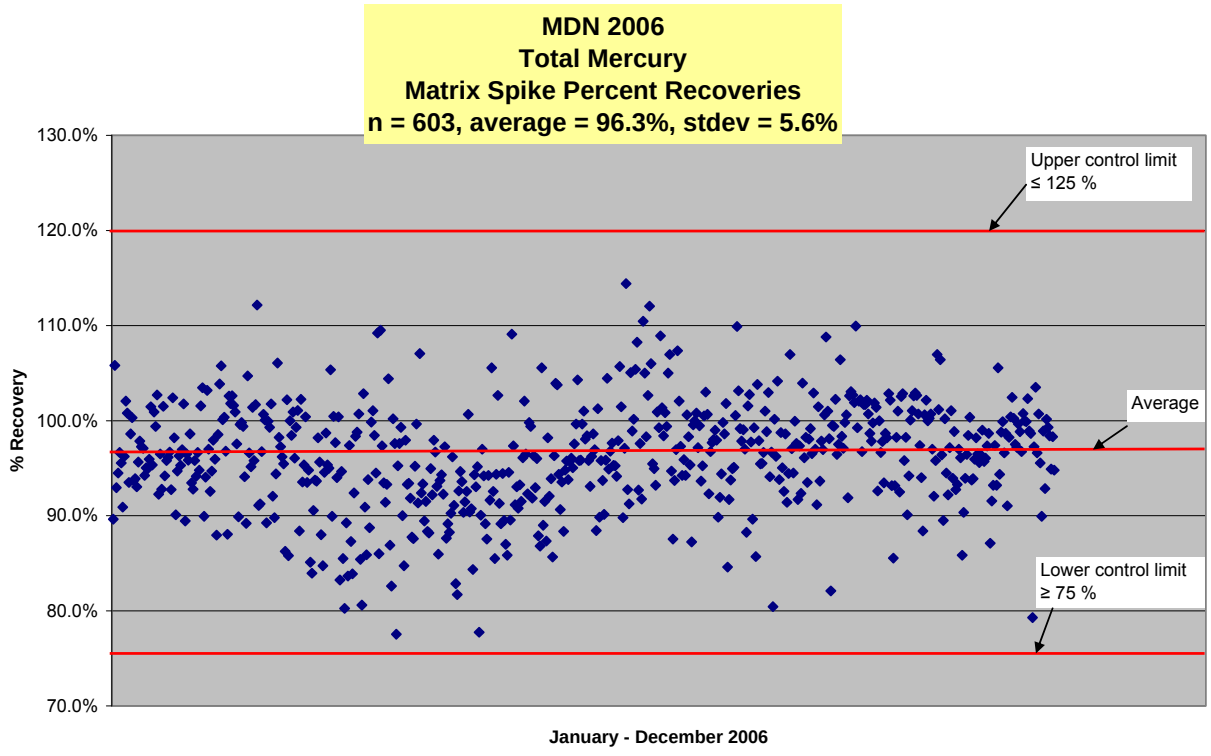
A matrix spike is created when an MDN sample with known mercury content is supplemented with an additional 1.00ng of mercury standard. The MDN control limits for total mercury are currently set at 75-125%. The control limits for US EPA method 1631, for matrix spikes and matrix spike duplicates are currently set at 71-125%. The MDN control limits for methyl mercury are currently set at 75-125%. US EPA method 1630 has the matrix spike and matrix spike duplicates levels set at 65-135%.

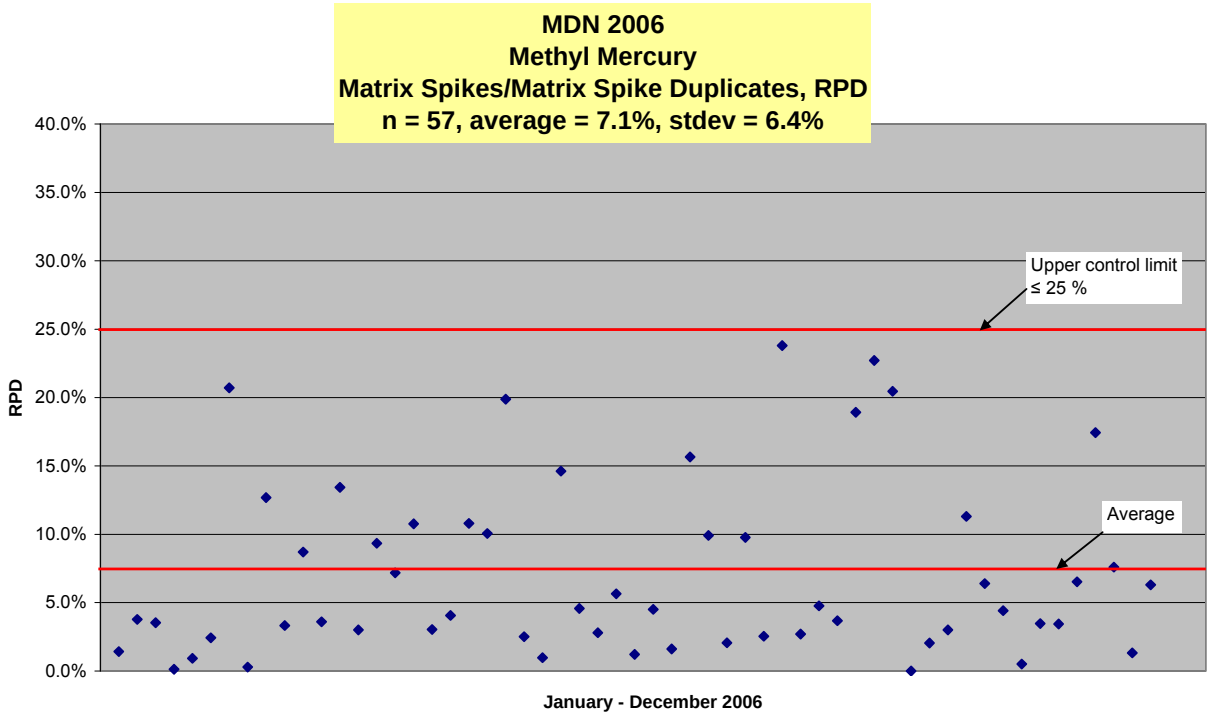
### 3.6.2. Purpose

As the combined mercury content of the matrix spike sample is known in theory, matrix spike recoveries are expected to be within 75% and 125% of this theoretical value. Matrix spike recoveries determine if, and how, the sample matrix interferes with target analyte recovery. They also ensure that HAL's preparation and analytical procedures do not result in significant analyte losses.

### 3.6.3. Discussion

In 2006, the mean of 603 matrix spike recoveries for total mercury was 96.3% with a standard deviation of 5.6%. There were no unacceptable matrix spike recoveries for the MDN project in 2006. This is indicative of a chemically passive sample matrix, as well as good analytical accuracy. Had any Matrix Spikes fallen outside the 75%-125% control limits, involved samples would have been rerun to investigate possible matrix interference. In 2006, the mean RPD of 57 matrix spike/matrix spike duplicates for methyl mercury was 7.1% with a standard deviation of 6.4%. No matrix spike/matrix spike duplicate RPD was above the acceptance criteria.






## 3.7. Certified Reference Materials

### 3.7.1. Description

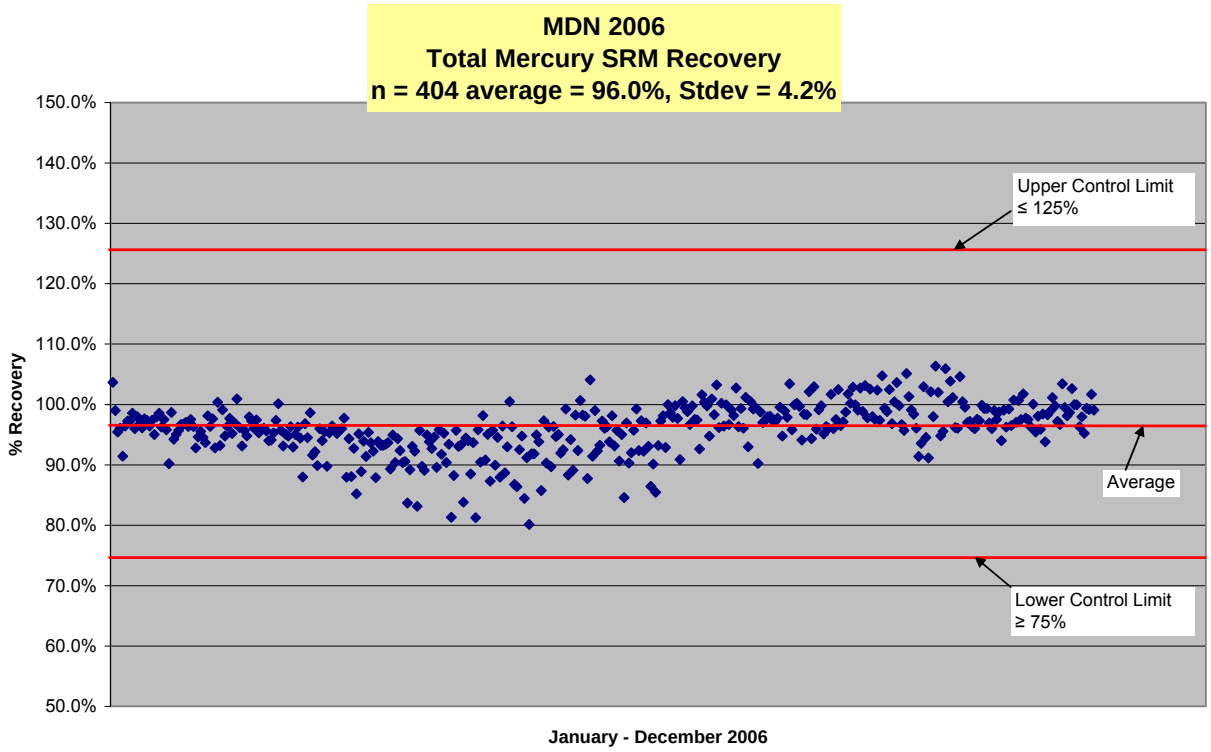
Certified reference materials are commercially available samples containing known quantities of analyte in a specific matrix. Currently, there is no available Reference Material matching the MDN rainwater matrix. Instead, HAL uses National Institute of Standards and Technology Reference Material 1641d – Total Mercury in Water. For methylmercury, HAL uses National Research Council Canada Reference Material DORM-2. The MDN control limits for total mercury and methyl mercury are currently set at 75-125%. US EPA methods 1630 and 1631 do not require a certified reference material.

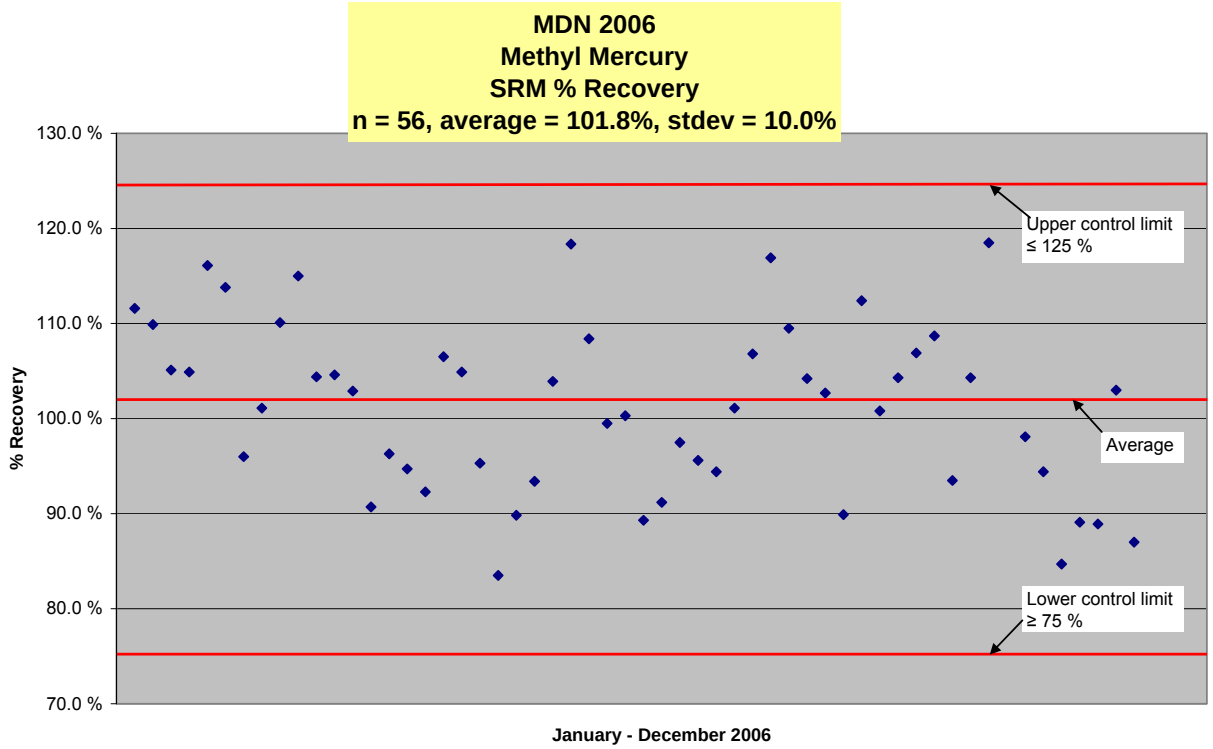
### 3.7.2. Purpose

Certified reference materials are used to demonstrate HAL's ability to recover a target analyte from a specific matrix. They are also a secondary source for verifying the validity of the analytical curve.

### 3.7.3. Discussion

In 2006, the mean of 404 certified reference material recoveries for total mercury was 96.0% with a standard deviation of 4.2%. For methylmercury, the mean of 56 certified reference material recoveries was 101.8% with a standard deviation of 10.0%. In 2006, there were no recoveries outside the control limits for total and methylmercury. Failing recoveries are immediately rerun to ensure that the analytical failure is isolated rather than systemic.


MDN 2006
Total Mercury SRM Recovery
n = 404 average = 96.0%, Stdev = 4.2%
150.0%
140.0%
130.0%
120.0%
110.0%
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
% Recovery
Upper Control Limit
≤ 125%
Average
Lower Control Limit
≥ 75%
January - December 2006


MDN 2006
Methyl Mercury
SRM % Recovery
n = 56, average = 101.8%, stdev = 10.0%
130.0 %
120.0 %
110.0 %
100.0 %
90.0 %
80.0 %
70.0 %
% Recovery
Upper control limit
≤ 125 %
Average
Lower control limit
≥ 75 %
January - December 2006

# 4. Calculations

Calculations have been color-coded in instances where results become variables in subsequent calculations.

## 4.1. Calculation: Gross MDN Sample Concentration

Calc 1) {(Sample PA - Ave BB) / Slope} - {(Aliquot * BrCl RB) / 100} = ng Hg/aliquot (mL)

Sample PA = sample peak area (PA units)
Ave BB = average bubbler blank (PA units)
Slope = slope (PA units/ng)
Aliquot = volume of sample analyzed (mL)
BrCl RB = BrCl reagent blank value (ng/mL of preservative)
1/100 = correction for 1% preservation concentration

## 4.2. Calculation: Net MDN Sample Concentration

ng Hg/aliquot (mL) * mL / Sample Bottle = ng Hg/Sample Bottle

ng Hg/Sample Bottle – ng Hg/Quarterly Bottle Blank = net ng Hg/Sample Bottle

net ng Hg/Sample Bottle * (Sample Bottle / mL) * 1000 = net ng Hg/L

## 4.3. Calculation: MDN Deposition

(net ng Hg/L) * (precip vol (mL) / 120.0$cm^2$) * (1/1000mL) * (10000$cm^2/m^2$) = ($ng/m^2$)

*Alternatively, because there are 10000 $cm^2$ in 1$m^2$:*

(net ng Hg/L) * (precip vol (mL) / 120.0$cm^2$)*10 = ($ng/m^2$)

120.0$cm^2$ = Area of MDN Funnel
Precip volume (mL) = Precipitation Volume — see below

*The standard rain gauge (Belfort) is used for the precipitation volume when the rain gauge data has passed Quality Assurance.*

Precip volume (Rain Gauge (mL)) = Inches of Rain (rain gauge) * (825mL / Inch Belfort)

*When the standard rain gauge (Belfort) has not passed Quality Assurance, the Bottle Catch is used to calculate deposition (as long as the Event Recorder shows that the collector worked properly).*

Precip volume (Bottle Catch (mL)) = Total mL of sample captured in MDN Sample Bottle minus 20mL preservative

# 5. Analytical Run Sequence

HAL routinely includes the aforementioned QC samples in all of its analyses for the MDN project. The following bench sheet shows how these samples are arranged within a typical analysis day. For every set of ten samples analyzed, the sample set is preceded and followed with a matrix duplicate, a matrix spike, ongoing calibration standard, and an ongoing calibration blank. In addition, after the twentieth sample an additional reference material sample is analyzed.

**MDN Precipitation Sample Analysis Lab Sheet**

Analysis Date:
Analyzer:
Analyst:

REVIEWER:

FGS DATA SET ID:
MDN LAB DATA SET CODE:
DATE:

**Analytical Run**
D=Duplicate Analysis

Trap Set:
S=Sample Spike @ 1.00ng

| Run | Tp | Bub | HAL Code | Sample ID | PA | % BrCl | Aliquot Volume | THg per Aliquot | THg Conc (Net) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | | 4.00 ng | | | | | | |
| 2 | 2 | 2 | | 2.00 ng | | | | | | |
| 3 | 3 | 3 | | 1.00 ng | | | | | | |
| 4 | 4 | 4 | | 0.50 ng | | | | | | |
| 5 | 5 | 1 | | 0.05 ng | | | | | | |
| 6 | 6 | 2 | | BB-1 | | | | | | |
| 7 | 7 | 3 | | BB-2 | | | | | | |
| 8 | 8 | 4 | | BB-3 | | | | | | |
| 9 | 9 | 1 | | NIST1641d | | 2 | | | | |
| 10 | 10 | 2 | | BrCl-1 | | | | | | |
| 11 | 1 | 3 | | BrCl-2 | | | | | | |
| 12 | 2 | 4 | | BrCl-3 | | | | | | |
| 13 | 3 | 1 | | BB-4 | | | | | | |
| 14 | 4 | 2 | | Sample #1 | | | | | | |
| 15 | 5 | 3 | | Sample #1 D | | | | | | |
| 16 | 6 | 4 | | Sample #1 S | | | | | | |
| 17 | 7 | 1 | | Sample #2 | | | | | | |
| 18 | 8 | 2 | | Sample #3 | | | | | | |
| 19 | 9 | 3 | | Sample #4 | | | | | | |
| 20 | 10 | 4 | | Sample #5 | | | | | | |
| 21 | 1 | 1 | | Sample #6 | | | | | | |
| 22 | 2 | 2 | | Sample #7 | | | | | | |
| 23 | 3 | 3 | | Sample #8 | | | | | | |
| 24 | 4 | 4 | | Sample #9 | | | | | | |
| 25 | 5 | 1 | | Sample #10 | | | | | | |
| 26 | 6 | 2 | | 1.00 | | | | | | |
| 27 | 7 | 3 | | BB-5 | | | | | | |
| 28 | 8 | 4 | | Sample #11 | | | | | | |
| 29 | 9 | 3 | | Sample #12 | | | | | | |
| 30 | 10 | 4 | | Sample #13 | | | | | | |
| 31 | 1 | 1 | | Sample #14 | | | | | | |
| 32 | 2 | 2 | | Sample #15 | | | | | | |
| 33 | 3 | 3 | | Sample #16 | | | | | | |
| 34 | 4 | 4 | | Sample #17 | | | | | | |
| 35 | 5 | 1 | | Sample #18 | | | | | | |
| 36 | 6 | 2 | | Sample #19 | | | | | | |
| 37 | 7 | 3 | | Sample #20 | | | | | | |
| 38 | 8 | 4 | | Sample #11 D | | | | | | |
| 39 | 9 | 3 | | Sample #11 S | | | | | | |
| 40 | 10 | 4 | | 1.00 | | | | | | |
| 41 | 1 | 1 | | BB-6 | | | | | | |
| 42 | 2 | 2 | | NIST1641d | | | | | | |
| 43 | 3 | 3 | | Sample #21 | | | | | | |
| 44 | 4 | 4 | | Sample #22 | | | | | | |
| 45 | 5 | 1 | | Sample #23 | | | | | | |
| 46 | 6 | 2 | | etc… | | | | | | |
| 47 | 7 | 3 | | | | | | | | |
| 48 | 8 | 4 | | | | | | | | |
| 49 | 9 | 1 | | | | | | | | |
| 50 | 10 | 2 | | | | | | | | |
| 51 | 1 | 3 | | | | | | | | |
| 52 | 2 | 4 | | | | | | | | |
| 53 | 3 | 1 | | Sample #21 D | | | | | | |
| 54 | 4 | 2 | | Sample #21 S | | | | | | |
| 55 | 5 | 3 | | 1.00 | | | | | | |
| 56 | 6 | 4 | | BB-7 | | | | | | |

Key

- Reference materials
- Preparation blanks
- Matrix duplicates
- Matrix spikes
- Ongoing calibration
- Ongoing calibration

# 6. Proficiency Tests and Laboratory Intercomparisons

Proficiency tests (PT) and laboratory intercomparisons are an important part of the Quality Assurance Program. Each year, FGS completes at least four PTs representing a suite of trace metals in wastewater and solid waste matrices. While these studies are a requirement of accreditation, they are also a valuable tool for internal quality control.

## 6.1. Proficiency Tests

The following proficiency tests were completed by HAL during 2006. Results for these tests are available upon request.

**Table 1**

| | | |
|---|---|---|
| Non-Potable Water / Solid and Hazardous Waste Proficiency Study | New York Department of Health | 01/2006 |
| Soils | Analytical Products Group | 04/2006 |
| Water Pollution | ERA | 06/2006 |
| Non-Potable Water / Solid and Hazardous Waste Proficiency Study | New York Department of Health | 08/2006 |
| Water Pollution | DMRQA | 10/2006 |
| Soils | Analytical Products Group | 12/2006 |
| Water Pollution | Analytical Products Group | 12/2006 |

## 6.2. Laboratory Intercomparisons

The HAL participates in a U.S. Geological Survey PE sample laboratory intercomparison program. This program is coordinated by the USGS.

FGS did not participate in any laboratory intercomparisons in 2006.

# 7. Field Quality Control

The MDN network utilizes two different procedures to ensure that the sample train is not compromised. The two procedures are field blanks and system blanks.

## 7.1. Field Bottle Blanks

### 7.1.1. Description

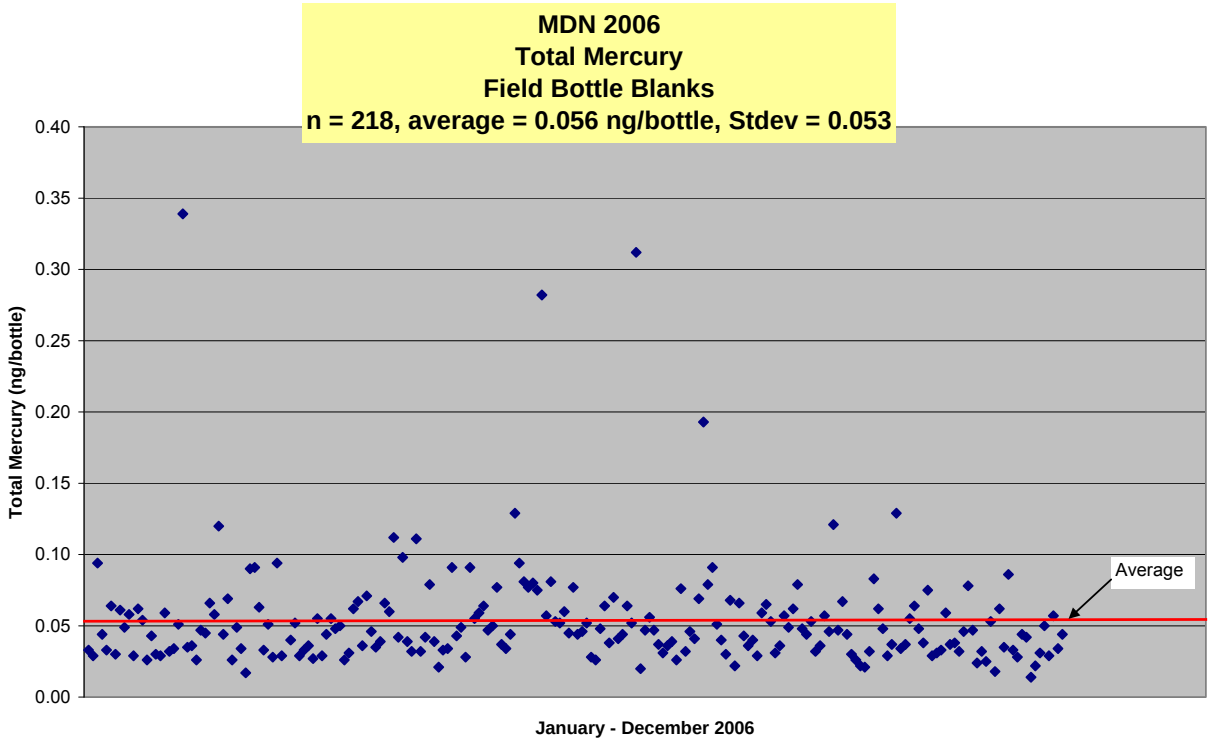
A field bottle blank has the same contents as a laboratory bottle blank. However, this blank is left exposed at the sampling site for the entire collection period without any collector openings. All field bottle blanks that maintain at least 15mL of the initial 20mL 1% hydrochloric acid charge are then analyzed for total mercury.

### 7.1.2. Purpose

Outside of the controlled laboratory environment, ambient mercury levels increase and additional sample handling occurs. Because such contamination sources are inevitable, their contributions must be quantified so that they can be objectively subtracted from final sample results.

### 7.1.3. Discussion

In 2006, the mean of 218 Field Bottle Blanks was 0.056ng/bottle with a standard deviation of 0.053ng/bottle. This suggests that the MDN aerochem collector protects the sample train and bottle well and the field exposure is minimal.




## 7.2. Field System Blanks

### 7.2.1. Description

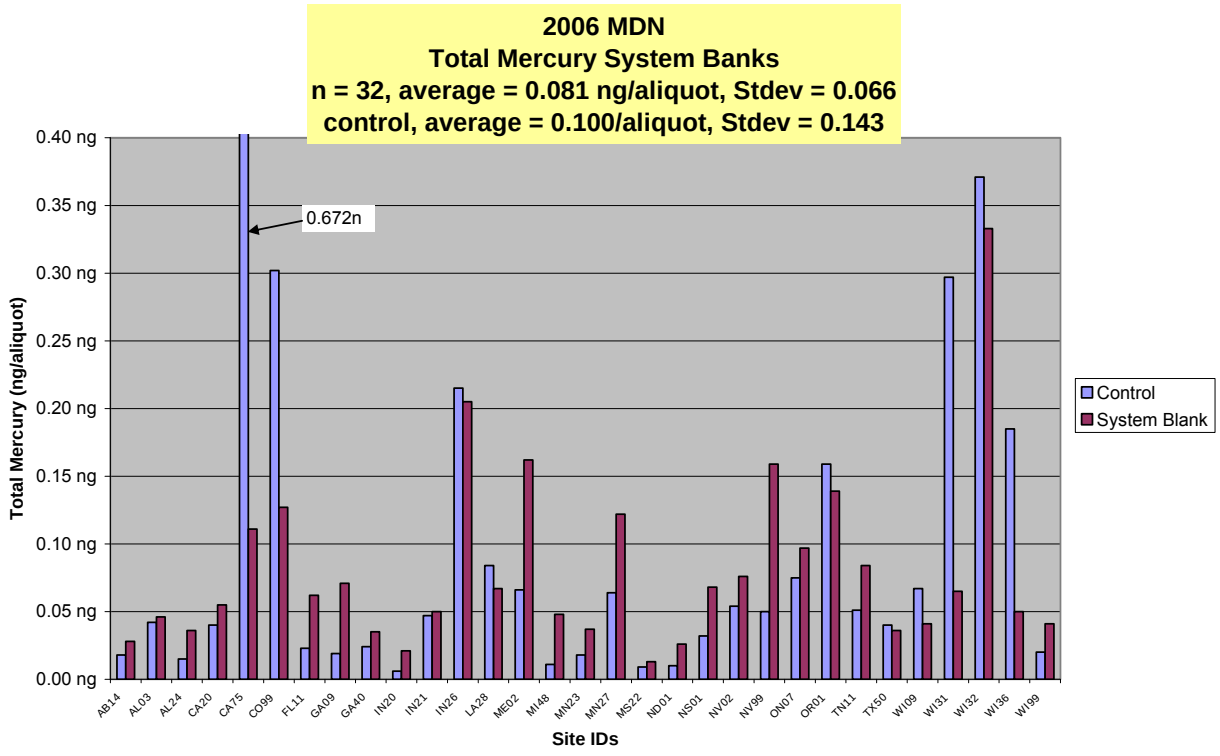
A field system blank is essentially a field bottle blank in which a solution is poured through the wet side collection sample train that was installed in the field for an entire week with no precipitation.

### 7.2.2. Purpose

This quality assurance program, conducted jointly by the U.S. Geological Survey and FGS, is intended to measure the effects of field exposure, handling, and processing on the chemistry of MDN precipitation samples.

### 7.2.3. Discussion

In 2006, the mean of 32 field system blanks was 0.081ng/aliquot with a standard deviation of 0.066ng/aliquot. This again suggests that the MDN sample train is well protected.



# 8. Quality Rating Codes

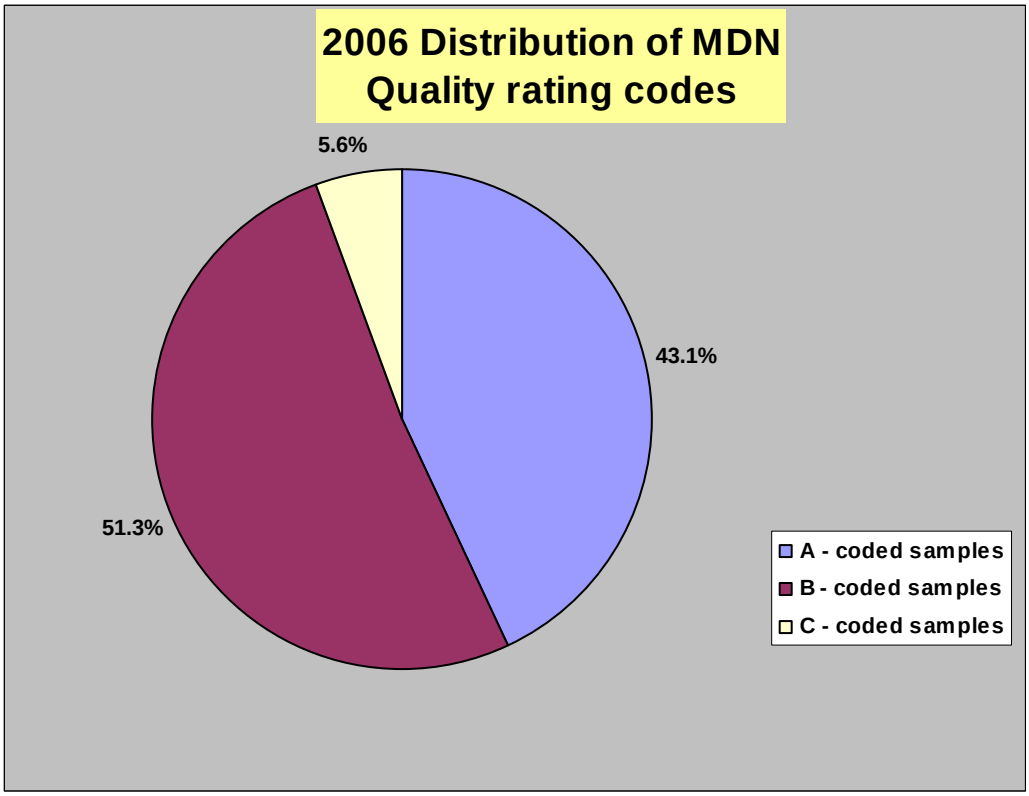
The quality rating code (QR) is designed as a user-friendly method to indicate the overall quality of each individual MDN data value. The MDN QR is modeled directly from the NADP AirMon QR. The QR code is what the general user of the final database will use in the evaluation of MDN data. This QR code is assigned by the computer program based on the results of the notes codes given to each MDN sample. A general description of each code follows.

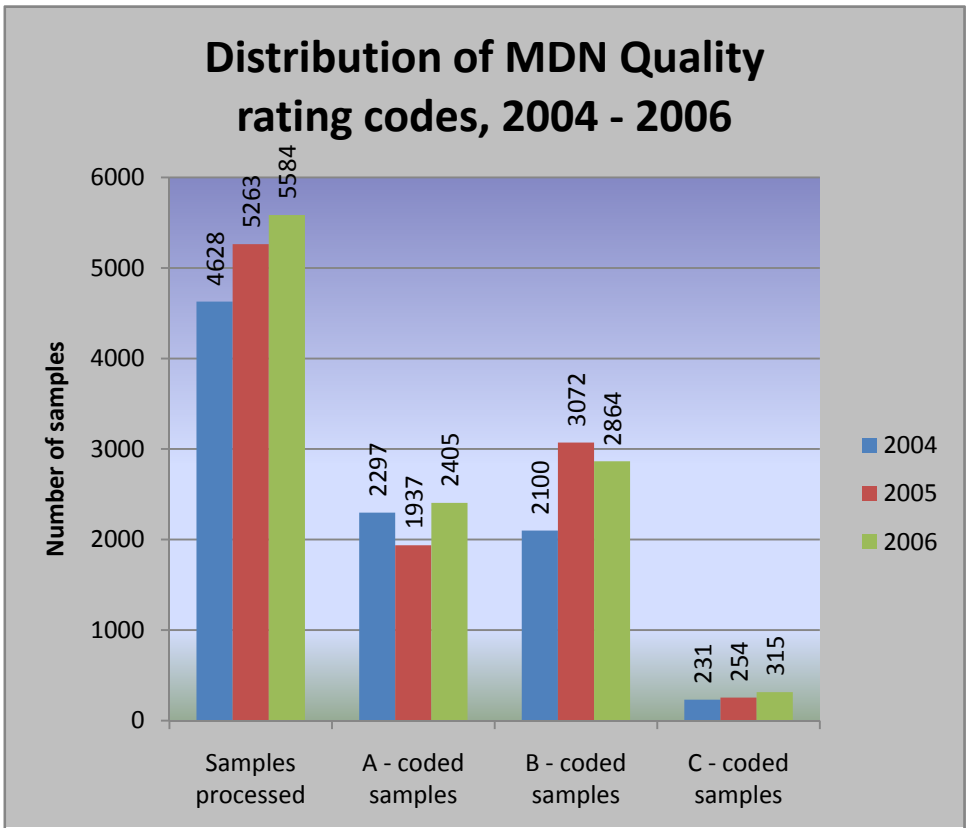
A. Valid samples with no problems; contained only precipitation; all sampling and laboratory protocols were followed; all required equipment was installed and operating properly.

B. Valid samples with minor problems; may have contaminants such as insects or other debris; there may be an exception to approved sampling or laboratory methods; required equipment may be lacking or not operating properly. The laboratory does not consider these problems sufficient to invalidate the data, but there is more uncertainty than for A data. These data are used along with A data to calculate average concentrations and deposition.

C. Invalid samples; major problems occurred; the laboratory does not have confidence in the data.

The HAL processed 5584 samples in 2006. 2405 samples received a QR code of A, 2864 received a B QR code, and 315 received a C QR code. FGS continued to maintain and demonstrate acceptable quality control in 2006.




Distribution of MDN Quality rating codes, 2004 - 2006
Number of samples
6000
5000
4000
3000
2000
1000
0
4628
5263
5584
2297
1937
2405
2100
3072
2864
231
254
315
Samples processed
A - coded samples
B - coded samples
C - coded samples
2004
2005
2006

# Appendix A

## Matrix Specific MDL Studies

# Matrix Specific MDN MDL Study:

April 13, 2006

Frontier Geosciences Inc.
414 Pontius North
Seattle, WA 98109

**Objective.** Determine the method detection limit (MDL) for total mercury in water using preservation method FGS-012 and analysis method FGS-MDN-05, and following the protocols outlined in 40 CFR 136. As detailed below, the MDL for Total Mercury in Water was determined to be **0.12** ng/L THg.

**Analytical Method.** A calibration was performed according to FGS-MDN-05. Briefly, this method incorporates oxidation with the addition of BrCl, reduction of Mercury in the sample aliquot with $SnCl_2$, analysis by purge and trap and dual amalgamation CV-AFS.

The MDL study consisted of the analysis of ten replicates of a water sample spiked with 0.5 ng/L THg oxidized with 1% BrCl. Two results were removed from the MDL calculations. MDL replicate 4 was mistakenly double spiked during analysis. MDL replicate 10 was analyzed at a different aliquot due to insufficient volume and could not be compared with the other nine replicates. The results of these measurements are found in the table on the next page, as well in the raw data sheets (ID # THg9-060413-1). All results are reported ***corrected*** for the method blanks.

**MDL Calculation.** Using 40 CFR 136, the MDL was calculated using the standard deviation of the spiked samples, with n = 8 replicates (7 degrees of freedom). In this case, the t value of 2.998 was used in the following equation, where $\sigma$ is the standard deviation of the results obtained on samples spiked at a level near the MDL.

$$\mathbf{MDL = t*\sigma}$$

*The MDL calculated from these data is (2.998)*(0.040), or 0.12 ng/L.*

# Total Mercury in Water (THg) MDN MDL Study Data for CV-AFS #9

## April 13, 2006

| Sample | [THg], ng/L | % Recovery |
|---|---|---|
| method blank #1 | 0.011 | |
| method blank #2 | 0.012 | |
| method blank #3 | 0.003 | |
| | | |
| **Mean** | **0.009** | |
| **SD** | **0.005** | |
| MDL-1 (0.5 ng/L) | 0.517 | 103.4 |
| MDL-2 (0.5 ng/L) | 0.499 | 99.8 |
| MDL-3 (0.5 ng/L) | 0.480 | 96.0 |
| MDL-5 (0.5 ng/L) | 0.494 | 98.8 |
| MDL-6 (0.5 ng/L) | 0.511 | 102.2 |
| MDL-7 (0.5 ng/L) | 0.414 | 82.8 |
| MDL-8 (0.5 ng/L) | 0.540 | 108.0 |
| MDL-9 (0.5 ng/L) | 0.534 | 106.8 |
| | | |
| | | |
| **Mean** | **0.499** | **99.7** |
| **SD** | **0.040** | **7.9** |
| **NIST1641d** | **1588542** | **99.2** |
| | | |
| **certified value NIST 1641d** | **1601000** | |

# Matrix Specific MDN MDL Study:

April 13, 2006

Frontier Geosciences Inc.
414 Pontius North
Seattle, WA 98109

**Objective.** Determine the method detection limit (MDL) for total mercury in water using preservation method FGS-012 and analysis method FGS-MDN-05, and following the protocols outlined in 40 CFR 136. As detailed below, the MDL for Total Mercury in Water was determined to be **0.13** ng/L THg.

**Analytical Method.** A calibration was performed according to FGS-MDN-05. Briefly, this method incorporates oxidation with the addition of BrCl, reduction of Mercury in the sample aliquot with $SnCl_2$, analysis by purge and trap and dual amalgamation CV-AFS.

The MDL study consisted of the analysis of ten replicates of a water sample spiked with 0.5 ng/L THg oxidized with 1% BrCl. One result was removed from the MDL calculations. MDL replicate 10 was analyzed at a different aliquot due to insufficient volume and could not be compared with the other nine replicates. The results of these measurements are found in the table on the next page, as well in the raw data sheets (ID # THg10-060413-1). All results are reported ***corrected*** for the method blanks.

**MDL Calculation.** Using 40 CFR 136, the MDL was calculated using the standard deviation of the spiked samples, with n = 9 replicates (8 degrees of freedom). In this case, the t value of 2.896 was used in the following equation, where $\sigma$ is the standard deviation of the results obtained on samples spiked at a level near the MDL.

$$\mathbf{MDL = t*\sigma}$$

*The MDL calculated from these data is (2.896)*(0.046), or 0.13 ng/L.*

## Total Mercury in Water (THg) MDN MDL Study Data for CV-AFS #10

## April 13, 2006

| Sample | [THg], ng/L | % Recovery |
|---|---|---|
| method blank #1 | 0.003 | |
| method blank #2 | 0.008 | |
| method blank #3 | 0.004 | |
| | | |
| **Mean** | **0.005** | |
| **SD** | **0.003** | |
| MDL-1 (0.5 ng/L) | 0.514 | 102.8 |
| MDL-2 (0.5 ng/L) | 0.504 | 100.8 |
| MDL-3 (0.5 ng/L) | 0.425 | 85.0 |
| MDL-4 (0.5 ng/L) | 0.531 | 106.2 |
| MDL-5 (0.5 ng/L) | 0.504 | 100.8 |
| MDL-6 (0.5 ng/L) | 0.547 | 109.4 |
| MDL-7 (0.5 ng/L) | 0.505 | 101.0 |
| MDL-8 (0.5 ng/L) | 0.548 | 109.6 |
| MDL-9 (0.5 ng/L) | 0.593 | 118.6 |
| | | |
| | | |
| **Mean** | **0.519** | **103.8** |
| **SD** | **0.046** | **9.2** |
| **NIST1641d** | **1546232** | **96.6** |
| | | |
| **certified value NIST 1641d** | **1601000** | |

# Matrix Specific MDL Study:

April 12, 2006

Frontier Geosciences Inc.
414 Pontius North, Suite B
Seattle, WA 98109

**Objective.** Determine the method detection limit (MDL) for methyl mercury in water, using distillation method FGS-013, and following the protocols outlined in 40 CFR 136. As detailed below, the MDL for Methyl Mercury in Water was determined to be **0.025 ng/L** MeHg.

**Analytical Method.** A calibration was performed according to FGS-070. Briefly, this method incorporates distillation followed by analysis utilizing aqueous phase ethylation, CV purge and trap, thermal desorption, GC separation, pyrolytic decomposition, and detection using CV-AFS.

*The MDL study consisted of the distillation and analysis of ten waters spiked with 0.111 ng/L of MHg. Results for the ten measurements are found in the table on the next page, as well in the raw data sheets (ID # MHg7-060412-1). All results are reported* **corrected** *for the method blanks.*

**MDL Calculation.** Using 40 CFR 136, the MDL was calculated using the standard deviation of the spiked samples, with n = 10 replicates (9 degrees of freedom). In this case, the t value of 2.821 was used in the following equation, where $\sigma$ is the standard deviation of the results obtained on samples spiked at a level near the MDL.

$$\mathbf{MDL = t*\sigma}$$

*The MDL calculated from these data is (2.821)*(0.009), or 0.025 ng/L.*

## Methyl Mercury in Water (MHg) MDL Study (CV-GC-AFS #7)

## April 12, 2006

| Sample | [MeHg], ng/L | |
|---|---|---|
| method blank #1 | 0.015 | |
| method blank #2 | 0.008 | |
| method blank #3 | 0.008 | |
| **Mean** | **0.010** | |
| **SD** | **0.004** | |
| | | |
| MDL #1+ 0.111 ng/L | 0.111 | 100.0% |
| MDL #2+ 0.111 ng/L | 0.107 | 96.4% |
| MDL #3+ 0.111 ng/L | 0.101 | 91.0% |
| MDL #4+ 0.111 ng/L | 0.108 | 97.3% |
| MDL #5+ 0.111 ng/L | 0.103 | 92.8% |
| MDL #6+ 0.111 ng/L | 0.115 | 103.6% |
| MDL #7+ 0.111 ng/L | 0.115 | 103.6% |
| MDL #8+ 0.111 ng/L | 0.109 | 98.2% |
| MDL #9+ 0.111 ng/L | 0.086 | 77.5% |
| MDL #10+ 0.111 ng/L | 0.111 | 100.0% |
| **Mean** | **0.107** | **96.0** |
| **SD** | **0.009** | **0.1** |
| | | |
| **DORM-2 (4470ug/L)** | **5063** | **113.3** |

# Matrix Specific MDL Study:
# Methyl Mercury in Water (FGS-013, FGS-070)
# MDL Study Data for CV.GC.AFS #15

August 4, 2006
**MHg15-060725-1**

Frontier Geosciences Inc.
414 Pontius North
Seattle, WA 98109

**Objective.** Determine the method detection limit (MDL) for methyl mercury in water, using the Distillation of Aqueous Samples for Methyl Mercury method FGS-013, and following the protocols outlined in 40 CFR 136. As detailed below, the MDL for Methyl Mercury in Water was determined to be **0.010 ng/L MHg.**

**Analytical Method.** A calibration was performed according to FGS-070. Briefly, this method incorporates the digestion and extraction followed by analysis utilizing aqueous phase ethylation, CV purge and trap, thermal desorption, GC separation, pyrolytic decomposition, and detection using CV-AFS.

*The MDL study consisted of the distillation and analysis of ten water replicates spiked with 0.050 ng/L of MHg. The results of these measurements are found in the table on page 2, as well in the raw data sheets (ID # MHg15-060725-1). All results reported are **corrected** for the instrument blanks and the preparation blanks.*

***MDL Calculation.*** *Using 40 CFR 136, the MDL was calculated using the standard deviation of the spiked samples, with n = 10 replicates (9 degrees of freedom). In this case, the t value of 2.821 was used in the following equation, where σ is the standard deviation of the results obtained on samples spiked at a level near the MDL.*

$$MDL = t^{*}\sigma$$

*The MDL calculated from these data is (2.821)*(0.004), or **0.010 ng/L MHg**.*

***MDL Validation.*** *The dataset was peer reviewed and all qualifying parameters (ICV, CCV, CCB, LCS, R-value, etc.) passed. All ten replicates showed a percent recovery between 70-130% (85.5% ± 7.4%), making this dataset eligible for determining either a PQL or an MDL.*

*For MDL validation, according to 40 CFR, the PQL must be within 1 to 10 times the MDL. For this dataset, the PQL is 4.777 times the MDL, thus validating the **MDL value of 0.010 ng/L MHg**.*

# Matrix Specific MDL Study:
# Methyl Mercury in Water (FGS-013, FGS-070)
# MDL Study Data for CV.GC.AFS #15

August 4, 2006
**MHg15-060725-1**

Frontier Geosciences Inc.
414 Pontius North
*Seattle, WA 98109*

## 0.050 ng/L MHg

| Sample | [MHg], ng/L |
|---|---|
| PBW-1 | 0.002 |
| PBW-2 | 0.005 |
| PBW-3 | 0.016 |
| **Mean** | **0.008** |
| **SD** | **0.008** |

| | [MHg], ng/L | [TV], ng/L | [%Recovery] |
|---|---|---|---|
| Water MDL-1 | 0.039 | 0.050 | 78.2% |
| Water MDL-2 | 0.050 | 0.050 | 99.9% |
| Water MDL-3 | 0.041 | 0.050 | 81.9% |
| Water MDL-4 | 0.046 | 0.050 | 92.7% |
| Water MDL-5 | 0.045 | 0.050 | 89.1% |
| Water MDL-6 | 0.045 | 0.050 | 89.1% |
| Water MDL-7 | 0.037 | 0.050 | 74.6% |
| Water MDL-8 | 0.041 | 0.050 | 81.9% |
| Water MDL-9 | 0.041 | 0.050 | 81.9% |
| Water MDL-10 | 0.043 | 0.050 | 85.5% |
| **Mean** | **0.043** | **0.050** | **85.5%** |
| **SD** | **0.004** | **0.000** | **7.4%** |
| | | | |
| **DORM-2** | **3494.755** | **4470.0** | **78.2%** |
| **BS** | **1.9** | **2.0** | **95.2%** |

| | | |
|---|---|---|
| **MDL** | 0.010 | failure (but included in calculation) |
| **PQL (TV)/MDL** | 4.777 | |

# Appendix B

## QC Summary Tables

## *MDN ANALYSIS QC SUMMARY*

## *2006 MDN QC Summary*

| Analysis | | Calibration | BrCl Blk | SRM (Nist 1641-d) | | Duplicates | | Spikes | | Bottle Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | R | Conc | TV=8.005 ng/mL | %Rec | Bottle ID | RPD | Bottle ID | %Rec. | Bottle ID | Conc |
| **2006-001** | 1/16/2006 | 0.9990 | 0.070 ng/L | 8.30 ng/mL | 103.7% | MDN0081 | 1.5% | MDN0081 | 92.95% | | |
| | CVAFS-9 | | | 7.92 ng/mL | 99.0% | MDN2137 | 8.4% | MDN2137 | 105.80% | | |
| | | | | | | MDN2522 | 17.6% | MDN2522 | 89.65% | | |
| **2006-002** | 1/19/2006 | 0.9998 | 0.000 ng/L | 7.64 ng/mL | 95.4% | MDN0770 | 5.2% | MDN0770 | 95.55% | | |
| | CVAFS-9 | | | 7.69 ng/mL | 96.1% | MDN0811 | 1.2% | MDN0811 | 94.50% | | |
| | | | | | | MDN0866 | 3.3% | MDN0866 | 96.65% | | |
| **2006-003** | 2/8/2006 | 1.0000 | 0.090 ng/L | 7.32 ng/mL | 91.4% | MDN2168 | 4.1% | MDN2168 | 90.90% | MDN2198 | 0.015 ng/Bottle |
| | CVAFS-10 | | | 7.72 ng/mL | 96.4% | MDN2648 | 7.0% | MDN2648 | 102.05% | | |
| | | | | | | MDN2714 | 2.1% | MDN2714 | 96.25% | | |
| **2006-004** | 1/19/2006 | 0.9999 | 0.100 ng/L | 7.78 ng/mL | 97.3% | MDN2546 | 5.5% | MDN2546 | 100.80% | | |
| | CVAFS-10 | | | 7.78 ng/mL | 97.3% | MDN2670 | 1.0% | MDN2670 | 98.60% | | |
| | | | | | | MDN3006 | 8.2% | MDN3006 | 93.50% | | |
| **2006-005** | 1/24/2006 | 0.9998 | 0.100 ng/L | 7.89 ng/mL | 98.6% | MDN1937 | 9.2% | MDN1937 | 93.70% | MDN2778 | 0.019 ng/Bottle |
| | CVAFS-10 | | | 7.68 ng/mL | 96.0% | MDN2755 | 7.6% | MDN2755 | 93.90% | | |
| | | | | | | MDN3011 | 2.5% | MDN3011 | 100.30% | | |
| **2006-006** | 1/25/2006 | 0.9996 | 0.000 ng/L | 7.84 ng/mL | 98.0% | MDN1966 | 0.2% | MDN1966 | 93.05% | | |
| | CVAFS-9 | | | 7.74 ng/mL | 96.8% | MDN2212 | 0.6% | MDN2212 | 97.85% | | |
| | | | | | | MDN2607 | 4.0% | MDN2607 | 95.65% | | |
| **2006-007** | 2/3/2006 | 0.9997 | 0.030 ng/L | 7.69 ng/mL | 96.1% | MDN1928 | 1.2% | MDN1928 | 94.25% | | |
| | CVAFS-9 | | | 7.81 ng/mL | 97.6% | MDN2596 | 0.3% | MDN2596 | 97.10% | | |
| | | | | | | MDN2769 | 0.5% | MDN2769 | 97.25% | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **2006-008** | 2/1/2006 | 0.9996 | 0.050 ng/L | 7.79 ng/mL | 97.4% | MDN0831 | 3.4% | MDN0831 | 95.95% | | |
| | CVAFS-9 | | | 7.72 ng/mL | 96.4% | MDN2316 | 1.0% | MDN2316 | 95.05% | | |
| | | | | | | MDN2684 | 2.4% | MDN2684 | 94.95% | | |
| **2006-009** | 2/1/2006 | 0.9998 | 0.080 ng/L | 7.79 ng/mL | 97.4% | MDN1760 | 14.8% | MDN1760 | 100.90% | | |
| | CVAFS-10 | | | 7.60 ng/mL | 95.0% | MDN2694 | 3.4% | MDN2694 | 95.35% | | |
| | | | | | | MDN2753 | 6.1% | MDN2753 | 101.45% | | |
| **2006-010** | 2/2/2006 | 0.9998 | 0.100 ng/L | 7.84 ng/mL | 97.9% | MDN0832 | 2.3% | MDN0832 | 102.70% | | |
| | CVAFS-9 | | | | | MDN2498 | 3.8% | MDN2498 | 99.40% | | |
| **2006-011** | 2/9/2006 | 0.9998 | 0.090 ng/L | 7.89 ng/mL | 98.6% | MDN0824 | 5.2% | MDN0824 | 92.25% | | |
| | CVAFS-10 | | | 7.70 ng/mL | 96.3% | MDN2005 | 2.1% | MDN2005 | 96.50% | | |
| | | | | | | MDN2406 | 1.4% | MDN2406 | 92.80% | | |
| **2006-012** | 2/3/2006 | 0.9999 | 0.070 ng/L | 7.80 ng/mL | 97.5% | MDN0135 | 8.0% | MDN0135 | 95.80% | | |
| | CVAFS-10 | | | 7.67 ng/mL | 95.8% | MDN2352 | 1.1% | MDN2352 | 94.20% | | |
| | | | | | | MDN2739 | 6.4% | MDN2739 | 101.50% | | |
| **2006-013** | 2/8/2006 | 0.9999 | 0.060 ng/L | 7.22 ng/mL | 90.2% | MDN0405 | 0.9% | MDN0405 | 92.75% | | |
| | CVAFS-9 | | | 7.90 ng/mL | 98.7% | MDN1959 | 7.1% | MDN1959 | 96.70% | | |
| | | | | | | MDN2234 | 7.4% | MDN2234 | 96.15% | | |
| **2006-014** | 2/17/2006 | 0.9995 | 0.050 ng/L | 7.54 ng/mL | 94.3% | MDN0487 | 1.6% | MDN0487 | 90.10% | MDN2499 | 0.017 ng/Bottle |
| | CVAFS-9 | | | 7.61 ng/mL | 95.1% | MDN0757 | 0.9% | MDN0757 | 102.40% | | |
| | | | | | | MDN0802 | 0.0% | MDN0802 | 98.20% | | |
| **2006-015** | 2/6/2006 | 0.9997 | 0.050 ng/L | 7.66 ng/mL | 95.7% | MDN0408 | 0.0% | MDN0408 | 94.70% | MDN0183 | 0.017 ng/Bottle |
| | CVAFS-9 | | | 7.74 ng/mL | 96.7% | MDN2616 | 1.0% | MDN2616 | 95.30% | | |
| | | | | | | MDN2750 | 5.1% | MDN2750 | 96.30% | | |
| **2006-016** | 2/6/2006 | 0.9998 | 0.090 ng/L | 7.74 ng/mL | 96.8% | MDN0943 | 5.7% | MDN0943 | 101.75% | MDN2546 | 0.025 ng/Bottle |
| | CVAFS-10 | | | 7.77 ng/mL | 97.1% | MDN2342 | 6.4% | MDN2342 | 89.45% | MDN2819 | 0.016 ng/Bottle |
| | | | | | | MDN2692 | 1.1% | MDN2692 | 96.95% | | |

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| **2006-017** | 2/9/2006 | 0.9997 | 0.060 ng/L | 7.71 ng/mL | 96.4% | MDN0833 | 0.7% | MDN0833 | 95.85% | | |
| | CVAFS-9 | | | 7.80 ng/mL | 97.5% | MDN2817 | 4.9% | MDN2817 | 96.50% | | |
| | | | | | | MDN3017 | 1.8% | MDN3017 | 98.60% | | |
| **2006-018** | 2/15/2006 | 0.9996 | 0.090 ng/L | 7.71 ng/mL | 96.4% | MDN1943 | 5.8% | MDN1943 | 92.80% | | |
| | CVAFS-9 | | | 7.43 ng/mL | 92.8% | MDN1963 | 1.0% | MDN1963 | 93.45% | | |
| | | | | | | MDN1974 | 1.4% | MDN1974 | 95.80% | | |
| **2006-019** | 2/22/2006 | 0.9998 | 0.080 ng/L | 7.57 ng/mL | 94.6% | MDN0922 | 1.3% | MDN0922 | 94.80% | | |
| | CVAFS-9 | | | 7.65 ng/mL | 95.6% | MDN2674 | 0.6% | MDN2674 | 94.15% | | |
| | | | | | | MDN2810 | 0.1% | MDN2810 | 96.65% | | |
| **2006-020** | 2/17/2006 | 1.0000 | 0.080 ng/L | 7.57 ng/mL | 94.6% | MDN1734 | 1.5% | MDN1734 | 89.95% | MDN0665 | 0.016 ng/Bottle |
| | CVAFS-10 | | | 7.50 ng/mL | 93.7% | MDN2144 | 3.6% | MDN2144 | 103.45% | | |
| | | | | | | MDN2792 | 6.6% | MDN2792 | 101.55% | | |
| **2006-021** | 2/27/2006 | 1.0000 | 0.100 ng/L | 7.85 ng/mL | 98.1% | MDN1984 | 1.7% | MDN1984 | 94.05% | | |
| | CVAFS-10 | | | 7.71 ng/mL | 96.4% | MDN1983 | 2.0% | MDN1983 | 97.00% | | |
| | | | | | | MDN2656 | 1.8% | MDN2656 | 103.18% | | |
| **2006-022** | 3/16/2006 | 0.9997 | 0.070 ng/L | 7.81 ng/mL | 97.6% | MDN3000 | 0.8% | MDN3000 | 92.55% | | |
| | CVAFS-10 | | | 7.43 ng/mL | 92.8% | MDN2585 | 10.1% | MDN2585 | 94.70% | | |
| | | | | | | MDN2320 | 2.5% | MDN2320 | 97.95% | | |
| **2006-023** | 3/9/2006 | 0.9999 | 0.040 ng/L | 8.03 ng/mL | 100.4% | MDN0144 | 0.3% | MDN0144 | 98.55% | | |
| | CVAFS-10 | | | 7.46 ng/mL | 93.2% | MDN2627 | 4.0% | MDN2627 | 95.95% | | |
| | | | | | | MDN2764 | 2.6% | MDN2764 | 87.95% | | |
| **2006-024** | 2/22/2006 | 1.0000 | 0.060 ng/L | 7.93 ng/mL | 99.1% | MDN0117 | 5.0% | MDN0117 | 103.85% | | |
| | CVAFS-10 | | | | | MDN0953 | 11.9% | MDN0953 | 105.75% | | |
| | | | | | | | | MDN2718 | 100.10% | | |
| **2006-025** | 3/1/2006 | 0.9996 | 0.090 ng/L | 7.58 ng/mL | 94.8% | MDN2369 | 2.6% | MDN2369 | 100.35% | MDN2182 | 0.019 ng/Bottle |
| | CVAFS-9 | | | 7.71 ng/mL | 96.4% | MDN2445 | 0.0% | MDN2445 | 96.80% | MDN2483 | 0.017 ng/Bottle |
| | | | | | | MDN2718 | 3.3% | MDN2718 | 100.10% | | |

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| **2006-026** | 3/1/2006 | 1.0000 | 0.100 ng/L | 7.82 ng/mL | 97.7% | MDN2170 | 5.7% | MDN2170 | 101.80% | MDN0020 | 0.038 ng/Bottle |
| | CVAFS-10 | | | 7.62 ng/mL | 95.2% | MDN2438 | 3.4% | MDN2438 | 88.05% | | |
| | | | | | | MDN1741 | 9.0% | MDN1741 | 102.58% | | |
| **2006-027** | 3/6/2006 | 0.9998 | 0.080 ng/L | 7.76 ng/mL | 96.9% | MDN2738 | 1.0% | MDN2738 | 100.90% | MDN0262 | 0.018 ng/Bottle |
| | CVAFS-9 | | | 8.08 ng/mL | 100.9% | MDN2016 | 0.6% | MDN2016 | 101.60% | | |
| | | | | | | MDN2047 | 0.5% | MDN2047 | 102.60% | | |
| **2006-028** | 3/6/2006 | 1.0000 | 0.090 ng/L | 7.70 ng/mL | 96.2% | MDN2370 | 4.9% | MDN2370 | 97.55% | MDN0173 | 0.017 ng/Bottle |
| | CVAFS-10 | | | 7.45 ng/mL | 93.1% | MDN1754 | 5.9% | MDN1754 | 99.60% | | |
| | | | | | | MDN6008 | 6.9% | MDN6008 | 89.90% | | |
| **2006-029** | 3/7/2006 | 0.9997 | 0.040 ng/L | 7.66 ng/mL | 95.7% | MDN2644 | 1.5% | MDN2644 | 99.80% | | |
| | CVAFS-9 | | | 7.59 ng/mL | 94.8% | MDN2504 | 0.5% | MDN2504 | 99.40% | | |
| | | | | | | MDN2493 | 1.7% | MDN2493 | 94.10% | | |
| **2006-030** | 3/22/2006 | 0.9998 | 0.020 ng/L | 7.84 ng/mL | 97.9% | MDN2774 | 0.0% | MDN2774 | 96.60% | MDN2015 | 0.024 ng/Bottle |
| | CVAFS-9 | | | 7.78 ng/mL | 97.3% | MDN2391 | 1.2% | MDN2391 | 89.20% | | |
| | | | | | | MDN2258 | 1.6% | MDN2258 | 104.70% | | |
| **2006-031** | 3/9/2006 | 0.9995 | 0.020 ng/L | 7.69 ng/mL | 96.1% | MDN2284 | 1.9% | MDN2284 | 101.40% | | |
| | CVAFS-9 | | | 7.80 ng/mL | 97.4% | MDN0086 | 2.6% | MDN0086 | 95.80% | | |
| | | | | | | MDN0407 | 1.6% | MDN0407 | 95.15% | | |
| **2006-032** | 3/16/2006 | 0.9997 | 0.000 ng/L | 7.63 ng/mL | 95.3% | MDN2614 | 2.1% | MDN2614 | 91.10% | | |
| | CVAFS-9 | | | 7.68 ng/mL | 95.9% | MDN0161 | 2.4% | MDN0161 | 101.70% | | |
| | | | | | | MDN2580 | 2.0% | MDN2580 | 112.15% | | |
| **2006-033** | 3/17/2006 | 0.9999 | 0.020 ng/L | 7.69 ng/mL | 96.1% | MDN2594 | 0.2% | MDN2594 | 100.65% | MDN2455 | 0.025 ng/Bottle |
| | CVAFS-9 | | | 7.65 ng/mL | 95.6% | MDN2235 | 7.5% | MDN2235 | 96.75% | | |
| | | | | | | MDN2336 | 1.8% | MDN2336 | 91.25% | | |
| **2006-034** | 3/17/2006 | 0.9998 | 0.090 ng/L | 7.52 ng/mL | 94.0% | MDN2434 | 0.6% | MDN2273 | 99.95% | MDN2651 | 0.009 ng/Bottle |
| | CVAFS-10 | | | 7.53 ng/mL | 94.1% | MDN1916 | 2.7% | MDN1916 | 100.05% | | |
| | | | | | | MDN2273 | 4.4% | MDN2434 | 89.25% | | |

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| **2006-035** | 3/23/2006 | 0.9998 | 0.000 ng/L | 7.63 ng/mL | 95.3% | MDN2065 | 2.2% | MDN2065 | 101.75% | | |
| | CVAFS-9 | | | | | MDN1936 | 3.6% | MDN2731 | 92.05% | | |
| | | | | | | MDN2731 | 3.0% | MDN1936 | 99.30% | | |
| **2006-036** | 3/22/2006 | 0.9998 | 0.050 ng/L | 7.79 ng/mL | 97.4% | MDN2054 | 1.0% | MDN0783 | 94.40% | MDN0288 | 0.016 ng/Bottle |
| | CVAFS-10 | | | 8.01 ng/mL | 100.1% | MDN0783 | 2.1% | MDN0196 | 106.05% | | |
| | | | | | | MDN0196 | 10.0% | MDN2054 | 89.80% | | |
| **2006-037** | 3/23/2006 | 0.9999 | 0.020 ng/L | 7.66 ng/mL | 95.8% | MDN0185 | 2.9% | MDN0185 | 96.20% | MDN1742 | 0.006 ng/Bottle |
| | CVAFS-10 | | | 7.45 ng/mL | 93.1% | MDN2616 | 2.0% | MDN2616 | 98.25% | MDN2609 | 0.010 ng/Bottle |
| | | | | | | MDN2820 | 0.4% | MDN2820 | 97.25% | | |
| **2006-038** | 3/28/2006 | 0.9998 | 0.010 ng/L | 7.61 ng/mL | 95.1% | MDN2636 | 3.3% | MDN2636 | 102.20% | | |
| | CVAFS-9 | | | 7.58 ng/mL | 94.8% | MDN0638 | 1.1% | MDN0638 | 95.45% | | |
| | | | | | | MDN2107 | 4.0% | MDN2107 | 86.25% | | |
| **2006-039** | 3/28/2006 | 0.9999 | 0.070 ng/L | 7.71 ng/mL | 96.3% | MDN2340 | 0.9% | MDN2575 | 100.00% | | |
| | CVAFS-10 | | | 7.44 ng/mL | 92.9% | MDN6009 | 6.7% | MDN2340 | 85.80% | | |
| | | | | | | MDN2575 | 6.3% | MDN6009 | 98.45% | | |
| **2006-040** | 3/30/2006 | 0.9995 | 0.010 ng/L | 7.60 ng/mL | 95.0% | MDN0401 | 5.8% | MDN2686 | 96.05% | | |
| | CVAFS-9 | | | 7.70 ng/mL | 96.3% | MDN2686 | 1.9% | MDN0401 | 99.30% | | |
| | | | | | | MDN2028 | 3.9% | MDN2028 | 100.90% | | |
| **2006-041** | 3/30/2006 | 1.0000 | 0.040 ng/L | 7.56 ng/mL | 94.4% | MDN2409 | 0.6% | MDN2409 | 88.40% | MDN3010 | 0.010 ng/Bottle |
| | CVAFS-10 | | | 7.04 ng/mL | 88.0% | MDN2531 | 6.2% | MDN2379 | 101.07% | | |
| | | | | | | MDN2379 | 0.4% | MDN2531 | 102.25% | | |
| **2006-042** | 4/4/2006 | 0.9999 | 0.020 ng/L | 7.75 ng/mL | 96.8% | MDN0162 | 0.2% | MDN0162 | 93.55% | | |
| | CVAFS-9 | | | 7.56 ng/mL | 94.5% | MDN2066 | 0.7% | MDN2066 | 95.35% | | |
| | | | | | | MDN2189 | 0.3% | MDN2189 | 100.40% | | |
| **2006-043** | 4/4/2006 | 0.9999 | 0.030 ng/L | 7.89 ng/mL | 98.6% | MDN2160 | 4.0% | MDN2160 | 94.80% | MDN2594 | 0.021 ng/Bottle |
| | CVAFS-10 | | | 7.33 ng/mL | 91.6% | MDN0662 | 4.1% | MDN0662 | 93.50% | | |
| | | | | | | MDN1987 | 1.8% | MDN1987 | 85.10% | | |

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| **2006-044** | 4/5/2006 | 0.9998 | 0.040 ng/L | 7.38 ng/mL | 92.2% | MDN0408 | 1.6% | MDN0408 | 93.75% | | |
| | CVAFS-10 | | | 7.19 ng/mL | 89.9% | MDN2122 | 1.2% | MDN2122 | 83.95% | | |
| | | | | | | MDN0169 | 3.4% | MDN0169 | 90.55% | | |
| **2006-045** | 4/7/2006 | 0.9999 | -0.010 ng/L | 7.68 ng/mL | 96.0% | MDN2760 | 0.3% | MDN2760 | 93.65% | MDN2405 | 0.006 ng/Bottle |
| | CVAFS-9 | | | 7.52 ng/mL | 94.0% | MDN2503 | 0.5% | MDN2503 | 95.65% | | |
| | | | | | | MDN0936 | 1.8% | MDN0936 | 98.20% | | |
| **2006-046** | 4/7/2006 | 0.99870 | -0.010 ng/L | 7.64 ng/mL | 95.5% | MDN2009 | 5.1% | MDN2009 | 84.75% | | |
| | CVAFS-10 | | | 7.18 ng/mL | 89.8% | MDN1930 | 1.3% | MDN1930 | 94.55% | | |
| | | | | | | MDN2790 | 1.4% | MDN2790 | 88.00% | | |
| **2006-047** | 4/12/2006 | 0.99940 | 0.050 ng/L | 7.63 ng/mL | 95.3% | MDN2511 | 1.3% | MDN2511 | 95.35% | MDN2271 | 0.015 ng/Bottle |
| | CVAFS-9 | | | 7.72 ng/mL | 96.4% | MDN0655 | 2.2% | MDN0655 | 98.70% | | |
| | | | | | | MDN2797 | 1.4% | MDN2797 | 95.00% | | |
| **2006-048** | 4/12/2006 | 0.99900 | 0.050 ng/L | 7.68 ng/mL | 96.0% | MDN2324 | 7.0% | MDN2324 | 105.35% | MDN0779 | 0.017 ng/Bottle |
| | CVAFS-10 | | | 7.62 ng/mL | 95.2% | MDN1734 | 1.5% | MDN1734 | 89.95% | | |
| | | | | | | MDN2776 | 11.3% | MDN2776 | 100.45% | | |
| **2006-049** | 4/14/2006 | 0.99970 | 0.030 ng/L | 7.66 ng/mL | 95.7% | MDN2476 | 0.9% | MDN2476 | 94.00% | MDN2686 | 0.015 ng/Bottle |
| | CVAFS-9 | | | 7.68 ng/mL | 96.0% | MDN0894 | 4.1% | MDN0894 | 97.70% | | |
| | | | | | | MDN2458 | 1.8% | MDN2458 | 100.41% | | |
| **2006-050** | 4/14/2006 | 0.99980 | 0.020 ng/L | 7.82 ng/mL | 97.8% | MDN1924 | 0.1% | MDN1924 | 85.50% | | |
| | CVAFS-10 | | | 7.04 ng/mL | 87.9% | MDN2148 | 9.1% | MDN2148 | 83.25% | | |
| | | | | | | MDN2049 | 5.4% | MDN2049 | 94.65% | | |
| **2006-051** | 4/18/2006 | 0.99970 | 0.010 ng/L | 7.55 ng/mL | 94.3% | MDN0490 | 1.7% | MDN0490 | 83.65% | | |
| | CVAFS-10 | | | 7.05 ng/mL | 88.1% | MDN1976 | 3.6% | MDN1976 | 80.25% | | |
| | | | | | | MDN2772 | 3.7% | MDN2772 | 89.25% | | |
| **2006-052** | 4/19/2006 | 0.99980 | 0.040 ng/L | 7.42 ng/mL | 92.8% | MDN2370 | 5.0% | MDN2370 | 97.40% | MDN0693 | 0.015 ng/Bottle |
| | CVAFS-9 | | | 6.82 ng/mL | 85.2% | MDN2449 | 1.0% | MDN2449 | 83.90% | | |
| | | | | | | MDN3001 | 3.3% | MDN3001 | 87.30% | | |

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| **2006-053** | 4/19/2006 | 1.00000 | 0.030 ng/L | 7.61 ng/mL | 95.1% | MDN2456 | 5.1% | MDN2456 | 98.35% | MDN0936 | 0.028 ng/Bottle |
| | CVAFS-10 | | | 7.11 ng/mL | 88.9% | MDN2793 | 7.3% | MDN2793 | 92.40% | | |
| | | | | | | MDN3013 | 17.0% | MDN3013 | 98.80% | | |
| **2006-054** | 4/25/2006 | 0.99980 | 0.050 ng/L | 7.52 ng/mL | 93.9% | MDN0430 | 1.0% | MDN0430 | 85.40% | | |
| | CVAFS-10 | | | 7.31 ng/mL | 91.4% | MDN0827 | 4.8% | MDN0827 | 100.70% | | |
| | | | | | | MDN2400 | 0.6% | MDN2400 | 80.60% | | |
| **2006-055** | 5/2/2006 | 0.99950 | 0.030 ng/L | 7.63 ng/mL | 95.4% | MDN2480 | 1.2% | MDN2480 | 85.90% | | |
| | CVAFS-10 | | | 7.49 ng/mL | 93.6% | MDN2712 | 1.9% | MDN2712 | 90.90% | | |
| | | | | | | MDN2775 | 13.4% | MDN2775 | 102.85% | | |
| **2006-056** | 5/2/2006 | 1.00000 | 0.030 ng/L | 7.38 ng/mL | 92.3% | MDN0173 | 0.5% | MDN0173 | 93.80% | MDN0747 | 0.010 ng/Bottle |
| | CVAFS-9 | | | 7.03 ng/mL | 87.9% | MDN2176 | 0.2% | MDN2176 | 88.75% | | |
| | | | | | | MDN2735 | 3.3% | MDN2735 | 99.85% | | |
| **2006-057** | 5/3/2006 | 1.00000 | 0.000 ng/L | 7.51 ng/mL | 93.9% | MDN0811 | 1.2% | MDN0811 | 94.50% | | |
| | CVAFS-9 | | | 7.46 ng/mL | 93.3% | MDN0915 | 0.3% | MDN0915 | 98.45% | | |
| | | | | | | MDN2708 | 2.0% | MDN2708 | 101.05% | | |
| **2006-058** | 5/3/2006 | 0.99900 | 0.030 ng/L | 7.46 ng/mL | 93.3% | MDN0925 | 15.3% | MDN0925 | 109.50% | | |
| | CVAFS-10 | | | 7.47 ng/mL | 93.4% | MDN1955 | 1.0% | MDN1955 | 86.00% | | |
| | | | | | | MDN2447 | 12.5% | MDN2447 | 109.20% | | |
| **2006-059** | 5/4/2006 | 1.00000 | 0.030 ng/L | 7.50 ng/mL | 93.7% | MDN2020 | 1.1% | MDN2020 | 97.35% | | |
| | CVAFS-9 | | | 7.15 ng/mL | 89.3% | MDN2303 | 3.0% | MDN2303 | 91.40% | | |
| | | | | | | MDN2652 | 0.2% | MDN2652 | 93.45% | | |
| **2006-060** | 5/9/2006 | 1.00000 | 0.000 ng/L | 7.60 ng/mL | 94.9% | MDN1918 | 1.4% | MDN1918 | 104.40% | MDN1734 | 0.007 ng/Bottle |
| | CVAFS-9 | | | 7.23 ng/mL | 90.4% | MDN2183 | 0.6% | MDN2183 | 93.30% | | |
| | | | | | | MDN2733 | 4.2% | MDN2733 | 96.80% | | |
| **2006-061** | 5/10/2006 | 1.00000 | 0.050 ng/L | 7.55 ng/mL | 94.3% | MDN2360 | 19.1% | MDN2360 | 82.60% | MDN2052 | 0.048 ng/Bottle |
| | CVAFS-9 | | | 7.39 ng/mL | 92.4% | MDN2585 | 6.8% | MDN2585 | 100.20% | | |

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| **2006-062** | 5/10/2006 | 1.00000 | 0.070 ng/L | 5.98 ng/mL | 74.8% | MDN2671 | 6.0% | MDN2671 | 97.60% | | |
| | CVAFS-10 | | | | | | | | | | |
| **2006-063** | 5/11/2006 | 0.99930 | 0.040 ng/L | 7.25 ng/mL | 90.6% | MDN0654 | 9.7% | MDN0654 | 95.25% | | |
| | CVAFS-10 | | | 6.70 ng/mL | 83.7% | MDN2029 | 0.4% | MDN2029 | 77.55% | | |
| **2006-064** | 5/12/2006 | 1.00000 | 0.020 ng/L | 7.14 ng/mL | 89.2% | MDN1936 | 3.6% | MDN1936 | 99.30% | | |
| | CVAFS-9 | | | 7.45 ng/mL | 93.1% | MDN1999 | 1.1% | MDN1999 | 90.00% | | |
| | | | | | | MDN2005 | 9.1% | MDN2005 | 97.60% | | |
| **2006-065** | 5/15/2006 | 0.99950 | 0.040 ng/L | 7.38 ng/mL | 92.3% | MDN0866 | 4.4% | MDN0866 | 97.95% | | |
| | CVAFS-10 | | | 6.65 ng/mL | 83.1% | MDN2523 | 0.2% | MDN2523 | 84.75% | | |
| **2006-066** | 5/18/2006 | 1.00000 | 0.010 ng/L | 7.66 ng/mL | 95.7% | MDN0479 | 0.7% | MDN0479 | 93.30% | MDN2480 | 0.017 ng/Bottle |
| | CVAFS-9 | | | 7.18 ng/mL | 89.8% | MDN2044 | 2.8% | MDN2044 | 91.85% | | |
| | | | | | | MDN2349 | 0.0% | MDN2349 | 93.40% | | |
| **2006-067** | 5/31/2006 | 1.00000 | 0.060 ng/L | 7.13 ng/mL | 89.1% | MDN0126 | 3.8% | MDN0126 | 87.60% | | |
| | CVAFS-9 | | | 7.60 ng/mL | 94.9% | MDN0979 | 3.1% | MDN0979 | 87.75% | | |
| | | | | | | MDN2069 | 0.4% | MDN2069 | 95.20% | | |
| **2006-068** | 5/31/2006 | 0.99900 | -0.010 ng/L | 7.51 ng/mL | 93.8% | MDN0277 | 3.5% | MDN0277 | 99.65% | MDN2170 | 0.015 ng/Bottle |
| | CVAFS-10 | | | 7.42 ng/mL | 92.7% | MDN2379 | 2.7% | MDN2379 | 91.35% | | |
| | | | | | | MDN2529 | 3.4% | MDN2529 | 107.05% | | |
| **2006-069** | 5/15/2006 | 1.00000 | 0.070 ng/L | 7.57 ng/mL | 94.6% | MDN0832 | 2.2% | MDN0832 | 89.45% | | |
| | CVAFS-9 | | | 7.17 ng/mL | 89.6% | MDN2028 | 0.3% | MDN2028 | 92.40% | | |
| | | | | | | MDN2756 | 1.0% | MDN2756 | 93.35% | | |
| **2006-071** | 5/27/2006 | 1.00000 | 0.040 ng/L | 7.67 ng/mL | 95.8% | MDN1956 | 3.7% | MDN1956 | 88.20% | | |
| | CVAFS-9 | | | 7.34 ng/mL | 91.8% | MDN2601 | 0.6% | MDN2601 | 88.35% | | |
| | | | | | | MDN2803 | 4.6% | MDN2803 | 91.50% | | |
| **2006-072** | 5/27/2006 | 0.99860 | 0.070 ng/L | 7.62 ng/mL | 95.3% | MDN2707 | 17.8% | MDN2707 | 94.95% | MDN2502 | 0.022 ng/Bottle |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| | CVAFS-10 | | | 7.23 ng/mL | 90.4% | | | | | | |
| **2006-073** | 6/1/2006 | 0.99880 | 0.010 ng/L | 7.48 ng/mL | 93.4% | MDN1959 | 12.1% | MDN1959 | 97.95% | | |
| | CVAFS-10 | | | 6.51 ng/mL | 81.3% | MDN2064 | 6.3% | MDN2064 | 92.20% | | |
| | | | | | | MDN2342 | 6.9% | MDN2342 | 96.70% | | |
| **2006-074** | 6/2/2006 | 1.00000 | 0.030 ng/L | 7.06 ng/mL | 88.3% | MDN1755 | 1.5% | MDN1755 | 93.70% | | |
| | CVAFS-9 | | | 7.66 ng/mL | 95.7% | MDN2195 | 4.0% | MDN2195 | 93.10% | | |
| | | | | | | MDN2522 | 0.6% | MDN2522 | 85.95% | | |
| **2006-075** | 6/2/2006 | 0.99870 | 0.000 ng/L | 7.45 ng/mL | 93.1% | MDN0437 | 3.5% | MDN0437 | 97.25% | | |
| | CVAFS-10 | | | 7.47 ng/mL | 93.3% | MDN2519 | 7.6% | MDN2519 | 94.30% | | |
| | | | | | | MDN2565 | 2.2% | MDN2565 | 92.25% | | |
| **2006-076** | 6/15/2006 | 1.00000 | 0.030 ng/L | 6.71 ng/mL | 83.8% | MDN0421 | 0.7% | MDN0421 | 88.25% | MDN0279 | 0.012 ng/Bottle |
| | CVAFS-9 | | | 7.56 ng/mL | 94.4% | MDN0642 | 0.6% | MDN0642 | 89.15% | | |
| | | | | | | MDN0770 | 3.5% | MDN0770 | 87.65% | | |
| **2006-077** | 6/5/2006 | 0.99880 | 0.000 ng/L | 7.52 ng/mL | 94.0% | MDN0774 | 1.6% | MDN0774 | 90.25% | MDN2207 | 0.021 ng/Bottle |
| | CVAFS-10 | | | 7.08 ng/mL | 88.5% | MDN2282 | 5.3% | MDN2282 | 91.10% | | |
| | | | | | | MDN2819 | 6.9% | MDN2819 | 96.20% | | |
| **2006-078** | 6/6/2006 | 1.00000 | 0.030 ng/L | 7.50 ng/mL | 93.7% | MDN2025 | 5.5% | MDN2025 | 81.70% | | |
| | CVAFS-9 | | | 6.50 ng/mL | 81.3% | MDN2055 | 0.8% | MDN2055 | 82.85% | | |
| | | | | | | MDN2316 | 0.5% | MDN2316 | 92.60% | | |
| **2006-079** | 6/6/2006 | 0.99890 | 0.030 ng/L | 7.67 ng/mL | 95.8% | MDN0483 | 10.3% | MDN0483 | 93.60% | | |
| | CVAFS-10 | | | 7.24 ng/mL | 90.4% | MDN2091 | 6.9% | MDN2091 | 94.65% | | |
| | | | | | | MDN2681 | 0.2% | MDN2681 | 90.35% | | |
| **2006-080** | 6/7/2006 | 0.99900 | 0.080 ng/L | 7.86 ng/mL | 98.2% | MDN1997 | 7.0% | MDN1997 | 100.65% | | |
| | CVAFS-10 | | | 7.27 ng/mL | 90.8% | MDN2234 | 13.0% | MDN2234 | 91.45% | | |
| | | | | | | MDN2637 | 1.2% | MDN2637 | 92.55% | | |
| **2006-081** | 6/7/2006 | 0.99990 | 0.060 ng/L | 7.61 ng/mL | 95.1% | MDN2010 | 2.4% | MDN2010 | 90.40% | | |

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| | CVAFS-9 | | | 6.99 ng/mL | 87.3% | MDN2638 | 1.6% | MDN2638 | 90.75% | | |
| | | | | | | MDN2804 | 4.3% | MDN2804 | 84.35% | | |
| **2006-082** | 6/12/2006 | 1.00000 | 0.060 ng/L | 7.66 ng/mL | 95.7% | MDN0894 | 1.1% | MDN0894 | 94.30% | MDN2017 | 0.015 ng/Bottle |
| | CVAFS-9 | | | 7.20 ng/mL | 89.9% | MDN2339 | 0.3% | MDN2339 | 93.05% | | |
| | | | | | | MDN2767 | 1.6% | MDN2767 | 95.15% | | |
| **2006-083** | 6/12/2006 | 1.0000 | 0.070 ng/L | 7.57 ng/mL | 94.6% | MDN0445 | 20.3% | MDN0445 | 77.75% | | |
| | CVAFS-10 | | | 7.04 ng/mL | 87.9% | MDN2576 | 4.4% | MDN2576 | 90.05% | | |
| | | | | | | MDN2657 | 5.2% | MDN2657 | 99.00% | | |
| **2006-084** | 6/13/2006 | 0.9996 | 0.060 ng/L | 7.72 ng/mL | 96.4% | MDN0688 | 1.4% | MDN0688 | 94.20% | | |
| | CVAFS-9 | | | 7.10 ng/mL | 88.7% | MDN0912 | 1.7% | MDN0912 | 87.55% | | |
| | | | | | | MDN2145 | 6.8% | MDN2145 | 89.15% | | |
| **2006-085** | 6/21/2006 | 1.0000 | 0.070 ng/L | 8.05 ng/mL | 100.6% | MDN0668 | 1.1% | MDN0668 | 105.55% | | |
| | CVAFS-9 | | | 7.45 ng/mL | 93.1% | MDN0183 | 5.2% | MDN0183 | 91.65% | | |
| | | | | | | MDN2084 | 0.2% | MDN2084 | 94.25% | | |
| **2006-086** | 6/13/2006 | 1.0000 | 0.020 ng/L | 7.71 ng/mL | 96.3% | MDN2714 | 5.2% | MDN2714 | 92.55% | | |
| | CVAFS-10 | | | 6.95 ng/mL | 86.8% | MDN2263 | 3.5% | MDN2263 | 94.35% | | |
| | | | | | | MDN1924 | 0.1% | MDN1924 | 85.50% | | |
| **2006-087** | 6/21/2006 | 0.99900 | 0.050 ng/L | 6.91 ng/mL | 86.4% | MDN0086 | 7.0% | MDN0086 | 102.65% | | |
| | CVAFS-10 | | | | | | | | | | |
| **2006-088** | 6/28/2006 | 0.99920 | 0.030 ng/L | 7.40 ng/mL | 92.5% | MDN2349 | 2.4% | MDN2349 | 91.30% | | |
| | CVAFS-10 | | | | | | | | | | |
| **2006-089** | 6/28/2006 | 1.00000 | 0.030 ng/L | 7.58 ng/mL | 94.8% | MDN1927 | 0.4% | MDN1927 | 94.45% | | |
| | CVAFS-9 | | | 6.76 ng/mL | 84.4% | MDN2414 | 1.1% | MDN2414 | 89.15% | | |
| **2006-090** | 6/23/2006 | 1.00000 | 0.040 ng/L | 7.30 ng/mL | 91.2% | MDN2278 | 2.8% | MDN2278 | 87.00% | MDN2246 | 0.023 ng/Bottle |
| | CVAFS-9 | | | 6.41 ng/mL | 80.1% | MDN2484 | 1.0% | MDN2484 | 89.50% | | |
| | | | | | | MDN2656 | 1.9% | MDN2656 | 85.85% | | |

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| **2006-091** | 6/27/2006 | 1.00000 | 0.080 ng/L | 7.35 ng/mL | 91.8% | MDN0287 | 0.4% | MDN0287 | 89.55% | MDN1911 | 0.016 ng/Bottle |
| | CVAFS-9 | | | 7.35 ng/mL | 91.8% | MDN1968 | 3.1% | MDN1968 | 109.10% | | |
| | | | | | | MDN2568 | 2.1% | MDN2568 | 94.55% | | |
| **2006-092** | 6/29/2006 | 0.99960 | 0.030 ng/L | 7.60 ng/mL | 94.9% | MDN2092 | 2.3% | MDN2092 | 97.35% | | |
| | CVAFS-10 | | | | | | | | | | |
| **2006-093** | 6/29/2006 | 1.00000 | 0.040 ng/L | 7.51 ng/mL | 93.8% | MDN0757 | 3.5% | MDN0757 | 90.80% | MDN2819 | 0.021 ng/Bottle |
| | CVAFS-9 | | | 6.86 ng/mL | 85.8% | MDN2112 | 1.1% | MDN2112 | 93.05% | | |
| | | | | | | MDN2778 | 2.1% | MDN2778 | 91.15% | | |
| **2006-094** | 7/3/2006 | 0.99990 | 0.040 ng/L | 7.79 ng/mL | 97.3% | MDN2243 | 1.5% | MDN2243 | 91.50% | | |
| | CVAFS-9 | | | 7.23 ng/mL | 90.3% | MDN2511 | 1.0% | MDN2511 | 96.10% | | |
| | | | | | | MDN2771 | 0.6% | MDN2771 | 93.25% | | |
| **2006-095** | 7/3/2006 | 0.99920 | 0.030 ng/L | 7.70 ng/mL | 96.3% | MDN0769 | 2.3% | MDN0769 | 102.05% | MDN2118 | 0.019 ng/Bottle |
| | CVAFS-10 | | | 7.18 ng/mL | 89.7% | MDN0813 | 7.5% | MDN0813 | 92.30% | | |
| | | | | | | MDN2571 | 0.4% | MDN2571 | 96.50% | | |
| **2006-096** | 7/7/2006 | 1.00000 | 0.060 ng/L | 7.71 ng/mL | 96.4% | MDN0719 | 1.6% | MDN0719 | 91.85% | | |
| | CVAFS-9 | | | 7.58 ng/mL | 94.7% | MDN0949 | 0.0% | MDN0949 | 99.80% | | |
| | | | | | | MDN2299 | 5.6% | MDN2299 | 99.40% | | |
| **2006-097** | 7/13/2006 | 1.00000 | 0.030 ng/L | 7.60 ng/mL | 95.0% | MDN2071 | 2.0% | MDN2071 | 96.00% | MDN0266 | 0.012 ng/Bottle |
| | CVAFS-9 | | | 7.36 ng/mL | 91.9% | MDN2175 | 3.1% | MDN2175 | 92.95% | MDN2648 | 0.016 ng/Bottle |
| | | | | | | MDN2474 | 1.0% | MDN2474 | 96.30% | | |
| **2006-098** | 7/20/2006 | 0.99970 | 0.060 ng/L | 7.40 ng/mL | 92.5% | MDN1939 | 4.7% | MDN1939 | 86.80% | | |
| | CVAFS-10 | | | | | MDN2673 | 11.0% | MDN2673 | 87.90% | | |
| **2006-099** | 7/17/2006 | 0.99990 | 0.040 ng/L | 7.94 ng/mL | 99.3% | MDN0983 | 7.1% | MDN0983 | 91.15% | MDN2527 | -0.004 ng/Bottle |
| | CVAFS-10 | | | 7.07 ng/mL | 88.3% | MDN2541 | 9.8% | MDN2541 | 89.00% | | |
| | | | | | | MDN2698 | 10.7% | MDN2698 | 105.55% | | |

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| **2006-100** | 7/21/2006 | 0.99990 | 0.040 ng/L | 7.54 ng/mL | 94.2% | MDN0866 | 2.4% | MDN0866 | 98.20% | MDN1940 | 0.046 ng/Bottle |
| | CVAFS-10 | | | 7.13 ng/mL | 89.1% | MDN0927 | 8.5% | MDN0927 | 87.35% | MDN2204 | 0.016 ng/Bottle |
| | | | | | | MDN2726 | 1.5% | MDN2726 | 92.05% | | |
| **2006-101** | 7/18/2006 | 0.99980 | 0.040 ng/L | 7.86 ng/mL | 98.3% | MDN2078 | 0.5% | MDN2078 | 96.30% | | |
| | CVAFS-9 | | | 7.39 ng/mL | 92.4% | MDN2186 | 2.2% | MDN2186 | 93.90% | | |
| | | | | | | MDN2377 | 2.4% | MDN2377 | 85.65% | | |
| **2006-102** | 7/19/2006 | 0.99990 | 0.040 ng/L | 8.06 ng/mL | 100.7% | MDN0225 | 14.7% | MDN0225 | 94.35% | | |
| | CVAFS-9 | | | 7.86 ng/mL | 98.3% | MDN2161 | 0.5% | MDN2161 | 103.93% | | |
| | | | | | | MDN2705 | 2.5% | MDN2705 | 103.75% | | |
| **2006-103** | 7/21/2006 | 0.99980 | 0.080 ng/L | 7.85 ng/mL | 98.1% | MDN2058 | 3.0% | MDN2058 | 93.55% | MDN0936 | 0.017 ng/Bottle |
| | CVAFS-9 | | | 7.02 ng/mL | 87.8% | MDN2476 | 1.9% | MDN2476 | 88.35% | MDN0943 | 0.021 ng/Bottle |
| | | | | | | MDN2555 | 1.7% | MDN2555 | 90.65% | | |
| **2006-104** | 7/24/2006 | 0.99950 | 0.070 ng/L | 8.33 ng/mL | 104.1% | MDN0185 | 0.0% | MDN0185 | 94.80% | | |
| | CVAFS-9 | | | 7.32 ng/mL | 91.4% | MDN2099 | 1.3% | MDN2099 | 95.75% | | |
| | | | | | | MDN2183 | 0.0% | MDN2183 | 93.80% | | |
| **2006-105** | 7/26/2006 | 0.99990 | 0.100 ng/L | 7.92 ng/mL | 99.0% | MDN0437 | 3.2% | MDN0437 | 96.05% | | |
| | CVAFS-9 | | | 7.39 ng/mL | 92.3% | MDN2303 | 8.6% | MDN2303 | 95.05% | | |
| | | | | | | MDN2405 | 0.2% | MDN2405 | 95.70% | | |
| **2006-106** | 7/24/2006 | 0.99970 | 0.030 ng/L | 7.46 ng/mL | 93.3% | MDN0778 | 1.6% | MDN0778 | 99.65% | MDN0772 | 0.018 ng/Bottle |
| | CVAFS-10 | | | 7.78 ng/mL | 97.3% | MDN2166 | 0.8% | MDN2166 | 97.55% | | |
| | | | | | | MDN3002 | 6.7% | MDN3002 | 104.30% | | |
| **2006-107** | 7/20/2006 | 0.99960 | 0.070 ng/L | 7.69 ng/mL | 96.1% | MDN2613 | 0.8% | MDN2613 | 95.80% | | |
| | CVAFS-9 | | | | | MDN2616 | 1.4% | MDN2616 | 95.85% | | |
| **2006-108** | 7/26/2006 | 1.00000 | 0.060 ng/L | 7.71 ng/mL | 96.3% | MDN0661 | 1.8% | MDN0661 | 98.05% | | |
| | CVAFS-10 | | | 7.51 ng/mL | 93.8% | MDN2055 | 0.0% | MDN2055 | 101.00% | | |
| | | | | | | MDN2585 | 3.8% | MDN2585 | 99.65% | | |

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| **2006-109** | 7/28/2006 | 0.99990 | 0.060 ng/L | 7.85 ng/mL | 98.1% | MDN0190 | 1.5% | MDN0190 | 93.10% | | |
| | CVAFS-9 | | | 7.45 ng/mL | 93.1% | MDN0846 | 0.7% | MDN0846 | 95.80% | | |
| | | | | | | MDN2061 | 1.3% | MDN2061 | 98.40% | | |
| **2006-110** | 7/28/2006 | 1.00000 | 0.050 ng/L | 7.66 ng/mL | 95.8% | MDN0118 | 2.1% | MDN0118 | 96.25% | | |
| | CVAFS-10 | | | 7.25 ng/mL | 90.6% | MDN2411 | 4.9% | MDN2411 | 98.60% | | |
| | | | | | | MDN2547 | 1.0% | MDN2547 | 96.95% | | |
| **2006-111** | 7/31/2006 | 1.00000 | 0.030 ng/L | 7.60 ng/mL | 95.0% | MDN2482 | 2.0% | MDN2482 | 88.45% | MDN1954 | 0.017 ng/Bottle |
| | CVAFS-10 | | | 6.77 ng/mL | 84.6% | MDN2731 | 1.4% | MDN2731 | 89.85% | | |
| | | | | | | MDN3014 | 3.7% | MDN3014 | 101.25% | | |
| **2006-112** | 7/31/2006 | 0.99980 | 0.050 ng/L | 7.76 ng/mL | 96.9% | MDN0483 | 0.7% | MDN0483 | 90.15% | MDN0678 | 0.027 ng/Bottle |
| | CVAFS-9 | | | 7.23 ng/mL | 90.3% | MDN1969 | 0.3% | MDN1969 | 95.80% | | |
| | | | | | | MDN2080 | 2.7% | MDN2080 | 93.70% | | |
| **2006-113** | 8/1/2006 | 0.99990 | 0.030 ng/L | 7.36 ng/mL | 92.0% | MDN2030 | 9.6% | MDN2030 | 104.45% | MDN2590 | 0.020 ng/Bottle |
| | CVAFS-10 | | | 7.66 ng/mL | 95.8% | MDN2182 | 0.9% | MDN2182 | 95.85% | | |
| | | | | | | MDN2672 | 0.1% | MDN2672 | 94.90% | | |
| **2006-114** | 8/1/2006 | 0.99990 | 0.050 ng/L | 7.94 ng/mL | 99.3% | MDN1971 | 1.1% | MDN1971 | 96.80% | | |
| | CVAFS-9 | | | 7.39 ng/mL | 92.4% | MDN2114 | 0.5% | MDN2114 | 95.30% | | |
| | | | | | | MDN2768 | 1.6% | MDN2768 | 97.65% | | |
| **2006-115** | 8/16/2006 | 0.99990 | 0.050 ng/L | 7.79 ng/mL | 97.3% | MDN0648 | 0.3% | MDN0648 | 94.15% | | |
| | CVAFS-9 | | | 7.38 ng/mL | 92.3% | MDN2361 | 0.6% | MDN2361 | 97.90% | | |
| | | | | | | MDN3021 | 1.0% | MDN3021 | 95.25% | | |
| **2006-116** | 8/15/2006 | 0.99940 | 0.030 ng/L | 7.76 ng/mL | 96.9% | MDN1913 | 9.1% | MDN1913 | 89.80% | | |
| | CVAFS-10 | | | 7.45 ng/mL | 93.1% | MDN1970 | 5.9% | MDN1970 | 105.70% | | |
| | | | | | | MDN2577 | 7.4% | MDN2577 | 101.45% | | |
| **2006-117** | 8/9/2006 | 0.99980 | 0.000 ng/L | 6.92 ng/mL | 86.4% | MDN1992 | 2.0% | MDN1992 | 92.75% | | |
| | CVAFS-10 | | | 7.21 ng/mL | 90.1% | MDN2572 | 5.7% | MDN2572 | 114.40% | | |
| | | | | | | MDN2733 | 4.0% | MDN2733 | 97.10% | | |

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| **2006-118** | 8/8/2006 | 0.99970 | 0.000 ng/L | 6.84 ng/mL | 85.4% | MDN0636 | 10.8% | MDN0636 | 98.90% | MDN2681 | 0.034 ng/Bottle |
| | CVAFS-10 | | | 7.46 ng/mL | 93.2% | MDN2628 | 0.9% | MDN2628 | 91.25% | | |
| | | | | | | MDN2813 | 2.9% | MDN2813 | 105.05% | | |
| **2006-119** | 8/17/2006 | 0.99870 | -0.080 ng/L | 7.78 ng/mL | 97.3% | MDN2028 | 23.8% | MDN2028 | 100.15% | | |
| | CVAFS-10 | | | | | MDN2119 | 1.4% | MDN2119 | 108.25% | | |
| | | | | | | MDN2233 | 5.1% | MDN2233 | 105.40% | | |
| **2006-120** | 8/22/2006 | 0.99980 | 0.060 ng/L | 7.85 ng/mL | 98.1% | MDN0794 | 2.3% | MDN0794 | 97.60% | | |
| | CVAFS-9 | | | 7.43 ng/mL | 92.9% | MDN2409 | 0.4% | MDN2409 | 91.75% | | |
| | | | | | | MDN2412 | 3.4% | MDN2412 | 92.70% | | |
| **2006-121** | 8/22/2006 | 0.99990 | 0.020 ng/L | 8.00 ng/mL | 100.0% | MDN1921 | 5.4% | MDN1921 | 105.00% | MDN2566 | 0.031 ng/Bottle |
| | CVAFS-10 | | | 7.89 ng/mL | 98.6% | MDN1981 | 0.6% | MDN1981 | 110.45% | | |
| | | | | | | MDN2152 | 0.6% | MDN2152 | 98.30% | | |
| **2006-122** | 8/16/2006 | 0.99930 | -0.020 ng/L | 7.83 ng/mL | 97.9% | MDN0783 | 5.6% | MDN0783 | 112.05% | | |
| | CVAFS-10 | | | 7.99 ng/mL | 99.8% | MDN2509 | 3.1% | MDN2509 | 106.00% | | |
| | | | | | | MDN2691 | 6.8% | MDN2691 | 102.65% | | |
| **2006-123** | 8/24/2006 | 1.00000 | 0.050 ng/L | 7.82 ng/mL | 97.7% | MDN0277 | 1.4% | MDN0277 | 94.95% | MDN0848 | 0.006 ng/Bottle |
| | CVAFS-9 | | | 7.27 ng/mL | 90.9% | MDN2573 | 0.2% | MDN2573 | 93.20% | | |
| | | | | | | MDN2729 | 2.4% | MDN2729 | 95.45% | | |
| **2006-124** | 8/24/2006 | 0.99990 | 0.020 ng/L | 8.04 ng/mL | 100.5% | MDN0442 | 1.0% | MDN0442 | 100.90% | MDN2590 | 0.020 ng/Bottle |
| | CVAFS-10 | | | 7.96 ng/mL | 99.4% | MDN0893 | 0.9% | MDN0893 | 108.90% | MDN2476 | 0.026 ng/Bottle |
| | | | | | | MDN1908 | 0.5% | MDN1908 | 99.25% | | |
| **2006-125** | 8/29/2006 | 0.99990 | 0.120 ng/L | 7.91 ng/mL | 98.8% | MDN0447 | 3.1% | MDN0447 | 98.40% | | |
| | CVAFS-10 | | | 7.74 ng/mL | 96.7% | MDN0731 | 3.1% | MDN0731 | 101.35% | | |
| | | | | | | MDN2157 | 0.7% | MDN2157 | 100.85% | | |
| **2006-126** | 8/26/2006 | 0.99710 | 0.070 ng/L | 7.98 ng/mL | 99.8% | MDN0260 | 0.4% | MDN0260 | 106.95% | | |
| | CVAFS-10 | | | 7.80 ng/mL | 97.5% | MDN2255 | 4.3% | MDN2255 | 105.00% | | |
| | | | | | | MDN2656 | 4.3% | MDN2656 | 99.40% | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| **2006-127** | 8/26/2006 | 1.00000 | 0.070 ng/L | 7.80 ng/mL | 97.4% | MDN0973 | 5.2% | MDN0973 | 93.70% | | |
| | CVAFS-9 | | | 7.41 ng/mL | 92.6% | MDN2345 | 0.8% | MDN2345 | 87.55% | | |
| | | | | | | MDN2423 | 3.5% | MDN2423 | 94.70% | | |
| **2006-128** | 8/31/2006 | 0.99990 | 0.000 ng/L | 8.13 ng/mL | 101.6% | MDN0968 | 0.3% | MDN0968 | 107.35% | MDN2308 | 0.059 ng/Bottle |
| | CVAFS-10 | | | 8.03 ng/mL | 100.4% | MDN2052 | 9.2% | MDN2052 | 96.95% | | |
| | | | | | | MDN2806 | 0.7% | MDN2806 | 102.05% | | |
| **2006-129** | 9/5/2006 | 0.99980 | 0.100 ng/L | 7.98 ng/mL | 99.8% | MDN0774 | 2.6% | MDN0774 | 97.30% | MDN2358 | 0.038 ng/Bottle |
| | CVAFS-9 | | | 7.58 ng/mL | 94.8% | MDN1973 | 0.2% | MDN1973 | 94.25% | | |
| | | | | | | MDN2751 | 0.0% | MDN2751 | 95.90% | | |
| **2006-130** | 9/5/2006 | 1.00000 | 0.060 ng/L | 8.08 ng/mL | 100.9% | MDN0862 | 4.1% | MDN0862 | 98.30% | MDN2217 | 0.024 ng/Bottle |
| | CVAFS-10 | | | 7.87 ng/mL | 98.3% | MDN0916 | 8.7% | MDN0916 | 94.25% | | |
| | | | | | | MDN2017 | 1.0% | MDN2017 | 100.60% | | |
| **2006-131** | 9/7/2006 | 0.99950 | 0.050 ng/L | 8.26 ng/mL | 103.2% | MDN2168 | 5.8% | MDN2168 | 87.25% | | |
| | CVAFS-9 | | | 7.70 ng/mL | 96.2% | MDN2185 | 2.9% | MDN2185 | 95.35% | | |
| | | | | | | MDN2693 | 0.2% | MDN2693 | 99.55% | | |
| **2006-132** | 9/7/2006 | 0.99920 | 0.010 ng/L | 8.02 ng/mL | 100.2% | MDN0936 | 2.9% | MDN0936 | 97.15% | MDN2112 | 0.017 ng/Bottle |
| | CVAFS-10 | | | 7.72 ng/mL | 96.4% | MDN2490 | 4.5% | MDN2490 | 100.80% | | |
| | | | | | | MDN2575 | 6.3% | MDN2575 | 100.00% | | |
| **2006-133** | 9/13/2006 | 0.99940 | 0.040 ng/L | 8.00 ng/mL | 99.9% | MDN0137 | 3.0% | MDN0137 | 95.25% | | |
| | CVAFS-9 | | | 7.74 ng/mL | 96.7% | MDN0162 | 0.5% | MDN0162 | 99.45% | | |
| | | | | | | MDN2793 | 0.2% | MDN2793 | 93.65% | | |
| **2006-134** | 9/13/2006 | 0.99990 | 0.050 ng/L | 7.93 ng/mL | 99.1% | MDN0765 | 0.4% | MDN0765 | 100.50% | MDN2739 | 0.016 ng/Bottle |
| | CVAFS-10 | | | 7.86 ng/mL | 98.2% | MDN2047 | 3.7% | MDN2047 | 100.65% | | |
| | | | | | | MDN2074 | 7.9% | MDN2074 | 103.00% | | |
| **2006-135** | 9/14/2006 | 0.99930 | 0.000 ng/L | 8.22 ng/mL | 102.7% | MDN1941 | 2.6% | MDN1941 | 92.30% | | |
| | CVAFS-9 | | | 7.71 ng/mL | 96.3% | MDN2159 | 1.5% | MDN2159 | 96.75% | | |
| | | | | | | MDN2673 | 3.3% | MDN2673 | 97.70% | | |

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| **2006-136** | 9/14/2006 | 0.99990 | 0.060 ng/L | 7.95 ng/mL | 99.3% | MDN2023 | 1.0% | MDN2023 | 98.00% | | |
| | CVAFS-10 | | | 7.69 ng/mL | 96.1% | MDN2473 | 4.3% | MDN2473 | 99.00% | | |
| | | | | | | MDN2623 | 1.8% | MDN2623 | 97.95% | | |
| **2006-137** | 9/18/2006 | 0.99980 | 0.110 ng/L | 8.10 ng/mL | 101.2% | MDN0861 | 0.2% | MDN0861 | 94.40% | MDN0654 | 0.019 ng/Bottle |
| | CVAFS-9 | | | 7.44 ng/mL | 93.0% | MDN2113 | 6.5% | MDN2113 | 91.95% | MDN2465 | 0.033 ng/Bottle |
| | | | | | | MDN2763 | 2.2% | MDN2763 | 89.85% | | |
| **2006-138** | 9/18/2006 | 0.99990 | 0.120 ng/L | 8.04 ng/mL | 100.5% | MDN2096 | 1.9% | MDN2096 | 101.80% | | |
| | CVAFS-10 | | | 7.94 ng/mL | 99.3% | MDN2411 | 4.9% | MDN2411 | 98.60% | | |
| | | | | | | MDN2579 | 4.1% | MDN2579 | 99.80% | | |
| **2006-139** | 9/25/2006 | 1.00000 | 0.150 ng/L | 7.96 ng/mL | 99.5% | MDN2372 | 3.0% | MDN2372 | 84.60% | MDN2429 | 0.021 ng/Bottle |
| | CVAFS-9 | | | 7.22 ng/mL | 90.3% | MDN2487 | 1.7% | MDN2487 | 91.70% | | |
| | | | | | | MDN2800 | 0.8% | MDN2800 | 93.75% | | |
| **2006-140** | 9/19/2006 | 1.00000 | 0.140 ng/L | 7.90 ng/mL | 98.8% | MDN0190 | 0.1% | MDN0190 | 94.95% | | |
| | CVAFS-9 | | | 7.76 ng/mL | 97.0% | MDN2083 | 0.0% | MDN2083 | 95.10% | | |
| | | | | | | MDN2502 | 1.6% | MDN2502 | 100.55% | | |
| **2006-141** | 9/25/2006 | 0.99990 | 0.160 ng/L | 7.79 ng/mL | 97.4% | MDN0953 | 2.4% | MDN0953 | 109.90% | MDN0951 | 0.011 ng/Bottle |
| | CVAFS-10 | | | 7.84 ng/mL | 97.9% | MDN2022 | 1.6% | MDN2022 | 99.15% | | |
| | | | | | | MDN2535 | 8.0% | MDN2535 | 103.15% | | |
| **2006-142** | 9/22/2006 | 0.99980 | 0.100 ng/L | 7.85 ng/mL | 98.1% | MDN0656 | 1.0% | MDN0656 | 99.05% | | |
| | CVAFS-10 | | | 7.79 ng/mL | 97.3% | MDN0853 | 5.1% | MDN0853 | 97.85% | | |
| | | | | | | MDN2303 | 3.4% | MDN2303 | 97.00% | | |
| **2006-143** | 9/26/2006 | 0.00000 | 0.100 ng/L | 7.78 ng/mL | 97.2% | MDN0493 | 2.8% | MDN0493 | 102.75% | | |
| | CVAFS-10 | | | 7.82 ng/mL | 97.8% | MDN0934 | 5.8% | MDN0934 | 101.55% | | |
| | | | | | | MDN2514 | 1.2% | MDN2514 | 88.25% | | |
| **2006-144** | 9/28/2006 | 0.99990 | 0.140 ng/L | 7.97 ng/mL | 99.6% | MDN0969 | 2.0% | MDN0969 | 99.25% | | |
| | CVAFS-9 | | | 7.58 ng/mL | 94.8% | MDN2073 | 1.1% | MDN2073 | 97.75% | | |
| | | | | | | MDN2413 | 5.3% | MDN2413 | 89.65% | | |

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| **2006-145** | 9/28/2006 | 0.99990 | 0.130 ng/L | 7.92 ng/mL | 98.9% | MDN0421 | 1.4% | MDN0421 | 97.90% | MDN2472 | 0.024 ng/Bottle |
| | CVAFS-10 | | | 7.83 ng/mL | 97.9% | MDN1759 | 2.4% | MDN1759 | 103.80% | MDN2650 | 0.019 ng/Bottle |
| | | | | | | MDN2463 | 0.6% | MDN2463 | 85.70% | | |
| **2006-146** | 10/2/2006 | 1.00000 | 0.230 ng/L | 8.28 ng/mL | 103.4% | MDN2154 | 1.2% | MDN2154 | 95.45% | | |
| | CVAFS-9 | | | 7.67 ng/mL | 95.8% | MDN2294 | 4.1% | MDN2294 | 95.50% | | |
| | | | | | | MDN2496 | 1.9% | MDN2496 | 96.65% | | |
| **2006-147** | 10/2/2006 | 0.00000 | 0.120 ng/L | 8.00 ng/mL | 99.9% | MDN0689 | 2.3% | MDN0689 | 102.95% | | |
| | CVAFS-10 | | | 8.02 ng/mL | 100.2% | MDN2364 | 8.9% | MDN2364 | 98.85% | | |
| | | | | | | MDN2747 | 0.9% | MDN2747 | 101.00% | | |
| **2006-148** | 10/4/2006 | 0.99990 | 0.140 ng/L | 7.98 ng/mL | 99.7% | MDN0155 | 4.8% | MDN0155 | 80.45% | | |
| | CVAFS-9 | | | 7.53 ng/mL | 94.1% | MDN1761 | 2.8% | MDN1761 | 96.70% | | |
| | | | | | | MDN2821 | 3.2% | MDN2821 | 94.10% | | |
| **2006-149** | 10/4/2006 | 0.99940 | 0.140 ng/L | 7.87 ng/mL | 98.4% | MDN0805 | 0.5% | MDN0805 | 100.15% | | |
| | CVAFS-10 | | | 7.87 ng/mL | 98.3% | MDN0933 | 6.3% | MDN0933 | 96.25% | | |
| | | | | | | MDN2512 | 2.7% | MDN2512 | 104.15% | | |
| **2006-150** | 10/5/2006 | 0.99960 | 0.110 ng/L | 8.17 ng/mL | 102.1% | MDN0173 | 0.5% | MDN0173 | 93.80% | | |
| | CVAFS-9 | | | 7.55 ng/mL | 94.3% | MDN1954 | 1.5% | MDN1954 | 95.05% | | |
| | | | | | | MDN2488 | 4.6% | MDN2488 | 98.75% | | |
| **2006-151** | 10/10/200 | 0.99990 | 0.130 ng/L | 8.24 ng/mL | 102.9% | MDN0867 | 0.6% | MDN0867 | 91.40% | | |
| | CVAFS-9 | | | 7.68 ng/mL | 95.9% | MDN2606 | 3.2% | MDN2606 | 92.55% | | |
| | | | | | | MDN3017 | 1.8% | MDN3017 | 98.60% | | |
| **2006-152** | 10/10/200 | 0.99980 | 0.100 ng/L | 7.93 ng/mL | 99.1% | MDN2319 | 16.9% | MDN2319 | 97.05% | | |
| | CVAFS-10 | | | 7.99 ng/mL | 99.8% | MDN2812 | 0.5% | MDN2812 | 106.95% | | |
| | | | | | | MDN2817 | 4.0% | MDN2817 | 94.45% | | |
| **2006-153** | 10/5/2006 | 0.99980 | 0.080 ng/L | 7.61 ng/mL | 95.1% | MDN0956 | 13.1% | MDN0956 | 94.50% | MDN2055 | 0.014 ng/Bottle |
| | CVAFS-10 | | | 7.71 ng/mL | 96.4% | MDN2025 | 0.6% | MDN2025 | 97.60% | MDN0770 | 0.034 ng/Bottle |
| | | | | | | MDN2573 | 1.1% | MDN2573 | 99.95% | | |

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| **2006-154** | 10/12/200 | 0.99980 | 0.140 ng/L | 7.69 ng/mL | 96.1% | MDN0912 | 1.8% | MDN0912 | 97.35% | MDN2585 | 0.006 ng/Bottle |
| | CVAFS-9 | | | 8.14 ng/mL | 101.7% | MDN1916 | 0.7% | MDN1916 | 92.35% | | |
| | | | | | | MDN2140 | 2.3% | MDN2140 | 91.70% | | |
| **2006-155** | 10/12/200 | 0.99990 | 0.120 ng/L | 7.68 ng/mL | 96.0% | MDN0148 | 0.3% | MDN0148 | 98.25% | | |
| | CVAFS-10 | | | 7.80 ng/mL | 97.5% | MDN1929 | 0.8% | MDN1929 | 103.95% | | |
| | | | | | | MDN2761 | 5.8% | MDN2761 | 96.10% | | |
| **2006-156** | 10/17/200 | 0.99980 | 0.150 ng/L | 8.20 ng/mL | 102.5% | MDN1939 | 2.0% | MDN1939 | 93.50% | MDN2469 | 0.016 ng/Bottle |
| | CVAFS-9 | | | 7.72 ng/mL | 96.5% | MDN2079 | 6.0% | MDN2079 | 99.15% | | |
| | | | | | | MDN2696 | 4.1% | MDN2696 | 98.05% | | |
| **2006-157** | 10/17/200 | 0.99990 | 0.140 ng/L | 7.77 ng/mL | 97.1% | MDN0966 | 8.2% | MDN0966 | 96.55% | | |
| | CVAFS-10 | | | 7.90 ng/mL | 98.8% | MDN2524 | 3.8% | MDN2524 | 102.90% | | |
| | | | | | | MDN2789 | 1.0% | MDN2789 | 97.00% | | |
| **2006-158** | 10/25/200 | 0.99940 | 0.150 ng/L | 8.14 ng/mL | 101.7% | MDN0765 | 1.1% | MDN0765 | 101.45% | MDN2657 | 0.024 ng/Bottle |
| | CVAFS-9 | | | 8.02 ng/mL | 100.2% | MDN2596 | 6.9% | MDN2596 | 91.15% | | |
| | | | | | | MDN2793 | 0.2% | MDN2793 | 93.65% | | |
| **2006-159** | 10/18/200 | 0.99980 | 0.140 ng/L | 8.23 ng/mL | 102.9% | MDN2018 | 1.7% | MDN2018 | 100.60% | | |
| | CVAFS-9 | | | 8.00 ng/mL | 99.9% | MDN2023 | 3.4% | MDN2023 | 96.95% | | |
| | | | | | | MDN2212 | 0.6% | MDN2212 | 97.85% | | |
| **2006-160** | 10/18/200 | 0.99980 | 0.150 ng/L | 7.93 ng/mL | 99.1% | MDN2456 | 10.0% | MDN2456 | 98.10% | | |
| | CVAFS-10 | | | 8.22 ng/mL | 102.7% | MDN2682 | 0.0% | MDN2682 | 101.00% | | |
| | | | | | | MDN2786 | 1.6% | MDN2786 | 108.80% | | |
| **2006-161** | 10/25/200 | 0.99990 | 0.120 ng/L | 7.91 ng/mL | 98.9% | MDN0161 | 2.0% | MDN0161 | 82.10% | | |
| | CVAFS-10 | | | 8.25 ng/mL | 103.1% | MDN0973 | 1.0% | MDN0973 | 99.50% | | |
| | | | | | | MDN1924 | 0.3% | MDN1924 | 99.40% | | |
| **2006-162** | 10/27/200 | 0.99950 | 0.140 ng/L | 7.83 ng/mL | 97.8% | MDN0836 | 3.1% | MDN0836 | 96.45% | MDN2054 | 0.016 ng/Bottle |
| | CVAFS-9 | | | 8.21 ng/mL | 102.6% | MDN2313 | 2.7% | MDN2313 | 97.50% | | |
| | | | | | | MDN2377 | 4.1% | MDN2377 | 102.25% | | |

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| **2006-163** | 10/27/200 | 0.99980 | 0.141 ng/L | 7.84 ng/mL | 98.0% | MDN0772 | 9.2% | MDN0772 | 97.10% | | |
| | CVAFS-10 | | | 7.81 ng/mL | 97.6% | MDN2258 | 0.2% | MDN2258 | 98.35% | | |
| | | | | | | MDN2633 | 2.4% | MDN2633 | 106.40% | | |
| **2006-164** | 11/4/2006 | 0.99980 | 0.180 ng/L | 8.19 ng/mL | 102.4% | MDN0639 | 0.0% | MDN0639 | 99.80% | MDN1995 | 0.047 ng/Bottle |
| | CVAFS-9 | | | 7.79 ng/mL | 97.4% | MDN0843 | 0.9% | MDN0843 | 91.90% | | |
| | | | | | | MDN2282 | 6.1% | MDN2282 | 100.60% | | |
| **2006-165** | 11/7/2006 | 0.99950 | 0.170 ng/L | 8.38 ng/mL | 104.7% | MDN0150 | 1.8% | MDN0150 | 103.05% | MDN2694 | 0.026 ng/Bottle |
| | CVAFS-9 | | | 7.95 ng/mL | 99.4% | MDN0172 | 10.2% | MDN0172 | 102.70% | | |
| | | | | | | MDN0797 | 4.6% | MDN0797 | 102.60% | | |
| **2006-166** | 11/7/2006 | 0.99970 | 0.160 ng/L | 7.91 ng/mL | 98.8% | MDN0389 | 3.7% | MDN0389 | 101.90% | | |
| | CVAFS-10 | | | 8.20 ng/mL | 102.5% | MDN0407 | 5.3% | MDN0407 | 109.95% | | |
| | | | | | | MDN2078 | 11.8% | MDN2078 | 99.25% | | |
| **2006-167** | 11/4/2006 | 0.99980 | 0.170 ng/L | 7.75 ng/mL | 96.8% | MDN0020 | 0.1% | MDN0020 | 102.20% | MDN2299 | 0.015 ng/Bottle |
| | CVAFS-10 | | | 8.04 ng/mL | 100.4% | MDN0090 | 0.3% | MDN0090 | 96.75% | | |
| | | | | | | MDN2145 | 13.0% | MDN2145 | 102.05% | | |
| **2006-168** | 11/14/200 | 0.99970 | 0.160 ng/L | 8.29 ng/mL | 103.6% | MDN2546 | 9.0% | MDN2546 | 101.70% | | |
| | CVAFS-9 | | | 7.99 ng/mL | 99.8% | MDN2697 | 0.5% | MDN2697 | 102.15% | | |
| | | | | | | MDN2755 | 2.6% | MDN2755 | 101.70% | | |
| **2006-169** | 11/14/200 | 0.99940 | 0.120 ng/L | 7.74 ng/mL | 96.7% | MDN0180 | 11.7% | MDN0180 | 100.70% | | |
| | CVAFS-10 | | | 7.66 ng/mL | 95.7% | MDN0832 | 3.9% | MDN0832 | 98.65% | | |
| | | | | | | MDN1738 | 0.1% | MDN1738 | 97.85% | | |
| **2006-170** | 11/21/200 | 0.99940 | 0.170 ng/L | 8.41 ng/mL | 105.1% | MDN2194 | 2.9% | MDN2194 | 101.40% | MDN0141 | 0.013 ng/Bottle |
| | CVAFS-9 | | | 8.11 ng/mL | 101.3% | MDN2429 | 4.1% | MDN2429 | 99.75% | MDN1936 | 0.011 ng/Bottle |
| | | | | | | MDN2731 | 2.3% | MDN2731 | 101.85% | | |
| **2006-171** | 11/15/200 | 0.99920 | 0.160 ng/L | 7.93 ng/mL | 99.1% | MDN0750 | 0.7% | MDN0750 | 96.65% | MDN0439 | 0.020 ng/Bottle |
| | CVAFS-9 | | | 7.87 ng/mL | 98.4% | MDN2561 | 0.5% | MDN2561 | 100.00% | | |
| | | | | | | MDN2750 | 0.0% | MDN2750 | 92.60% | | |

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| **2006-172** | 11/20/200 | 0.99990 | 0.140 ng/L | 7.69 ng/mL | 96.1% | MDN2486 | 2.4% | MDN2486 | 97.80% | | |
| | CVAFS-10 | | | 7.31 ng/mL | 91.4% | MDN2590 | 2.7% | MDN2590 | 98.65% | | |
| | | | | | | MDN2661 | 4.0% | MDN2661 | 93.45% | | |
| **2006-173** | 11/15/200 | 0.99940 | 0.120 ng/L | 7.49 ng/mL | 93.6% | MDN0754 | 2.7% | MDN0754 | 98.20% | MDN2312 | 0.012 ng/Bottle |
| | CVAFS-10 | | | 8.24 ng/mL | 102.9% | MDN1963 | 2.6% | MDN1963 | 102.15% | | |
| | | | | | | MDN2522 | 3.8% | MDN2522 | 102.85% | | |
| **2006-174** | 11/21/200 | 0.99990 | 0.130 ng/L | 7.57 ng/mL | 94.6% | MDN0857 | 9.0% | MDN0857 | 93.15% | | |
| | CVAFS-10 | | | 7.29 ng/mL | 91.1% | MDN2473 | 0.5% | MDN2473 | 93.15% | | |
| | | | | | | MDN2727 | 12.6% | MDN2727 | 85.55% | | |
| **2006-175** | 11/20/200 | 0.99950 | 0.170 ng/L | 8.17 ng/mL | 102.1% | MDN0911 | 8.8% | MDN0911 | 92.50% | | |
| | CVAFS-9 | | | 7.84 ng/mL | 98.0% | MDN1966 | 2.0% | MDN1966 | 101.00% | | |
| | | | | | | MDN2413 | 1.9% | MDN2413 | 98.25% | | |
| **2006-176** | 11/22/200 | 0.99940 | 0.160 ng/L | 8.51 ng/mL | 106.4% | MDN0934 | 3.7% | MDN0934 | 102.55% | | |
| | CVAFS-9 | | | 8.16 ng/mL | 102.0% | MDN0945 | 0.9% | MDN0945 | 102.85% | | |
| | | | | | | MDN2154 | 0.3% | MDN2154 | 95.80% | | |
| **2006-177** | 11/22/200 | 0.99990 | 0.100 ng/L | 7.59 ng/mL | 94.8% | MDN1920 | 9.7% | MDN1920 | 94.20% | MDN2523 | 0.036 ng/Bottle |
| | CVAFS-10 | | | 7.65 ng/mL | 95.6% | MDN2103 | 8.2% | MDN2103 | 90.10% | | |
| | | | | | | MDN2423 | 6.5% | MDN2423 | 98.25% | | |
| **2006-178** | 11/30/200 | 0.99920 | 0.180 ng/L | 8.48 ng/mL | 105.9% | MDN0405 | 4.6% | MDN0405 | 100.05% | MDN2656 | 0.019 ng/Bottle |
| | CVAFS-9 | | | 8.04 ng/mL | 100.4% | MDN1733 | 4.3% | MDN1733 | 102.60% | | |
| | | | | | | MDN2057 | 2.1% | MDN2057 | 101.05% | | |
| **2006-179** | 12/4/2006 | 0.99930 | 0.180 ng/L | 8.31 ng/mL | 103.9% | MDN2390 | 1.8% | MDN2390 | 102.65% | MDN0297 | 0.039 ng/Bottle |
| | CVAFS-9 | | | 8.09 ng/mL | 101.1% | MDN2576 | 2.0% | MDN2576 | 100.70% | | |
| | | | | | | MDN2589 | 5.2% | MDN2589 | 102.90% | | |
| **2006-180** | 11/30/200 | 0.99990 | 0.150 ng/L | 7.70 ng/mL | 96.2% | MDN2158 | 7.1% | MDN2158 | 94.00% | | |
| | CVAFS-10 | | | 7.69 ng/mL | 96.1% | MDN2407 | 9.1% | MDN2407 | 88.40% | | |
| | | | | | | MDN3000 | 7.9% | MDN3000 | 97.40% | | |

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| **2006-181** | 12/5/2006 | 0.99940 | 0.150 ng/L | 8.37 ng/mL | 104.6% | MDN0646 | 3.4% | MDN0646 | 100.60% | | |
| | CVAFS-9 | | | 8.04 ng/mL | 100.4% | MDN1931 | 1.5% | MDN1931 | 100.00% | | |
| | | | | | | MDN2157 | 2.8% | MDN2157 | 102.15% | | |
| **2006-182** | 12/8/2006 | 0.99980 | 0.170 ng/L | 7.97 ng/mL | 99.6% | MDN0414 | 1.5% | MDN0414 | 97.00% | MDN2159 | 0.063 ng/Bottle |
| | CVAFS-9 | | | 7.76 ng/mL | 97.0% | MDN0790 | 8.0% | MDN0790 | 100.25% | | |
| | | | | | | MDN2709 | 2.2% | MDN2709 | 100.70% | | |
| **2006-183** | 12/8/2006 | 0.99990 | 0.150 ng/L | 7.78 ng/mL | 97.2% | MDN0260 | 0.4% | MDN0260 | 106.95% | MDN0982 | 0.014 ng/Bottle |
| | CVAFS-10 | | | 7.71 ng/mL | 96.3% | MDN0283 | 1.2% | MDN0283 | 92.05% | | |
| | | | | | | MDN0720 | 7.1% | MDN0720 | 95.80% | | |
| **2006-184** | 12/4/2006 | 0.99990 | 0.140 ng/L | 7.68 ng/mL | 96.0% | MDN2294 | 9.0% | MDN2294 | 96.40% | | |
| | CVAFS-10 | | | 7.81 ng/mL | 97.6% | MDN2633 | 2.4% | MDN2633 | 106.40% | | |
| | | | | | | MDN2803 | 2.1% | MDN2803 | 101.15% | | |
| **2006-185** | 12/5/2006 | 0.99990 | 0.150 ng/L | 7.79 ng/mL | 97.3% | MDN2395 | 9.4% | MDN2395 | 89.50% | | |
| | CVAFS-1 | | | 7.99 ng/mL | 99.9% | MDN2512 | 10.9% | MDN2512 | 94.50% | | |
| | | | | | | MDN2524 | 11.1% | MDN2524 | 100.20% | | |
| **2006-186** | 12/12/200 | 0.99970 | 0.000 ng/L | 7.95 ng/mL | 99.3% | MDN0129 | 2.1% | MDN0129 | 92.20% | | |
| | CVAFS-9 | | | 7.95 ng/mL | 99.3% | MDN0255 | 2.7% | MDN0255 | 101.05% | | |
| | | | | | | MDN2511 | 0.3% | MDN2511 | 97.15% | | |
| **2006-187** | 12/12/200 | 1.00000 | 0.170 ng/L | 7.76 ng/mL | 96.9% | MDN0796 | 5.6% | MDN0796 | 93.95% | MDN2686 | 0.011 ng/Bottle |
| | CVAFS-10 | | | 7.68 ng/mL | 96.0% | MDN0870 | 12.5% | MDN0870 | 92.75% | | |
| | | | | | | MDN2409 | 0.3% | MDN2409 | 98.86% | | |
| **2006-188** | 12/18/200 | 0.99970 | 0.150 ng/L | 7.92 ng/mL | 99.0% | MDN0165 | 4.3% | MDN0165 | 97.00% | | |
| | CVAFS-9 | | | 7.80 ng/mL | 97.5% | MDN0479 | 0.7% | MDN0479 | 93.30% | | |
| | | | | | | MDN2657 | 1.4% | MDN2657 | 96.10% | | |
| **2006-189** | 12/18/200 | 0.99990 | 0.170 ng/L | 7.90 ng/mL | 98.8% | MDN0765 | 10.3% | MDN0765 | 90.35% | | |
| | CVAFS-10 | | | 7.52 ng/mL | 94.0% | MDN2239 | 2.8% | MDN2239 | 93.95% | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MDN2618 | 3.5% | MDN2618 | 85.85% | | | |
| **2006-190** | 12/19/200 | 0.99970 | 0.140 ng/L | 7.93 ng/mL | 99.1% | MDN0895 | 1.5% | MDN0895 | 100.35% | MDN0943 | 0.016 ng/Bottle |
| | CVAFS-9 | | | 7.70 ng/mL | 96.3% | MDN2003 | 1.8% | MDN2003 | 96.45% | | |
| | | | | | | MDN2466 | 0.8% | MDN2466 | 98.45% | | |
| **2006-191** | 12/19/200 | 1.00000 | 0.170 ng/L | 7.94 ng/mL | 99.3% | MDN0804 | 12.7% | MDN0804 | 95.95% | MDN2792 | 0.041 ng/Bottle |
| | CVAFS-10 | | | 7.72 ng/mL | 96.5% | MDN2108 | 3.0% | MDN2108 | 93.75% | | |
| | | | | | | MDN2668 | 1.6% | MDN2668 | 93.90% | | |
| **2006-192** | 12/21/200 | 0.99980 | 0.150 ng/L | 8.06 ng/mL | 100.7% | MDN2118 | 2.6% | MDN2118 | 96.50% | MDN2637 | 0.014 ng/Bottle |
| | CVAFS-9 | | | 7.77 ng/mL | 97.1% | MDN2300 | 1.2% | MDN2300 | 98.20% | MDN2012 | 0.016 ng/Bottle |
| | | | | | | MDN2306 | 6.1% | MDN2306 | 95.60% | | |
| **2006-193** | 12/22/200 | 0.99980 | 0.170 ng/L | 8.06 ng/mL | 100.7% | MDN0662 | 2.6% | MDN0662 | 95.70% | | |
| | CVAFS-9 | | | 7.80 ng/mL | 97.5% | MDN2027 | 3.6% | MDN2027 | 99.00% | | |
| | | | | | | MDN2256 | 2.6% | MDN2256 | 96.40% | | |
| **2006-194** | 12/29/200 | 0.99980 | 0.170 ng/L | 8.14 ng/mL | 101.7% | MDN0847 | 3.5% | MDN0847 | 97.35% | MDN0255 | 0.017 ng/Bottle |
| | CVAFS-9 | | | 7.82 ng/mL | 97.8% | MDN2634 | 8.1% | MDN2634 | 96.05% | | |
| | | | | | | MDN2762 | 1.4% | MDN2762 | 98.65% | | |
| **2006-195** | 12/21/200 | 0.99890 | 0.140 ng/L | 7.80 ng/mL | 97.5% | MDN2519 | 2.4% | MDN2519 | 87.10% | | |
| | CVAFS-10 | | | 7.71 ng/mL | 96.3% | MDN2694 | 5.8% | MDN2694 | 93.20% | | |
| | | | | | | MDN2717 | 0.9% | MDN2717 | 91.55% | | |
| **2006-197** | 12/29/200 | 0.99990 | 0.120 ng/L | 7.85 ng/mL | 98.1% | MDN2058 | 4.4% | MDN2058 | 99.90% | MDN2013 | 0.007 ng/Bottle |
| | CVAFS-10 | | | 7.67 ng/mL | 95.9% | MDN2367 | 1.2% | MDN2367 | 94.35% | | |
| | | | | | | MDN2601 | 1.4% | MDN2601 | 98.80% | | |
| **2006-198** | 12/22/200 | 0.99990 | 0.000 ng/L | 7.88 ng/mL | 98.4% | MDN0832 | 3.9% | MDN0832 | 98.65% | MDN0723 | 0.019 ng/Bottle |
| | CVAFS-10 | | | 7.51 ng/mL | 93.8% | MDN2165 | 1.8% | MDN2165 | 96.60% | | |
| | | | | | | MDN2683 | 5.0% | MDN2683 | 91.05% | | |
| **2006-196** | 1/3/2007 | 1.00000 | 0.160 ng/L | 8.01 ng/mL | 100.1% | MDN0668 | 1.1% | MDN0668 | 105.55% | | |
| | CVAFS-9 | | | 7.64 ng/mL | 95.4% | MDN2014 | 0.9% | MDN2014 | 93.20% | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MDN2695 | 3.4% | MDN2695 | 97.40% | | | |
| **2006-199** | 1/3/2007 | 1.00000 | 0.100 ng/L | 7.87 ng/mL | 98.3% | MDN0173 | 4.5% | MDN0173 | 100.40% | | | |
| | CVAFS-10 | | | 7.91 ng/mL | 98.9% | MDN0437 | 10.2% | MDN0437 | 102.45% | | | |
| | | | | | | MDN2783 | 0.9% | MDN2783 | 98.25% | | | |
| **2006-200** | 1/4/2007 | 0.99990 | 0.150 ng/L | 8.09 ng/mL | 101.1% | MDN1734 | 2.7% | MDN1734 | 100.25% | MDN0693 | 0.015 ng/Bottle | |
| | CVAFS-9 | | | 7.98 ng/mL | 99.8% | MDN2074 | 2.2% | MDN2074 | 97.20% | | | |
| | | | | | | MDN2383 | 3.5% | MDN2383 | 97.50% | | | |
| **2006-201** | 1/4/2007 | 0.99990 | 0.120 ng/L | 7.78 ng/mL | 97.2% | MDN0911 | 2.7% | MDN0911 | 98.85% | | | |
| | CVAFS-10 | | | 7.74 ng/mL | 96.7% | MDN2393 | 3.0% | MDN2393 | 96.75% | | | |
| | | | | | | MDN2540 | 3.3% | MDN2540 | 99.65% | | | |
| **2006-202** | 1/9/2007 | 0.99960 | 0.150 ng/L | 8.28 ng/mL | 103.4% | MDN2348 | 1.6% | MDN2348 | 100.75% | MDN2792 | 0.052 ng/Bottle | |
| | CVAFS-9 | | | 7.96 ng/mL | 99.5% | MDN2441 | 5.2% | MDN2441 | 99.90% | | | |
| | | | | | | MDN2681 | 1.5% | MDN2681 | 100.00% | | | |
| **2006-203** | 1/9/2007 | 1.00000 | 0.110 ng/L | 7.85 ng/mL | 98.1% | MDN0389 | 4.9% | MDN0389 | 102.30% | | | |
| | CVAFS-10 | | | 7.90 ng/mL | 98.7% | MDN2023 | 1.2% | MDN2023 | 98.90% | | | |
| | | | | | | MDN2151 | 0.2% | MDN2151 | 98.65% | | | |
| **2006-204** | 1/11/2007 | 0.99970 | 0.180 ng/L | 8.21 ng/mL | 102.6% | MDN1976 | 4.7% | MDN1976 | 79.30% | MDN0815 | 0.018 ng/Bottle | |
| | CVAFS-9 | | | 8.00 ng/mL | 100.0% | MDN2543 | 5.0% | MDN2543 | 103.50% | | | |
| | | | | | | MDN2802 | 6.1% | MDN2802 | 97.25% | | | |
| **2006-205** | 1/15/2007 | 0.99990 | 0.130 ng/L | 8.00 ng/mL | 99.9% | MDN0277 | 11.3% | MDN0277 | 96.60% | | | |
| | CVAFS-9 | | | 7.71 ng/mL | 96.3% | MDN2361 | 2.0% | MDN2361 | 95.55% | | | |
| | | | | | | MDN2576 | 2.0% | MDN2576 | 100.70% | | | |
| **2006-206** | 1/15/2007 | 0.99990 | 0.070 ng/L | 7.84 ng/mL | 97.9% | MDN0831 | 0.7% | MDN0831 | 89.95% | | | |
| | CVAFS-10 | | | 7.62 ng/mL | 95.3% | MDN2136 | 1.3% | MDN2136 | 92.85% | | | |
| | | | | | | MDN2719 | 5.0% | MDN2719 | 98.90% | | | |
| **2006-207** | 1/22/2007 | 0.99960 | 0.130 ng/L | 7.95 ng/mL | 99.4% | MDN0492 | 3.2% | MDN0492 | 100.15% | | | |

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|---|---|---|---|---|---|---|---|---|---|
| | CVAFS-9 | | | 7.94 ng/mL | 99.2% | MDN2276 | 7.0% | MDN2276 | 99.30% |
| | | | | | | MDN2313 | 4.8% | MDN2313 | 98.40% |
| **2006-208** | 1/26/2007 | 0.99980 | 0.140 ng/L | 8.14 ng/mL | 101.7% | MDN2019 | 3.9% | MDN2019 | 94.90% |
| | CVAFS-9 | | | 7.93 ng/mL | 99.1% | MDN2035 | 0.0% | MDN2035 | 94.80% |
| | | | | | | MDN2703 | 3.8% | MDN2703 | 98.30% |

# 2006 Methyl Mercury QC Summary

| DataSetID | | Batch # | Calibration | Prep Blk | Dorm - 2 TV=44700 | | Duplicates | | Spikes | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | R | Conc | ng/mL | %Rec | Comp ID | RPD | Comp ID | %Rec | RPD. |
| **MHG7-060105-1** | 1/5/2006 | Batch#162 | 0.99974 | 0.330 ng/L | 4086.718 ng/L | 91.40% | LA2320051121 | 37.50% | 18WA20051129 MS | 99.31% | 1.40% |
| | MHg7 | | | | | | LA2320051121 | 22.50% | 18WA20051129 MSD | 100.92% | |
| **MHG7-060111-1** | 1/11/2006 | Batch#163 | 0.99953 | 0.020 ng/L | 2.547 ng/L | 113.70% | | | LA0520051129 MS | 103.21% | 3.60% |
| | MHg7 | | | | 5036.720 ng/L | 112.70% | | | LA0520051129 MSD | 99.50% | |
| **MHG7-060118-1** | 1/18/2006 | Batch#164 | 0.99852 | 0.030 ng/L | 2.562 ng/L | 114.40% | OR10 COMP 039 | 9.10% | OR10 COMP 039 MS | 102.39% | 1.20% |
| | MHg7 | | | | 4957.470 ng/L | 110.90% | | | OR10 COMP 039 MSD | 100.95% | |
| **MHG7-060125-1** | 1/25/2006 | Batch#165 | 0.99917 | 0.100 ng/L | 2.487 ng/L | 111.00% | WA2020051206 | 3.80% | WA1820051129 MS | 104.8% | 2.20% |
| | MHg7 | | | | 5083.476 ng/L | 113.70% | WA2020051206 | 9.30% | WA1820051129 MSD | 102.5% | |
| **MHG7-060126-1** | 1/26/2006 | Batch#166 | 0.99928 | 0.230 ng/L | 2.464 ng/L | 110.00% | OR01 COMP 025 | 9.20% | OR01 COMP 025 MS | 98.90% | 2.80% |
| | MHg7 | | | | 5255.454 ng/L | 117.60% | | | OR01 COMP 025 MSD | 102.45% | |
| **MHG7-060206-1** | 2/6/2006 | Batch#161 | 0.99996 | 0.230 ng/L | 2.480 ng/L | 110.70% | OR10 COMP 038 | 4.90% | OR10 COMP 038 MS | 81.72% | 5.60% |
| | MHg7 | | | | 4331.021 ng/L | 96.90% | | | OR10 COMP 038 MSD | 76.47% | |
| **MHG1-060207-1** | 2/7/2006 | Batch#159 | 0.99989 | 0.130 ng/L | 2.287 ng/L | 102.10% | VT98 COMP 003 | 5.50% | VT98 COMP 003 MS | 76.35% | 4.80% |
| | MHg1 | | | | 4574.800 ng/L | 102.30% | | | VT98 COMP 003 MSD | 80.26% | |
| **MHG1-060208-1** | 2/8/2006 | Batch#160 | 0.99868 | 0.250 ng/L | 2.197 ng/L | 98.10% | 18WA20051115 | 9.60% | WA1920051108 MS | 92.91% | 11.30% |
| | MHg1 | | | | 4982.427 ng/L | 111.50% | | | WA1920051108 MSD | 80.28% | |
| **MHG7-060302-1** | 3/2/2006 | Batch#167 | 0.99939 | 0.350 ng/L | 2.462 ng/L | 109.90% | OR10 COMP 040 | 6.00% | OR10 COMP 040 MS | 85.69% | 4.50% |
| | MHg7 | | | | 4989.432 ng/L | 111.60% | | | OR10 COMP 040 MSD | 81.14% | |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| **MHG1-060308-1** | 3/8/2006 | Batch#168 | 0.99967 | 0.210 ng/L | 2.350 ng/L | 104.90% | 18WA20060110 | 10.80% | | | |
| | MHg1 | | | | 4699.868 ng/L | 105.10% | | | | | |
| **MHG1-060309-1** | 3/9/2006 | Batch#169 | 0.99919 | 0.130 ng/L | 2.601 ng/L | 116.10% | OR10 COMP 041 | 1.20% | OR10 COMP 041 MS | 121.1% | 2.00% |
| | MHg1 | | | | 5088.542 ng/L | 113.80% | | | OR10 COMP 041 MSD | 118.6% | |
| **MHG7-060321-1** | 3/21/2006 | Batch#170 | 0.99939 | 0.190 ng/L | 2.264 ng/L | 101.10% | | | 18WA20060131 MS | 130.93% | 4.60% |
| | MHg7 | | | | 4290.540 ng/L | 96.00% | | | 18WA20060131 MSD | 125.08% | |
| **MHG7-060322-1** | 3/22/2006 | Batch#171 | 0.99827 | 0.190 ng/L | 2.466 ng/L | 110.10% | WA2120060131 | 10.90% | LA2820060207 MS | 104.0% | 19.2% |
| | MHg7 | | | | 5142.522 ng/L | 115.00% | | | LA2820060207 MSD | 85.8% | |
| **MHG7-060510-1** | 5/10/2006 | Batch#172 | 0.99949 | 0.370 ng/L | 2.338 ng/L | 104.40% | | | WA2120060207 MS | 109.70% | 0.50% |
| | MHg7 | | | | 4675.632 ng/L | 104.60% | | | WA2120060207 MSD | 110.20% | |
| **MHG7-060516-1** | 5/16/2006 | Batch#173 | 0.9997 | 0.050 ng/L | 4600.607 ng/L | 102.90% | | | LA1020060227 MS | 90.06% | 10.80% |
| | MHg7 | | | | | | | | LA1020060227 MSD | 100.85% | |
| **MHG7-060524-1** | 5/24/2006 | Batch#174 | 0.99989 | 0.050 ng/L | 2.032 ng/L | 90.70% | 18WA20060314 | 20.60% | FL32(cb)20060307 MS | 92.84% | 12.70% |
| | MHg7 | | | | 4305.461 ng/L | 96.30% | | | FL32(cb)20060307 MSD | 81.80% | |
| **MHG7-060525-1** | 5/25/2006 | Batch#175 | 0.99965 | 0.090 ng/L | 2.068 ng/L | 92.30% | WA2120060314 | 3.70% | LA2320060321 MS | 93.52% | 4.10% |
| | MHg7 | | | | 4234.018 ng/L | 94.70% | | | LA2320060321 MSD | 89.67% | |
| **MHG7-060601-1** | 6/1/2006 | Batch#176 | 0.99975 | 0.020 ng/L | 4760.109 ng/L | 106.50% | OR10 COMP 043 | 6.00% | OR10 COMP 043 MS | 101.94% | 15.70% |
| | MHg7 | | | | | | | | OR10 COMP 043 MSD | 85.39% | |
| **MHG7-060605-1** | 6/5/2006 | Batch#177 | 0.99989 | 0.080 ng/L | 2.134 ng/L | 95.30% | IL11 COMP 039 | 18.80% | WI99 COMP 121 MS | 97.21% | 6.30% |
| | MHg7 | | | | 4689.478 ng/L | 104.90% | | | WI99 COMP 121 MSD | 104.07% | |
| **MHG7-060607-1** | 6/7/2006 | Batch#178 | 0.99987 | 0.150 ng/L | 1.870 ng/L | 83.50% | WA2020060411 | 8.60% | WA2120060418 MS | 123.70% | 5.90% |
| | MHg7 | | | | 4015.386 ng/L | | | | WA2120060418 MSD | 116.60% | |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| **MHG7-060608-1** | 6/8/2006<br>MHg7 | Batch#179 | 0.99947 | 0.200 ng/L | 4175.842 ng/L | 93.40% | WA1820060501 | 10.20% | WA1920060501 MS<br>WA1920060501 MSD | 92.80%<br>89.90% | 3.20% |
| **MHG7-060613-1** | 6/13/2006<br>MHg7 | Batch#180 | 0.99973 | 0.080 ng/L | 2.327 ng/L<br>5290.475 ng/L | 103.90% | VA98 COMP 018 | 9.50% | LA0520060502 MS<br>LA0520060502 MSD | 109.65%<br>125.55% | 13.50% |
| **MHG7-060615-1** | 6/15/2006<br>MHg7 | Batch#181 | 0.99971 | 0.160 ng/L | 2.427 ng/L<br>4449.464 ng/L | 108.40%<br>99.50% | LA2020060501 | 9.60% | LA0520060509 MS<br>LA0520060509 MSD | 104.90%<br>101.60% | 3.20% |
| **MHG7-060628-1** | 6/28/2006<br>MHg7 | Batch#182 | 0.9994 | 0.080 ng/L | 2.000 ng/L<br>4485.458 ng/L | 89.30%<br>100.30% | | | WI31 COMP 054 MS<br>WI31 COMP 054 MSD | 100.31%<br>98.87% | 1.30% |
| **MHG7-060720-1** | 7/20/2006<br>MHg7 | Batch#183 | 0.99621 | 0.090 ng/L | 4077.226 ng/L | 91.20% | OR10 COMP 045 | 12.90% | | | |
| **MHG7-060727-1** | 7/27/2006<br>MHg7 | Batch#184 | 0.99868 | 0.050 ng/L | 4356.121 ng/L | 97.50% | VT99 COMP 011 | 6.00% | VT98 COMP 011 MS<br>VT98 COMP 011 MSD | 95.47%<br>101.55% | 3.70% |
| **MHG7-060809-1** | 8/9/2006<br>MHg7 | Batch#185 | 0.99999 | 0.070 ng/L | 2.141 ng/L<br>4217.801 ng/L | 95.60%<br>94.40% | | | WA2120060530 MS<br>WA2120060530 MSD | 92.50%<br>89.10% | 3.70% |
| **MHG7-060810-1** | 8/10/2006<br>MHg7 | Batch#186 | 0.99989 | 0.120 ng/L | 4519.728 ng/L | 101.10% | KM620060605 | 4.60% | KM520060605 MS<br>KM520060605 MSD | 112.70%<br>123.80% | 9.30% |
| **MHG7-060817-1** | 8/17/2006<br>MHg7 | Batch#187 | 0.99992 | 0.070 ng/L | 4775.004 ng/L | 106.80% | | | VA0820060627 MS<br>VA0820060627 MSD | 119.46%<br>122.83% | 2.80% |
| **MHG15-060823-1** | 8/23/2006<br>MHg15 | Batch#188 | 0.99888 | 0.220 ng/L | 2.619 ng/L | 116.90% | | | PA1920060627 MS<br>PA1920060627 MSD | 99.30%<br>109.50% | 9.80% |
| **MHG15-061005-1** | 10/5/2006<br>MHg15 | Batch#190 | 0.99757 | 0.030 ng/L | 2.454 ng/L | 109.50% | VT98 COMP 012 | 3.30% | VT98 COMP 012 MS<br>VT98 COMP 012 MSD | 102.63%<br>84.15% | 18.90% |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| **MHG7-061024-1** | 10/24/200<br>MHg7 | Batch#192 | 0.99941 | 0.100 ng/L | 2.334 ng/L | 104.20% | FL32 COMP 037 | 23.50% | TN12 COMP 001 MS<br>TN12 COMP 001 MSD | 109.76%<br>106.60% | 2.50% |
| **MHG15-061025-1** | 10/25/200<br>MHg15 | Batch#189 | 0.9998 | 0.120 ng/L | 2.300 ng/L | 102.70% | | | FL32 COMP 036 MS<br>FL32 COMP 036 MSD | 82.62%<br>105.26% | 20.70% |
| **MHG7-061101-1** | 11/1/2006<br>MHg7 | Batch#191 | 0.99998 | 0.110 ng/L | 2.015 ng/L | 89.90% | LA0520060705 | 33.70% | LA2820060711MS<br>LA2820060711MSD | 107.70%<br>104.60% | 2.90% |
| **MHG7-061102-1** | 11/2/2006<br>MHg7 | Batch#193 | 1 | 0.050 ng/L | | | LA2820060705 | 14.60% | LA0520060829 MS<br>LA0520060829 MSD | 92.20%<br>83.70% | 9.70% |
| **MHG15-061102-1** | 11/2/2006<br>MHg15 | Batch#194 | 0.99888 | 0.050 ng/L | | | LA2320060801 | 11.70% | VT98 COMP 013 MS<br>VT98 COMP 013 MSD | 79.52%<br>103.55% | 22.70% |
| **MHG15-061107-1** | 11/7/2006<br>MHg15 | Batch#195 | 0.99991 | 0.130 ng/L | 2.517 ng/L | 112.40% | 99PR20060829 | 30.20% | 99PR20060627 MS<br>99PR20060627 MSD | 102.50%<br>102.36% | 0.10% |
| **MHG7-061108-1** | 11/8/2006<br>MHg7 | Batch#196 | 0.99816 | 0.130 ng/L | 2.257 ng/L | 100.80% | WA1820060919 | 23.90% | LA1020060919 MS<br>LA1020060919 MSD | 101.40%<br>104.60% | 3.10% |
| **MHG7-061109-1** | 11/9/2006<br>MHg7 | Batch#197 | 0.99998 | 0.080 ng/L | 2.336 ng/L | 104.30% | WA2120060919 | 17.10% | LA2320060919 MS<br>LA2320060919 MSD | 86.50%<br>96.20% | 10.60% |
| **MHG7-061115-1** | 11/15/200<br>MHg7 | Batch#198 | 0.99981 | -0.010 ng/L | 2.394 ng/L | 106.9 % | KY10 COMP 003 | 20.7% | IL11 COMP 044 MS<br>IL11 COMP 044 MSD | 92.71%<br>96.24% | 3.3% |
| **MHG7-061116-1** | 11/16/200<br>MHg7 | Batch#199 | 0.99982 | 0.080 ng/L | 2.434 ng/L | 108.7 % | VA98 COMP 23 | 33.3% | MN23 COMP 129 MS<br>MN23 COMP 129 MSD | 115.36%<br>98.23% | 14.6% |
| **MHG7-061122-1** | 11/22/200<br>MHg7 | Batch#200 | 0.99912 | 0.090 ng/L | | | VT98 COMP 014 | 22.6% | TN12 COMP 003 MS<br>TN12 COMP 003 MSD | 102.84%<br>80.20% | 23.8% |

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| **MHG7-061129-1** | 11/29/200<br>MHg7 | Batch#201 | 0.99896 | 0.250 ng/L | 2.093 ng/L | 93.5 % | LA2820061017 | 221.1% | FL32 COMP 039 MS<br>FL32 COMP 039 MSd | 101.83%<br>101.53% | 0.3% |
| **MHG7-061130-1** | 11/30/200<br>MHg7 | Batch#202 | 0.99996 | 0.060 ng/L | 2.337 ng/L | 104.3 % | PR9920061005 | 31.6% | LA2320061018 MS<br>LA2320061018 MSD | 96.1%<br>86.8% | 10.2% |
| **MHG7-061207-1** | 12/7/2006<br>MHg7 | Batch#203 | 0.99985 | 0.090 ng/L | | | VT98 COMP 015<br>VT98 COMP 015 | 24.3%<br>33.7% | VT98 COMP 015 MS<br>VT98 COMP 015 MSD | 111.87%<br>89.83% | 20.5% |
| **MHG7-061214-1** | 12/14/200<br>MHg7 | Batch#204 | 0.99967 | 0.060 ng/L | 2.655 ng/L | 118.5 % | | | NJ30 COMP 010 MS<br>NJ30 COMP 010 MSD | 110.50%<br>115.82% | 4.6% |
| **MHG7-070104-1** | 1/4/2007<br>MHg7 | Batch#205 | 0.99701 | 0.160 ng/L | 3.024 ng/L | 135.0 % | LA2820061108 | 109.1% | WA2120061114 MS<br>WA2120061114 MSD | 111.2%<br>103.6% | 7.1% |
| **MHG7-070109-1** | 1/9/2007<br>MHg7 | Batch#206 | 0.99935 | 0.060 ng/L | | | LA0520061106 | 33.3% | KY10 COMP 004 MS<br>KY10 COMP 004 MSD | 88.87%<br>121.96% | 30.3% |
| **MHG7-070110-1** | 1/10/2007<br>MHg7 | Batch#207 | 0.99978 | -0.020 ng/L | 2.116 ng/L<br>4385.708 ng/L | 94.4 %<br>98.1 % | | | | | |
| **MHG7-070111-1** | 1/11/2007<br>MHg7 | Batch#208 | 0.99962 | 0.100 ng/L | 1.896 ng/L | 84.7 % | PR9920061129 | 0.0% | 99PR20061129 MS<br>99PR20061129 MSD | 101.7%<br>100.7% | 0.9% |
| **MHG7-070112-1** | 1/12/2007<br>MHg7 | Batch#209 | 1110.8270 | 0.070 ng/L | | | OR10 COMP 051 | 41.0% | OR10 COMP 051 MS<br>OR10 COMP 051 MSD | 84.86%<br>94.24% | 9.9% |
| **MHG7-070117-1** | 1/17/2007<br>MHg7 | Batch#210 | 0.99997 | -0.070 ng/L | 1.991 ng/L<br>3982.576 ng/L | 88.9 %<br>89.1 % | FG0120061121 | 14.0% | FG0620061121 MS<br>FG0620061121 MSD | 83.0%<br>85.3% | 2.7% |
| **MHG7-070131-1** | 1/31/2007<br>MHg7 | Batch#211 | 888.68650 | -0.230 ng/L | 2.307 ng/L | 103.0 % | WA2020061212 | 15.7% | WA2120061215 MS<br>WA2120061215 MSD | 99.6%<br>82.9% | 18.3% |

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| **MHG7-070221-1** | 2/21/2007<br>MHg7 | Batch#212 | 0.99979 | 0.090 ng/L | 1.948 ng/L | 87.0 % | WA2120061226 | 13.0% | 18WA20061226 MS<br>18WA20061226 MSD | 91.1%<br>94.7% | 3.8% |
| **MHG7-070222-1** | 2/22/2007<br>MHg7 | Batch#213 | 0.99919 | 0.040 ng/L | | | SC09 COMP 013 | 24.0% | WA2220061226 MS<br>WA2220061226 MSD | 94.1%<br>86.5% | 8.5% |
| **MHG15-070227-1** | 2/27/2007<br>MHg15 | Batch#215 | 0.99911 | 0.060 ng/L | | | WA1920070102 | 45.8% | LA0520070103 MS<br>LA0520070103 MSD | 103.5%<br>96.3% | 7.2% |
| **MHG7-070227-1** | 2/27/2007<br>MHg7 | Batch#214 | 0.99825 | 0.020 ng/L | | | WA2220070109 | 35.9% | WA1820070102 MS<br>WA1820070102 MSD | 98.5%<br>95.4% | 3.2% |
| **MHG7-070228-1** | 2/28/2007<br>MHg7 | Batch#217 | 0.99930 | 0.060 ng/L | | | | | LA2820070129 MS<br>LA2820070129 MSD | 101.9%<br>103.0% | 1.1% |
| **MHG15-070228-1** | 2/28/2007<br>MHg15 | Batch#216 | 0.99990 | 0.040 ng/L | | | WA1820070109 | 47.8% | OR10 COMP 052 MS<br>OR10 COMP 052 MSD | 101.92%<br>104.26% | 2.1% |
| **MHG7-070307-1** | 3/7/2007<br>MHg7 | Batch#218 | 0.99781 | 0.000 ng/L | | | TN11 COMP 007 | 0.0% | VT98 COMP 019 MS<br>VT98 COMP 019 MSD | 99.6%<br>99.6% | 0.0% |