

EXHIBIT 36



Analytical Report

TACONIC

Analysis of PFOA in Water Samples

Exygen Report No. L0003924

Testing Laboratory

Exygen Research
3058 Research Drive
State College, PA 16801

Requester

Tim Kosto
TACONIC
136 Coonbrook Road
Petersburgh, New York, 12138
Phone: 518-658-3202

11/2004

1 Introduction

Results are reported for the analysis of perfluorooctanoic acid (PFOA) in wastewater samples received at Exygen from Tim Kosto at TACONIC. The Exygen project number assigned to the samples is L0003924. Table I lists the target analytes quantitated for the samples.

Table I. Target Analytes for Quantitation

<u>Parameter</u>	<u>Acronym</u>	<u>Formula</u>
Perfluorooctanoic acid	PFOA	C ₇ F ₁₅ COOH

2 Sample Receipt

Four samples were received at Exygen in 500 mL clear plastic bottles. A copy of all sample log-in information is presented in Attachment A.

The samples were received on 11/23/04. The samples were shipped on ice via UPS. The samples were stored refrigerated from time of receipt until analysis.

3 Methods - Analytical and Preparatory

3.1 Sample Preparation

Solid phase extraction (SPE) was used to prepare the samples for LC/MS/MS analysis. A forty milliliter portion of each sample was transferred to a C₁₈ SPE cartridge. The cartridge was eluted with 5 mL of 100% methanol. This treatment resulted in an eight-fold concentration of the samples prior to analysis. A portion of the extract was transferred to autosampler vials and analyzed using electrospray LC/MS/MS.

3.2 Sample Analysis by LC/MS/MS

In High Pressure Liquid Chromatography (HPLC), an aliquot of extract is injected and passed through a liquid-phase chromatographic column. Based on the affinity of the analyte for the stationary phase in the column relative to the liquid mobile phase, the analyte is retained for a characteristic amount of time. Following HPLC separation, mass spectrometry provides a rapid and accurate means for analyzing a wide range of organic compounds. Molecules are ionized, fragmented, and detected. The ions characteristic of the compounds are observed and quantitated against extracted standards.

An HP1100 system interfaced to a Micromass Quattro system was used to analyze the sample extracts for quantitation. A gradient elution through a Jones Chromatography Genesis C-8 50 x 2.1 mm x 4µm column was used for separation.

The following gradient was performed:

Mobile Phase (A): 2mM Ammonium Acetate in Water
Mobile Phase (B): Methanol

Time	%A	%B
0.0	60	40
0.4	60	40
1.0	10	90
7.0	10	90
7.5	0	100
9.0	0	100
9.5	60	40
13.5	60	40
14.0	60	40

The following parameters were used for operation of the mass spectrometer:

Parameter	Setting
Ionization Mode	Electrospray
Polarity	Negative
Transitions Monitored	413->369 (PFOA)
Gas Temperature	350°C
Drying Gas (N2)	7.0 L/min

4 Analysis

4.1 Calibration

A 7-point calibration curve was analyzed throughout the analytical sequence for PFOA. The calibration points were prepared at 0, 25, 50, 100, 250, 500, and 1000 ng/L (ppt) for LC/MS/MS analysis. Calibration standards are prepared using the same SPE procedure used for samples. The instrument response versus the concentration was plotted for each point. Using linear regression with 1/x weighting, the slope, y-intercept and coefficient of determination (r^2) were determined. A calibration curve is acceptable if $r^2 \geq 0.985$.

For the results reported here, calibration criteria were met. The calibration curves are included in the raw data in Attachment C.

4.2 Surrogates

Surrogates were not used in this study.

4.3 Laboratory Control Spikes

Laboratory control spikes in the analytical set were prepared by adding a known concentration of the analyte to laboratory water. Laboratory control spikes are used to assess method accuracy. The laboratory control spikes must show recoveries between 70-130% or the data is rejected. For the results reported here, the laboratory control spikes were within the acceptable range.

4.4 Matrix Spikes

A matrix spike was prepared for each sample in the analytical set by adding a known concentration of the target analyte to a separate sample. Matrix spikes are used to assess method accuracy in the matrix. The matrix spikes should show recoveries between 70-130%. For the results reported here the matrix spike for 04-10-03A,B was within the acceptable range. For the other three samples, 04-10-01A,B, 04-10-02A,B and 04-10-04, the amount of PFOA found in the sample greatly exceeded the spiking level and an accurate recovery could not be calculated.

4.5 Sample Related Comments

Each sample was extracted in duplicate and analyzed. Duplicate sample results are reported along with the sample results in Attachment B.

5 Data Summary

Please see Attachment B for a detailed listing of the analytical results. Results are reported in parts per billion (ng/mL) for the analyte, PFOA, on an as-received basis.


6 Data/Sample Retention

Samples are disposed of one month after the report is issued unless otherwise specified. All electronic data is archived on retrievable media and hard copy reports are stored in data folders maintained by Exygen. Hardcopy data is stored for a minimum of five years. The client will be notified 30 days prior to the disposal of hardcopy data.

7 Attachments

- 7.1 Attachment A: Chain of Custody
- 7.2 Attachment B: Analytical Results
- 7.3 Attachment C: Raw Analytical Data


8 Signatures



Karen Rishaj, Principal Investigator

12/21/04

Date



John M. Flaherty, Vice President

12/21/04

Date



Login

Login Group: L0003924

Login #:	4034	Conform COC Sample:	True
Project:	P0001069	Conform COC:	True
Company Name:	TACONIC	Conform Sample:	True
Submitted By:	Tim Kosto	Conform Request:	True
Login Type:	Immediate Receipt of Samples		
Started:	True		
Date Start:	11/23/2004		
Due Date:	12/07/2004		
Received Date:	11/23/2004		
Received By:	Ammerman, Mark		
Spread Sample:			
Label:			
Exygen SD/PI:	Risha, Karen		
Project Title/Type:	Analysis of APFO in Water Samples by LCMSMS / ROUTINE		
Login Notes:			
Conform Notes:			

Packages / Containers

Package	Carton	Mail Date / Condition	Shipper / ID	Temp. Control/Temp.	Direction / Handled By
PK0004742		11/23/2004 2:08:55PM Package & Contents Uncompromised	UPS 1Z1207900145335324	Wet Ice 1.2	RECEIVED Ammerman, Mark

Container #	Gross Weight	pH	Container Type	Preservative	Mfg. Lot	Mfg. ID
C0051125	590.40 g		500 ml Clear Plastic Narrow	NONE		
C0051126	576.90 g		500 ml Clear Plastic Narrow	NONE		
C0051127	533.80 g		500 ml Clear Plastic Narrow	NONE		
C0051128	573.30 g		500 ml Clear Plastic Narrow	NONE		
C0051129	560.80 g		500 ml Clear Plastic Narrow	NONE		
C0051130	551.30 g		500 ml Clear Plastic Narrow	NONE		
C0051131	599.80 g		500 ml Clear Plastic Narrow	NONE		



Login

Samples

Sample ID	Container	Matrix	Fraction	Sample	Date Sampled	Date Received	Date Due
L0003924-0001	C0051125 C0051126	LIQUID	Water	04-10-01	11/22/2004	11/23/2004	12/07/2004
L0003924-0002	C0051127 C0051128	LIQUID	Water	04-10-02	11/22/2004	11/23/2004	12/07/2004
L0003924-0003	C0051129 C0051130	LIQUID	Water	04-10-03	11/22/2004	11/23/2004	12/07/2004
L0003924-0004	C0051131	LIQUID	Water	04-10-04	11/22/2004	11/23/2004	12/07/2004

11/23/2004
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Instance: R0132205



000650

TAC-SEN_03632

22 November 2004

Mark Ammerman
Exygen Research
3048 Research Drive
State College, PA 16801

Dear Mark,

Please find enclosed seven sample bottles containing material for 4 PFOA analyses each in duplicate. The three samples which include duplicates, labeled A and B were each taken consecutively from the sampling location. You may take a sample from each bottle for the duplicate analysis or if you prefer, take both samples from one bottle and discard the other sample bottle.

The duplicate samples are:

04-10-01A and 04-10-01B
04-10-02A and 04-10-02B
04-10-03A and 04-10-03B

Sample 04-10-04 does not have a duplicate. Thank you for your assistance.

Yours,



Timothy J. Kosto II

RECEIVING OFFICE
 STATE COLLEGE PA 16801-2702

PA 168-0-10

UPS NEXT DAY AIR 1

TRACKING #: 1Z 120 790 01 4533 5324

STATE COLLEGE PA 16801-2702



B



000654

TAC-SEN_03636

Summary of PFOA in Water Samples

Sample ID	Analyte Found ppb (ng/mL) PFOA
04-10-01A,B	117
04-10-01A,B*	116
04-10-02A,B	152
04-10-02A,B*	148
04-10-03A,B	2.30
04-10-03A,B*	2.07
04-10-04	13700
04-10-04*	14100

Bldg #4 dispersion well (A.K.A. well #2)
Bldg #2 well (A.K.A. well #1)
Bldg #6 well (A.K.A. well #3)

*Laboratory Duplicate

X
 3058 Research Drive
 State College, PA 16801, USA
 T: 814.272.1039
 F: 814.231.1580
 oxygen.com

Recovery Summary for PFOA in Water Samples

Sample Description	Amount Spiked (ng/mL)	PFOA		
		Amt Found in Sample (ng/mL)	Amount Recovered (ng/mL)	Recovery (%)
04-10-01A,B 5 ng/mL Spike	5	117	120	^
04-10-02A,B 5 ng/mL Spike	5	152	154	^
04-10-03A,B 5 ng/mL Spike	5	2.30	7.75	109
04-10-04 5 ng/mL Spike	5	13700	14100	^

^Sample residue exceeded the spiking level significantly; therefore, an accurate recovery cannot be calculated.