Exygen™ RESEARCH
Precise Research.
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Analytical Report

Air Sampling Fluorochemical Report

DuPont Washington Works – Air Sampling Program Round 7

Exygen Research Report No. L0001444

Testing Laboratory

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State College, PA 16801

Requester

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Summary

Seven solid media samples were received by Centre Analytical Laboratories, Inc. (dba Exygen Research) (Exygen) from DuPont Corporation. The media represent samples of air collected on OVS tubes. Please see Table 1 for a completed listing of samples received and field air volumes collected. Sample WWK-A-AMS3-E7 had sampler problems during collection. No results are reported for this sample.

The samples were analyzed for Perfluorooctanoic Acid (C8 Acid) using liquid chromatography / mass spectrometry (LCMS). The method employed is entitled "Method of Analysis for the Determination of Perfluorooctanoic Acid (PFOA) in OVS Airtubes by LCMS" (James Miller Exygen Research, February 17, 2003).

The OVS tubes were separated into three fractions for specific fluorochemical analysis. Fraction A consisted of the filter, backing material and plastic ring. Fraction B contained the first bed of XAD resin and the PUF backing. Fraction C contained the second bed of XAD resin and PUF backing. Fractions A and B were extracted with 1 mL of methanol. Fraction C was not analyzed but saved for possible future analysis. Perfluorodecanoic Acid (C10 Acid) was added as a surrogate spike to each fraction prior to extraction.

Instrument operating conditions can be found at the beginning of each analytical run. Raw instrument data is given in Appendix A. Chain-of-custody information can be found in Appendix B.

Results Summary

Request #	Air Volume Sampled (L)	C8 Acid (mg/m3)	$\frac{ng}{m^3}$
WWK-A-AMS1-E7 A	1356	0.0003	
WWK-A-AMS1-E7 B	1356	< 0.00007	
WWK-A-AMS1-E7 C	1356	NA	
WWK-A-AMS1-E7 (Total)		0.0003	0.3
WWK-A-AMS2-E7 A	1490	0.0003	
WWK-A-AMS2-E7 B	1490	< 0.00007	
WWK-A-AMS2-E7 C	1490	NA	
WWK-A-AMS2-E7 (Total)		0.0003	0.3
WWK-A-AMS4-E7 A	1652	< 0.00006	
WWK-A-AMS4-E7 B	1652	< 0.00006	
WWK-A-EMS4-E7 C	1652	NA	
WWK-A-EMS4-E7 (Total)		< 0.00012	<0.12
WWK-A-AMS5-E7 A	1530	< 0.00007	
WWK-A-AMS5-E7B	1530	< 0.00007	
WWK-A-AMS5-E7 C	1530	NA	
WWK-A-AMS5-E7 (Total)		< 0.00014	<0.14
WWK-A-AMS6-E7 A	1539	< 0.00006	
WWK-A-AMS6-E7 B	1539	< 0.00006	
WWK-A-AMS6-E7 C	1539	NA	
WWK-A AMS6-E7 (Total)		< 0.00012	<0.12

NA – Not Analyzed. B fraction was below the quantitation limit, therefore the backup fraction does not require analysis.

1. "<" is defined as not detected at or above the reported level.
2. Sample results have not been corrected for blank results or control spike recoveries.
3. Please note the following descriptions of the OVS sample tube fractions:

Fraction	Fraction Description
A	Frit Extract
B	1st set beads extract
C	2nd set beads extract (not analyzed)

ALL DATA CONTAINED IN THIS REPORT WAS GENERATED BY EXYGEN RESEARCH

QC Data

LCS

Please note: One control sample was spiked with each perfluorooctanoic acid to give a final concentration of 500 ppb. Air was pulled through the tube at a rate of 1-liter per minute for one hour (60 liters of air). The fractions were separated and analyzed. The acceptable range for control recovery is 75-125%.

Request #	C8 Acid (amount spiked - ppb)	C8 Acid (amount recovered – ppb)	C8 Acid (percent recovery
Control 1	500	397	79

Blanks

Request #	Vol. Of Air (L)	C8 Acid (ug/fraction)
WWK-A-AMSFBLK-E7 A	0	< 0.10
WWK-A-AMSFBLK-E7 B	0	< 0.10

ALL DATA CONTAINED IN THIS REPORT WAS GENERATED BY EXYGEN RESEARCH

Surrogates

A surrogate spike (C10 Acid) was added to all OVS tubes to give a final concentration of 500 ppb in the extract. Surrogate spike recoveries are given in the following table. There are no set criteria for surrogate spike recoveries. Advisory ranges are 75-125%.

Sample #	Amount Spiked (ppb)	Amount Recovered (ppb)	Percent Recovery (%)
WWK-A-AMSFBLK-E7 A	500	639	128*
WWK-A-AMSFBLK-E7 B	500	353	71*
WWK-A-AMS1-E7 A	500	530	106
WWK-A-AMS1-E7 B	500	374	75
WWK-A-AMS2-E7 A	500	603	121
WWK-A-AMS2-E7 B	500	382	76
WWK-A-AMS4-E7 A	500	511	102
WWK-A-AMS4-E7 B	500	462	92
WWK-A-AMS5-E7 A	500	596	119
WWK-A-AMS5-E7 B	500	417	83
WWK-A-AMS6-E7 A	500	566	113
WWK-A-AMS6-E7 B	500	373	75
Control Spike A	500	453	91
Control Spike B	500	347	69*

* Surrogate recovery outside of advisory range.

Calculations

Request #	Vol. Of Air (L)	C8 Acid (raw-ppb)	C8 Acid (ug/fraction)	C8 Acid (mg/m3)
WWK-A-AMSFBLK-E7 A	0	< 10	< 0.10	
WWK-A-AMSFBLK-E7 B	0	< 10	< 0.10	
WWK-A-AMS1-E7 A	1356	429	0.43	0.0003
WWK-A-AMS1-E7 B	1356	< 10	< 0.10	< 0.00007
WWK-A-AMS2-E7 A	1490	426	0.43	0.0003
WWK-A-AMS2-E7 B	1490	< 10	< 0.10	< 0.00007
WWK-A-AMS4-E7 A	1652	< 10	< 0.10	< 0.00006
WWK-A-AMS4-E7 B	1652	< 10	< 0.10	< 0.00006
WWK-A-AMS5-E7 A	1530	< 10	< 0.10	< 0.00007
WWK-A-AMS5-E7 B	1530	< 10	< 0.10	< 0.00007
WWK-A-AMS6-E7 A	1539	< 10	< 0.10	< 0.00006
WWK-A-AMS6-E7 B	1539	< 10	< 0.10	< 0.00006
Control Spike A	0	397	0.40	
Control Spike B	0	< 10	< 0.10	

ALL DATA CONTAINED IN THIS REPORT WAS GENERATED BY EXYGEN RESEARCH

Example Calculation

For sample WWK-A-AMS2-E7 A C8 Acid,

= [426 ng/ml of C8 Acid x (1ml) x (1 ug / 1000 ng) x (1 mg / 1000 ug)] / [(1490 L) x (1 m3 / 1000 L)]

= 0.0003 mg / m3

Signatures

Paul Connolly, LCMS Team Leader — 2/25/04 Date

John M. Flaherty, Vice President — 2/25/04 Date

Other Lab Members Contributing to Data

James Miller

ALL DATA CONTAINED IN THIS REPORT WAS GENERATED BY EXYGEN RESEARCH

Table 1. Login Information / Field Data

Sample ID	Exygen Lab ID	Date Received	Description	Air Volume Sampled (L)
WWK-A-AMSFBLK-E7 A	L0001444-1	12/12/03	Frit extract	0
WWK-A-AMSFBLK-E7 B	L0001444-2	12/12/03	1st set beads extract	0
WWK-A-AMSFBLK-E7 C	L0001444-3	12/12/03	2nd set beads extract	0
WWK-A-AMS1-E7 A	L0001444-4	12/12/03	Frit extract	1356
WWK-A-AMS1-E7 B	L0001444-5	12/12/03	1st set beads extract	1356
WWK-A-AMS1-E5 C	L0001444-6	12/12/03	2nd set beads extract	1356
WWK-A-AMS2-E7 A	L0001444-7	12/12/03	Frit extract	1490
WWK-A-AMS2-E7B	L0001444-8	12/12/03	1st set beads extract	1490
WWK-A-AMS2-E7 C	L0001444-9	12/12/03	2nd set beads extract	1490
WWK-A-AMS4-E7 A	L0001444-13	12/12/03	Frit extract	1652
WWK-A-AMS4-E7 B	L0001444-14	12/12/03	1st set beads extract	1652
WWK-A-AMS4-E7 C	L0001444-15	12/12/03	2nd set beads extract	1652
WWK-A-AMS5-E7 A	L0001444-16	12/12/03	Frit extract	1530
WWK-A AMS5-E7 B	L0001444-17	12/12/03	1st set beads extract	1530
WWK-A-AMS5-E7 C	L0001444-18	12/12/03	2nd set beads extract	1530
WWK-A-AMS6-E7 A	L0001444-19	12/12/03	Frit extract	1539
WWK-A-AMS6-E7 B	L0001444-20	12/12/03	1st set beads extract	1539
WWK-A AMS6-E7 C	L0001444-21	12/12/03	2nd set beads extract	1539
Control Spike A	L0001444-22	12/12/03	Frit extract	0
Control Spike B	L0001444-23	12/12/03	1st set beads extract	0
Control Spike C	L0001444-24	12/12/03	2nd set beads extract	0

Table 2. Chain of Custody

Sample ID	Date Collected	Date Received at Exygen	Date Extracted by Exygen	Date Analyzed by Exygen
WWK-A-AMSFBLK-E7 A	12/11/03	12/12/03	12/18/03	12/18 -12/19/03
WWK-A-AMSFBLK-E7 B	12/11/03	12/12/03	12/18/03	12/18 -12/19/03
WWK-A-AMSFBLK-E7 C	12/11/03	12/12/03	NA	NA
WWK-A-AMS1-E7 A	12/11/03	12/12/03	12/18/03	12/18 -12/19/03
WWK-A-AMS1-E7 B	12/11/03	12/12/03	12/18/03	12/18 -12/19/03
WWK-A-AMS1-E5 C	12/11/03	12/12/03	NA	NA
WWK-A-AMS2-E7 A	12/11/03	12/12/03	12/18/03	12/18 -12/19/03
WWK-A-AMS2-E7B	12/11/03	12/12/03	12/18/03	12/18 -12/19/03
WWK-A-AMS2-E7 C	12/11/03	12/12/03	NA	NA
WWK-A-AMS4-E7 A	12/11/03	12/12/03	12/18/03	12/18 -12/19/03
WWK-A-AMS4-E7 B	12/11/03	12/12/03	12/18/03	12/18 -12/19/03
WWK-A-AMS4-E7 C	12/11/03	12/12/03	NA	NA
WWK-A-AMS5-E7 A	12/11/03	12/12/03	12/18/03	12/18 -12/19/03
WWK-A AMS5-E7 B	12/11/03	12/12/03	12/18/03	12/18 -12/19/03
WWK-A-AMS5-E7 C	12/11/03	12/12/03	NA	NA
WWK-A-AMS6-E7 A	12/11/03	12/12/03	12/18/03	12/18 -12/19/03
WWK-A-AMS6-E7 B	12/11/03	12/12/03	12/18/03	12/18 -12/19/03
WWK-A AMS6-E7 C	12/11/03	12/12/03	NA	NA
Control Spike A	NA	12/12/03	12/18/03	12/18 -12/19/03
Control Spike B	NA	12/12/03	12/18/03	12/18 -12/19/03
Control Spike C	NA	12/12/03	NA	NA

Exygen® RESEARCH
3058 Research Drive
State College, PA 16801
Phone: 814-272-1039
Fax: 814-231-1580

Login

Login Group: L0001444

Login #:	1554	Conform COC Sample:	True
Project:	P0000419	Conform COC:	True
Project Storage:		Conform Sample:	True
Company Name:	DuPont de Nemours & Co, Inc.	Conform Request:	True
Submitted By:	Michael D. Aucoin		
Login Type:	Immediate Receipt of Samples		
Started:	T		
Date Start:	12/12/2003		
Due Date:	12/26/2003		
Received Date:	12/12/2003		
Received By:	AMMERMAN, MARK		
Spread Sample:			
Label:			
Project Title/Type:	Analysis of PFOA in OVS Tubes / ROUTINE		
Exygen SD/PI:	MILLER, JAMES		
Login Notes:			
Conform Notes:			

Packages / Containers

Package	Carton	Mail Date / Condition	Shipper / ID	Temp. Control/Temp.	Direction / Handled By
PK0002035		12/12/2003 10:46:19PM Package & Contents Uncompromised	FEDEX 8363913019600200	None 23.3	RECEIVED AMMERMAN, MARK

Container #	Gross Weight	pH	Container Type	Preservative	Mfg. Lot	Mfg. ID
C0021109	7.2 g		Other	NONE		
C0021110	7.2 g		Other	NONE		
C0021111	7.2 g		Other	NONE		
C0021112	7.0 g		Other	NONE		
C0021113	7.0 g		Other	NONE		
C0021114	7.0 g		Other	NONE		
C0021115	7.2 g		Other	NONE		
C0021116	7.2 g		Other	NONE		
C0021117	7.2 g		Other	NONE		
C0021118	7.1 g		Other	NONE		
C0021119	7.1 g		Other	NONE		
C0021120	7.1 g		Other	NONE		
C0021121	7.2 g		Other	NONE		
C0021122	7.2 g		Other	NONE		
C0021123	7.2 g		Other	NONE		
C0021124	7.2 g		Other	NONE		
C0021125	7.2 g		Other	NONE		
C0021126	7.2 g		Other	NONE		
C0021127	7.0 g		Other	NONE		
C0021128	7.0 g		Other	NONE		
C0021129	7.0 g		Other	NONE		
C0021130	7.0 g		Other	NONE		
C0021131	7.0 g		Other	NONE		
C0021132	7.0 g		Other	NONE		

ICOC

Miscellaneous Item Key	Description
None	

Login

Samples

Sample ID	Matrix	Fraction	Sample	Date Sampled	Date Received	Date Due
L0001444-0001	GAS	OVS Tubes	WWK-A-AMSFBLK-E7 A	12/11/2003	12/12/2003	12/26/2003
L0001444-0002	GAS	OVS Tubes	WWK-A-AMSFBLK-E7 B	12/11/2003	12/12/2003	12/26/2003
L0001444-0003	GAS	OVS Tubes	WWK-A-AMSFBLK-E7 C	12/11/2003	12/12/2003	12/26/2003
L0001444-0004	GAS	OVS Tubes	WWK-A-AMS1-E7 A	12/11/2003	12/12/2003	12/26/2003
L0001444-0005	GAS	OVS Tubes	WWK-A-AMS1-E7 B	12/11/2003	12/12/2003	12/26/2003
L0001444-0006	GAS	OVS Tubes	WWK-A-AMS1-E7 C	12/11/2003	12/12/2003	12/26/2003
L0001444-0007	GAS	OVS Tubes	WWK-A-AMS2-E7 A	12/11/2003	12/12/2003	12/26/2003
L0001444-0008	GAS	OVS Tubes	WWK-A-AMS2-E7 B	12/11/2003	12/12/2003	12/26/2003
L0001444-0009	GAS	OVS Tubes	WWK-A-AMS2-E7 C	12/11/2003	12/12/2003	12/26/2003
L0001444-0010	GAS	OVS Tubes	WWK-A-AMS3-E7 A	12/11/2003	12/12/2003	12/26/2003
L0001444-0011	GAS	OVS Tubes	WWK-A-AMS3-E7 B	12/11/2003	12/12/2003	12/26/2003
L0001444-0012	GAS	OVS Tubes	WWK-A-AMS3-E7 C	12/11/2003	12/12/2003	12/26/2003
L0001444-0013	GAS	OVS Tubes	WWK-A-AMS4-E7 A	12/11/2003	12/12/2003	12/26/2003
L0001444-0014	GAS	OVS Tubes	WWK-A-AMS4-E7 B	12/11/2003	12/12/2003	12/26/2003
L0001444-0015	GAS	OVS Tubes	WWK-A-AMS4-E7 C	12/11/2003	12/12/2003	12/26/2003
L0001444-0016	GAS	OVS Tubes	WWK-A-AMS5-E7 A	12/11/2003	12/12/2003	12/26/2003
L0001444-0017	GAS	OVS Tubes	WWK-A-AMS5-E7 B	12/11/2003	12/12/2003	12/26/2003
L0001444-0018	GAS	OVS Tubes	WWK-A-AMS5-E7 C	12/11/2003	12/12/2003	12/26/2003
L0001444-0019	GAS	OVS Tubes	WWK-A-AMS6-E7 A	12/11/2003	12/12/2003	12/26/2003
L0001444-0020	GAS	OVS Tubes	WWK-A-AMS6-E7 B	12/11/2003	12/12/2003	12/26/2003
L0001444-0021	GAS	OVS Tubes	WWK-A-AMS6-E7 C	12/11/2003	12/12/2003	12/26/2003
L0001444-0022	GAS	OVS Tubes	Control 1 A	12/12/2003	12/12/2003	12/26/2003
L0001444-0023	GAS	OVS Tubes	Control 1 B	12/12/2003	12/12/2003	12/26/2003
L0001444-0024	GAS	OVS Tubes	Control 1 C	12/12/2003	12/12/2003	12/26/2003

Login

Bottles

.0001444-0001

Container
.0021109 / Other / NONE

Method

.0001444-0002

Container
C0021110 / Other / NONE

Method

.0001444-0003

Container
C0021111 / Other / NONE

Method

.0001444-0004

Container
C0021112 / Other / NONE

Method

.0001444-0005

Container
C0021113 / Other / NONE

Method

.0001444-0006

Container
C0021114 / Other / NONE

Method

.0001444-0007

Container
C0021115 / Other / NONE

Method

.0001444-0008

Container
C0021116 / Other / NONE

Method

.0001444-0009

Container
C0021117 / Other / NONE

Method

.0001444-0010

Container
C0021118 / Other / NONE

Method

.0001444-0011

Container
C0021119 / Other / NONE

Method

.0001444-0012

Container
.1120 / Other / NONE

Method

Login

L0001444-0013

Container
C0021121 / Other / NONE

Method

L0001444-0014

Container
C0021122 / Other / NONE

Method

L0001444-0015

Container
C0021123 / Other / NONE

Method

L0001444-0016

Container
C0021124 / Other / NONE

Method

L0001444-0017

Container
C0021125 / Other / NONE

Method

L0001444-0018

Container
C0021126 / Other / NONE

Method

L0001444-0019

Container
C0021127 / Other / NONE

Method

L0001444-0020

Container
C0021128 / Other / NONE

Method

L0001444-0021

Container
C0021129 / Other / NONE

Method

L0001444-0022

Container
C0021130 / Other / NONE

Method

L0001444-0023

Container
C0021131 / Other / NONE

Method

L0001444-0024

Container
C0021132 / Other / NONE

Method

Exygen RESEARCH — CHAIN OF CUSTODY/ANALYSIS REQUEST FORM

Exygen Research Sample Receiving • 3117 Research Drive • State College, PA 16801, USA
T: 814.231.8032 • F: 814.231.1580 • exygenresearch.com

PROJECT INFORMATION

Client (name & address): AQM DuPont Washington Works

Project Manager (Name & E-mail Address): Mike Arcaro

Phone: (304) 892-1698

Project Name: Air Sampling Program

Fax:

P.O. #:

Sampler: S.Opp/A.Crane

Quotation #:

Please fill out this form *completely* to ensure correct analysis and proper handling of your samples.

SAMPLE ANALYSIS

ExyLIMS#	Client Sample Identification	Collection Date	Collection Time	Grab	Composite	Number of Containers	Specify Matrix	Comments	PC-143							
	WWK-A-AMSFBLK-E7	12/11/03	0615	X		1	Air	Field Blank	X							
	WWK-A-AMS 1-E7	12/11/03	0616	X		1	Air		X							
	WWK-A-AMS 2-E7	12/11/03	0625	X		1	Air		X							
	WWK-A-AMS 3-E7	12/11/03	0628	X		1	Air	cancel	X							
	WWK-A-AMS 4-E7	12/11/03	0646	X		1	Air		X							
	WWK-A-AMS 5-E7	12/11/03	0700	X		1	Air		X							
	WWK-A-AMS 6-E7	12/11/03	0715	X		1	Air		X							
	control															

LAB USE ONLY

CHAIN OF CUSTODY

Relinquished by	Date	Time
Jason C Crane	12/11/03	0915

Cooler ID # 10cwb Cooler Temp. (°C) 4

Received by	Date	Time
[illegible]	12/12/03	0830
	12/12/03	1046

LAB USE ONLY

PROJECT REQUIREMENTS

Results Deadline:

Laboratory Report Options:

- ☐ Sample results only
- ☐ Add case narrative
- ☐ Add quality control summary
- ☐ Add calibration summary
- ☐ Add raw data
- ☐ Other

OTHER INFORMATION: Event 7

Fed Express

Form ID No. 0200

1 From

Date

Sender's Name _____ Phone _____

Company _____

Address _____ Dept/Floor/Suite/Room

City _____ State _____ ZIP _____

2 Your Internal Billing Reference

3 To

Recipient's Name _____ Phone _____

Company _____

Address _____ Dept/Floor/Suite/Room

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

City _____ State _____ ZIP _____

8363 9130 1960

4a Express Package Service — *Packages up to 150 lbs.* Delivery commitment may be later in some areas.

- [X] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day — Second business day
- [ ] FedEx Express Saver — Third business day

FedEx Envelope rate not available. Minimum charge: One-pound rate

4b Express Freight Service — *Packages over 150 lbs.* Delivery commitment may be later in some areas.

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation: _____

5 Packaging — * Declared value limit $500

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
- [X] Other

6 Special Handling — Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — Available only for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] HOLD Weekday at FedEx Location — Not available for FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location — Available only for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [X] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 _____ x _____ kg

Dangerous Goods (including Dry Ice) cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:* — Enter FedEx Acct. No. or Credit Card No. below.

- [X] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check
- [ ] Obtain Recip. Acct. No

Total Packages	Total Weight	Total Declared Value†	Total Charges
1		$ .00	Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See back for details.

8 Release Signature *Sign to authorize delivery without obtaining signature.*

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

Questions? Visit our Web site at fedex.com or call 1.800.Go.FedEx® 800.463.3339.

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DuPont Washington Works
Air Sampling Program

Sampler(s): SO, AC

FedEx Airbill #: 836391301960

Event Number: Event 7

Pump #	Station #	Exygen ID	Calibration (pre)	Date	Start Time	Date	Stop Time	Calibration (post)	Total Minutes	Total Volume
669842	AMS-1	WWK-A-AMS1-E7	1.006	10-Dec	0630	11-Dec	0616	0.8967	1428	1356 liters
669908	AMS-2	WWK-A-AMS2-E7	1.005	10-Dec	0635	11-Dec	0625	1.08	1434	1490 liters
669878	AMS-3	WWK-A-AMS3-E7	1.003	10-Dec	0636	11-Dec	0628	pump stopped	987	990* liters
669809	AMS-4	WWK-A-AMS4-E7	1.011	10-Dec	0643	11-Dec	0646	1.279	1444	1652 liters
669769	AMS-5	WWK-A-AMS5-E7	1.007	10-Dec	0650	11-Dec	0700	1.104	1448	1530 liters
669848	AMS-6	WWK-A-AMS6-E7	1.015	10-Dec	0701	11-Dec	0715	1.102	1451	1539 liters

Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes
0	0	5	300	10	600	15	900	20	1200
1	60	6	360	11	660	16	960	21	1260
2	120	7	420	12	720	17	1020	22	1320
3	180	8	480	13	780	18	1080	23	1380
4	240	9	540	14	840	19	1140	24	1440

Field Blank: yes (yes or no) WWK-K-AMSFBLK-E7

Weather:
12/10 = Cloudy, mid 40's, rain expected.
12/11 = Overcast 37 degrees, possible snow flurries.

SAFER operational: yes (yes or no)

Comments: Total minutes column is the reading from the monitor counter.

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