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Quantification of soluble organic fraction measurement variation in diesel particulate matter emissions

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Quantification of Soluble Organic Fraction Measurement Variation in Diesel Particulate Matter Emissions

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ABSTRACT

Quantification of Soluble Organic Fraction Measurement Variation in Diesel Particulate Matter Emissions

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Heavy-duty diesel engines (HDDE) are the dominate prime movers of goods and services in the United States (US) and the world today. HDDE will continue to lead the transportation sector in the near term because of its superior fuel economy and performance compared to existing alternatives. However, HDDE produce many harmful emissions constituents that include: hydrocarbons (HC), oxides of nitrogen (NOx), carbon monoxide (CO), and particulate matter (PM). Due to these harmful emissions, the US Environmental Protection Agency (EPA) has been entrusted to enforce the Clean Air Act to limit the amount of emissions that can be produced from these HDDE. Additionally, the EPA requires that each state maintain a state implantation plan (SIP) to ensure minimum air quality standards. Because of SIP concerns, California and Texas have identified on-road heavy-duty diesel engines as a significant pollution source and have implemented an alternative diesel fuel formulation program in order to meet their SIP. To meet these more stringent fuel requirements, refineries use additives in diesel fuel to reduce these emissions. One main concern is when reducing these emissions using fuel additives, PM may be increased. PM is composed of soluble organics along with other constituents. The soluble organic fraction (SOF) contains polynuclear (or polycyclic) aromatic hydrocarbons (PAH) and nitro-PAHs (nitrogen-bound PAH) that are carcinogens and linked to heart and respiratory diseases. Because of this, California has required that the SOF emissions from HDDE fueled with on-road fuels sold in the state of California must not increase SOF more than 6% above a 48 cetane, 10% aromatic reference fuel SOF emissions values.

The purpose of this research was to develop a test procedure for SOF determination and quantifying the variability when using Soxhlet extraction. This was accomplished by extracting SOF from PM gathered from engines exercised over an engine dynamometer transient test cycle using various fuels. Also, the filter media, loaded and unloaded with PM, was examined to understand weighing variations over time in a controlled environment. Lastly, handling issues with the transportation of the filter media was examined.

The test procedure developed for SOF determination produced a coefficient of variation of 4.3%. Weighing variations were found to be caused from constituents lost by the filter media during the extraction process. However, some of this weight loss was then regained while the filter was conditioning in a conditioned clean room. This weight gain can be expressed using the equation: $W_{gain}=.001175(t_{hours}^{0.74014})$. Lastly, shipping and receiving of filter media caused slight weight loss of initial weighing before extraction but had no affect on weight gain after extraction.

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Table of Contents

List of Figures

List of Tables

1 Introduction

1.1 Prologue

Heavy-duty diesel engines (HDDE) are the dominate prime movers of goods and services in the United States (US) and the world today and will continue to lead the transportation sector in the near term because of its superior fuel economy and performance compared to existing alternatives. However, HDDE produce many harmful emissions constituents that include: hydrocarbons (HC), oxides of nitrogen (NOx), carbon monoxide (CO), and particulate matter (PM). Additionally, HC are divided between methane and non-methane hydrocarbons (NMHC) because of green house gas reactivity concerns. Due to these harmful emissions, the US Environmental Protection Agency (EPA) has been entrusted to enforce the Clean Air Act [1] to limit the amount of emissions that can be produced from these HDDE as shown in Table 1-1. As illustrated in this table, NOx and PM emissions will have been reduced by over 98% between 1988 and 2010.

Table 1-1 EPA Heavy-Duty Diesel Engine Emissions Standards (g/bhp-hr) [2]

Year	HC	CO	NOx	PM	NMHC + NOx	NMHC
1988	1.3	15.5	10.7	0.6	n/a	n/a
1990	1.3	15.5	6.0	0.6	n/a	n/a
1991	1.3	15.5	5.0	0.25	n/a	n/a
1994	1.3	15.5	5.0	0.1	n/a	n/a
1998	1.3	15.5	4.0	0.1	n/a	n/a
2004 *(option 1)	1.3	15.5	n/a	0.1	2.4	n/a
2004 *(option 2)	1.3	15.5	n/a	0.1	2.5	0.5
2007 - 2010	1.3	15.5	0.2	0.01	n/a	0.14

* 2004 was moved to October 2002

Although the emissions of NOx and PM from HDDE have been reduced by two orders of magnitude over the last two decades, some cities and states still have trouble meeting minimum air quality standards. Specifically, states such as California and Texas have difficulties meeting their state implementation plans (SIP) on certain criteria pollutants. As such, these states have

implemented measures to reduce those pollutants that are in violation of their respected SIP. With regards to HDDE, California and Texas have identified that by changing the diesel fuel composition, lower emissions can be achieved and thus reduce the ambient emissions that are a concern in their SIP. Although diesel fuel sold in the US must meet certain standards for emissions and engine performance as shown in Table 1-2, California and Texas have placed tighter requirements on fuels that are to be sold in these states. Specifically, a minimum cetane number of 48 and a maximum aromatic content of 10% is specified to be sold in these two states. It is well documented that increased cetane number and decreased aromatic content will reduce NOx and PM emissions [3]. However, it is expensive for refineries to produce diesel fuels that are 48 cetane number and 10% aromatic content. Any additional cost that would be incurred by the refinery would be passed on to the consumer. A significant additional cost to diesel fuel would offset the fuel economy benefit that HDDE have over their spark ignition (gasoline) counterparts and would result in added costs to the consumer. Because of these additional costs, the states of California and Texas have implemented an alternative diesel fuel formulation program to demonstrate equivalency between a candidate fuel and a 48 cetane number and 10% aromatic reference fuel. The candidate fuel still has to meet the on-road specifications as shown in Table 1-2 but can be below the 48 cetane number and above the 10% aromatic content [2, 3].

Table 1-2 Fuel property requirements for on-road fuels [6]

Property	Test Method	Units	ASTM D975
Flash Point, min	D93	°F	125.6
Water and Sediment, max	D2709	% vol	0.05
Distillation Temperature @ 90%	D86	°F	540 - 640
Kinematic Viscosity at 40 °C	D445	mm^2/s	1.9 - 4.1
Ash, max	D482	% mass	0.01
Sulfur, max	D5453	ppm mass	15
Copper Strip Corrosion, max	D130	-	No. 3
Cetane Number, min	D613	-	40
Aromaticity, max	D1319	% vol	35
Cloud Point, max	D2500	°C	Report
Ramsbottom Carbon Residue on 10% distillation Residue, max	D524	% mass	0.35
Lubricity, HFRR at 60 °C, max	D6079	micron	520

Many refineries have been able to demonstrate equivalency of diesel product produced through refining processes. Many of these processes involve reducing the aromatic content of the diesel range with some form of hydrotreating to a level that has equivalent emissions as the reference fuel. Hydrotreating or hydrodesulfurization, uses a chemical process to remove sulfur and nitrogen from gasoline, jet fuels, and diesel fuels by vaporizing the fuel in the presence of hydrogen and introducing the mixture to a catalyst (for example, molybdenum disulfide). This catalyst causes a chemical reaction to occur, where sulfur and nitrogen compounds are converted to hydrogen sulfide and ammonia, then condensed and the hydrocarbons are separated from the gas [7]. However, as with any process, reducing the aromatic content through hydrotreating is relatively expensive. Another means to show equivalency by some has been through the use of additives to reduce the emissions from a higher aromatic diesel stock. Many of these additives increase the cetane number of the fuel without influencing the other fuel properties to any significant extent. The increased cetane number correlates to a shorter ignition delay which

results in a lower NOx value and increase in PM [5]. The increase in PM is problematic in the California and Texas fuel equivalency tests since there is a limit to how high the candidate NOx and PM values can be relative to the reference fuel values. Presently, the candidate fuel NOx and PM values can be a nominal 1% and 2%, respectively, higher than the reference fuel values. Additionally, California requires the reporting of soluble organic fraction (SOF) of the PM where the candidate fuel SOF value can only be 6% higher than the reference fuel SOF value.

Particulate matter is composed of three different matters: solid fraction (SOL), SOF, and sulfate particulates (SO_4). Of these three parts, SOF is the main concern. SOF is composed of unburned fuels, burned fuels and lubricating oils [8]. SOF also contains polynuclear (or polycyclic) aromatic hydrocarbons (PAH) and nitro-PAHs (nitrogen-bound PAH). These PAHs are carcinogens that are linked to heart and reparatory diseases [9]. Due to this, the California Air Resources Board (CARB) has enforced testing these candidate fuels to insure they do not cause an overall rise in SOF while trying to reduce other emissions.

The method for SOF determination is an extraction process known as Soxhlet. Soxhlet is a chemical process where solvent is cycled through a PM-loaded filter to dissolve all organic matter in the PM and only leaving the inorganic matter on the filter media. From this, the SOF can be determined from pre- and post-weight of the PM-loaded filter and from the post Soxhlet process filter weight.

1.2 Objectives

The main objective of this study was to develop a test procedure for SOF determination and quantifying the variability when using Soxhlet extraction. This was accomplished by extracting SOF from PM gathered from engines exercised over an engine dynamometer transient test cycles using various fuels. The second objective of this study was to examine how the SOF

may vary over time when weighed in a controlled environment. This determined what weighing precautions must be taken to insure accurate results. The third and final objective of this work was to explore handling issues with the transportation of the filter media.

2 Literature Review

2.1 Introduction

Diesel engines are known for excellent fuel economy and low CO and HC emissions, but with that come at the expense of high NOx and PM emissions relative to their gasoline counterparts. PM is formed from carbonaceous particulate that is comprised of inorganic and organic compounds [10]. The organic compounds are formed from engine lubrication oils, unburned fuel, PAH and nitro-PAHs [8]. These PAHs are highly carcinogenetic and also known to increase the risk of heart and respiratory diseases [9]. For this reason SOF is monitored from PM formed from diesel combustion. SOF is determined through an extraction process of a PM sample. In this section three different extraction processes will be explained and compared: microwave, supercritical, and Soxhlet along with SOF derivation, composition and health effects. Although present (2007 and newer model year) on-road HDDE's implement some form of particulate traps in the exhaust and hence change the PM mass and type coming out of the exhaust, this discussion will only focus on engine-out PM.

2.2 SOF Derivation

In pre-2007 HDDE regulations, diesel emission "particulates" are measured as any material deposited on the filter from the dilute exhaust gases sampled at a temperature lower than 125°F but above 68°F [9]. These particulate are made up of three different matters: solid fraction (SOL), SOF, and sulfate particulates (SO_4). SOL is composed of elemental carbon and ash, whereas SO_4 is composed of sulfuric acid and water. One reason PM is so heavily restricted is SOF is derived from engine lubricating oil, unburned fuel and species formed from partially burned fuel [1]. As shown in Figure 2- 1, SOF makes up on average 32% of the engine-out PM

sample, where over two-thirds comes from the engine lube oil [8]. SOF formation depends highly on operating conditions of the engine such as test modes and duty cycles.

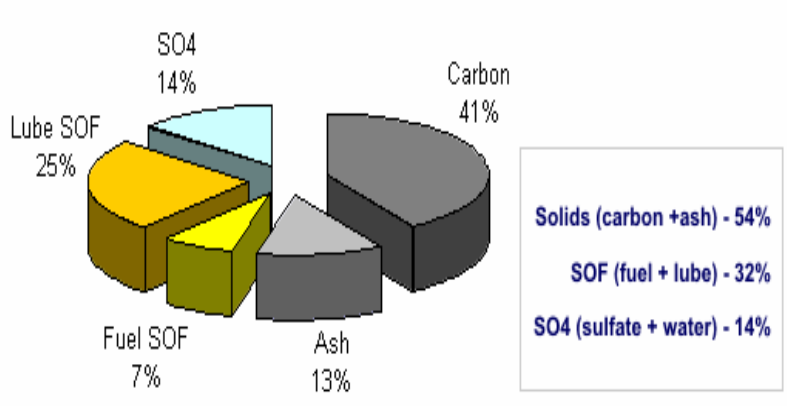

Figure 2- 1 PM makeup [8]

For some engines the SOF may only constitute 10% or less of the total PM deposited, this is known as a "dry" sample. Other engines may have a SOF of over 50%, up to 80%, and this is referred to as a "wet" sample. SOF formation is mainly affected by engine load and exhaust temperature. Figure 2- 2 shows as engine load and exhaust temperature increases SOF formation decreases. At low engine load and with temperatures lower then 100°C SOF is at almost 50% of PM, but as the engine reaches full load and temperatures greater then 400°C SOF drops to less than 5%.

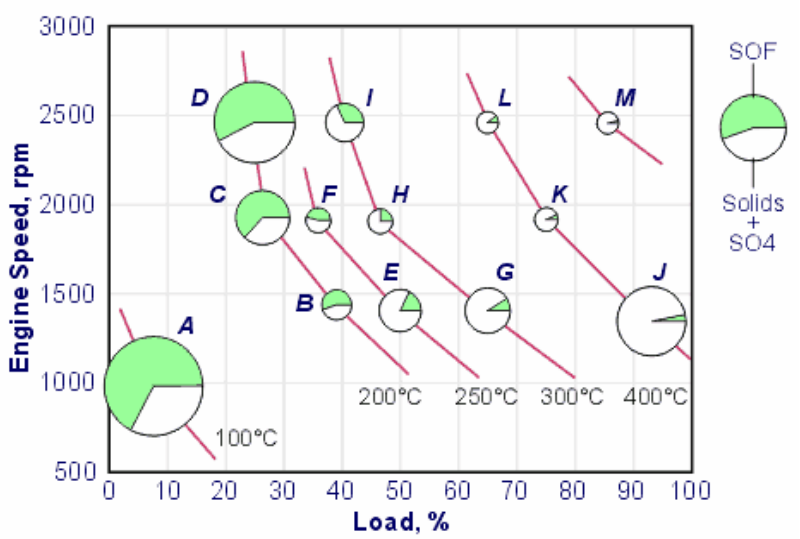

Figure 2- 2 Engine load and Exhaust Temperature effects on SOF formation [7]

2.3 SOF Composition

SOF is mainly composed of engine lube oil derived hydrocarbons, and some hydrocarbons that come from high temperature boiling end fuel hydrocarbons. Diesel lube contains hydrocarbons that range from C18 to C36 whereas diesel fuel contains hydrocarbons from C12 to C20 [8]. An analysis of an SOF sample with a chromatograph illustrate that the majority of the hydrocarbons contain mostly hydrocarbon ranging from C20 to C32 corresponding with engine lube oil as shown in Figure 2- 3.

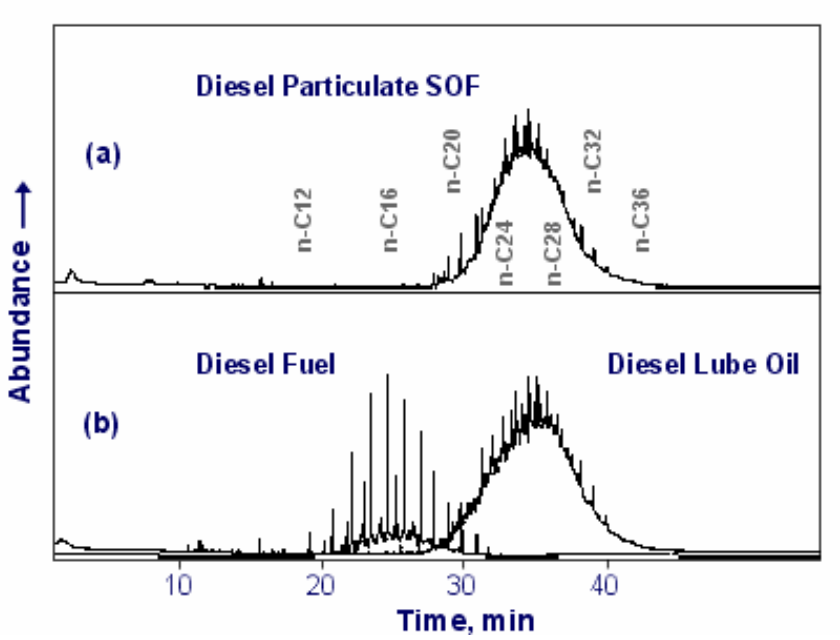

Figure 2- 3 A chromatograph of a SOF sample [8]

2.4 Health Effects

The most harmful effect of SOF is that it contains most of the PAH and nitro-PAHs emitted with diesel exhaust emissions [1]. PAHs are carcinogens that are linked to heart diseases and respiratory disease [9]. PAHs are made up of one to seven fused aromatic rings joined in various cluster forms as show in Figure 2- 4.

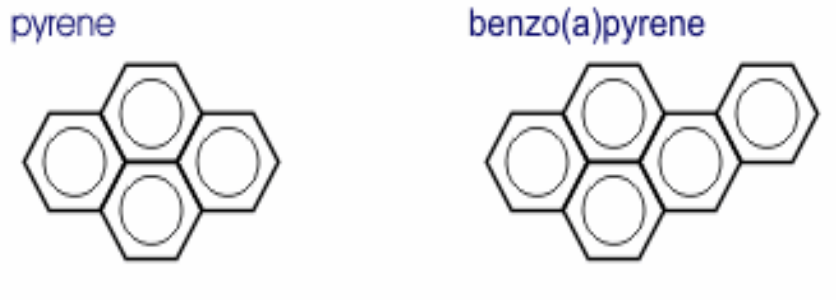

Figure 2- 4 Example of 4 and 5 Ring PAH [8]

PAHs are under close observation by the US EPA, they classify PAHs as an air toxin or polycyclic organic matter (POM). This is a class that is defined by having one or more benzene

rings and a boiling point of 100°C and higher [8]. Seven major POMs are classiefed as a major human carcinogen and include benz(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, chrysene, 7,12-dimethylbenz(a)anthracene, and indeno(1,2,3-cd)pyrene which all are found in SOF.

2.5 SOF Extraction Techniques

Since the PM is composed of more than just SOF, such as SOL and SO_4, extraction methods must be used to separate the SOF from all other compounds found in the PM. Three such techniques are microwave, supercritical, and Soxhlet and are detailed below.

2.5.1 Microwave Extraction

The use of microwave energy to help in the extraction of organic material was first achieved in the late 1980s [11]. Microwave extraction uses polar organic solvents in contact with solid samples heated in a microwave to extract organic contaminants [12]. Microwave energy is non ionizing radiation; it causes molecular motion by migration of ions and rotation of dipoles. This extraction technique needs a solvent to separate the organic matter from inorganic matter. For normal extraction techniques benzene is used, but benzene is a non-polar solvent, so it is not affected by the microwaves energy. For this reason a polar additive must be introduced such as dichloromethane. When the microwave energy is introduced to the polar solvent, heat is generated and cycled through the PM sample causing the organic material to dissolve.

2.5.2 Supercritical Extraction

During supercritical extraction the fluid or solvent is heated and pressurized to its critical point (CP). The critical point is where the vapor and liquid coexist. A fluid reaches a supercritical point (as shown in Figure 2- 5) when the temperature and pressure are higher than

the corresponding critical values [13]. Once this point is met a fluid can no longer transition to a liquid phase, regardless of the amount of pressure applied.

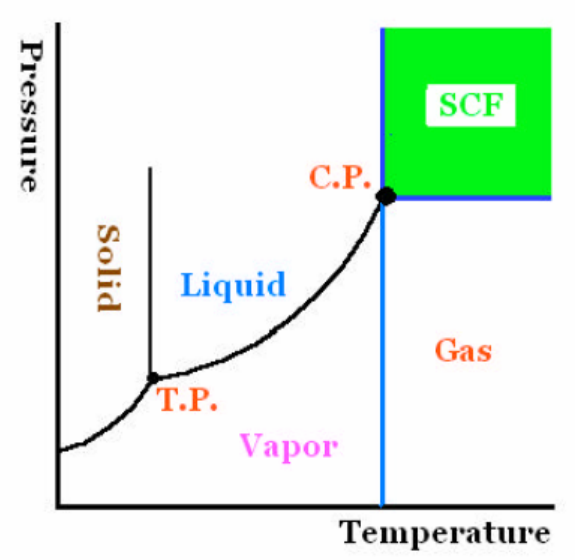

Figure 2- 5 Supercritical point [13]

Fluid at the supercritical point has a much higher diffusivity than for a liquid allowing it to readily penetrate porous and fibrous solids; this can offer excellent catalytic activity [9]. Supercritical fluids can be used to extract SOF from samples. "The main advantages of using supercritical fluids for extractions is that they are inexpensive, extract the SOF faster and more environmentally friendly than organic solvents. For these reasons supercritical fluid CO_2 is the reagent widely used as the supercritical solvent [14]."

2.5.3 Soxhlet Extraction

Soxhlet extraction was invented in 1879 by Franz von Soxhlet and is illustrated in Figure 2- 6. The Soxhlet process works by placing the PM sample into a thimble (4) made from either thick filter paper or glass with a false bottom made out of a filter substance [15]. The thimble is placed onto a flask containing the solvent (in most cases dichloromethane is used but there are many other solvents depending on what the extraction is for). The solvent is then heated to the

boiling point which enables the solvent vapor to travel up the distillation arm and condenses in the thimble. The top of the apparatus has a condenser to ensure none of the solvent is able to escape, it cools down and drips back to the stirred bath (2). The chamber housing the thimble then completely fills with warm solvent dissolving part of the organic matter [15]. Once the solvent reaches the level indicated at (6), the solvent is then automatically emptied by the siphon arm (7) taking the dissolved organic material out of the sample. This process is repeated up to 600 times and may take as long as 24 hours to complete and fully dissolve all of the SOF. After the extraction has completed the PM filter sample is permitted to completely dry or evaporate all of the solvent and only leave the inorganic material [15].

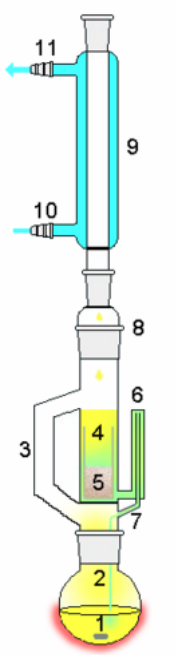

Figure 2- 6 Soxhlet extractor [8]

2.6 Extraction Results

2.6.1 Microwave Extraction

One microwave extraction study used different concentration of a dichloromethane and benzene mixture to extract the PM sample. In this study, the dichloromethane-benzene ratio was changed over ten different tests from a molar fraction of 0.1475 to 0.8425 and a run time from 10 to 32 minutes. Since a dual solvent was used two maximum extraction cases are observed as shown in Figure 2- 7 [10]. One instance is high dichloromethane-benzene ratios with low temperatures and high extraction times. The other case of low dichloromethane-benzene ratios with higher temperatures and shorter extraction times [10].

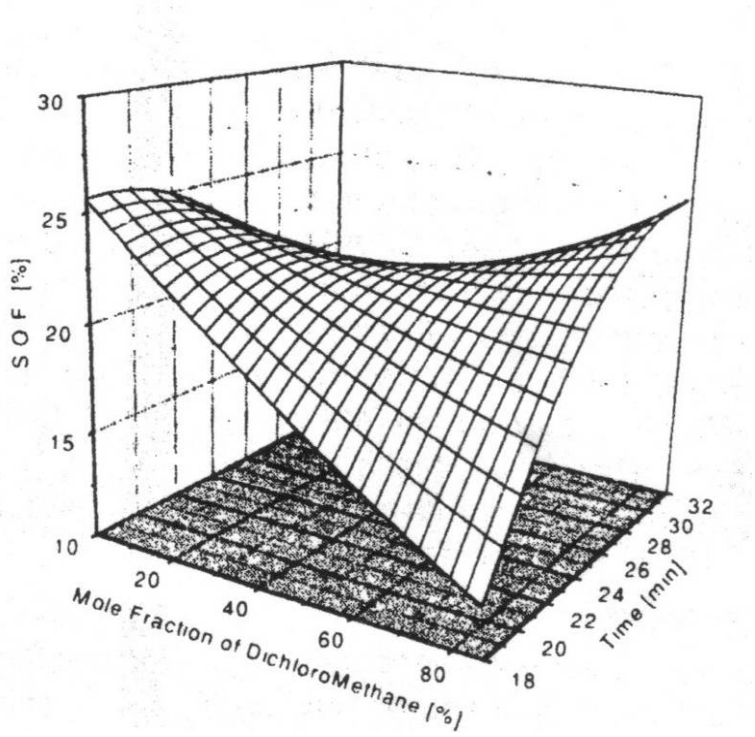

Figure 2- 7 Results of factorial design in microwave extraction of SOF in diesel PM [10]

2.6.2 Supercritical Extraction

Supercritical extraction was performed using CO_2 and CH_2Cl_2 as a modifier. The process was performed at the highest temperature and pressure achievable (T=130°C and P=300atm due to lab restrictions). Supercritical extraction only needs 40 minutes to complete an entire test and shows similar results as microwave extraction [10].

2.6.3 Soxhlet Extraction

For the same PM samples, experiments were performed changing the molar fraction of dichloromethane in benzene from .025 to 1. Also the number of cycles was increased from 100 to 400 [16]. As shown in Figure 2- 8 the optimal condition for extraction is a dichloromethane-benzene ratio of 70:30 and a relatively high number of cycles. This can be explained because hydrocarbons with low molecular weight are extracted more easily using a solvent that is heavy in dichloromethane, whereas hydrocarbons that are heavier in molecular weight need a solvent

containing benzene in order to extract the most possible SOF. This is why a binary mixture solvent is beneficial over a single component solvent for the SOF extraction process [10].

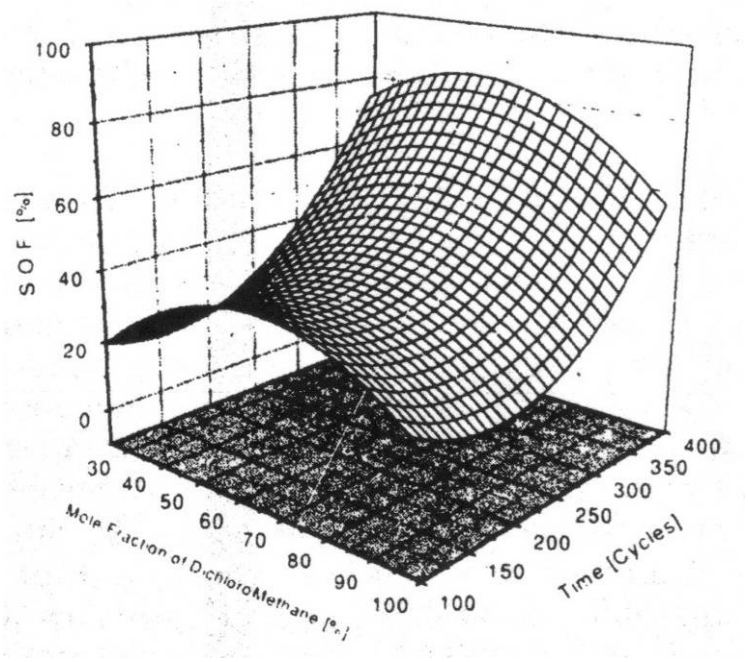

Figure 2- 8 Results of factorial design in Soxhlet extraction of SOF in diesel PM [10]

3 Experimental Procedures and Equipment

3.1 Introduction

All experiments conducted for this research were performed at the Center for Alternative Fuels, Engines, and Emissions (CAFEE) at West Virginia University which operate following the 40 CFR Part 86, Subpart N and the standards set by ISO 8178 [2]. There were five different engines used to gather particulate matter for this experiment: 1991 Detroit Diesel Corporation S60, 1992 Detroit Diesel Corporation S60, 1992 rebuilt Detroit Diesel S60, 1999 Cummins ISM 370, and 2004 Cummins ISM 370. This chapter will go into detail to explain all equipment and procedures used to perform this study.

3.2 Exhaust Gas Analyzers

Although not directly related to the SOF procedures, the gaseous emissions sampling system is used in the collection of emissions at CAFEE during an emissions test. A description of these systems is provided here to provide a complete description of the laboratory. Additionally, the gaseous emissions data provided a means to verify the repeatability of the engine emissions. The gaseous emissions data are not discussed in this work.

The WVU CAFEE has an array of gas analyzers, heated sampling probes, heated pumps, and heated sampling lines to measure HC, NOx, CO, and CO_2. These sensors are located in the exhaust emission analyzer bench [Figure 3- 1] that receives exhaust emission via the full scale dilution tunnel (explained in a latter section). These analyzers are calibrated in accordance with 40 CFR Part 86, Subpart N using a 10-point calibration curve that is certified within an accuracy of 1% traceable to National Institute of Standards and Technology (NIST).

Figure 3- 1 Exhaust Analyzer Bench

3.2.1 Hydrocarbon Analyzers

HC is measured using a Rosemont Analytical Model 402 with HFID technology for measuring HC concentrations. This analyzer uses an internal filter and pump and receives exhaust emissions via a heated line, maintained at 375 ± 20°F to prevent condensation of heavier hydrocarbons. Once passed through the internal filter a flame composed of 60% helium and 40% hydrogen burns the hydrogen-carbon molecules. This creates positively charged ions and electrons. A cathode and an anode are used to attract these ions and electrons, which generates current that is proportional to the amount of carbons atoms present in the exhaust gas. This current is processed into an analog voltage with a readable output of 0.0 to 100.0. This represents zero to full scale of the calibration gas used.

3.2.1 Oxides of Nitrogen (NOx) Analyzer

NOx is measured using the Rosemount Analytical Model 955 CLA as a primary device while a secondary device, the Eco Physics CLD 844 CM h, provides for an independent NOx value for quality assurance. Both these analyzer use the principle of chemiluminescence. Any NO_2 in the dilute sample stream is converted to NO by a catalyst inside the analyzer. This NO stream is then reacted with ozone to produce NO_2. In this excited state, a small portion of the molecules decay by emitting photons. Using a photo-detector, the analyzer can measure the amount of light given off by the decaying molecules and convert this light signal into a proportional voltage. An analog voltage is displayed from 0 to 5V that represents zero to full scale of the calibration gas used.

3.2.2 CO_2 and CO Analyzers

CO_2 is measured using the HORIBA AIA-210 NDIR whereas CO uses the HORIBA AIA-210LE NDIR. A NDIR (non-dispersive infrared) analyzer for CO_2 and CO works by emitting only light with the wavelength that the gas being measured can be absorbed. The gas concentration is then measured electro optically by its absorption of the specific wavelength and then converted to a full scale read out. In the CAFEE laboratory, two CO analyzers are used, a low-range analyzer to measure CO up to 1000ppm and a high analyzer to measure 1000ppm to 5000ppm. This allows a more accurate measurement of the full span of CO emissions based on the type of engine and test cycle being run.

3.3 Full Flow Exhaust Dilution Tunnel

To simulate real world environments when analyzing diesel exhaust emissions, a full scale dilution tunnel is implemented. This tunnel provides ambient air to mix with raw diesel exhaust emissions in order for reactions to occur to simulate exhaust entering the atmosphere. This also allows exhaust gases to cool and eliminates any condensates that may occur. The

dilution tunnel is composed of an 18inch diameter stainless steel duct, 40feet long as shown in Figure 3- 2.

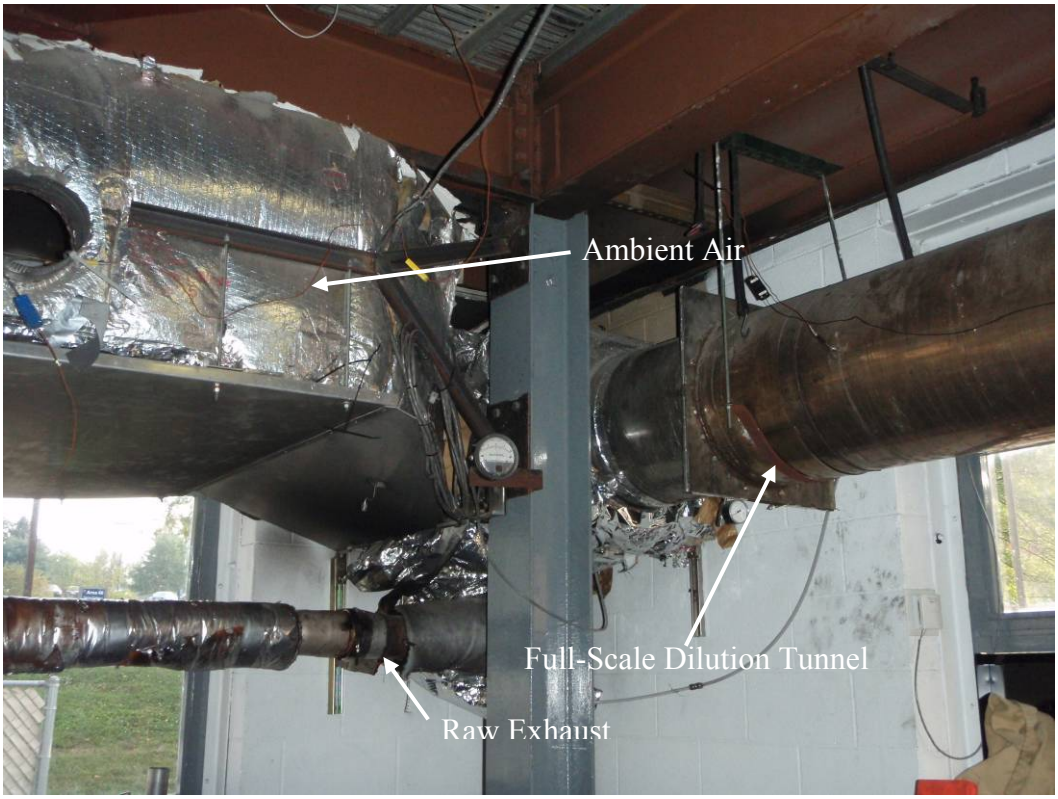

Figure 3- 2 Full Scale Dilution Tunnel

Temperature controlled ambient air is pulled through up to four critical flow venturis (CFV) using a 75hp blower. At the entrance to the tunnel, the raw exhaust and ambient air introduced at a mixing orifice to promote adequate mixing of these two streams. The four CFVs are composed of one 400scfm venturi and three 1000scfm venturis. These venturis can be opened or closed to provide a total flow rate of 3400scfm. The venturi flow rate is proportional to temperature and pressure thus allowing the mass flow rate through the tunnel to be calculated using the equation below:

$$Q(scfm) = K_v \frac{P_{abs}}{\sqrt{T_{abs}}}.$$

Equation 3- 1

Where, Q (scfm) is the standard volumetric flow rate at 29.92inHg and 68°F, K_v is the calibration constant for the operating venturi, P_{abs} is the absolute pressure before entering the venturi, and T_{abs} is the absolute temperature of the diluted exhaust before the venturi entrance.

The sampling probes for the analyzer are placed 10 diameters (180inches) downstream to collect the diluted exhaust as shown in Figure 3- 3. The diluted exhaust is then piped to the sensors using heated lines and filters to prevent condensation.

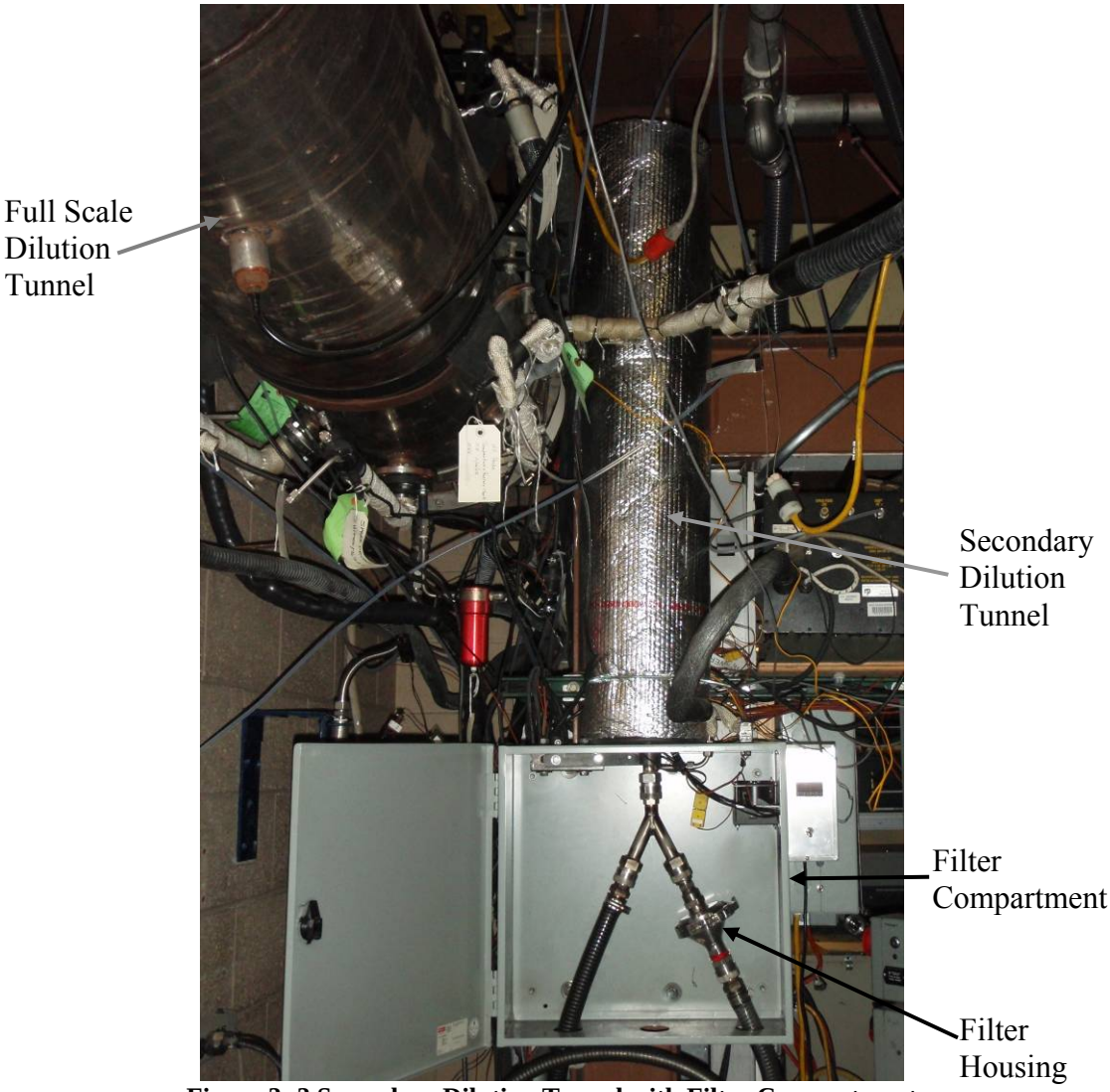

Figure 3- 3 Secondary Dilution Tunnel with Filter Compartment

3.4 Particulate Matter Sampling System.

Particulate matter is gathered using a gravimetric-based approach. A slipstream is taken from the main dilution tunnel and routed to a secondary dilution tunnel. This secondary dilution tunnel, as shown in Figure 3- 3 and Figure 3- 4, is held to a proportionally equivalent mass flow rate of the main dilution tunnel.

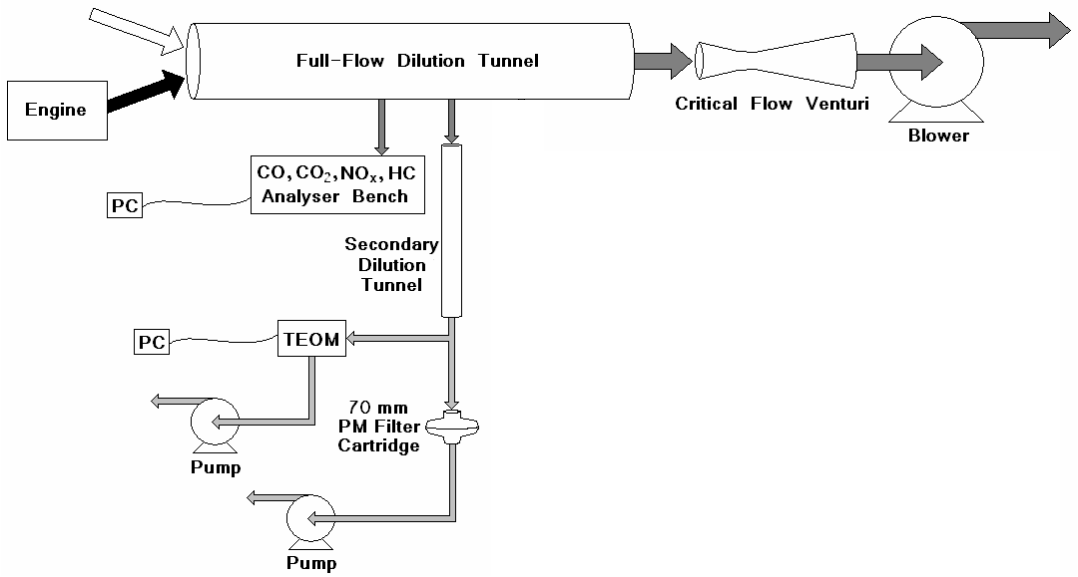

Figure 3- 4 Schematic of Full Scale and Secondary Dilution Tunnels

The diluted air is drawn through a stainless steel filter housing (shown in Figure 3- 3, Figure 3- 5, and Figure 3- 6), containing a primary and secondary T60A20 70mm Pallflex fluorocarbon coated glass filter. The volumetric flow rate through this secondary dilution tunnel is regulated using a mass flow controller. The mass flow rate is calibrated yearly using a laminar flow element (LFE) manufactured by Meriam Instruments (Model No. 50MC2-6) as specified by the CAFEE Emissions Laboratory Standard Procedures [18]. The filter face is maintained at a temperature below 52°C per requirements of the 40 CFR Part 86, Subpart N [2].

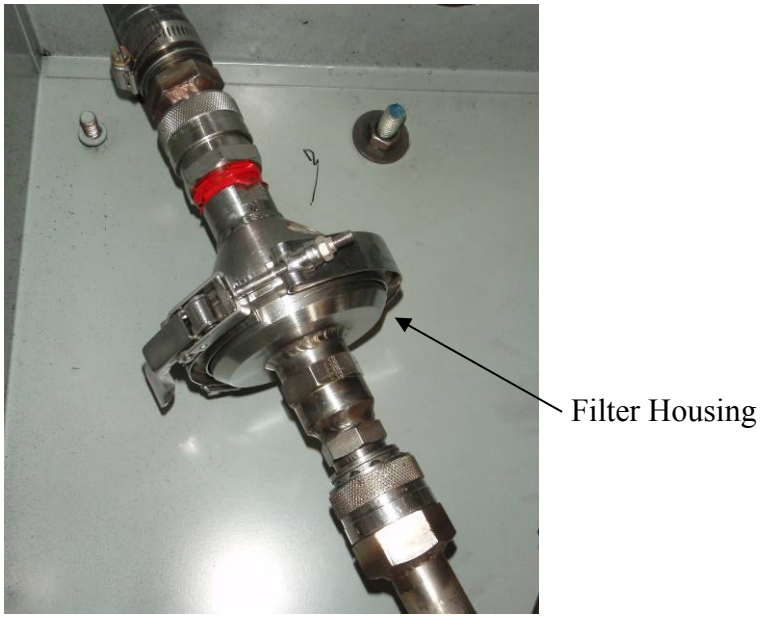

Figure 3- 5 Stainless steel filter holder connected in line with the Secondary Dilution Tunnel

Figure 3- 6 Stainless steel filter housing separated into it's components

3.5 Clean Room Weighing and Filter Conditioning

The WVU CAFEE has an ISO Class 6 clean room, where all conditioning and weighing of filters are performed. Although this clean room exceeds the requirements for filter weighing for the engines tested, it was used in this program. As specified in 40 CFR Part 86, Subpart N

[2], the filters are pre-conditioned in an environmentally controlled room for at least one hour before PM weighing. The room is maintained at a temperature of 22 ± 3°C and a dew point of 9.5 ± 1°C. Initially, the filters are pre-conditioned before the initial pre-weight. Prior to the initial pre-weight, reference filters are weighed during each weighing session to track the amount of variation on these filters as a quality check. These reference filters are maintained for the entire length of the emissions testing period. After the reference filters are weighed, the test filters are weighed to obtain the filter's pre-weight before the test. The filters are weighed using a Sartorius SE2-F ultra-microbalance. This microbalance has a readability of 0.1µg and a repeatability of ±0.25µg [19]. Once a test cycle has been completed and PM is collected, the filters are placed back into the clean room and brought back to equilibrium condition for at least one hour before post weighing. The microbalance located in the clean room is shown in Figure 3- 7. The post test weight is collected in a similar manner as the pre-weight measurement.

Figure 3- 7 Microbalance

An in-house computer software system was designed and written to record all weight measurements gathered from the reference filters and PM deposited filters. This software utilizes

a barcode scanning system, which enables the user to track all filters by scanning a unique barcode that is assigned to each Petri dish housing the filters. The software then tracks each weight entered, time, date, and user. The software also tracks temperature, humidity, dew point and records a running average to alert the user if the clean room measure was out of allowed tolerance in any of these areas. Finally this system is used to record when a filter has been checkout of the clean room for testing, when the filter has been returned to the clean room, and when the filter has been in equilibrium conditions for at least one hour. If the filter is then tried to be post weighed and has not meet the one hour requirement, it will alert the user and not allow the weight measurement to be recorded. A visual display is shown in Figure 3- 8 of the software system.

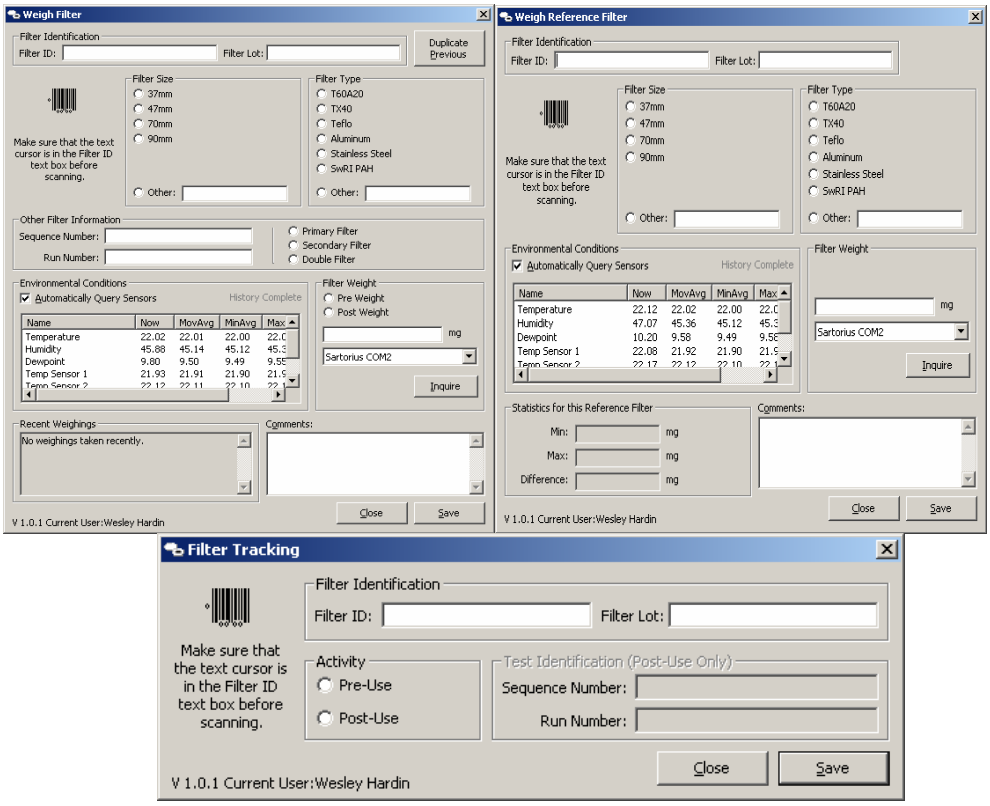

Figure 3- 8 Filter weight tracking software

3.6 SOXHLET Extraction

3.6.1 Introduction

Soxhlet extraction is a process that involves placing a filter with deposited PM into an extraction device to dissolve all organic matter in the PM while leaving only inorganic matter behind. From this, the soluble organic fraction can be calculated. The Soxhlet process used for this study is governed by the "Test Method for Soluble Organic Fraction (SOF) Extraction" [20] as stated by the State of California Air Resources Board. Although there are other processes and solvents that may be used for SOF determination, the California Air Resources Board method was of interest since the CAFEE laboratory performs research on behalf of the California Air Resources Board and prior test programs using external laboratories to extract the SOF has shown high variability in the SOF data. The following section will explain in detail how CAFEE uses the Soxhlet extraction process to measure the SOF following the California Air Resources Board requirements.

3.6.2 Soxhlet Laboratory Setup

The Soxhlet extraction process uses six Ace Glass 6716 extraction apparatus, a Glas-Col heating mantle, and Glas-Col heating control module as shown in Figure 3- 9. The extraction apparatus is made up of four parts: (from top to bottom) condenser, 45/50 extractor, thimble, and 125ml flask. The condenser has cold tap water pipe to it, entering at the bottom and exiting at the top. Each condenser is linked to the next unit to providing cooling for the vaporized solvent to condense and drain back into the extractor. The whole assembly is contained inside a chemical hood to prevent fumes escaping to the room.

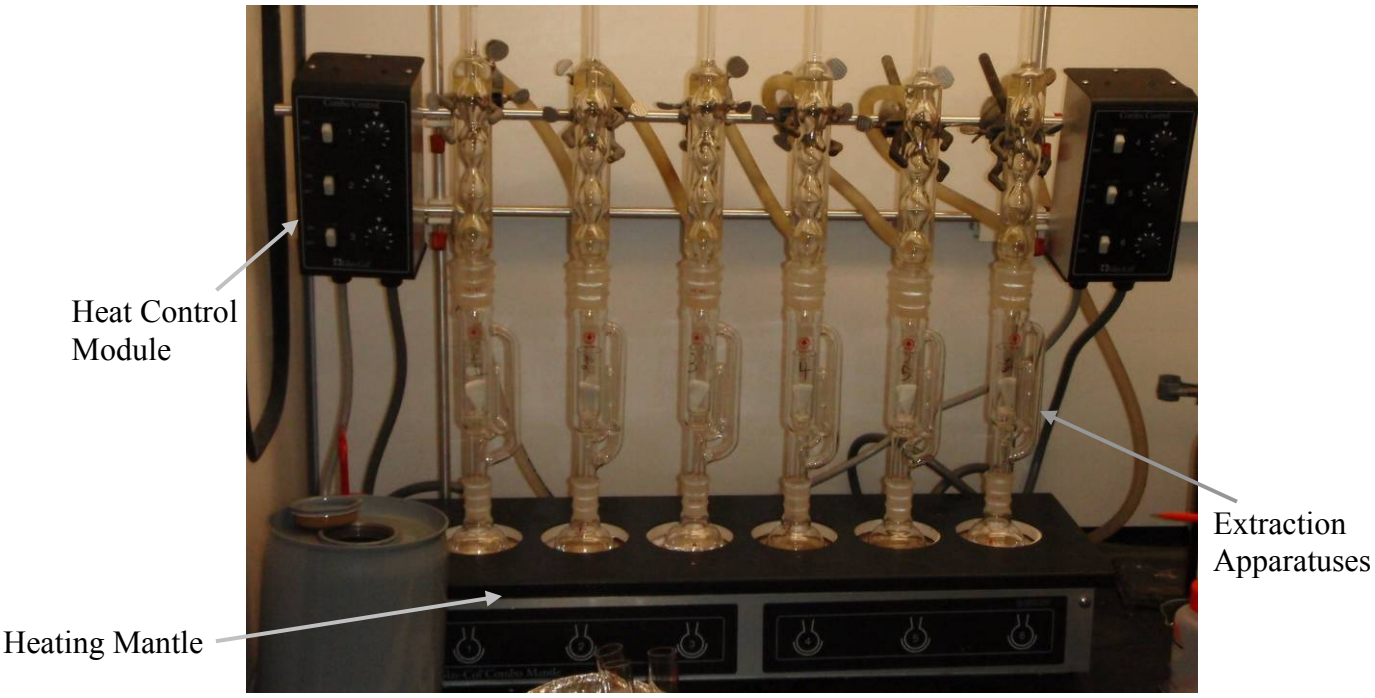

Figure 3- 9 Extraction Apparatus, Heating Mantle, and Heat Control Module

3.6.3 SOXHLET Extraction Procedure

To use the extraction apparatus, first the filter pair with the deposited PM must be folded using forceps and a spatula. This is done by laying the primary and secondary filter with PM sided towards one another on a clean stainless steel work surface. The two filters are then folded in halves, then quarter, and finally eights while only being touched with the forceps and spatula, as shown in Figure 3- 10. This is done in the clean room to prevent containments from depositing on the filters. The filter is then placed into a glass thimble as shown in Figure 3- 11. The thimble and filter are then placed into a sealed container for transportation to the extraction apparatus located in the Engineering Sciences Building. Once at the extraction apparatus, 80ml of solvent is placed into the flask along with three boiling chips (Boileezers). The solvent used for this process was composed of a toluene:ethanol binary solvent 32:68 wt/wt. with a boiling point of 76.7°C as required by the California Air Resources Board test method [20]. Boiling chips are used to prevent the solvent from becoming superheated and boiling violently [21]. The thimble is

removed form the container, placed carefully into the extractor, and the whole assembly is then placed onto the heating mantle. Note that rubber gloves are used to handle the thimble and glassware to prevent contamination of the glassware with oils from the skin and to prevent the solvent contacting the skin. The heat control module and the water valve are turned on. The heat control module is set to apply heat to the flask such that the solvent is cycled though the extraction process once every 15 minutes. Once the solvent has cycled for 8-12 hours (32 to 48 cycles), the heat is turned off and the extractor is allowed to cool. The apparatus is then taken apart and the thimble is removed from the extractor. The thimble with the filter is left in the chemical hood for six hours to allow the filter to dry. After the filter has dried, it is placed back in the sealed container and transported to the clean room. Therein the clean room, the filter is removed from the thimble using forceps, placed into a Petri dish, and allowed to reach equilibrium for at least one hour. The filter is then weighed, the weight recorded, and the SOF determined.

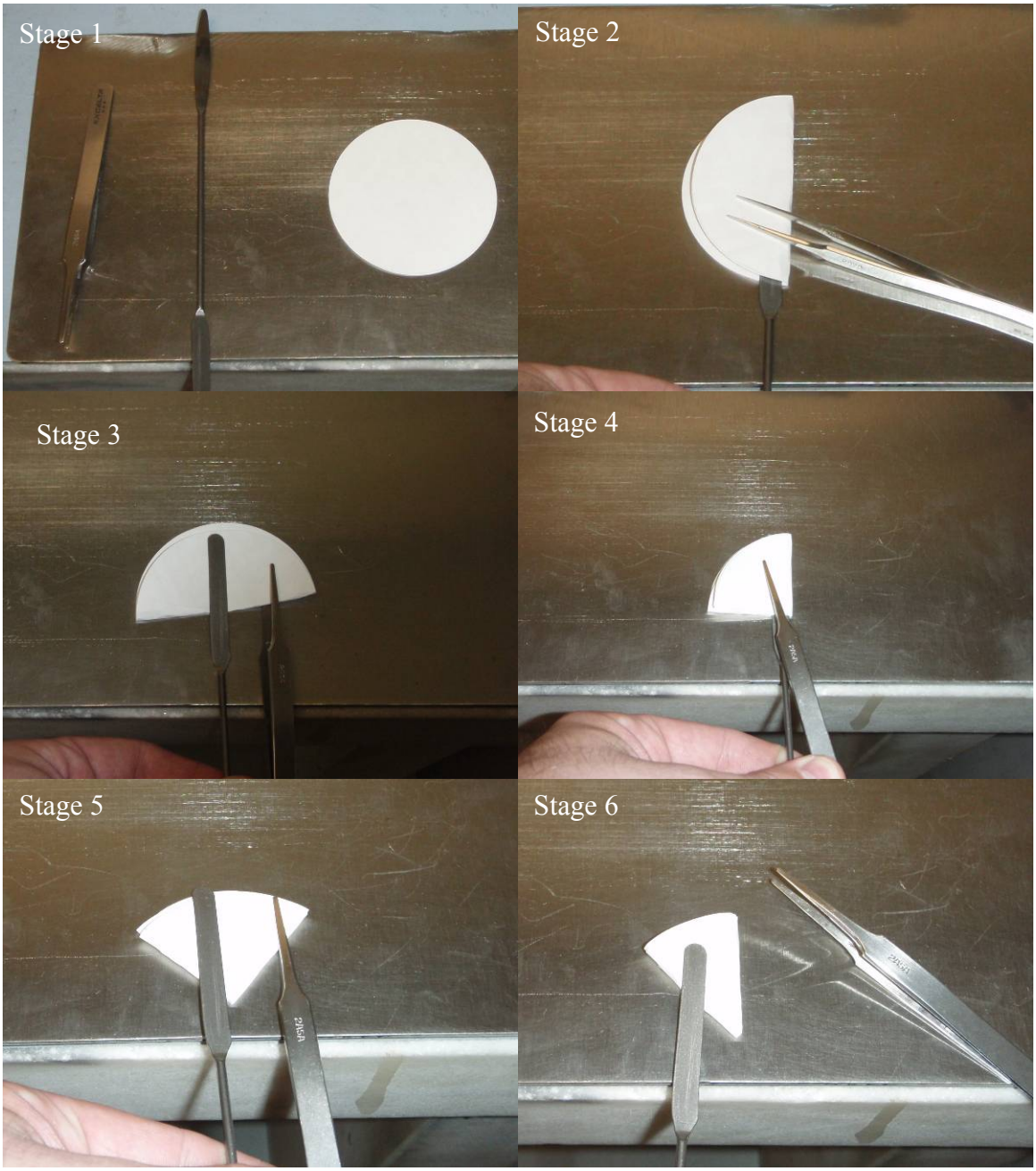

Figure 3- 10 Filter Folding Procedure

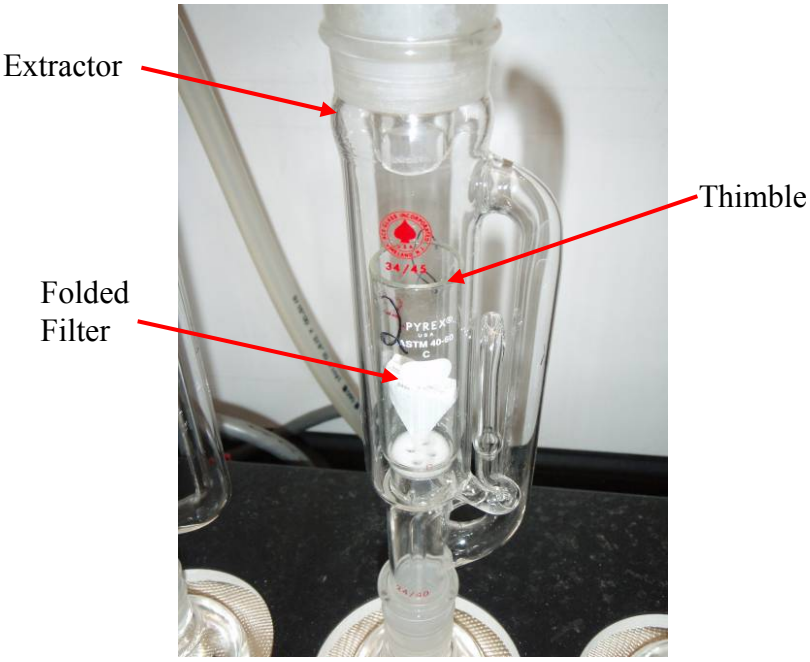

Figure 3- 11 Thimble with filter inserted into extractor

Experimental Configuration

The PM-loaded filters used for this work were obtained from prior studies where the filters were stored in their original glass Petri dishes or in anti static bags. The prior studies were generally from a 1992 Detroit Diesel Corporation Series 60 HDDE with the same fuel but at different time periods. Although different filters were used from different time periods with possible different fuels, the experiments conducted in this study were selected to use the same batch of filters from a common program to examine test-to-test variability. In other words, the uncertainty in the SOF measurement from a batch of filters were of interest and not the absolute value. It is noted that 40 CFR Part 86, Subpart N requires reference filters to be changed out during monthly intervals and that test filters' pre and post weights be done with the same reference filter pair. Due to the nature of the experiments being conducted over many months, this requirement was not meet. However, additional reference filters were collected to account for the extended duration of this program. It is also noted that the reference filters used for the

PM-loaded filters net mass determination and the reference filters used for the reporting of this data were generally different.

Only 70 mm T60A20 fiber filters were used in this study since these filters are specifically called for in 40 CFR Part 86, Subpart N for the testing required by the California Air Resources Board. Two filters were used as a pair with the nominal mass of these filters pair of 300mg. The net mass from an FTP test was on the order of four to five mg. The uncertainty (one standard deviation) in repeated reference filter weighing was approximately 0.006mg (6 micrograms), the uncertainty in the zero reading of the scale was approximately 0.001mg (1 microgram), and the uncertainty in the calibration reading of the scale was approximately 0.0007mg (0.7 microgram). An overall uncertainty in the measurement of a filter is assumed to be 0.010mg (10 micrograms) as required by 40 CFR Part 86, Subpart N. The variations listed were from a span of more than a one month period and from different personnel weighing the filters.

For this research, the CARB regulations govern that the test must be a minimum of 40 cycles as a guideline. Each cycle takes a minimum of 12 minutes to complete, for a total cycling time of 8 hours. It is noted that cycling time could last up to 72 hours for different applications for Soxhlet extraction such as if organic matter being further extracted and tested for the individual species; however, the cycle times in this program were less than 24 hours.

Table 3- 1 Test Performed and Description

Tests Performed			
SOF Variability		**Shipping and Weighing**	
Type of Test	Description	Type of Test	Description
		Set 1 Control	Clean filters placed in clean room and weighed continuously for a month
COV% of SOF	57 sets of PM Deposited filters extracted and weighed	Set 2 Petri Ship Control	Clean filters placed in Petri dishes then shipped, returned, and weighed
Weight Gain over Time		Set 3 Petri Ship Extract	PM deposited filters shipped, returned, extracted, and weighed
Type of Test	Description	Set 4 Anti-Static Ship Control	Clean filters placed in anti-static bags, shipped, returned, and weighed
Set 1 Control	Clean filters placed in clean room and weighed continuously for a month	Set 5 Anti-Static Extract	PM deposited filters placed in anti-static bags, shipped, returned, extracted, weighed
Set 2 Transport Control	Folded, place in SOF thimble transported to experiment room and back to clean room	Set 6 Freezer Petri Control	Clean Filters, placed in petri dishes, placed in freezer, placed in clean room, weighed
Set 4 Soxhlet Extraction	Soxhlet Extraction performed on filters with PM and continuously weighed for a month	Set 7 Freezer Petri Extract	PM deposited filters, placed in petri dishes, placed in freezer, extracted, weighed
Set 5 Sonication	Clean filters, first sonicated, then extracted, then weighed continuously for a month	Set 8 Freezer Petri Ship Control	Clean Filters, placed in petri dishes, placed in freezer, shipped, returned, placed in clean room, weighed
Set 6 Oil deposited	1 mg of 15-W40 oil deposited on clean filter. Placed in clean room and weighed continuously for a month	Set 9 Freezer Petri Ship Extract	PM deposited filters, placed in petri dishes, placed in freezer, shipped, returned, extracted' placed in clean room, weighed
Set 7 Oven Baking	Clean filters baked in oven at 375 F, for 1 hour, then weighed continuously for one month	Set 10 Extracted	PM deposited filters, extracted, placed in clean room, weighed

The above table is an outline of all test performed for this study. The first set of test performed were 52 sets of PM deposited filters that were extracted using the Soxhlet extraction process. These sets of filters were used to test and prove the variability of the test procedure for determining SOF. The next sets of test performed were to examine the weight gain over time from different processes that T60A20 filters may experience. Configuration other than just PM extracted filters were used to try to determine the root cause of post SOF extraction weight gain in a controlled environment. Finally the last sets of test were performed to test the impact of shipping had on extraction results.

4 Results and Discussions

4.1 Introduction

For this study, three outcomes were desired; first develop a test procedure that would reduce variability for SOF determination when using Soxhlet extraction. The second was to examine how post extraction weight can vary over time in a controlled environment. The last objective was to explore handling issues with the transportation of the filter media. This chapter will explain in detail results for each objective.

4.2 Variability in SOF Determination

The main purpose of this study was to deliver a procedure to determine SOF while achieving a low variability of results. This was achieved by creating a test procedure that could be followed by different laboratory personnel while obtaining the same results. While doing this, many factors in SOF determination were observed in order to produce lower variability. In order to test the variability for this procedure, groups of filters were selected that were run as a set of FTP's. Since these filter groups were collected from repeat FTP tests using the same engine and setup (engine set point file, fuel, intake and exhaust settings, etc.) they produced relatively the same amount of deposited PM. Each of these sets were then extracted and weighed at the same time to check variability of the procedure. SOF was found using the following equation.

$$SOF = \frac{TestMass_{final} - ExtractionMass}{TestMass_{final} - TestMass_{initial}}$$ **Equation 4- 1**

Where the $TestMass_{initial}$ is the mass of the filter set prior to the engine emissions test (pre-test mass), $TestMass_{final}$ is the mass of the filter set after the engine emissions test (post-test mass), and *ExtractionMass* is the mass of the filter set after the SOF.

Once the SOF is found for individual FTP tests, the coefficient of variation (COV) was calculated using

$$COV = \frac{\text{Standard Deviation}_{\text{FTP}}}{\text{Average}_{\text{FTP}}} \times 100\% \quad \textbf{Equation 4- 2}$$

Where the $\text{Standard Deviation}_{\text{FTP}}$ is the standard deviation of the set of FTP tests and the $\text{Average}_{\text{FTP}}$ is the average of the set of FTP tests. Quantifying the variability is desired because CARB has implemented a passage criterion for all fuel additives being tested as shown in

$$\bar{x}_C \le \bar{x}_R + \delta - S_p\left(\sqrt{2/n}\right)t(a, 2n-2). \quad \textbf{Equation 4- 3 [3]}$$

Where $\bar{x}_C$ = Average SOF during testing with the candidate fuel;
$\bar{x}_R$ = Average SOF during testing with reference fuel;
δ = Tolerance level, equal to 6 percent for SOF;
S_p = Pooled standard deviation;
$t(a, 2n-2)$ = The one-sided upper point of t distribution with a=0.15 and 2n-2 degrees of freedom;
n = Number of paired candidate and reference fuel tests, generally either 20 or 21.

As the COV of the SOF extractions is lowered, the pooled standard deviation will lower. The lower the pooled deviation, the larger the $\bar{x}_C$ of the candidate fuel can be, without failing the passage criterion set forth by CARB. Equation 4- 4 can be rearranged as:

$$\frac{\overline{x}_C - \overline{x}_R}{\overline{x}_R} \le 0.06 - \frac{S_p}{\overline{x}_R} C \text{ . Equation 4- 4}$$

Where δ has been set to 0.06 (6%) and

$$C = \left(\sqrt{2/n}\right) t(a, 2n-2) \text{ . Equation 4- 5}$$

For 20 tests (n=20) and a=0.15, C=0.33228 and for 21 tests, C=0.32405. Figure 4- 1 illustrates the range of allowable variation in the pooled deviation and difference between the candidate and reference fuel SOF values relative to the reference fuel SOF average value. For no variation (Sp=0) in the test-to-test SOF values, the candidate fuel SOF average value may be 6% higher than the reference fuel SOF average value. However, as the variation in the test-to-test SOF values increase, the allowable difference between the candidate fuel and reference fuel SOF average values decrease to where the candidate fuel SOF value must be less than the reference fuel SOF value for a pooled variation of ~18% and the candidate fuel SOF average value must be 10% lower than the reference fuel SOF average value for a pooled variation of ~48%.

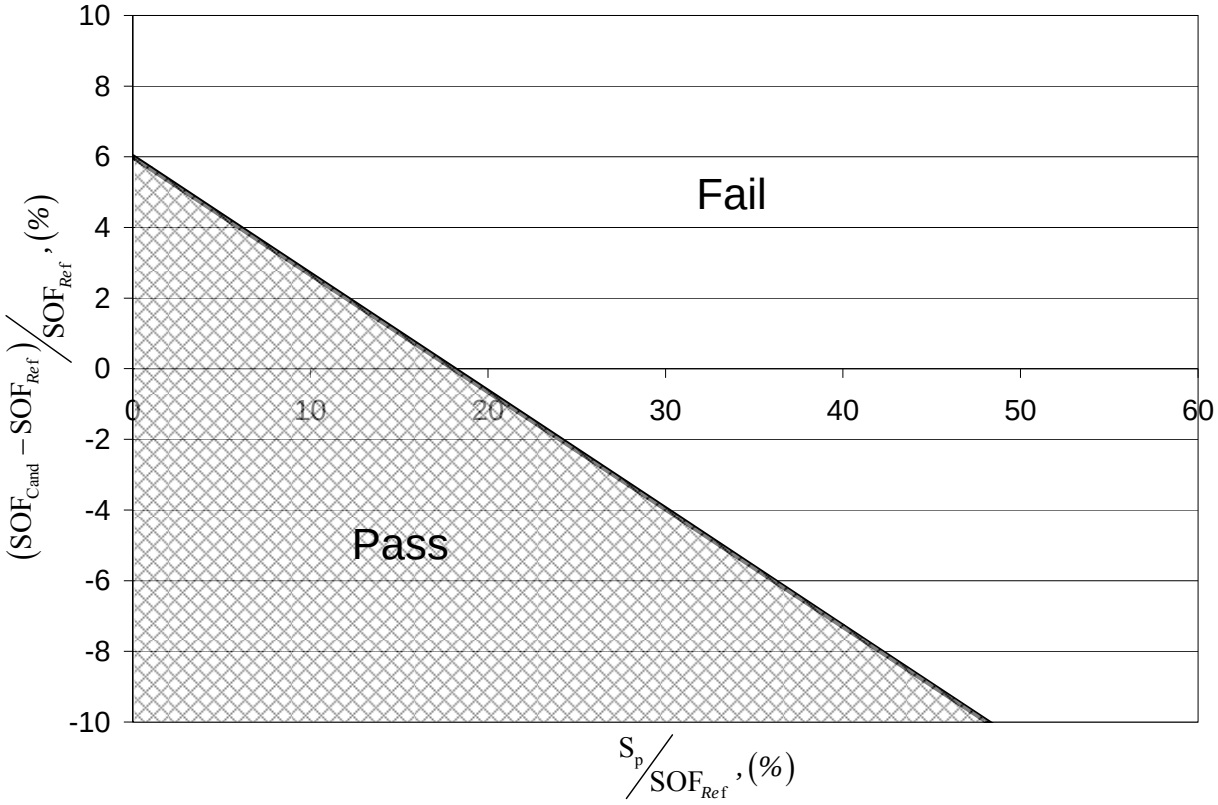

Figure 4- 1 Allowable SOF Variation for Passage

Figure 4- 2 shows the COV for each of the 52 sets extracted. Each of the labeled series represents the sets of FTP's tested shown in Appendix E (all other weight data is shown in Appendix F). The COVs range from 2.6% to 13.7%, over a six month test period. Within this six month test period many test procedures were tried to reduce the COV. When the trials first started (series 1-23) a glass thimble was used with a porous porcelain bottom. When the extractor would cycle, then drain away the used solvent, the thimble would not drain quick enough to empty all of the used solvent. This was a problem because fresh solvent was unable to refill the thimble holding the filters and dissolve the organic fraction of the PM. This might have been a cause of higher variability because the filter wasn't experiencing a full cycle of extraction. This was solved by drilling six small holes in the porcelain bottom. This still allowed the filter to remain in the thimble, but would allow all used solvent to drain out of the thimble when the

extractor cycled, insuring the filter would receive a full cycle of extraction. Another reason for variance in SOF results is human error between tests. Since working with a small weight difference for SOF (~1mg extracted mass out of the 4 to 5mg net mass), any small error would result in a large variation in test results. A main problem that caused variation was folding of the filter sets. Even though many precautions were taken when folding such as wearing gloves, and sterilizing the folding utensils, errors can still occur from damaging the filters while folding, such as puncturing or tearing. This damage to the filter could result in weight loss before extraction leading to higher variation in test-to-test averages.

The 52 test series produced an overall average COV of 7.3%. Included in the 7.3% COV for the SOF, is the COV for all the repeat FTP tests, this is approximately 3% for PM for an early 1990's (5g/bhp-hr NOx, 0.25g/bhp-hr PM) electronically-controlled heavy-duty diesel engine and about 1.5% for a late 1990's (4g/bhp-hr NOx, 0.1g/bhp-hr PM) electronically-controlled heavy-duty diesel engine. Excluding the COV from the PM, the COV for the SOF is as low as 4.3%. Based on the variability of the extracted filter sets shown in Figure 4- 2, Additional studies were commissioned to determine the cause of the variability.

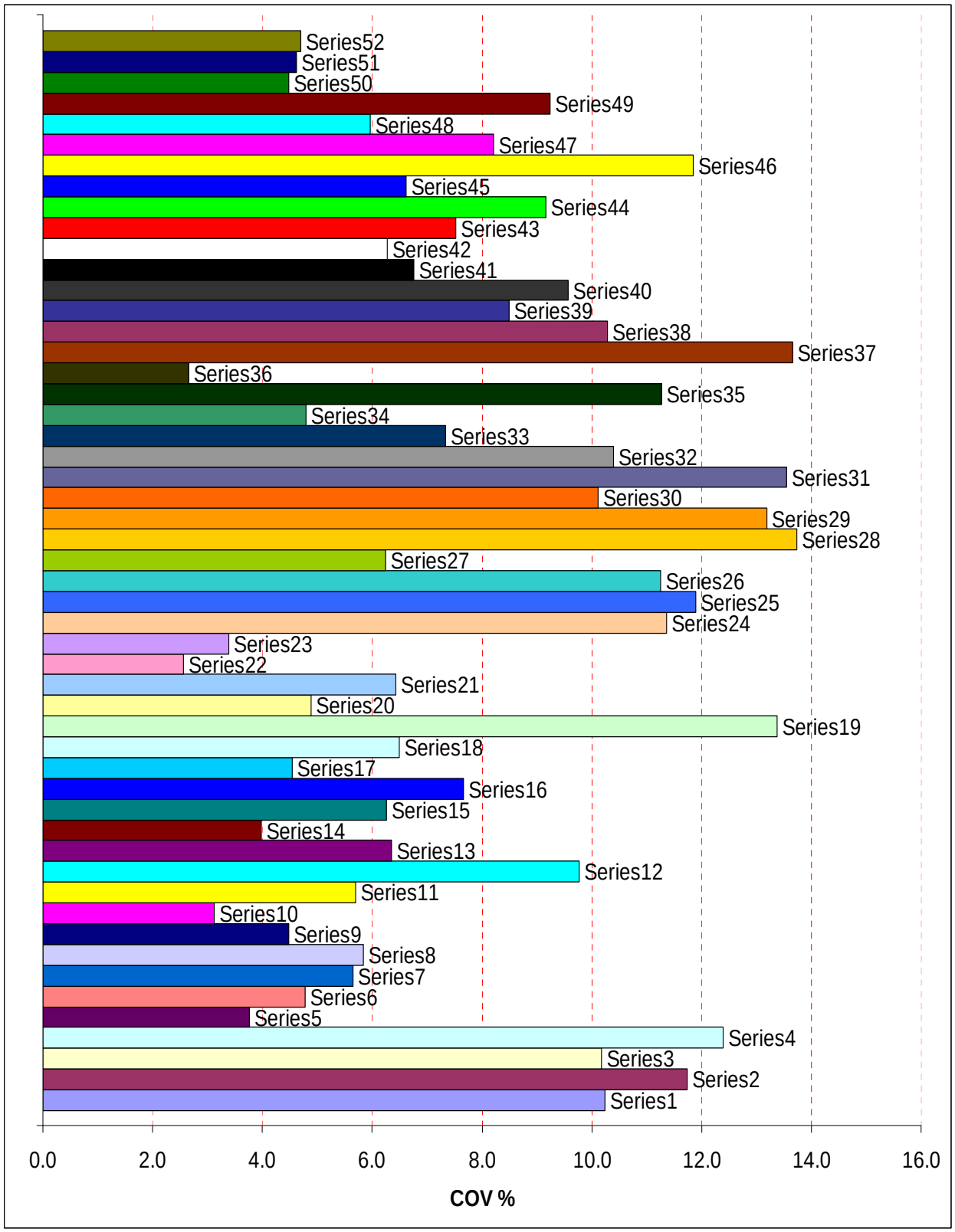

Figure 4- 2 COV of SOF for Each Set of FTPs PM filters Extracted

4.3 Unloaded Filter Weight Loss

An examination of the weight loss of an unused, unloaded 70mm T60A20 filter pair illustrates that there is a significant weight loss from these filters as shown in Figure 4- 3. This weight loss from unloaded filters was a motivating factor that spurred this research effort. As illustrated in this figure, the net weight loss for the initial weight following the 11.5 hours extraction process (7/8/08 weighing) is on the order of 0.22mg for the five filter set examined. Based on prior work in the WVU CAFEE laboratory, this is a typical weight loss for unloaded dual 70mm T60A20 filters that are extracted using the Soxhlet procedures described herein. The variation (one standard deviation) in the five filter set examined for this research was 0.014mg. However, a prior research program at CAFEE included a 16 unloaded extracted filter set with an average extracted mass of 0.19mg and a variation (one standard deviation) of 0.023mg. Although the average unloaded filter blank mass can be accounted for in the SOF calculation, the variability can not be accounted for and is detrimental to the passage criteria shown in Equations 4-3 and 4-4 and detailed above. For the typical case of ~4mg net mass on the PM filter and 25% SOF (1mg extracted), the 0.023mg variation results in a 2.3% variation (one standard deviation) in the SOF just due to artifacts on the unused filter. It is assumed that these artifacts carry over after the filter set has been loaded with PM and are subsequently extracted. At a three standard deviation variation, this will result in an SOF variation of ~7%, a significant influence to the passage criteria as shown in Figure 4- 1. Based on this result, the minimum expected COV for the data presented is 2.3% due to filter media artifacts with this result supported by the data in Figure 4- 2.

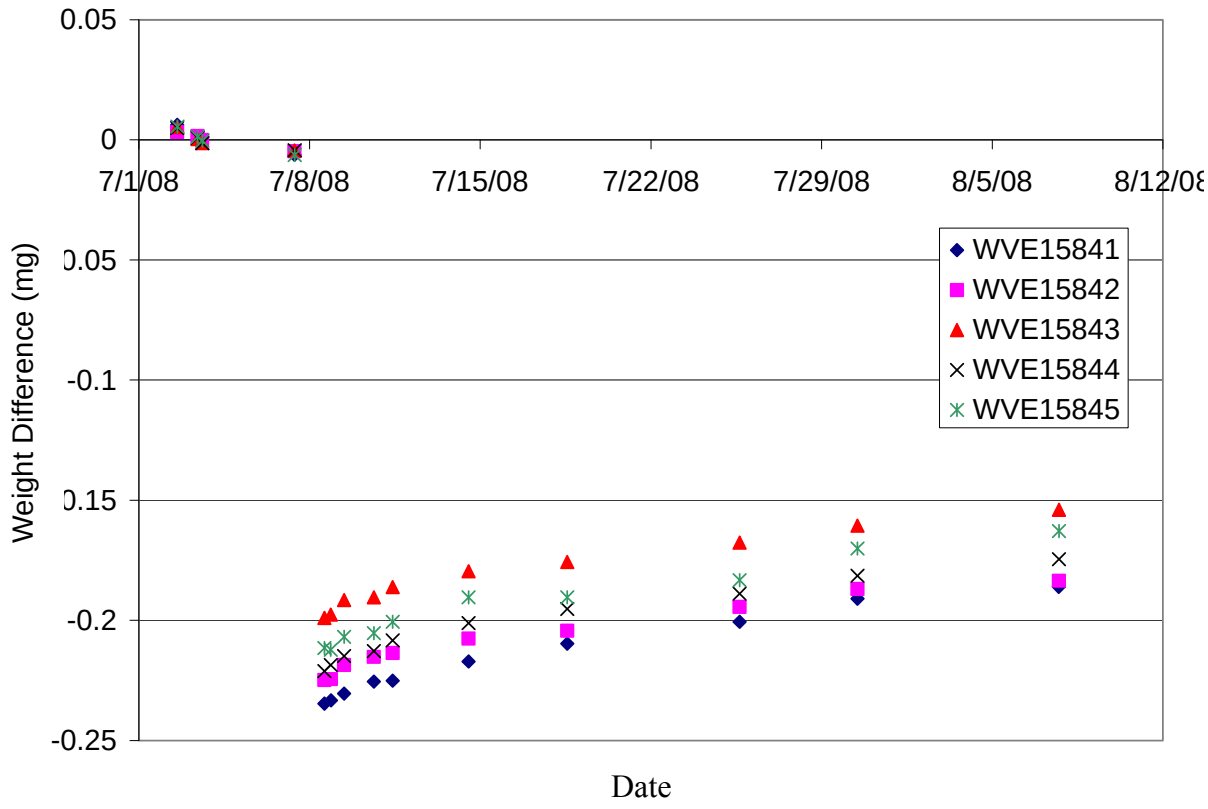

Figure 4- 3 Net weight loss of an unloaded filter due to Soxhlet extraction

4.4 Weight Gain after Extraction

Based on the weight gain of the extracted, unloaded filters in Figure 4- 3, additional experiments were performed to explore this effect. Used, loaded filters were examined and after extraction, the filters were left to sit in the clean room and weighed at regular intervals. After continual weighing of the filter sets, weight gains were again noticed. Figure 4- 4 shows the first three filters that were weighed over a period of six months. The filters gained on average of 0.40mg and have relatively the same slope of weight gain over time. This weight gain is ten times the allowable variation in the reference filter pair. Based on this finding, other tests were performed to try to find the cause of this weight gain. It is noted that good engineering practice would ensure that PM-loaded filters would be post weighed with 24 hours after a test and that 40 CFR Part 86, Subpart N requires post weighing within less than four days. However, some of

the field work that CAFEE performs does result in post filter weighing to occur until a week or two after the tests have been performed, and the net mass could be influenced by a time delay between test and weighing. Additionally, extraction for SOF is not well defined in time requirements and it is possible that there could be significant delay between the post test weighing and SOF extraction.

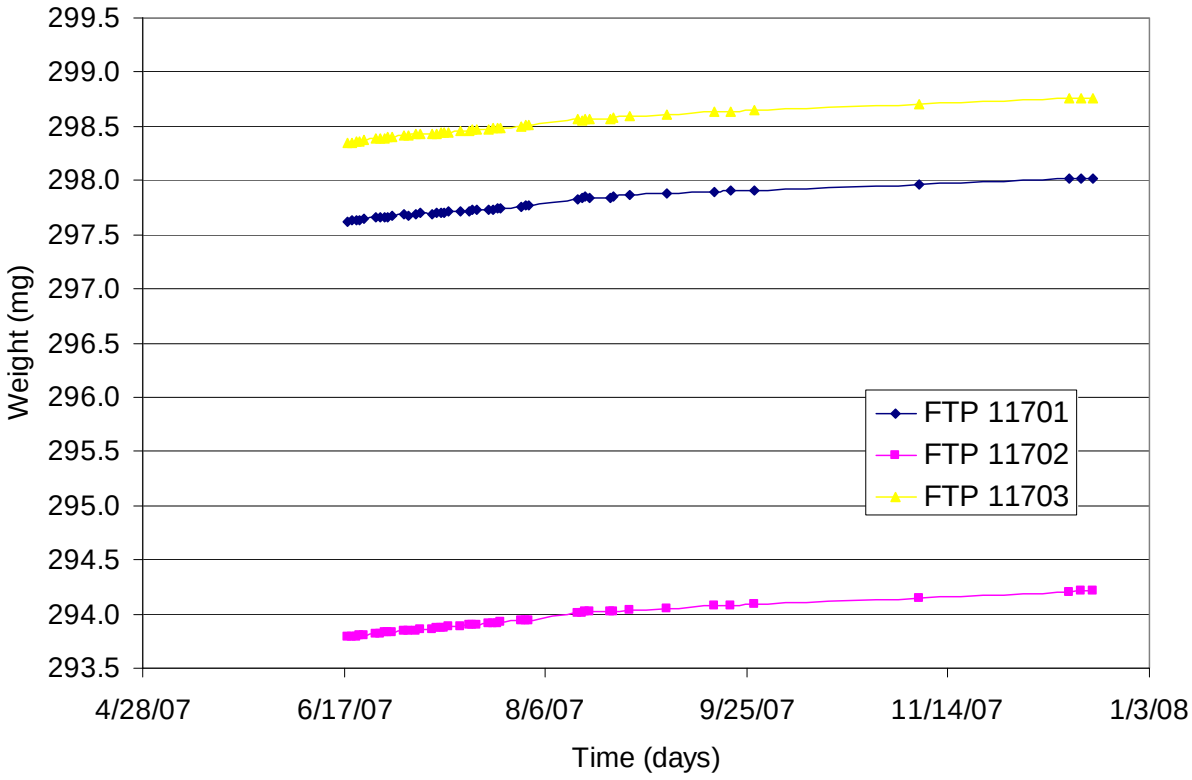

Figure 4- 4 Weighed Gained after Extraction over Time

This initial experiment was done without the use of a common set of reference filters. Because of the lack of the reference filters over the repeated weighing experiment, the experiment was then repeated with reference filters to track weight gain along with extracted filters to insure consistency of clean room conditions. For this subsequent set of experiments, unused T60A20 filter pairs were extracted. The interval for post weighing the extracted filters was three to five times the first day, then every day for the first week, then finally once a week

for the remainder of the test period. In the discussion of the data, the average of the first four sets of mass measurement, for each filter set, were used as the baseline and then all measurements, for each filter set, were subtracted by this average measurement in order to provide a relative change in the filter mass for display purposes since the nominal mass on a filter pair could vary by tens of milligrams as illustrated in Figure 4- 4. Figure 4- 5 shows the reference filters used to tracks clean room variation. In this graph, the average and one standard deviation of multiple filters (five sets) are shown for two set of unused reference filters. The first set was filters kept in the clean room for the duration of this part of the study. The second set was folded, placed in the glass thimble, transported to the extraction room, and then transported back to the clean room. The reference filters gained negligible amounts of weight over the length of the experiment. This weight gain was on the order of the uncertainty of the scale.

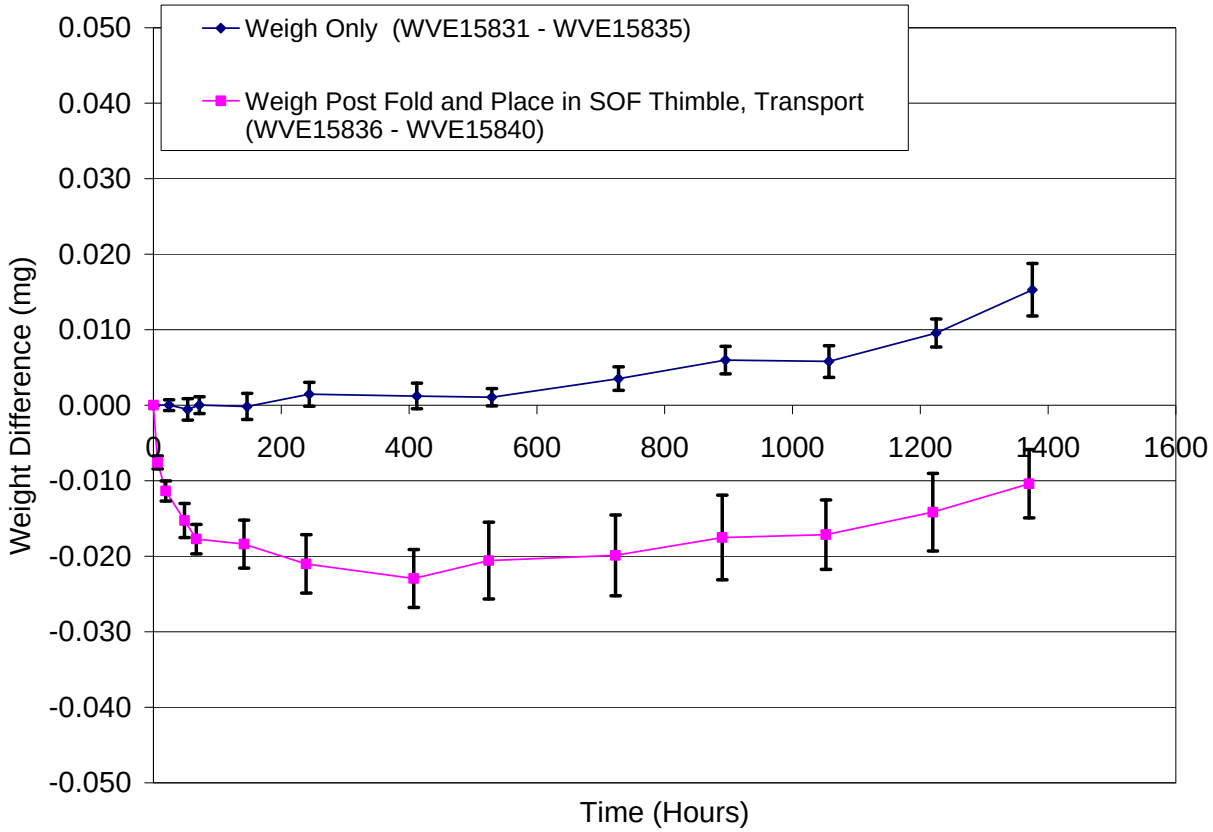

Figure 4- 5 Reference Filter Tracking

Figure 4- 6 shows a steady increase in the post extracted weight of unloaded filters over a 31 day tracking period. The data is the average of the five filters and the bar represents one standard deviation of the weight gain for the five filters at each time. It is evident from this figure that an unloaded, extracted filter gains about 0.040mg, the maximum variation of the reference filters, after three weeks of conditioning. Note these filters are the same filters as shown in Figure 4- 3 but with time and net filter mass set to zero for the initial weighing on 7/8/08.

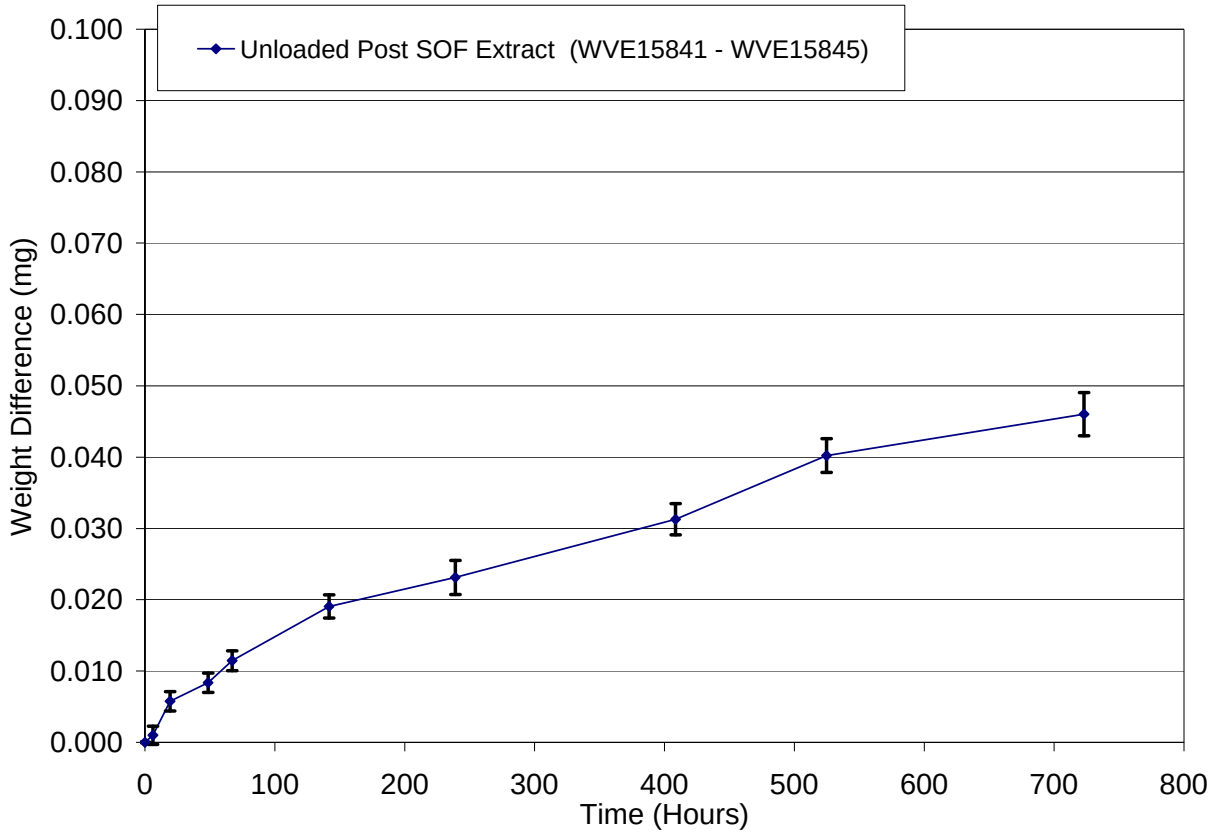

Figure 4- 6 Weight Gain of Unused T60A20 Extracted Filters Over 31 Days

4.4.1 Oven Experiment

A set of blank, unused filters were placed in an oven, heated to 375°F for one hour, and let cool in the clean room. These filters were then weighed at regular intervals to examine if water or volatile matter removed from the filters would affect weight gain. These filters lost

~0.35mg after being placed in the oven and gained ~0.15mg back over the 31 day interval as shown in Figure 4- 7. These filters gained over four times that of only extracted filters, showing that water and or volatiles in the filter itself could cause a large amount of weight gain. It is evident that T60A20 filters exposed to high temperatures will have sampling artifacts associated with them.

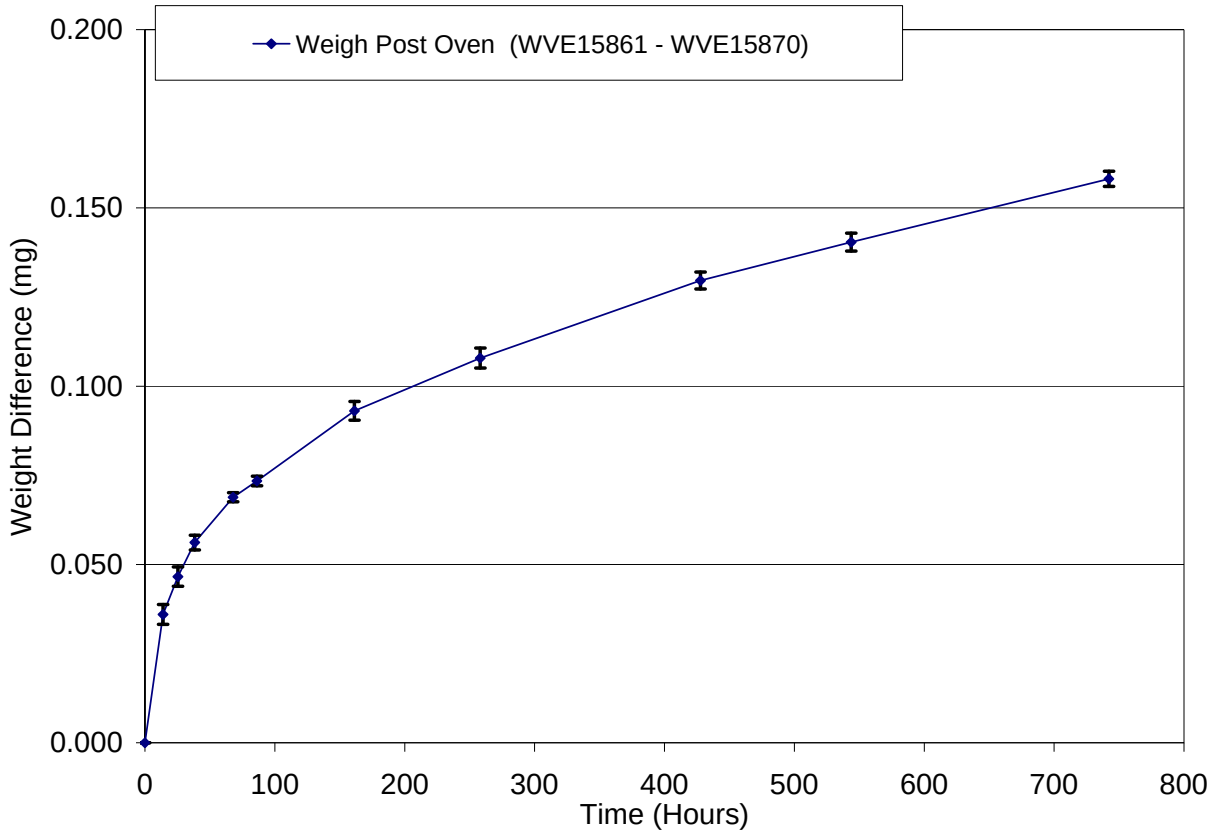

Figure 4- 7 Filters Backed in Oven

4.4.2 Oil Deposit Experiment

Another test was done to try to establish weight gain in the presence of organic matter. Unused filters were loaded with ~1mg of 15-W40 motor oil to simulate the amount of organic matter on a typical PM-loaded filter for the filters used in this work. This is supported by the

data presented in Figure 2- 3 where the majority of the SOF is motor oil. These filters were placed in the clean room and weighed at regular intervals. As shown in Figure 4- 8, the oil deposited filters gained approximately 0.01mg over the 31 day test period. This is equivalent to the variation in the filter weighing, establishing that the presence of organic matter does not influence the change in weight over a one month duration.

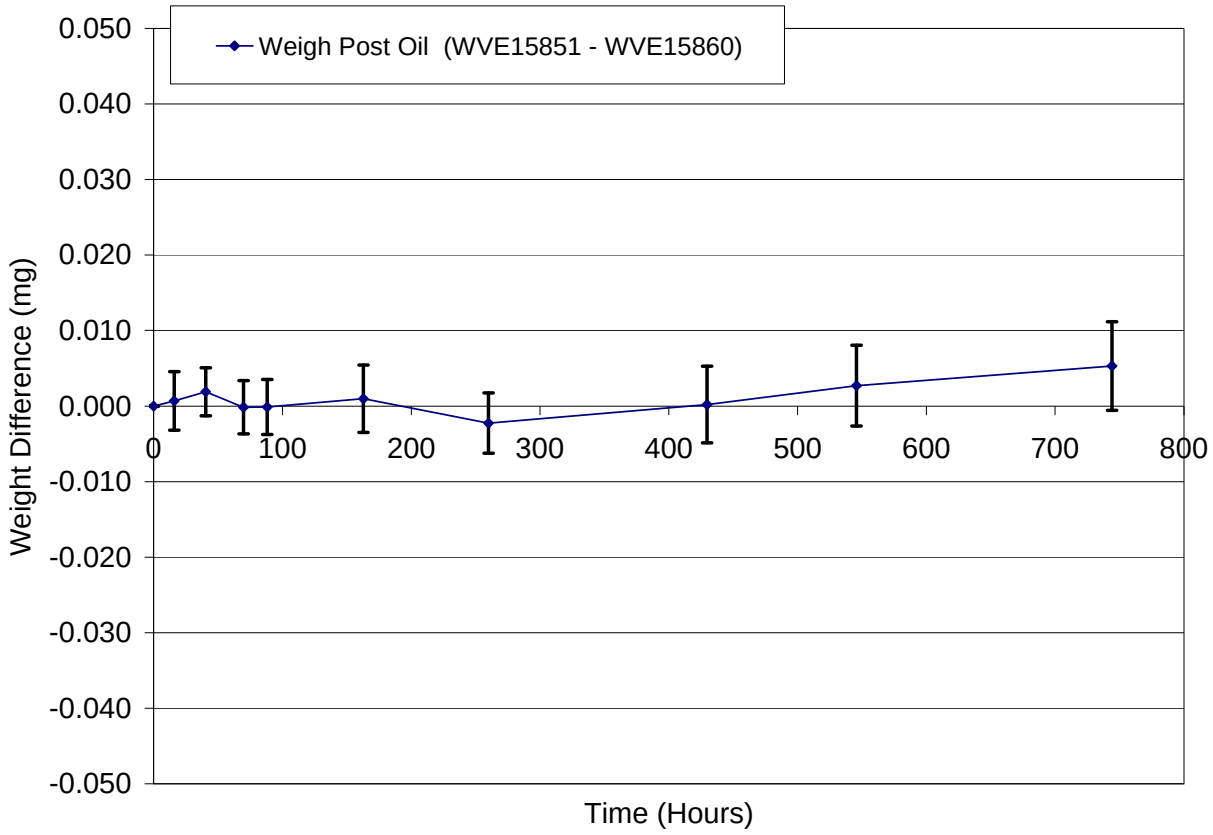

Figure 4- 8 Oil Deposited Filters

4.4.5 Loaded vs. Non Loaded Filters

The oil deposit experiment showed the weight gain in the filters is caused by something other than organic matter deposited on the filter during testing. The plots below illustrate two sets of filter groups. One set is blank, unused filters (unloaded) and displayed in Figure 4- 3 and

Figure 4- 6; the other is loaded with PM from FTP testing (loaded). Both of these groups were extracted using the Soxhlet apparatus and stated testing procedures. After extraction these groups were placed in the clean room and weighed periodically for 31 days. Averages of the elapsed time between weighing and weight gained were calculated. From these averages, two linear results were plotted on a log-log graph. As seen in Figure 4- 9, both sets of filters produce relatively close slopes, 0.591 for loaded filter set, and 0.589 for unloaded filter set, showing for loaded and unloaded filter sets, post extraction weight gain over time occurs at the same rate. However, the intercept value is different. Based on the linear relationship on the log-log plot, the weight gain (W) of an extracted filter as a function of time (t) has the form of the equation

$$W_{gain}=C*t_{hour}^{m} \quad \textbf{Equation 4- 6}$$

Where C accounts for the intercept and m is the slope of the line in log-log form.

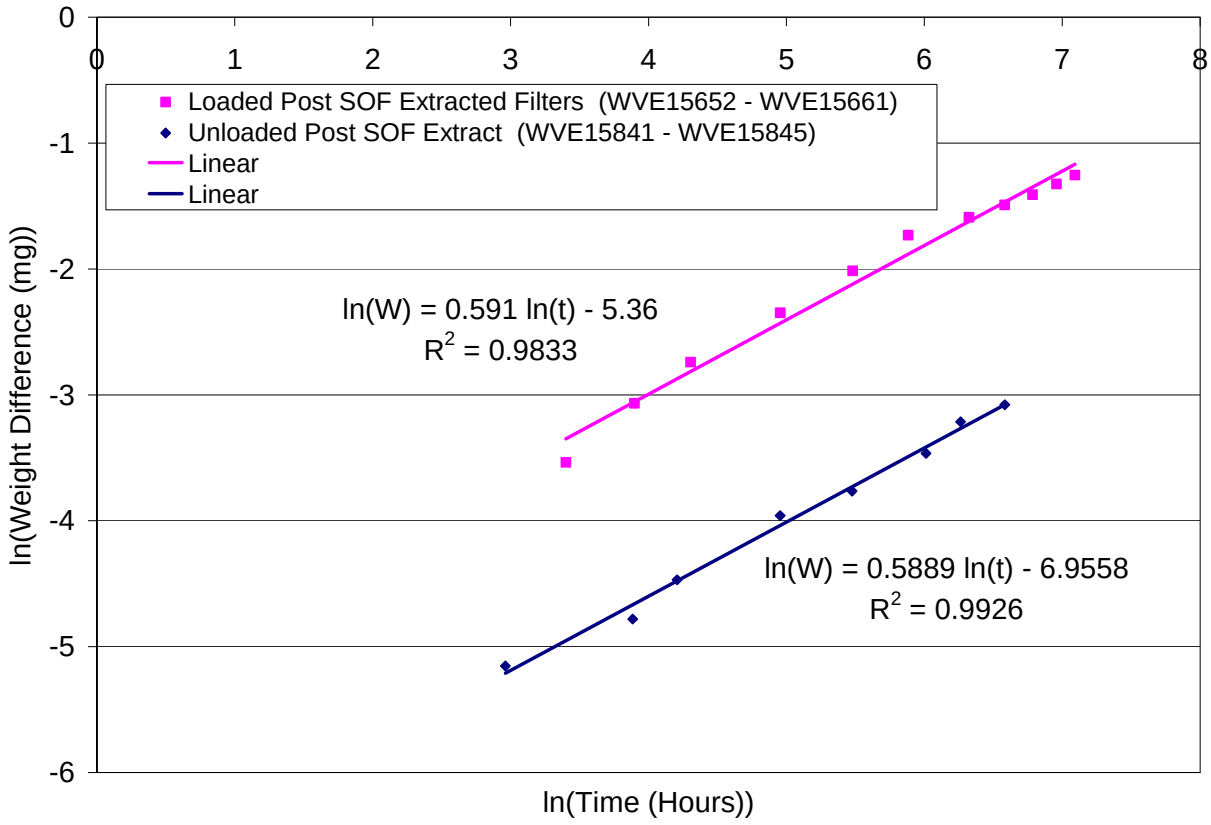

Figure 4- 9 Loaded vs. Unloaded Weight Gain

4.4.6 Weight Gain Analysis

Figure 4- 10 shows trend lines applied to each of the different extracted filter sets. The data for this plot is explained in more detail in section 4.5. For this plot only the weight gain over the test period is of value. The five sets of data show weight gain on a linear plot. This data is gathered from sets of similar filters that were averaged to create each curve for multiple filter sets. The bars represent one standard deviation of the data for that filter set. The data was then plotted as weight gain over time, and a trend line was applied to see the rate of growth for each filter set. Averaging these growth rates of the five data sets gives an average log-log slope of 0.740 regardless of the handling method of the filter. The method of freezing and shipping the filter in a Petri dish may result in greater post extraction weight gain than the other methods but additional testing would be warranted to make this claim.

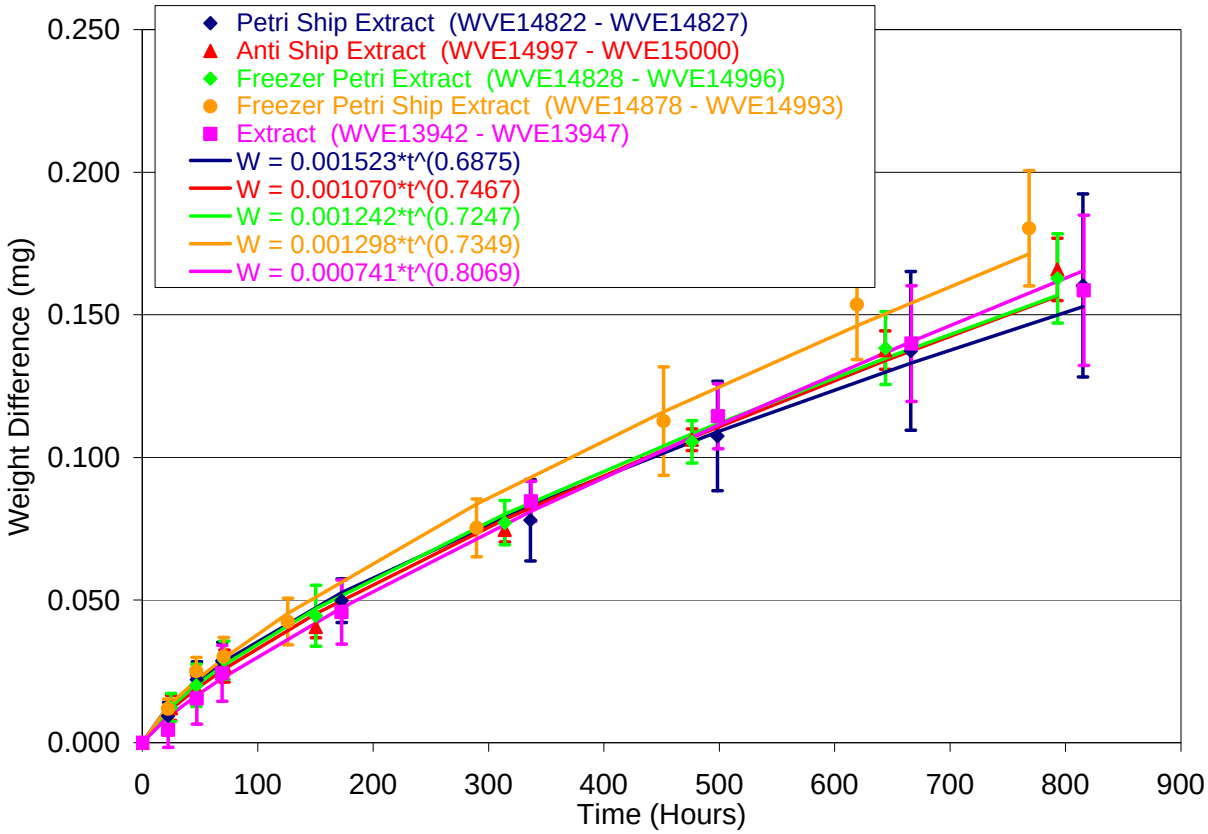

Figure 4- 10 Weight Gained after Extraction over Time

Based on the results presented in Figure 4- 10, a significant delay between post weighing and post extraction weighing can dramatically affect the SOF reading. Using the baseline of ~4mg net PM mass and ~1mg of extracted SOF from the filter, each 0.010mg weight gain results in a 1% error in the SOF determination. Therefore, post SOF extraction weighing should occur within the first 24 hours and should be consistent for all filters that are extracted.

4.5 Handling of Filter Media

The final objective of this study was to explore how transportation of the filter media would affect the variability of the Soxhlet extraction process and what impact it would have on

overall weight gain. As shown in Table 3- 1, ten tests were performed to examine in detail how different ways of storing and shipping the filter media could affect the SOF.

Four tests were performed: for the first test loaded filters were placed in a Petri dish, boxed and shipped via Fedex to California and then returned. Once returned, a set of filters were extracted and a set were used for control. After extraction, both the control filters and extracted filters were periodically weighed for 31 days. The second test used loaded filters that were placed in 3M anti-static bags. The remainder of the test was performed the same as the first. The third and fourth test explored the option of freezing the filters before shipment. Media such as PM filters are typically stored in a freezer to minimize post test reactions that may occur before final extraction. All filters were placed in the freezer while being contained in Petri dishes. Once removed from the freezer, one set was boxed and shipped via Fedex to Califonia, while the other set went straight to extraction. For the third and fourth test, sets were also kept as controls. For these four tests another two sets of loaded filters were kept, one in the clean room only as a control, while the second set was extracted and then placed in the clean room. As in the loaded versus non-loaded filter experiments, the recorded data for the filters sets were averaged and referenced to zero average weight to obtain the resulting plots. Shown in Figure 4- 11 are the weight gain for the control set for each experiment. None of the control tests lost or gained over .020mg in the 31 day test period, but each of the controls did show a similar pattern of loosing weight for the first 50 hours once placed back in the clean room after shipping.

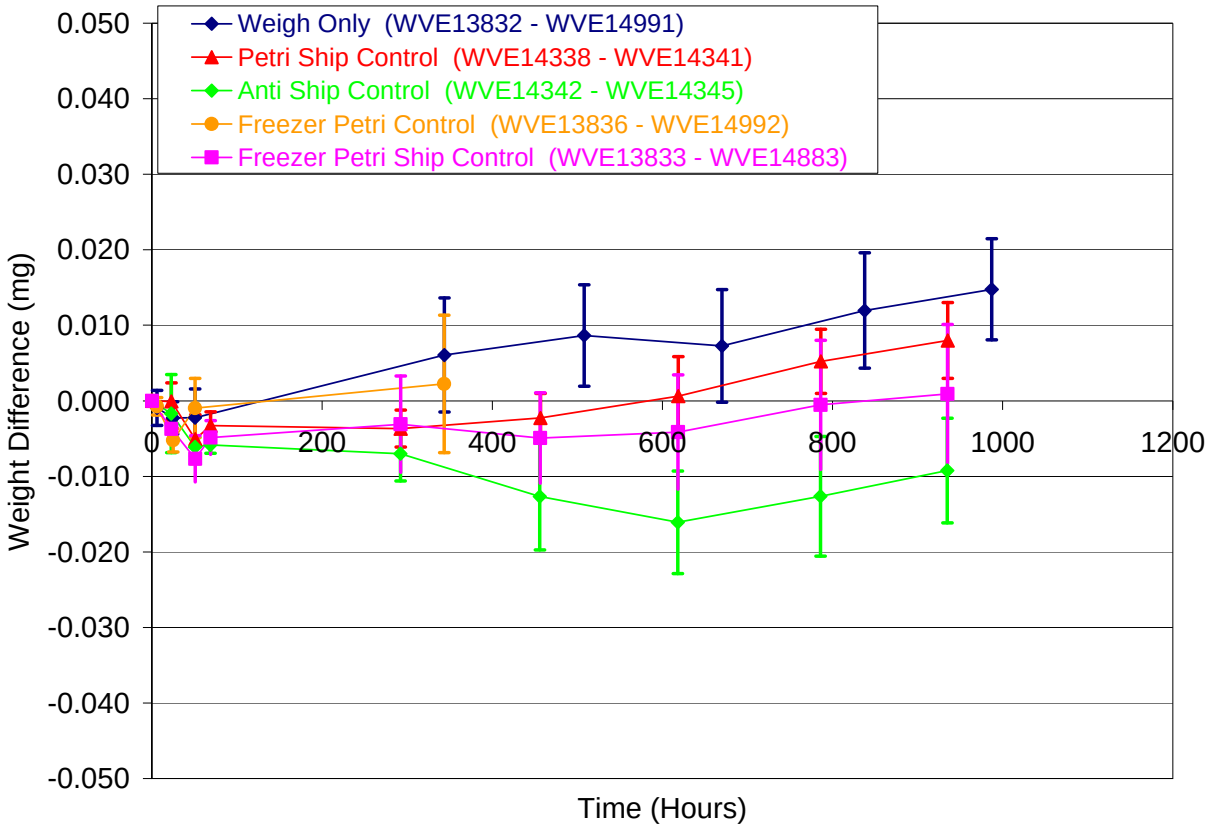

Figure 4- 11 Control Sets

Figure 4- 11 shows weight gain of averaged data from the shipping experiment appear to be independent of the method used to store and ship the filters. These results show that the methods of shipping the filter sets examined in this work have little or no affect on weight gain after extraction for control filters. Weight gain occurs at close to the same rate for all sets recorded.

5 Conclusions and Recommendations

5.1 Conclusions

This research was performed to solve three main objectives. First, develop a test procedure for SOF determination and quantifying the variability when using Soxhlet extraction. Second, examine how the SOF may vary over time when weighed in a controlled environment. Lastly, explore handling issues with the transportation of the filter media.

Test procedure "Determination of Soluble Organic Fraction (SOF) – CARB Method (SOP-0720)" (Appendix A) was created to provide guidelines to reduce results of test to test variation of Soxhlet extraction (Appendix B, Appendix C, Appendix D are referenced by Appendix A). Following this test procedure over a course of 52 test cycles, a COV was reached of 7.3%. Removing the COV for all repeat FTP tests, a COV for Soxhlet extraction is approximately 4.3%. Approximately half of this variation, 2.3%, is due to artifacts on the filter media. These numbers are specific to the experiments conducted herein and should be used with care. These numbers are applicable to early 1990's HDDEs exercised over the FTP cycle. Based on Figure 4- 1, this permits the candidate fuel SOF value to be ~4% higher than the reference fuel SOF value.

Weight gain after extraction is shown by loaded and unloaded filters sets, almost at the same rate, concluding that the accumulated weight is due to the filter itself, not from the PM on the filter. This weight gain happens after extraction of the filter, showing that the T60A20 filters are losing a percentage of its weight, which it continues to regain from atmospheric conditions when placed in a clean room. This weight gain can be expressed using the equation: $W_{gain}=.001175(t_{hours}^{0.74014})$.

Shipping and receiving of filter media had little affect on the weight gain of the filter sets. All shipping experiments examined provided almost identical rates of weight gain over the 31 days test cycle. Shipping and receiving filters did have a slight effect on the initial weighing of the filter media before extraction but is within the variation of the measurement for 70mm T60A20 filter pairs. Each of the controls showed a slight decrease in weight before reaching a stable condition. This variation will result in increased variability of SOF.

5.2 Recommendations

The following suggestion will be made to expand on additional conclusions about this study. These recommendations are based on parameters that were not or could not be controlled in this work.

- When testing for SOF, the extraction device should be in close vicinity (within the same building) of the clean room to help reduce potential errors that can occur from transportation of filter media.
- The extraction device be placed in a controlled environment to keep atmospheric conditions close to that of clean room conditions and to insure no contaminates are introduced to the filters during extraction.
- A drying rack should be constructed to enable filters to dry in a flat state. This would facilitate quicker weighing.
- A measurement device should be constructed to assure continuous cycling of the extraction solvent in order to insure the number of cycles are reached for desired test (40 for this research).
- A more practical device should be constructed for folding filter sets to insure no damage to the filter is occurring.

- Tests should be performed to determine the mechanism of weight loss and then weight gain of extracted, unloaded T60A20 filters.
- Tests should be performed to determine the mechanism of weight gain of extracted, loaded T60A20 filters.

References

1. Clean Air Act, Environmental Protection Agency, Washington, DC, Feb. 24, 2004.
2. "Texas Low Emission Diesel (TxLED) Program," Texas Commission on Environmental Quality, 30 Sept. 2008. Accessed 19 Oct 2008 from <http://www.tceq.state.tx.us/implementation/air/sip/cleandiesel.html#top>.
3. "The California Diesel Fuel Regulations," California Air Resources Board, 14 Aug. 2004, California Code of Regulations. Accessed 19 Oct 2008 from <http://www.arb.ca.gov/fuels/iesel/081404dslregs.pdf>.
4. Code of Federal Regulations, CFR Title 40 Part 86-89, Office of Federal Register National Archives and Records Administration, Washington, DC, 2006.
5. Li, X., Chippior, L. W., and Gulder, L. O., "Effects of Cetane-Enhancing Additives and Ignition Quality on Diesel Engine Emissions," SAE Paper No. 972968, SAE International, Warrendale, PA, 1997.
6. ASTM D975-08, "Standard Specification for Diesel Fuel Oils," ASTM International, West Conshohocken, PA. See also www.astm.org.
7. "Hydrotreating," Sundyne Corporation World Headquarters, Arvada, Colorado, Accessed 9 Sep. 2008 from <http://www.sundyne.com/ind/details/0,,cli1_div92_eti8025,00+en-uss_0fsbc.html>.
8. Majewski, A. W., "Diesel Particulate Matter," DiesnetNet Technolgy Guide. 2002. Accessed 24 Apr. 2007 from <http://www.dieselnet.com/tech/dpm.html#sof>.
9. "Toxicological Profile for Polycyclic Aromatic Hydrocarbons (PAHs)," U.S. Department of Health and Human Services, Public Health Service, Atlanta, GA, 1995.
10. Duran, A., Carmona, M., de Lucas, A., and Lapuerta, M., "Characterization of Soluble Organic Fraction in DPM: Optimization of the Extraction Method." SAE Paper 1999-01-3532, SAE International, Warrendale, PA, 1999.
11. Burtscher, H. and Majewski, A. W., "PM Measurement: Collecting Methods," DieselNet Technolgy Guide (2004). Accessed 24 Apr. 2007 from <http://www.dieselnet.com/tech/measure_pm_col.html>.
12. Ganzler, K. Salgo, A., and Valto, K., "Microwave Extraction: a Novel Sample Preparation Method for Chromatography," Journal of Chromatogrphy, Volume 1192, Issue 2, 30 May 2008, Pages 203-207.
13. Soxhlet, F., "Die gewichtsanalytische Bestimmung des Milchfettes," Dinglers Polytechnisches Journal, 1879, Pages 462-465.
14. Masoori, G. A., "Supercritcal Fluids and Suprecritcal Fluid Extraction." Department of Chemical Engineering, University of Illinois at Chicago, Chicago, IL, 60680, Accessed 24 Apr. 2007 from <http://tigger.uic.edu/~mansoori/SCF.and.SFE.by.TRL.at.UIC.pdf >
15. Kramer, B. K. and Ryan, P. B., "Soxhlet and Microwave Extraction in Determining the Bioaccessibility of Pesticides from Soil and Model Solids," Department of Chemistry, Emory University, Atlanta, GA, 2000. Accessed 24 Apr. 2007 from <http://www.p2pays.org/ref/15/14758.pdf>
16. Gomes, P. C. and Yates. D. A., "The Influence of Some Engine Operating Parameters on Particulate Emissions," SAE Paper 922222, SAE International, Warrendale, PA, 1992.
17. Flaim, K. A. C., "Study of Variations in Continuous Diesel Particulate Matter Size Measurements and Effect of Fuel Properties on DPM Size," Masters Thesis, Department of Mechanical and Aerospace Engineering, West Virginia University, Morgantown, WV, 2008.

18. CAFEE Emissions Laboratory Standard Procedures, Calibration Procedures and Scheduled Maintenance Checks, Center for Alternative Fuels, Engines and Emissions, Version 20070305, Department of Mechanical and Aerospace Engineering, West Virginia University, Morgantown, WV, 2008..
19. “Sartorius SE2-F Ultra-microbalance,” Precision Weight Balances, Bradford, MA, 2008.
20. “Test Method for Soluble Organic Fraction (SOF) Extraction,” State of California Air Resources Board, Sacramento, CA, April 1989.
21. "Boiling Chip." Wikipedia, Wikimedia Foundation Inc, San Francisco, CA, 29 Oct 2008. Accessed 25 Sep 2008 from <http://en.wikipedia.org/ wiki/Boiling_chip>.

Appendix A

Determination of Soluble Organic Fraction (SOF) – CARB Method (SOP-0720)

Overview

The soluble organic fraction (SOF) is defined as the fraction of total particulate matter (TPM) that is removed in an extraction process from the TPM filter media collected from an emissions test. A Soxhlet extraction unit is used to cycle solvent through the test filter to remove the SOF fraction. The solvent removes the soluble hydrocarbon fraction from the TPM collected on the filter media, leaving the carbon fraction on the filter.

The procedures are based on 70 mm T60A20 filter media used for TPM collection of heavy-duty diesel engines exercised over the Federal Test Procedure (FTP) test schedule. These procedures may be used for other test cycles or other filter media. However, changes in solvent type, solvent volume, or cycle times may need to be varied and must be documented in the Extraction/Custody log (E/C log).

Precision scales are used to measure the filter mass before and after extraction.

References

40 CFR Parts 86.1312-88, 86.1339-90
State of California Air Resources Board, "Test Method for Soluable Organic Fraction (SOF) Extraction," April 1989.
SOP-0270 – "TPM Filter Weighing"
SOP-0600 – "TPM Media (70 mm) Handling"
SOP-0630 – "SOF Media Handling"

Conditions

Ensure that the TPM filter has been post weighed from the emissions test and that the TPM filter may be released for SOF analysis. The TPM filter pre- and post-test masses must be known to calculate the SOF fraction.

Filter media must be transferred between the Engine and Emissions Research Laboratory and the fume hood where the Soxhlet extraction resides. It is recommended to transfer the filters in their original Petri dishes if possible. Otherwise, the filter may be transported in the storage container that it is in. Ensure that the filter is secured to prevent any damage to the filter media or the loss of TPM from the filter.

The extraction is carried out using a toluene:ethanol binary solvent (32:68 wt/wt). Use only HPLC-grade toluene and ethanol to make this binary solvent.

Procedure

The following procedures parallel those of the 1989 ARB SOF document with minor differences.

1. Record the TPM filter pre-test and post-test mass in the E/C log. This may be obtained from the emissions test sheet log or from the filter weighing database.

2. Ensure that the fume hood will be free of any other experiments for the duration of the extraction process. Ensure that each Soxhlet extraction unit is intact and free of any defects that may impede the performance of the extraction.
3. Ensure the area is clean of dust or any other foreign matter that may be deposited on the filters. Ensure that the stainless steel filter folder surface is clean of any foreign matter.
4. Ensure that the extraction unit has been rinsed with solvent prior to use. This may be accomplished by placing approximately 5 ml of solvent in the extractor and another 5 ml in the flask. The extractor, and then the flask, should be rotated or turned to coat the inside of each unit with the solvent. After the unit has been coated, the solvent is placed in the waste container. The extractor and flask are permitted to air dry in the fume hood while the rest of the procedure is performed.
5. Fold the filter in halves, quarters, and final eights with the particulate to the inside. Use the stainless steel filter forceps to fold the filter. Wear gloves to prevent transferring of hand oils or other contaminates to the forceps. However, do not touch the filters with your hands. If the filter is touched with any other surface other than the storage container, forceps, or folder surface, note this in the E/C log. Avoid tearing fibers from the filter. If a fiber is torn from the filter, include the torn portion with the rest of the filter and note this in the E/C log.
6. Place the folded filter in a Pyrex thimble, with the point of the fold towards the base of the thimble, and place the thimble in a Soxhlet extractor. Record the thimble ID on the E/C log. Use care when inserting the thimble into the extractor to avoid damaging the extractor unit. Record the extractor ID on the E/C log.
7. Place approximately 80 ml of solvent in the flask. Use the bottle dispenser to set the volume of solvent to be transferred or use a 100 ml beaker and measure to 80±2 ml.
8. Assemble the Soxhlet apparatus. Ensure that the extraction is done in the dark. If this is not possible, cover the Soxhlet apparatus with aluminum foil to keep light from the extractor unit
9. Turn on the water supply.
10. Turn on the electric heater units. Record the time in the E/C log that the heater was turned on.
11. Ensure that the cycle time is approximately 15 minutes. A minimum of 40 cycles are required or approximately eight and one half hours. It is recommended to use approximately eleven and one half hours for each extraction.
12. Turn off the heat and allow the solvent to stop boiling. Record the time in the E/C log that the heater was turned off.
13. Disassemble the Soxhlet apparatus and carefully remove the thimble. Dispose of the solvent from the flask and extractor unit into a waste container. Place the thimble on a clean surface in the fume hood and allow the solvent to evaporate for at least six hours. After six hours in the fume hood the filter can be placed back in the storage container and returned to the constant temperature and humidity clean room. Record the time in the E/C log that the filter was removed from the thimble. Record the time in the extraction log that the filter was placed in the clean room.
14. Follow the weighing procedures in SOP-0270 to record the post extraction filters mass. Record the time in the E/C log that the filter was weighed.
15. The loss of weight after this extraction is the SOF and is given by:

$$SOF = \frac{TestMass_{final} - ExtractionMass}{TestMass_{final} - TestMass_{initial}}$$

Where the $TestMass_{initial}$ is the mass of the filter set prior to the engine emissions test (Pre-Test Mass), $TestMass_{final}$ is the mass of the filter set after the engine emissions test (Post-Test Mass), and *ExtractionMass* is the mass of the filter set after the SOF extraction. Calculate and record the final SOF in the E/C log. The SOF may be corrected for background or interferences using good engineering judgment.

Repeatability

The recommended minimum net mass on a 70 mm filter set is 2 mg for the FTP cycle. Lower net mass on a filter will result in higher variability in the SOF results from repeat emissions test (multiple filters extracted using the same engine and same conditions). For repeat FTP tests using the same engine and setup (engine set point file, fuel, intake and exhaust settings, etc.), the coefficient of variation (COV, standard deviation divided by the average) is approximately 3% for TPM for an early 1990's (5 g/bhp-hr NOx, 0.25 g/bhp-hr TPM) electronically-controlled heavy-duty diesel engine and about 1.5% for a late 1990's (4 g/bhp-hr NOx, 0.1 g/bhp-hr TPM) electronically-controlled heavy-duty diesel engine. The extraction process adds additional variation to the final SOF value and for tightly-controlled conditions the overall SOF variation should have a COV of less than 20%. Filters with higher TPM loading will generally have lower COV values.

Interferences

It is possible that organic matter existed on the filter prior to the emissions test. It is recommended that pre-cleaned filter be used prior to the emissions test. Additionally, torn or missing filter media will lead to incorrect SOF determination. Any abnormality with the filter or SOF extraction process must be reported on the E/C log.

Field blanks must be extracted as part of the SOF analysis and may be used to correct the SOF value. Likewise, tunnel background filters should also be extracted and used in the correction of the SOF value. Similar filters (lot number) that were assigned for the emissions must be extracted during the same time period as the test filter SOF extractions. Field blanks should be at least 10% of the TPM test filters with a minimum of 6 filter sets per test program.

Corrective Actions

If there were any problems, record the issue in the E/C log and contact the principal investigator and laboratory supervisor.

Outliers should be identified using the methodology stated in the test plan.

Filter sets from repeat tests with a large COV may be re-extracted a second time to determine if the initial extraction process failed to remove all of the organic matter. The principal investigator must approve the second extraction. If a filter set is extracted a second time, both the initial and final extraction values are to be reported with the dataset.

Appendix B

SOF Media Handling (SOP-0630)

Overview

The laboratory's 70 mm TPM media may be used for the SOF determination. The procedures used in the TPM handling must be followed. Additional handling for the SOF determination is given below for filters shipped to external laboratories. Filter analyzed for SOF internally at WVU do not need to follow this procedure.

References

None

Conditions

The media must be tracked using the existing TPM software. After post TPM weighing, the used media is placed in anti-static bags if sent for analysis to an external laboratory. Tweezers must be used to handle the filters. Under no circumstances shall filters come in contact with any surfaces other than the storage container, tweezers, or filter holders. If the filter contacts any other surface, the filter must be marked as invalid.

Procedure – Check In

1. Follow the TPM filter weighing and handling procedures.

Procedure – Use

1. Follow the TPM filter use procedures.
2. After the TPM filter post weighing, place the used media in the storage container. Maintain custody sheets with the media.

Procedure – Check Out

1. Check out should occur as late in the day as possible so that the shipping container does not sit at the shipping company for an extended period of time. Additionally, the day that the shipping occurs should be done so that the analytical laboratory receiving the media is open the next morning.
2. When the media is to be shipped, check the media out with the Media Custody Log program. Use dust-free gloves to handle the media container. Visually inspect the media to ensure that there is no apparent damage. Contact the principle investigator if there are problems.
3. The media must be secured to prevent movement of the filter media as it is being shipped. Package the media into anti-static bags. Label each anti-static bag with the same filter identification as that on the Petri dish. Tape the anti-static bag onto a sheet of paper. Up to four anti-static bags may be taped to one sheet of paper. Multiple sheets of paper may be stacked together. Place the sheets together between two pieces of cardboard and tape the cardboard together. Cover the cardboard in "bubble wrap" or similar material. Place contents in a shipping box. Ensure that the contents are not free

to move in the box. Place the media custody sheets in the box with the media. Other media samples should be shipped in a different box.

4. Take the box to the local shipping office (FedEx). Do not allow the box to sit in the open environment where the media is exposed to high temperatures.

Corrective Actions

If the filter contacts any other surface other than the media storage containers, tweezers, or filter holder, the filter must be identified on the custody sheet and the principal investigator notified. Any filter that is damaged prior to use must not be used. Any filter that is damaged during or after use must be clearly noted in the logs. Filters damaged prior to the end of the test phase in which an extra set of filters can not be used in its place may result in the test being repeated.

Appendix C

TPM Filter Weighing (SOP-0270)

Overview

Precision scales are used to measure filter weights. Environment, calibration and weighing information is recorded by software on the weighing room computer.

References

40 CFR Parts 86.1312-88, 86.1339-90

Conditions

Ensure that the environmental conditions of the weighing and storage area within the following specifications.

- Filters must be exposed to the environment of the conditioning area for a minimum of 1 hour prior to weighing.
- Filters must be stored in covered Petri dishes or sealed filter holders in the conditioned storage area when not in use.
- Used filter pairs must be stored face-to-face in covered Petri dishes.
- If the sample on the filters contacts the Petri dish or any other surface, the associated test is void and must be re-run.
- At least two unused reference filter pairs must be in use at any given time. If the average weight of the reference filter pairs changes between sample filter weighings by more than 40 micrograms, then all the associated sample and background filters being stabilized are void and their respective emissions tests must be re-run.
- The 1988 version requires post weight before 56 hours.
- Filters must be weighed within 4 hours of reference filters but preferably during the same session.
- The reference filters should be changed once a month, however, reference filters must not be changed until all filters being processed with those reference filters are pre- and post-weighed
- The zero/tare drift of the scale must not exceed ±5 micrograms during a weighing session and must be checked after weighing 10 filters and at the conclusion of a weighing session.

The filter weighing room must be maintained at the following conditions

- Temperature: 22±3°C
- Dew Point: 9.4±3°C
- Relative Humidity: 45±8%

where the dew point and relative humidity are averaged over 10 minutes. If these conditions are not met the room conditions must be brought to within the above specifications and allowed to remain in that state for one hour prior to performing filter weighing operations.

Procedure

1. Check that the room conditions are within specification.
2. Level the scale.

3. Follow the manufacturer's recommended procedures for the scale's internal calibration or adjustments.
4. Check that the zero/tare reading is 0±5 micrograms. If the zero/tare reading is outside this range, re-zero the scale. Record the zero/tare reading from the scale.
5. Place the 200mg reference weight on the balance and record the reading. The weight must be within ±5 micrograms of its actual value. For the "CAL4" weight, that value is 199.992 mg.
6. Remove the 200mg reference weight and check that the zero/tare reading is 0±5 micrograms. If the zero/tare reading is outside this range, re-zero the scale, re-weigh the 200mg reference weight and re-check the zero until both the ±5 microgram zero/tare and ±5 microgram reference weight conditions are satisfied.
7. Measure and record the weights of the reference filter pairs.
8. Check that the difference in the sum of the weight of the each reference filter with their previously recorded value is within 40 micrograms.
9. Check that the zero/tare reading is 0±5 micrograms. If the zero/tare reading is outside this range, re-zero the scale, re-weigh the reference filter pairs.
10. Measure and record the weights of the sample filters.
11. After 10 filter sets have been weighed, check that the zero/tare reading is 0±5 micrograms. Record the zero/tare reading from the scale. If the zero/tare reading is outside this range, re-zero the scale and re-weigh the previous filters since that last valid zero/tare reading.
12. Continue with steps 10 and 11 until the entire filter set has been weighed or four hours has passed since the reference filter pairs were weighed.

Corrective Actions

If the room conditions can not be met, wait until the room conditions are within specifications. If the scale is unable to meet the zero, spans, or reference filter requirements, ensure that the room conditions are stable. If problems persist, contact the laboratory supervisor.

Appendix D

TPM Media (70 mm) Handling (SOP-0600)

Overview

The laboratory's 70 mm filters are used for the TPM determination. The filters must be pre-conditioned and pre-weighed before use.

References

40 CFR Parts 86.1312-88, 86.1339-90

Conditions

The filters must be pre-weighed before using. Tweezers must be used to handle the filters. Under no circumstances shall filters come in contact with any surfaces other than the storage containers, tweezers, or filter holders. If the filter contacts any other surface, the filter must be marked as invalid. Filters are to be loaded and unloaded in the PM room pass thru window only.

Procedure – Check In

1. Obtain the required number of filters for the test session.
2. Record each filter as "Pre-use" in the PM room database.
3. Attach PM filter bar code for each filter set on the test sheet.
4. Place Petri dish(s) and test sheet(s) in the filter room pass thru window.

Procedure – Use

1. Install a filter into a filter holder in the pass thru window.
2. Place a cover over the entrance to the filter holder to prevent dirt or debris from entering the filter holder.
3. Remove the filter holder from the PM room and take to the secondary dilution tunnel.
4. Remove the PM filter holder in the secondary tunnel, if installed. Remove the cover from the new PM filter holder and place over the old PM filter holder. Install the new PM filter holder into the secondary tunnel.
5. Return the old PM filter holder to the PM room pass thru window. Remove the filters from the filter holder. If filters are dummy media, discard filters. If filters are from a test, return the filter to the appropriate Petri dish.
6. At the end of the last test, place test sheets in PM room pass thru window.

Procedure – Check Out

1. Retrieve Petri dish(s) and test sheet(s) from the filter room pass thru window.
2. Record each filter as "Post-use" in the PM room database.
3. Place Petri dishes on shelves to condition for at least one hour. Remove Petri dish lid to permit air movement around the filter during conditioning.
4. Follow TPM Filter Weighing procedure for post weighing the filters.
5. After post weighing procedures, the filter may be stored in a freezer if further analyses are required; ensure that custody sheets remain with each filter set. If filters are not required to be maintained, discard used filters.

Corrective Actions

If the filter contacts any other surface other than the media storage containers, tweezers, or filter holder, the filter must be marked as invalid. Any filter that is damaged prior to use must not be used. Any filter that is damaged during or after use must be clearly noted in the logs. Filters damaged prior to the end of the test phase in which an extra set of filters can not be used in its place will result in the test being repeated.

Appendix E

	Double 70mm Only												
	Run Number	Test Number	Extractor Used	Thimble used	Date Ran	Preweight	Postwieght	PM Amount	Sox Post date	Sox Postweight	Sox Diff	SOF	COV %
	11657		6		6/4/07	293.4930	298.4053	4.9123	6/21/07	297.7696	0.6357	**12.9410**	**10.2**
	11660		1		6/12/07	291.8482	296.8787	5.0305	6/21/07	296.1602	0.7185	**14.2829**	
Series 1	11663		4		6/4/07	293.1744	298.1870	5.0126	6/21/07	297.604	0.5830	**11.6307**	
	11666		3		6/4/07	293.4063	298.3954	4.9891	6/7/07	297.6877	0.7077	**14.1849**	**11.7**
	11667		2		6/4/07	284.6155	289.7425	5.1270	6/7/07	288.9848	0.7577	**14.7786**	
Series 2	11668		1		6/4/07	296.0604	301.0032	4.9428	6/7/07	300.1336	0.8696	**17.5933**	
	11674		1		6/6/07	294.4327	298.9501	4.5174	6/7/07	298.1249	0.8252	**18.2671**	**10.2**
	11675		2		6/6/07	293.8072	298.3485	4.5413	6/7/07	297.6723	0.6762	**14.8900**	
Series 3	11676		2		6/12/07	288.9654	293.5200	4.5546	6/13/07	292.7618	0.7582	**16.6469**	
	11679		1		6/13/07	294.8682	299.0822	4.2140	6/14/07	298.3118	0.7704	**18.2819**	**12.4**
	11680		2		6/13/07	287.5177	291.8069	4.2892	6/14/07	291.0326	0.7743	**18.0523**	
Series 4	11681		3		6/13/07	291.2214	295.5857	4.3643	6/14/07	294.6097	0.9760	**22.3633**	
	11683		3		6/12/07	291.7609	296.1001	4.3392	6/21/07	295.5792	0.5209	**12.0045**	**3.8**
	11684		4		6/12/07	294.4005	298.6851	4.2846	6/21/07	298.1593	0.5258	**12.2719**	
Series 5	11685		6		6/12/07	295.4195	299.8262	4.4067	6/21/07	299.2572	0.5690	**12.9122**	
	11701		1		6/15/07	293.8455	298.2144	4.3689	6/18/07	297.6211	0.5933	**13.5801**	**4.8**
	11702		2		6/15/07	290.0210	294.3744	4.3534	6/18/07	293.7855	0.5889	**13.5274**	
Series 6	11703		3		6/15/07	294.5894	298.9936	4.4042	6/18/07	298.3459	0.6477	**14.7064**	
	11778		1		6/21/07	296.1069	300.6263	4.5194	6/21/07	299.858	0.7683	**17.0000**	**5.7**
	11779		2		6/21/07	296.5233	300.9909	4.4676	6/21/07	300.2569	0.7340	**16.4294**	
Series 7	11780		3		6/21/07	293.6939	298.1681	4.4742	6/21/07	297.348	0.8201	**18.3295**	
	11783		4		6/21/07	297.1851	301.6694	4.4843	6/21/07	300.9424	0.7270	**16.2121**	**5.8**
	11784		5		6/21/07	295.6151	300.2353	4.6202	6/21/07	299.4021	0.8332	**18.0339**	
Series 8	11785		6		6/21/07	296.9137	301.4708	4.5571	6/21/07	300.655	0.8158	**17.9017**	
	11878		1		6/22/07	293.2093	299.3287	6.1194	6/25/07	298.2403	1.0884	**17.7861**	**4.5**
	11879		2		6/22/07	290.3185	296.4015	6.0830	6/25/07	295.2868	1.1147	**18.3248**	
Series 9	11880		3		6/22/07	294.1768	300.1747	5.9979	6/25/07	299.0103	1.1644	**19.4135**	
	11894		4		6/25/07	295.2019	301.6062	6.4043	6/26/07	300.5834	1.0228	**15.9705**	**3.1**
	11895		5		6/25/07	293.9587	300.2982	6.3395	6/26/07	299.2253	1.0729	**16.9240**	
Series 10	11896		6		6/25/07	294.1719	300.42	6.2481	6/26/07	299.3709	1.0491	**16.7907**	

	11900		1		6/26/07	295.6042	301.9118	6.3076	6/27/07	300.9488	0.9630	**15.2673**	**5.7**
	11901		2		6/26/07	297.1184	303.3964	6.2780	6/27/07	302.3386	1.0578	**16.8493**	
Series 11	11902		3		6/26/07	290.6628	296.9772	6.3144	6/27/07	295.9094	1.0678	**16.9106**	
	11905		4		6/26/07	296.0268	302.2658	6.2390	6/27/07	301.1174	1.1484	**18.4068**	**9.8**
	11906		5		6/26/07	297.0297	303.2643	6.2346	6/27/07	302.0865	1.1778	**18.8913**	
Series 12	11907		6		6/26/07	292.0183	298.3021	6.2838	6/27/07	297.3163	0.9858	**15.6880**	
	11916		1		6/27/07	294.4978	300.7663	6.2685	6/28/07	299.8521	0.9142	**14.5840**	**6.4**
	11917		2		6/27/07	294.3	300.5698	6.2698	6/28/07	299.734	0.8358	**13.3306**	
Series 13	11918												
	11921		4		6/27/07	289.5067	295.9466	6.4399	6/28/07	295.0535	0.8931	**13.8682**	**4.0**
	11922		5		6/27/07	293.5585	299.9193	6.3608	6/28/07	298.9673	0.9520	**14.9667**	
Series 14	11923		6		6/27/07	291.3763	297.7778	6.4015	6/28/07	296.8719	0.9059	**14.1514**	
	11910		1		7/5/05	291.3826	297.7432	6.3606	7/6/07	296.9845	0.7587	**11.9281**	**6.3**
	11911		2		7/5/05	293.3104	299.5443	6.2339	7/6/07	298.7476	0.7967	**12.7801**	
Series 15	11912		5		7/5/05	294.2502	300.5051	6.2549	7/6/07	299.6593	0.8458	**13.5222**	
	11984		1	1b	7/10/07	297.0544	301.5217	4.4673	7/11/07	300.8925	0.6292	**14.0846**	**7.7**
	11985		2	2b	7/10/07	288.3267	292.7526	4.4259	7/11/07	292.1753	0.5773	**13.0437**	
	11986		5	3b	7/10/07	294.1594	298.6398	4.4804	7/11/07	297.956	0.6838	**15.2620**	
Series 16	11987		6	4b	7/10/07	289.7227	294.165	4.4423	7/11/07	293.4809	0.6841	**15.3997**	
	12000		1	1a	7/13/07	290.339	295.3644	5.0254	7/16/07	294.5851	0.7793	**15.5072**	**4.5**
	12001		2	2a	7/13/07	292.4123	297.3806	4.9683	7/16/07	296.689	0.6916	**13.9203**	
	12002		5	3a	7/13/07	295.9373	300.8973	4.9600	7/16/07	300.1506	0.7467	**15.0544**	
Series 17	12003		6	4a	7/13/07	291.2773	296.1842	4.9069	7/16/07	295.4466	0.7376	**15.0319**	
	12005		1	1b	7/14/07	290.1746	294.6582	4.4836	7/18/07	293.8664	0.7918	**17.6599**	**6.5**
	12006		2	2b	7/14/07	291.0934	295.6119	4.5185	7/18/07	294.8585	0.7534	**16.6737**	
	12007		5	3b	7/14/07	293.8361	298.273	4.4369	7/18/07	297.5467	0.7263	**16.3695**	
Series 18	12008		6	4b	7/14/07	290.6476	295.1336	4.4860	7/18/07	294.2868	0.8468	**18.8765**	
	12011		1	1a	7/17/07	296.916	301.4886	4.5726	7/19/07	300.7868	0.7018	**15.3479**	**13.4**
	12012		2	2a	7/17/07	296.0211	300.6101	4.5890	7/19/07	300.1048	0.5053	**11.0111**	
	12013		5	3a	7/17/07	293.0973	297.634	4.5367	7/19/07	297.0162	0.6178	**13.6178**	
Series19	12014		6	4a	7/17/07	288.6042	293.1624	4.5582	7/19/07	292.5328	0.6296	**13.8125**	
	12016		1	1b	7/17/07	291.107	295.639	4.5320	7/19/07	294.8544	0.7846	**17.3124**	**4.9**
	12017		2	2b	7/17/07	291.0513	295.5279	4.4766	7/19/07	294.779	0.7489	**16.7292**	
Series 20	12018		5	3b	7/17/07	292.5042	297.0782	4.5740	7/19/07	296.2814	0.7968	**17.4202**	

	12019		6	4b	7/17/07	292.0998	296.6452	4.5454	7/19/07	295.7925	0.8527	**18.7596**	
	11945		1	1b	7/19/07	285.8336	290.8555	5.0219	7/23/07	290.3107	0.5448	**10.8485**	**6.4**
	11946		2	2b	7/19/07	291.5184	296.6293	5.1109	7/23/07	296.0166	0.6127	**11.9881**	
Series 21	11947		5	3b	7/19/07	289.8509	295.0326	5.1817	7/23/07	294.3969	0.6357	**12.2682**	
	12143		1	1b	7/24/07	286.0909	291.6234	5.5325	7/26/07	290.5314	1.0920	**19.7379**	**2.6**
	12144		2	2b	7/24/07	296.2186	301.786	5.5674	7/26/07	300.6584	1.1276	**20.2536**	
	12145		5	3b	7/24/07	288.6546	294.4172	5.7626	7/26/07	293.207	1.2102	**21.0009**	
Series 22	12146		6	4b	7/24/07	294.3823	300.0375	5.6552	7/26/07	298.8818	1.1557	**20.4361**	
	12150		2	2a	7/24/07	295.0208	300.6382	5.6174	7/26/07	299.5983	1.0399	**18.5121**	**3.4**
	12151		3	3a	7/24/07	283.7716	289.4413	5.6697	7/26/07	288.4461	0.9952	**17.5530**	
Series 23	12152		4	4a	7/24/07	286.9984	292.6396	5.6412	7/26/07	291.658	0.9816	**17.4006**	
	12443	E02038-03	1	1 140micron	8/14/07	323.7065	328.4221	4.7156	8/16/07	327.5051	0.9170	**19.4461**	**11.4**
	12444	E02038-04	2	2 140micron	8/14/07	315.4444	320.0646	4.6202	8/16/07	319.4502	0.6144	**13.2981**	
	12445	E02038-05	3	3 140micron	8/14/07	319.308	323.9439	4.6359	8/16/07	323.1176	0.8263	**17.8239**	
	12446	E02038-06	4	4 140micron	8/14/07	312.6616	317.3194	4.6578	8/16/07	316.5391	0.7803	**16.7525**	
	12447	E02038-07	5	5 140micron	8/14/07	325.5572	330.1698	4.6126	8/16/07	329.3949	0.7749	**16.7996**	
	12448	E02038-08	6	6 140micron	8/14/07	307.7391	312.427	4.6879	8/16/07	311.569	0.8580	**18.3024**	
	12449	E02038-09	1	1 140micron	8/14/07	322.0509	326.6945	4.6436	8/16/07	325.7902	0.9043	**19.4741**	
Series 24	12450	E02038-10	2	2 140micron	8/14/07	316.9905	321.6914	4.7009	8/16/07	320.8928	0.7986	**16.9882**	
	12453	E02042-02	3	3 140micron	8/14/07	315.3053	320.1823	4.8770	8/16/07	319.4638	0.7185	**14.7324**	**11.9**
	12454	E02042-03	4	4 140micron	8/14/07	321.8331	326.6925	4.8594	8/16/07	325.9712	0.7213	**14.8434**	
	12455	E02042-04	5	5 140micron	8/14/07	317.1041	321.9614	4.8573	8/16/07	321.1673	0.7941	**16.3486**	
	12456	E02042-05	6	6 140micron	8/14/07	324.2906	329.1146	4.8240	8/16/07	328.3714	0.7432	**15.4063**	
	12457	E02042-06	1	1a Drilled Thimble	8/15/07	321.1469	325.9024	4.7555	8/17/07	325.224	0.6784	**14.2656**	
Series 25	12458	E02042-07	2	2a Drilled Thimble	8/15/07	312.9501	317.7253	4.7752	8/17/07	317.1867	0.5386	**11.2791**	
	12461	E02044-02	3	3a Drilled Thimble	8/15/07	323.4404	328.397	4.9566	8/17/07	327.7299	0.6671	**13.4588**	**11.3**
	12462	E02044-03	4	4a Drilled Thimble	8/15/07	321.7311	326.5894	4.8583	8/17/07	325.8774	0.7120	**14.6553**	
	12463	E02044-04	5	5a Drilled Thimble	8/15/07	317.177	322.0988	4.9218	8/17/07	321.3399	0.7589	**15.4192**	
	12464	E02044-05	6	6a Drilled Thimble	8/15/07	319.6735	324.546	4.8725	8/17/07	323.9208	0.6252	**12.8312**	
Series 26	12466	E02044-07	2	2b Drilled Thimble	8/15/07	319.9139	324.8545	4.9406	8/17/07	324.0139	0.8406	**17.0141**	
	12469	E02045-02	3	3b Drilled Thimble	8/15/07	310.8439	314.8804	4.0365	8/17/07	314.1036	0.7768	**19.2444**	**6.2**
	12470	E02045-03	4	4b Drilled Thimble	8/15/07	336.0691	340.057	3.9879	8/17/07	339.2373	0.8197	**20.5547**	
	12471	E02045-04	5	5b Drilled Thimble	8/15/07	319.3587	323.2837	3.9250	8/17/07	322.4999	0.7838	**19.9694**	
	12472	E02045-05	6	6b Drilled Thimble	8/15/07	315.8663	319.9247	4.0584	8/17/07	319.2183	0.7064	**17.4059**	
	12473	E02045-06	1	1a Drilled Thimble	8/16/07	319.954	323.8547	3.9007	8/20/07	323.0929	0.7618	**19.5298**	
Series 27	12474	E02045-07	2	2a Drilled Thimble	8/16/07	316.7147	320.6512	3.9365	8/20/07	319.8315	0.8197	**20.8231**	

	12477	E02046-02	3	3a Drilled Thimble	8/16/07	318.2251	322.2307	4.0056	8/20/07	321.3529	0.8778	**21.9143**	**13.7**
	12478	E02046-03	4	4a Drilled Thimble	8/16/07	311.9847	316.0836	4.0989	8/20/07	315.0936	0.9900	**24.1528**	
	12479	E02046-04	5	5a Drilled Thimble	8/16/07	317.8384	321.791	3.9526	8/20/07	320.9816	0.8094	**20.4777**	
	12480	E02046-05	6	6a Drilled Thimble	8/16/07	311.8318	315.849	4.0172	8/20/07	315.008	0.8410	**20.9350**	
	12481	E02046-06	1	1a Drilled Thimble	8/16/07	308.3002	312.338	4.0378	8/20/07	311.6542	0.6838	**16.9350**	
Series 28	12482	E02046-07	2	2b Drilled Thimble	8/16/07	315.7201	319.8027	4.0826	8/20/07	319.1004	0.7023	**17.2023**	
	12486	E02047-04	3	3b Drilled Thimble	8/16/07	317.6151	321.7358	4.1207	8/20/07	320.8491	0.8867	**21.5182**	**13.2**
	12487	E02047-05	4	4b Drilled Thimble	8/16/07	307.4027	311.4551	4.0524	8/20/07	310.7606	0.6945	**17.1380**	
	12488	E02047-06	5	5b Drilled Thimble	8/16/07	317.5195	321.7166	4.1971	8/20/07	320.7535	0.9631	**22.9468**	
Series 29	12489	E02047-07	6	6b Drilled Thimble	8/16/07	301.5519	305.7135	4.1616	8/20/07	304.9375	0.7760	**18.6467**	
	12492	E02048-02	1	1a Drilled Thimble	8/17/07	316.5557	321.746	5.1903	8/22/07	320.8543	0.8917	**17.1801**	**10.1**
	12493	E02048-03	2	2a Drilled Thimble	8/17/07	318.3626	323.5369	5.1743	8/22/07	322.8035	0.7334	**14.1739**	
	12494	E02048-04	3	3a Drilled Thimble	8/17/07	314.362	319.6562	5.2942	8/22/07	318.8844	0.7718	**14.5782**	
Series 30	12495	E02048-05	4	4a Drilled Thimble	8/17/07	316.432	321.5931	5.1611	8/22/07	320.877	0.7161	**13.8749**	
	12499	E02049-02	5	5a Drilled Thimble	8/17/07	314.298	318.2588	3.9608	8/22/07	317.601	0.6578	**16.6078**	**13.5**
	12500	E02049-03	6	6a Drilled Thimble	8/17/07	316.522	320.571	4.0490	8/22/07	319.7938	0.7772	**19.1949**	
	12501	E02049-04	5	5a Drilled Thimble	9/18/07	318.8982	322.8795	3.9813	9/21/07	321.9143	0.9652	**24.2433**	
	12502	E02049-05	6	6a Drilled Thimble	9/18/07	317.9778	321.9882	4.0104	9/21/07	321.1876	0.8006	**19.9631**	
	12503	E02049-06	1	1a Drilled Thimble	9/19/07	318.9217	322.9685	4.0468	9/21/07	322.0513	0.9172	**22.6648**	
Series 31	12504	E02049-07	2	2a Drilled Thimble	9/19/07	306.8737	310.8001	3.9264	9/21/07	310.0535	0.7466	**19.0149**	
	12658	E02095-02	1	1a Drilled Thimble	8/28/07	287.5933	292.247	4.6537	9/5/07	291.3379	0.9091	**19.5350**	**10.4**
	12659	E02095-03	2	2a Drilled Thimble	8/28/07	287.7254	292.3184	4.5930	9/5/07	291.5622	0.7562	**16.4642**	
	12660	E02095-04	3	3a Drilled Thimble	8/28/07	289.4624	294.0404	4.5780	9/5/07	293.3203	0.7201	**15.7296**	
Series 32	12661	E02095-05	4	4a Drilled Thimble	8/28/07	287.8841	292.4592	4.5751	9/5/07	291.5964	0.8628	**18.8586**	
	12637	E02093-02	1	1a Drilled Thimble	9/18/07	304.2039	308.8405	4.6366	9/21/07	307.7238	1.1167	**24.0845**	**7.3**
	12638	E02093-03	2	2a Drilled Thimble	9/18/07	305.3055	309.9623	4.6568	9/21/07	308.8115	1.1508	**24.7122**	
	12639	E02093-04	3	3a Drilled Thimble	9/18/07	304.3309	308.9436	4.6127	9/21/07	307.9283	1.0153	**22.0110**	
	12640	E02093-05	4	4a Drilled Thimble	9/18/07	310.7514	315.3872	4.6358	9/21/07	314.4021	0.9851	**21.2498**	
	12651	E02093-06	5	5a Drilled Thimble	8/28/07	286.33	290.9677	4.6377	9/5/07	289.94	1.0277	**22.1597**	
	12652	E02093-07	6	6a Drilled Thimble	8/28/07	289.3173	293.887	4.5697	9/5/07	292.9581	0.9289	**20.3274**	
	12653	E02093-08	1	1a Drilled Thimble	8/29/07	297.4142	302.0407	4.6265	9/5/07	301.082	0.9587	**20.7219**	
	12654	E02093-09	2	2a Drilled Thimble	8/29/07	293.1863	297.8278	4.6415	9/5/07	296.7193	1.1085	**23.8824**	
Series 33	12655	E02093-10	3	3a Drilled Thimble	8/29/07	296.1488	300.8328	4.6840	9/5/07	299.8577	0.9751	**20.8177**	
	12507	E02050-02	3	3a Drilled Thimble	9/19/07	318.1582	322.2144	4.0562	9/21/07	321.4251	0.7893	**19.4591**	**4.8**
	12508	E02050-03	4	4a Drilled Thimble	9/19/07	315.4461	319.4905	4.0444	9/21/07	318.7	0.7905	**19.5455**	
	12509	E02050-04	5	5a Drilled Thimble	9/19/07	313.5171	317.5971	4.0800	9/21/07	316.7539	0.8432	**20.6667**	
	12511	E02050-06	6	6a Drilled Thimble	9/19/07	316.676	320.7299	4.0539	9/21/07	319.8586	0.8713	**21.4929**	
Series 34	12512	E02050-07	1	1a Drilled Thimble	9/24/07	322.2567	326.1808	3.9241	9/27/07	325.1695	1.0113	**25.7715**	

	12514	E02052-02	1	1a Drilled Thimble	9/20/07	317.4239	322.0377	4.6138	9/21/07	321.1682	0.8695	**18.8456**	**11.3**
	12515	E02052-03	2	2a Drilled Thimble	9/20/07	316.7504	321.3155	4.5651	9/21/07	320.2105	1.1050	**24.2054**	
	12516	E02052-04	3	3a Drilled Thimble	9/20/07	311.4542	316.0619	4.6077	9/21/07	315.2202	0.8417	**18.2672**	
	12517	E02052-05	4	4a Drilled Thimble	9/20/07	311.3394	315.95	4.6106	9/21/07	315.0917	0.8583	**18.6158**	
	12518	E02052-06	5	5a Drilled Thimble	9/20/07	306.0085	310.703	4.6945	9/21/07	309.7476	0.9554	**20.3515**	
Series 35	12519	E02052-07	6	6a Drilled Thimble	9/20/07	317.219	321.9793	4.7603	9/21/07	321.0773	0.9020	**18.9484**	
	12522	E02053-02	1	1a Drilled Thimble	9/21/07	316.058	320.7603	4.7023	9/27/07	319.9775	0.7828	**16.6472**	**2.6**
	12523	E02053-03	2	2a Drilled Thimble	9/21/07	317.0631	321.7381	4.6750	9/27/07	320.923	0.8151	**17.4353**	
	12524	E02053-04	3	3a Drilled Thimble	9/21/07	304.8478	309.5295	4.6817	9/27/07	308.7464	0.7831	**16.7268**	
	12525	E02053-05	4	4a Drilled Thimble	9/21/07	319.4941	324.1499	4.6558	9/27/07	323.3609	0.7890	**16.9466**	
	12526	E02053-06	5	5a Drilled Thimble	9/21/07	319.412	324.1114	4.6994	9/27/07	323.2791	0.8323	**17.7108**	
Series 36	12527	E02053-07	6	6a Drilled Thimble	9/21/07	315.6156	320.3762	4.7606	9/27/07	319.542	0.8342	**17.5230**	
	12529	E02054-02	2	2a Drilled Thimble	9/24/07	311.738	316.4992	4.7612	9/27/07	315.4968	1.0024	**21.0535**	**13.7**
	12530	E02054-03	3	3a Drilled Thimble	9/24/07	321.8186	326.3623	4.5437	9/27/07	325.4512	0.9111	**20.0519**	
	12531	E02054-04	4	4a Drilled Thimble	9/24/07	307.3071	311.7855	4.4784	9/27/07	311.0002	0.7853	**17.5353**	
Series 37	12532	E02054-05	5	5a Drilled Thimble	9/24/07	313.5352	318.1776	4.6424	9/27/07	317.0458	1.1318	**24.3796**	
	12535	E02055-02	6	6a Drilled Thimble	9/24/07	325.3529	329.8714	4.5185	9/27/07	328.982	0.8894	**19.6835**	**10.3**
	12536	E02055-03	1	1a Drilled Thimble	9/25/07	313.3728	317.9732	4.6004	9/27/07	316.8903	1.0829	**23.5393**	
	12537	E02055-04	2	2a Drilled Thimble	9/25/07	317.0306	321.6274	4.5968	9/27/07	320.5892	1.0382	**22.5853**	
Series 38	12538	E02055-05	3	3a Drilled Thimble	9/25/07	316.281	320.858	4.5770	9/27/07	319.9857	0.8723	**19.0583**	
	12540	E02056-02	4	4a Drilled Thimble	9/25/07	314.4915	319.0784	4.5869	9/27/07	318.2498	0.8286	**18.0645**	**8.5**
	12562	E02056-04	5	5a Drilled Thimble	9/25/07	302.3836	307.1183	4.7347	9/27/07	306.1165	1.0018	**21.1587**	
Series 39	12563	E02056-06	6	6a Drilled Thimble	9/25/07	308.2408	312.9086	4.6678	9/27/07	311.9365	0.9721	**20.8257**	
	13103	E02187-02	1	1a Drilled Thimble	10/30/07	297.5969	300.9266	3.3297	11/2/07	300.1487	0.7779	**23.3625**	**9.6**
	13104	E02187-03	2	2a Drilled Thimble	10/30/07	296.8633	300.13	3.2667	11/2/07	299.2089	0.9211	**28.1967**	
	13105	E02187-04	3	3a Drilled Thimble	10/30/07	305.0563	308.4696	3.4133	11/2/07	307.623	0.8466	**24.8030**	
	13106	E02187-05	4	4a Drilled Thimble	10/30/07	299.363	302.6736	3.3106	11/2/07	301.7622	0.9114	**27.5298**	
	13107	E02187-06	5	5a Drilled Thimble	10/30/07	294.2738	297.4628	3.1890	11/2/07	296.4861	0.9767	**30.6272**	
Series 40	13108	E02187-07	6	6a Drilled Thimble	10/30/07	298.8103	302.0374	3.2271	11/2/07	301.1792	0.8582	**26.5935**	
	13117	E02189-02	1	1a Drilled Thimble	10/31/07	275.3932	278.1845	2.7913	11/2/07	277.5956	0.5889	**21.0977**	**6.8**
	13112	E02189-03	2	2a Drilled Thimble	10/31/07	298.4955	301.3237	2.8282	11/2/07	300.6776	0.6461	**22.8449**	
	13113	E02189-04	3	3a Drilled Thimble	10/31/07	304.1104	306.9545	2.8441	11/2/07	306.2159	0.7386	**25.9696**	
	13114	E02189-05	4	4a Drilled Thimble	10/31/07	299.8973	302.7381	2.8408	11/2/07	302.0651	0.6730	**23.6905**	
	13115	E02189-06	5	5a Drilled Thimble	10/31/07	301.2121	304.08	2.8679	11/2/07	303.4174	0.6626	**23.1040**	
Series 41	13116	E02189-07	6	6a Drilled Thimble	10/31/07	277.6	280.4293	2.8293	11/2/07	279.757	0.6723	**23.7621**	

	13119	E02191-02	1	1a Drilled Thimble	11/1/07	302.8403	305.885	3.0447	11/5/07	305.0321	0.8529	**28.0126**	**6.3**
	13120	E02191-03	2	2a Drilled Thimble	11/1/07	306.2385	309.3156	3.0771	11/5/07	308.5081	0.8075	**26.2422**	
	13121	E02191-04	3	3a Drilled Thimble	11/1/07	301.7282	304.7785	3.0503	11/5/07	304.0277	0.7508	**24.6140**	
	13122	E02191-05	4	4a Drilled Thimble	11/1/07	306.1713	309.2107	3.0394	11/5/07	308.4529	0.7578	**24.9326**	
	13123	E02191-06	5	5a Drilled Thimble	11/1/07	300.6467	303.6224	2.9757	11/5/07	302.7907	0.8317	**27.9497**	
	13124	E02191-07	6	6a Drilled Thimble	11/1/07	298.9502	301.8389	2.8887	11/5/07	301.0691	0.7698	**26.6487**	
	13125	E02191-08	1	1a Drilled Thimble	11/5/07	298.4658	301.3624	2.8966	11/6/07	300.5343	0.8281	**28.5887**	
Series 42	13126	E02191-09	2	2a Drilled Thimble	11/5/07	303.3735	306.1924	2.8189	11/6/07	305.3684	0.8240	**29.2313**	
	13131	E02192-04	3	3a Drilled Thimble	11/5/07	309.474	312.271	2.797	11/6/07	311.3849	0.8861	**31.6804**	**7.5**
	13132	E02192-05	4	4a Drilled Thimble	11/5/07	306.8462	309.6772	2.831	11/6/07	308.9399	0.7373	**26.0438**	
	13133	E02192-06	5	5a Drilled Thimble	11/5/07	310.6059	313.4004	2.7945	11/6/07	312.6199	0.7805	**27.9299**	
	13134	E02192-07	6	6a Drilled Thimble	11/5/07	308.6263	311.5126	2.8863	11/6/07	310.6812	0.8314	**28.8050**	
	13135	E02192-08	1	1b Drilled Thimble	11/6/07	299.8368	302.6149	2.7781	11/7/07	301.7336	0.8813	**31.7231**	
Series 43	13136	E02192-09	2	2b Drilled Thimble	11/6/07	304.2979	307.0843	2.7864	11/7/07	306.2631	0.8212	**29.4717**	
	13139	E02193-02	1	1a Drilled Thimble	11/6/07	306.0854	308.8435	2.7581	11/7/07	308.0726	0.7709	**27.9504**	**9.2**
	13140	E02193-03	2	2a Drilled Thimble	11/6/07	300.0987	302.8911	2.7924	11/7/07	302.0424	0.8487	**30.3932**	
	13141	E02193-04	3	3a Drilled Thimble	11/6/07	302.8864	305.6156	2.7292	11/7/07	304.8073	0.8083	**29.6167**	
	13142	E02193-05	4	4a Drilled Thimble	11/6/07	310.902	313.6503	2.7483	11/7/07	312.7393	0.9110	**33.1478**	
	13143	E02193-06	5	5a Drilled Thimble	11/6/07	300.3086	303.055	2.7464	11/7/07	302.1514	0.9036	**32.9013**	
Series 44	13144	E02193-07	6	6a Drilled Thimble	11/6/07	316.8667	319.7195	2.8528	11/7/07	318.9742	0.7453	**26.1252**	
	13146	E02194-02	1	1b Drilled Thimble	11/7/07	310.7381	313.4921	2.754	11/13/07	312.6601	0.8320	**30.2106**	**6.6**
	13147	E02194-03	2	2b Drilled Thimble	11/7/07	304.6489	307.4639	2.815	11/13/07	306.6793	0.7846	**27.8721**	
	13148	E02194-04	3	3b Drilled Thimble	11/7/07	309.6293	312.4917	2.8624	11/13/07	311.6315	0.8602	**30.0517**	
Series 45	13149	E02194-05	4	4b Drilled Thimble	11/7/07	302.1858	305.0288	2.843	11/13/07	304.2825	0.7463	**26.2504**	
	13159	E02195-02	1	1b Drilled Thimble	11/9/07	314.3018	317.3247	3.0229	11/13/07	316.2507	1.0740	**35.5288**	**11.8**
	13160	E02195-03	2	2b Drilled Thimble	11/9/07	305.6471	308.6162	2.9691	11/13/07	307.6334	0.9828	**33.1009**	
	13161	E02195-04	3	3b Drilled Thimble	11/9/07	304.9535	308.0921	3.1386	11/13/07	307.2606	0.8315	**26.4927**	
	13162	E02195-05	4	4b Drilled Thimble	11/9/07	308.3881	311.4367	3.0486	11/13/07	310.5884	0.8483	**27.8259**	
	13163	E02195-06	5	5b Drilled Thimble	11/9/07	303.0613	306.0052	2.9439	11/13/07	305.0677	0.9375	**31.8455**	
Series 46	13164	E02195-07	6	6b Drilled Thimble	11/9/07	309.4879	312.4302	2.9423	11/13/07	311.3976	1.0326	**35.0950**	
	13167	E02197-02	1	1a Drilled Thimble	11/12/07	309.131	312.0825	2.9515	11/15/07	311.2207	0.8618	**29.1987**	**8.2**
	13168	E02197-03	2	2a Drilled Thimble	11/12/07	305.5208	308.4593	2.9385	11/15/07	307.6308	0.8285	**28.1947**	
	13169	E02197-04	3	3a Drilled Thimble	11/12/07	307.0956	310.0136	2.918	11/15/07	309.1406	0.8730	**29.9178**	
	13170	E02197-05	4	4a Drilled Thimble	11/12/07	309.6928	312.7016	3.0088	11/15/07	311.748	0.9536	**31.6937**	
	13171	E02197-06	5	5a Drilled Thimble	11/12/07	302.6121	305.5609	2.9488	11/15/07	304.8353	0.7256	**24.6066**	
Series 47	13172	E02197-07	6	6a Drilled Thimble	11/12/07	308.643	311.592	2.949	11/15/07	310.7502	0.8418	**28.5453**	

	13212	E02199-02	1	1a Drilled Thimble	11/14/07	278.6357	281.509	2.8733	11/19/07	280.7467	0.7623	**26.5305**	**6.0**
	13213	E02199-03	2	2a Drilled Thimble	11/14/07	288.0448	290.8826	2.8378	11/19/07	290.1271	0.7555	**26.6227**	
	13214	E02199-04	3	3a Drilled Thimble	11/14/07	278.8664	281.699	2.8326	11/19/07	280.9585	0.7405	**26.1421**	
	13215	E02199-05	4	4a Drilled Thimble	11/14/07	284.8412	287.61	2.7688	11/19/07	286.8639	0.7461	**26.9467**	
	13216	E02199-06	5	5a Drilled Thimble	11/14/07	279.9265	282.6997	2.7732	11/19/07	281.9171	0.7826	**28.2201**	
Series 48	13217	E02199-07	6	6a Drilled Thimble	11/14/07	287.7202	290.5701	2.8499	11/19/07	289.9013	0.6688	**23.4675**	
	13219	E02120-02	1	1b Drilled Thimble	11/15/07	287.9825	290.9049	2.9224	11/19/07	290.2076	0.6973	**23.8605**	**9.2**
	13220	E02120-03	2	2b Drilled Thimble	11/15/07	277.1737	280.1377	2.964	11/19/07	279.3392	0.7985	**26.9399**	
	13221	E02120-04	3	3b Drilled Thimble	11/15/07	280.3548	283.243	2.8882	11/19/07	282.4965	0.7465	**25.8465**	
	13222	E02120-05	4	4b Drilled Thimble	11/15/07	287.0705	290.04	2.9695	11/19/07	289.1064	0.9336	**31.4396**	
	13223	E02120-06	5	5b Drilled Thimble	11/15/07	286.8324	289.7529	2.9205	11/19/07	288.9382	0.8147	**27.8959**	
Series 49	13224	E02120-07	6	6b Drilled Thimble	11/15/07	279.4377	282.2783	2.8406	11/19/07	281.487	0.7913	**27.8568**	
	13483	E02252-02	1	1a Drilled Thimble	12/12/07	296.0094	301.1985	5.1891	12/13/07	300.1966	1.0019	**19.3078**	**4.5**
	13484	E02252-03	2	2a Drilled Thimble	12/12/07	296.5815	301.6818	5.1003	12/13/07	300.6735	1.0083	**19.7694**	
	13485	E02252-04	3	3a Drilled Thimble	12/12/07	294.2146	299.2074	4.9928	12/13/07	298.2918	0.9156	**18.3384**	
	13486	E02252-05	4	4a Drilled Thimble	12/12/07	296.2525	301.3893	5.1368	12/13/07	300.432	0.9573	**18.6361**	
Series 50	13487	E02252-06	5	5a Drilled Thimble	12/12/07	300.7167	305.8312	5.1145	12/13/07	304.9303	0.9009	**17.6146**	
	13498	E02254-02	1	1b Drilled Thimble	12/13/07	296.7337	301.5396	4.8059	12/14/07	300.5905	0.9491	**19.7486**	**4.6**
	13499	E02254-03	2	2b Drilled Thimble	12/13/07	290.3686	295.1114	4.7428	12/14/07	294.1483	0.9631	**20.3066**	
	13500	E02254-04	3	3b Drilled Thimble	12/13/07	284.9383	289.7199	4.7816	12/14/07	288.7081	1.0118	**21.1603**	
Series 51	13501	E02254-05	4	4b Drilled Thimble	12/13/07	302.1627	306.944	4.7813	12/14/07	306.0372	0.9068	**18.9656**	
	13491	E02253-02	1	1a Drilled Thimble	12/13/07	284.3233	289.1126	4.7893	12/14/07	288.2708	0.8418	**17.5767**	**4.7**
	13492	E02253-03	2	2a Drilled Thimble	12/13/07	286.8362	291.5619	4.7257	12/14/07	290.6655	0.8964	**18.9686**	
	13493	E02253-04	3	3a Drilled Thimble	12/13/07	289.2428	294.0337	4.7909	12/14/07	293.0691	0.9646	**20.1340**	
	13494	E02253-05	4	4a Drilled Thimble	12/13/07	283.7612	288.4946	4.7334	12/14/07	287.5632	0.9314	**19.6772**	
	13495	E02253-06	5	5a Drilled Thimble	12/13/07	289.4803	294.2359	4.7556	12/14/07	293.3057	0.9302	**19.5601**	
Series 52	13496	E02253-07	6	6a Drilled Thimble	12/13/07	300.0058	304.7017	4.6959	12/14/07	303.8186	0.8831	**18.8058**	

Appendix F

	Index	FilterID	DateTime	Weight	Weighing Number
CAL4-1	26632	CAL4	7/2/08 13:16	199.9957	1
CAL4-2	26635	CAL4	7/2/08 13:18	199.9926	2
CAL4-3	26746	CAL4	7/3/08 9:17	199.9933	3
CAL4-4	26956	CAL4	7/7/08 8:51	199.9933	4
CAL4-5	27061	CAL4	7/7/08 16:32	199.9938	5
CAL4-6	27125	CAL4	7/8/08 9:28	199.9933	6
CAL4-7	27343	CAL4	7/9/08 9:37	199.994	7
CAL4-8	27346	CAL4	7/9/08 9:39	199.9923	8
CAL4-9	27460	CAL4	7/10/08 12:36	199.9929	9
CAL4-10	27464	CAL4	7/10/08 12:43	199.9935	10
CAL4-11	27584	CAL4	7/11/08 9:30	199.9929	11
CAL4-12	27760	CAL4	7/12/08 12:56	199.993	12
CAL4-13	27793	CAL4	7/13/08 14:55	199.993	13
CAL4-14	27828	CAL4	7/14/08 12:06	199.9931	14
CAL4-15	27977	CAL4	7/15/08 13:21	199.9933	15
CAL4-16	28106	CAL4	7/17/08 14:33	199.993	16
CAL4-17	28483	CAL4	7/22/08 8:25	199.9934	17
CAL4-18	28563	CAL4	7/23/08 11:25	199.9928	18
CAL4-19	28637	CAL4	7/24/08 12:12	199.9935	19
CAL4-20	28711	CAL4	7/25/08 13:01	199.9934	20
CAL4-21	28899	CAL4	7/26/08 14:53	199.9933	21
CAL4-22	28964	CAL4	7/27/08 14:10	199.9934	22
CAL4-23	28967	CAL4	7/27/08 14:12	199.9929	23
CAL4-24	29021	CAL4	7/28/08 18:10	199.9938	24
CAL4-25	29066	CAL4	7/29/08 7:56	199.9934	25
CAL4-26	29134	CAL4	7/30/08 7:21	199.9944	26
CAL4-27	29280	CAL4	7/31/08 15:20	199.9947	27
CAL4-28	29306	CAL4	8/1/08 13:37	199.9938	28
CAL4-29	29368	CAL4	8/2/08 14:19	199.9934	29
CAL4-30	29413	CAL4	8/3/08 12:26	199.9926	30
CAL4-31	29459	CAL4	8/4/08 12:51	199.9936	31
CAL4-32	29506	CAL4	8/5/08 12:55	199.9938	32
CAL4-33	30007	CAL4	8/21/08 9:42	199.9951	33
CAL4-34	30262	CAL4	8/28/08 9:19	199.9938	34
CAL4-35	30483	CAL4	9/3/08 14:22	199.9934	35
WVE13832-1	28332	WVE13832	7/18/08 16:43	281.3739	1
WVE13832-2	28464	WVE13832	7/21/08 12:25	281.3683	2
WVE13832-3	28546	WVE13832	7/22/08 13:09	281.3681	3
WVE13832-4	28620	WVE13832	7/23/08 12:08	281.3673	4
WVE13832-5	28646	WVE13832	7/24/08 12:19	281.3636	5
WVE13832-6	28690	WVE13832	7/24/08 18:10	281.3655	6
WVE13832-7	28721	WVE13832	7/25/08 13:08	281.3647	7

WVE13832-8	28912	WVE13832	7/26/08 15:01	281.3633	8
WVE13832-9	29699	WVE13832	8/7/08 20:05	281.374	9
WVE13832-10	29899	WVE13832	8/14/08 16:21	281.3747	10
WVE13832-11	30070	WVE13832	8/21/08 10:30	281.376	11
WVE13832-12	30325	WVE13832	8/28/08 10:07	281.3826	12
WVE13832-13	30548	WVE13832	9/3/08 15:25	281.3847	13
WVE13833-1	28333	WVE13833	7/18/08 16:44	281.3716	1
WVE13833-2	28465	WVE13833	7/21/08 12:26	281.3607	2
WVE13833-3	28547	WVE13833	7/22/08 13:09	281.3641	3
WVE13833-4	28621	WVE13833	7/23/08 12:09	281.361	4
WVE13833-5	28930	WVE13833	7/26/08 15:26	281.3311	5
WVE13833-6	29000	WVE13833	7/27/08 14:36	281.3268	6
WVE13833-7	29055	WVE13833	7/28/08 18:33	281.3228	7
WVE13833-8	29123	WVE13833	7/29/08 12:35	281.325	8
WVE13833-9	29694	WVE13833	8/7/08 20:01	281.3255	9
WVE13833-10	29858	WVE13833	8/14/08 15:50	281.3241	10
WVE13833-11	30028	WVE13833	8/21/08 9:57	281.3213	11
WVE13833-12	30283	WVE13833	8/28/08 9:34	281.3242	12
WVE13833-13	30504	WVE13833	9/3/08 14:40	281.3259	13
WVE13834-1	28334	WVE13834	7/18/08 16:45	282.7107	1
WVE13834-2	28466	WVE13834	7/21/08 12:26	282.7022	2
WVE13834-3	28548	WVE13834	7/22/08 13:10	282.7022	3
WVE13834-4	28622	WVE13834	7/23/08 12:10	282.7002	4
WVE13834-5	28948	WVE13834	7/26/08 15:40	282.6519	5
WVE13834-6	28993	WVE13834	7/27/08 14:30	282.6487	6
WVE13834-7	29047	WVE13834	7/28/08 18:27	282.6431	7
WVE13834-8	29115	WVE13834	7/29/08 12:29	282.6452	8
WVE13834-9	29684	WVE13834	8/7/08 19:54	282.6437	9
WVE13834-10	29859	WVE13834	8/14/08 15:50	282.6405	10
WVE13834-11	30029	WVE13834	8/21/08 9:58	282.6413	11
WVE13834-12	30284	WVE13834	8/28/08 9:35	282.6445	12
WVE13834-13	30505	WVE13834	9/3/08 14:41	282.6468	13
WVE13835-1	28335	WVE13835	7/18/08 16:45	285.2495	1
WVE13835-2	28467	WVE13835	7/21/08 12:27	285.2391	2
WVE13835-3	28549	WVE13835	7/22/08 13:11	285.2407	3
WVE13835-4	28623	WVE13835	7/23/08 12:10	285.2396	4
WVE13835-5	28949	WVE13835	7/26/08 15:41	285.1924	5
WVE13835-6	28992	WVE13835	7/27/08 14:29	285.1892	6
WVE13835-7	29046	WVE13835	7/28/08 18:27	285.1814	7
WVE13835-8	29114	WVE13835	7/29/08 12:28	285.186	8
WVE13835-9	29683	WVE13835	8/7/08 19:54	285.1854	9
WVE13835-10	29860	WVE13835	8/14/08 15:51	285.1856	10
WVE13835-11	30030	WVE13835	8/21/08 9:59	285.1866	11
WVE13835-12	30285	WVE13835	8/28/08 9:36	285.1888	12
WVE13835-13	30506	WVE13835	9/3/08 14:41	285.1881	13
WVE13836-1	28336	WVE13836	7/18/08 16:46	300.7863	1
WVE13836-2	28468	WVE13836	7/21/08 12:28	300.7735	2
WVE13836-3	28550	WVE13836	7/22/08 13:12	300.7793	3
WVE13836-4	28624	WVE13836	7/23/08 12:11	300.7755	4

WVE13836-5	28651	WVE13836	7/24/08 12:22	300.7544	5
WVE13836-6	28695	WVE13836	7/24/08 18:13	300.7528	6
WVE13836-7	28725	WVE13836	7/25/08 13:11	300.7501	7
WVE13836-8	28920	WVE13836	7/26/08 15:06	300.7504	8
WVE13836-9	29690	WVE13836	8/7/08 19:58	300.7497	9
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WVE13836-12	30288	WVE13836	8/28/08 9:37	300.7526	12
WVE13836-13	30509	WVE13836	9/3/08 14:45	300.7517	13
WVE13837-1	28337	WVE13837	7/18/08 16:47	295.9341	1
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WVE13837-3	28551	WVE13837	7/22/08 13:13	295.9218	3
WVE13837-4	28625	WVE13837	7/23/08 12:12	295.9208	4
WVE13837-5	28652	WVE13837	7/24/08 12:23	295.9079	5
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WVE13837-7	28726	WVE13837	7/25/08 13:11	295.9021	7
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WVE13837-9	29691	WVE13837	8/7/08 19:59	295.9047	9
WVE13837-10	29864	WVE13837	8/14/08 15:53	295.9036	10
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WVE13837-12	30289	WVE13837	8/28/08 9:38	295.9056	12
WVE13837-13	30510	WVE13837	9/3/08 14:46	295.9037	13
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WVE13838-2	28470	WVE13838	7/21/08 12:30	282.6632	2
WVE13838-3	28552	WVE13838	7/22/08 13:14	282.6604	3
WVE13838-4	28626	WVE13838	7/23/08 12:12	282.6598	4
WVE13838-5	28653	WVE13838	7/24/08 12:23	282.6588	5
WVE13838-6	28697	WVE13838	7/24/08 18:14	282.6591	6
WVE13838-7	28727	WVE13838	7/25/08 13:12	282.6512	7
WVE13838-8	28923	WVE13838	7/26/08 15:09	282.6569	8
WVE13838-9	29695	WVE13838	8/7/08 20:02	282.6561	9
WVE13838-10	29865	WVE13838	8/14/08 15:54	282.654	10
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WVE13838-12	30290	WVE13838	8/28/08 9:38	282.6663	12
WVE13838-13	30511	WVE13838	9/3/08 14:47	282.6626	13
WVE13839-1	28339	WVE13839	7/18/08 16:49	282.5631	1
WVE13839-2	28471	WVE13839	7/21/08 12:31	282.5045	2
WVE13839-3	28553	WVE13839	7/22/08 13:16	282.4996	3
WVE13839-4	28627	WVE13839	7/23/08 12:13	282.5024	4
WVE13940-1	28340	WVE13940	7/18/08 16:50	297.035	1
WVE13940-2	28472	WVE13940	7/21/08 12:32	297.0321	2
WVE13940-3	28554	WVE13940	7/22/08 13:17	297.029	3
WVE13940-4	28628	WVE13940	7/23/08 12:14	297.028	4
WVE13940-5	28647	WVE13940	7/24/08 12:19	297.0292	5
WVE13940-6	28691	WVE13940	7/24/08 18:11	297.0276	6
WVE13940-7	28722	WVE13940	7/25/08 13:09	297.026	7
WVE13940-8	28911	WVE13940	7/26/08 15:00	297.0223	8
WVE13940-9	29698	WVE13940	8/7/08 20:04	297.0288	9
WVE13940-10	29900	WVE13940	8/14/08 16:22	297.0347	10

WVE13940-11	30071	WVE13940	8/21/08 10:31	297.0333	11
WVE13940-12	30326	WVE13940	8/28/08 10:07	297.0379	12
WVE13940-13	30547	WVE13940	9/3/08 15:24	297.0407	13
WVE13941-1	28341	WVE13941	7/18/08 16:51	294.4728	1
WVE13941-2	28473	WVE13941	7/21/08 12:33	294.4699	2
WVE13941-3	28555	WVE13941	7/22/08 13:18	294.4659	3
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WVE13941-5	28654	WVE13941	7/24/08 12:24	294.46	5
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WVE13941-7	28728	WVE13941	7/25/08 13:13	294.4552	7
WVE13941-8	28924	WVE13941	7/26/08 15:09	294.4603	8
WVE13941-9	29696	WVE13941	8/7/08 20:03	294.4646	9
WVE13942-1	28344	WVE13942	7/18/08 16:53	296.4613	1
WVE13942-2	28477	WVE13942	7/21/08 12:37	296.4562	2
WVE13942-3	28558	WVE13942	7/22/08 13:20	296.4578	3
WVE13942-4	28632	WVE13942	7/23/08 12:16	296.4587	4
WVE13942-5	29289	WVE13942	7/31/08 15:25	295.5382	5
WVE13942-6	29315	WVE13942	8/1/08 13:44	295.5392	6
WVE13942-7	29384	WVE13942	8/2/08 14:32	295.5463	7
WVE13942-8	29430	WVE13942	8/3/08 12:38	295.5543	8
WVE13942-9	29706	WVE13942	8/7/08 20:09	295.576	9
WVE13942-10	29866	WVE13942	8/14/08 15:55	295.6286	10
WVE13942-11	30036	WVE13942	8/21/08 10:03	295.6595	11
WVE13942-12	30291	WVE13942	8/28/08 9:39	295.6903	12
WVE13942-13	30512	WVE13942	9/3/08 14:48	295.7179	13
WVE13943-1	28345	WVE13943	7/18/08 16:54	298.105	1
WVE13943-2	28478	WVE13943	7/21/08 12:38	298.093	2
WVE13943-3	28559	WVE13943	7/22/08 13:21	298.0957	3
WVE13943-4	28633	WVE13943	7/23/08 12:17	298.0999	4
WVE13943-5	29290	WVE13943	7/31/08 15:26	297.2031	5
WVE13943-6	29316	WVE13943	8/1/08 13:45	297.2035	6
WVE13943-7	29385	WVE13943	8/2/08 14:33	297.2148	7
WVE13943-8	29431	WVE13943	8/3/08 12:39	297.2245	8
WVE13943-9	29705	WVE13943	8/7/08 20:09	297.2404	9
WVE13943-10	29894	WVE13943	8/14/08 16:18	297.2877	10
WVE13943-11	30064	WVE13943	8/21/08 10:26	297.3081	11
WVE13943-12	30319	WVE13943	8/28/08 10:02	297.3231	12
WVE13943-13	30540	WVE13943	9/3/08 15:18	297.3357	13
WVE13944-1	28290	WVE13944	7/18/08 15:59	311.1093	1
WVE13944-2	28422	WVE13944	7/21/08 11:45	311.0998	2
WVE13944-3	28504	WVE13944	7/22/08 12:19	311.0944	3
WVE13944-4	28578	WVE13944	7/23/08 11:35	311.0968	4
WVE13944-5	29291	WVE13944	7/31/08 15:27	310.2406	5
WVE13944-6	29317	WVE13944	8/1/08 13:45	310.2436	6
WVE13944-7	29386	WVE13944	8/2/08 14:33	310.261	7
WVE13944-8	29432	WVE13944	8/3/08 12:39	310.2682	8
WVE13944-9	29707	WVE13944	8/7/08 20:10	310.2929	9
WVE13944-10	29895	WVE13944	8/14/08 16:19	310.3191	10
WVE13944-11	30065	WVE13944	8/21/08 10:27	310.3394	11

WVE13944-12	30320	WVE13944	8/28/08 10:03	310.3561	12
WVE13944-13	30541	WVE13944	9/3/08 15:19	310.3764	13
WVE13945-1	28291	WVE13945	7/18/08 16:00	309.386	1
WVE13945-2	28423	WVE13945	7/21/08 11:46	309.3751	2
WVE13945-3	28505	WVE13945	7/22/08 12:20	309.3698	3
WVE13945-4	28579	WVE13945	7/23/08 11:36	309.3704	4
WVE13945-5	29292	WVE13945	7/31/08 15:27	308.4344	5
WVE13945-6	29318	WVE13945	8/1/08 13:46	308.4346	6
WVE13945-7	29387	WVE13945	8/2/08 14:34	308.4401	7
WVE13945-8	29433	WVE13945	8/3/08 12:40	308.4479	8
WVE13945-9	29708	WVE13945	8/7/08 20:11	308.4691	9
WVE13945-10	29896	WVE13945	8/14/08 16:19	308.5141	10
WVE13945-11	30066	WVE13945	8/21/08 10:27	308.5502	11
WVE13945-12	30321	WVE13945	8/28/08 10:04	308.5725	12
WVE13945-13	30542	WVE13945	9/3/08 15:20	308.5745	13
WVE13946-1	28292	WVE13946	7/18/08 16:01	301.3783	1
WVE13946-2	28424	WVE13946	7/21/08 11:47	301.3679	2
WVE13946-3	28506	WVE13946	7/22/08 12:21	301.3634	3
WVE13946-4	28580	WVE13946	7/23/08 11:36	301.3634	4
WVE13946-5	29293	WVE13946	7/31/08 15:28	300.4862	5
WVE13946-6	29319	WVE13946	8/1/08 13:47	300.4926	6
WVE13946-7	29388	WVE13946	8/2/08 14:35	300.5035	7
WVE13946-8	29434	WVE13946	8/3/08 12:41	300.5128	8
WVE13946-9	29709	WVE13946	8/7/08 20:12	300.5355	9
WVE13946-10	29897	WVE13946	8/14/08 16:20	300.5651	10
WVE13946-11	30067	WVE13946	8/21/08 10:28	300.601	11
WVE13946-12	30322	WVE13946	8/28/08 10:05	300.6303	12
WVE13946-13	30543	WVE13946	9/3/08 15:21	300.6533	13
WVE13947-1	28293	WVE13947	7/18/08 16:01	291.9714	1
WVE13947-2	28425	WVE13947	7/21/08 11:47	291.9607	2
WVE13947-3	28507	WVE13947	7/22/08 12:22	291.9623	3
WVE13947-4	28581	WVE13947	7/23/08 11:37	291.9593	4
WVE13947-5	29294	WVE13947	7/31/08 15:28	290.8307	5
WVE13947-6	29320	WVE13947	8/1/08 13:48	290.8468	6
WVE13947-7	29389	WVE13947	8/2/08 14:36	290.8609	7
WVE13947-8	29439	WVE13947	8/3/08 12:43	290.8714	8
WVE13947-9	29716	WVE13947	8/7/08 20:17	290.8943	9
WVE13947-10	29898	WVE13947	8/14/08 16:21	290.9263	10
WVE13947-11	30068	WVE13947	8/21/08 10:29	290.9615	11
WVE13947-12	30323	WVE13947	8/28/08 10:05	291.0005	12
WVE13947-13	30544	WVE13947	9/3/08 15:22	291.0269	13
WVE14338-1	28284	WVE14338	7/18/08 15:51	296.5318	1
WVE14338-2	28416	WVE14338	7/21/08 11:40	296.5257	2
WVE14338-3	28498	WVE14338	7/22/08 12:13	296.5254	3
WVE14338-4	28572	WVE14338	7/23/08 11:32	296.5279	4
WVE14338-5	28937	WVE14338	7/26/08 15:32	296.4449	5
WVE14338-6	29003	WVE14338	7/27/08 14:38	296.4424	6
WVE14338-7	29058	WVE14338	7/28/08 18:35	296.4378	7
WVE14338-8	29126	WVE14338	7/29/08 12:37	296.439	8

WVE14338-9	29692	WVE14338	8/7/08 20:00	296.4377	9
WVE14338-10	29883	WVE14338	8/14/08 16:07	296.4388	10
WVE14338-11	30053	WVE14338	8/21/08 10:16	296.4381	11
WVE14338-12	30308	WVE14338	8/28/08 9:53	296.4451	12
WVE14338-13	30529	WVE14338	9/3/08 15:07	296.4456	13
WVE14339-1	28285	WVE14339	7/18/08 15:52	294.5253	1
WVE14339-2	28417	WVE14339	7/21/08 11:41	294.5175	2
WVE14339-3	28499	WVE14339	7/22/08 12:14	294.5169	3
WVE14339-4	28573	WVE14339	7/23/08 11:32	294.5211	4
WVE14339-5	28945	WVE14339	7/26/08 15:38	294.4577	5
WVE14339-6	28996	WVE14339	7/27/08 14:32	294.456	6
WVE14339-7	29050	WVE14339	7/28/08 18:29	294.4507	7
WVE14339-8	29118	WVE14339	7/29/08 12:31	294.4549	8
WVE14339-9	29687	WVE14339	8/7/08 19:56	294.4559	9
WVE14339-10	29884	WVE14339	8/14/08 16:08	294.4549	10
WVE14339-11	30054	WVE14339	8/21/08 10:17	294.4597	11
WVE14339-12	30309	WVE14339	8/28/08 9:54	294.4621	12
WVE14339-13	30530	WVE14339	9/3/08 15:08	294.4664	13
WVE14340-1	28286	WVE14340	7/18/08 15:53	297.5643	1
WVE14340-2	28418	WVE14340	7/21/08 11:42	297.5555	2
WVE14340-3	28500	WVE14340	7/22/08 12:15	297.5556	3
WVE14340-4	28574	WVE14340	7/23/08 11:33	297.5541	4
WVE14340-5	28947	WVE14340	7/26/08 15:39	297.4931	5
WVE14340-6	28994	WVE14340	7/27/08 14:31	297.4959	6
WVE14340-7	29048	WVE14340	7/28/08 18:28	297.4928	7
WVE14340-8	29116	WVE14340	7/29/08 12:30	297.4913	8
WVE14340-9	29685	WVE14340	8/7/08 19:55	297.4908	9
WVE14340-10	29885	WVE14340	8/14/08 16:09	297.4911	10
WVE14340-11	30055	WVE14340	8/21/08 10:18	297.4986	11
WVE14340-12	30310	WVE14340	8/28/08 9:54	297.5036	12
WVE14340-13	30531	WVE14340	9/3/08 15:09	297.5047	13
WVE14341-1	28287	WVE14341	7/18/08 15:54	281.7495	1
WVE14341-2	28419	WVE14341	7/21/08 11:43	281.7391	2
WVE14341-3	28501	WVE14341	7/22/08 12:16	281.7365	3
WVE14341-4	28575	WVE14341	7/23/08 11:33	281.7385	4
WVE14341-5	28946	WVE14341	7/26/08 15:38	281.6996	5
WVE14341-6	28995	WVE14341	7/27/08 14:31	281.7007	6
WVE14341-7	29049	WVE14341	7/28/08 18:29	281.6937	7
WVE14341-8	29117	WVE14341	7/29/08 12:30	281.697	8
WVE14341-9	29686	WVE14341	8/7/08 19:56	281.6962	9
WVE14341-10	29886	WVE14341	8/14/08 16:10	281.7014	10
WVE14341-11	30056	WVE14341	8/21/08 10:19	281.7014	11
WVE14341-12	30311	WVE14341	8/28/08 9:55	281.7054	12
WVE14341-13	30532	WVE14341	9/3/08 15:09	281.7106	13
WVE14342-1	28288	WVE14342	7/18/08 15:54	279.4554	1
WVE14342-2	28420	WVE14342	7/21/08 11:43	279.4424	2
WVE14342-3	28502	WVE14342	7/22/08 12:17	279.4451	3
WVE14342-4	28576	WVE14342	7/23/08 11:34	279.44	4
WVE14342-5	28954	WVE14342	7/26/08 15:44	279.421	5

WVE14342-6	28983	WVE14342	7/27/08 14:23	279.4166	6
WVE14342-7	29037	WVE14342	7/28/08 18:20	279.4147	7
WVE14342-8	29105	WVE14342	7/29/08 12:22	279.414	8
WVE14342-9	29679	WVE14342	8/7/08 19:50	279.4186	9
WVE14342-10	29847	WVE14342	8/14/08 15:41	279.4172	10
WVE14342-11	30017	WVE14342	8/21/08 9:50	279.4143	11
WVE14342-12	30272	WVE14342	8/28/08 9:26	279.42	12
WVE14342-13	30493	WVE14342	9/3/08 14:31	279.4219	13
WVE14343-1	28289	WVE14343	7/18/08 15:56	276.6593	1
WVE14343-2	28421	WVE14343	7/21/08 11:44	276.6442	2
WVE14343-3	28503	WVE14343	7/22/08 12:18	276.6389	3
WVE14343-4	28577	WVE14343	7/23/08 11:35	276.64	4
WVE14343-5	28955	WVE14343	7/26/08 15:44	276.6211	5
WVE14343-6	28984	WVE14343	7/27/08 14:23	276.6271	6
WVE14343-7	29038	WVE14343	7/28/08 18:21	276.6168	7
WVE14343-8	29106	WVE14343	7/29/08 12:23	276.6147	8
WVE14343-9	29678	WVE14343	8/7/08 19:50	276.6152	9
WVE14343-10	29848	WVE14343	8/14/08 15:42	276.6109	10
WVE14343-11	30018	WVE14343	8/21/08 9:50	276.6049	11
WVE14343-12	30273	WVE14343	8/28/08 9:27	276.6062	12
WVE14343-13	30494	WVE14343	9/3/08 14:31	276.6083	13
WVE14344-1	28296	WVE14344	7/18/08 16:07	294.8828	1
WVE14344-2	28428	WVE14344	7/21/08 11:53	294.8833	2
WVE14344-3	28510	WVE14344	7/22/08 12:26	294.8822	3
WVE14344-4	28584	WVE14344	7/23/08 11:40	294.8843	4
WVE14344-5	28956	WVE14344	7/26/08 15:45	294.8567	5
WVE14344-6	28976	WVE14344	7/27/08 14:18	294.8533	6
WVE14344-7	29030	WVE14344	7/28/08 18:16	294.8498	7
WVE14344-8	29098	WVE14344	7/29/08 12:18	294.8512	8
WVE14344-9	29682	WVE14344	8/7/08 19:53	294.8473	9
WVE14344-10	29849	WVE14344	8/14/08 15:43	294.8379	10
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WVE14344-12	30274	WVE14344	8/28/08 9:28	294.8381	12
WVE14344-13	30495	WVE14344	9/3/08 14:32	294.8423	13
WVE14345-1	28297	WVE14345	7/18/08 16:08	295.0351	1
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WVE14345-3	28511	WVE14345	7/22/08 12:27	295.0316	3
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WVE14345-5	28952	WVE14345	7/26/08 15:42	295.005	5
WVE14345-6	28981	WVE14345	7/27/08 14:22	295	6
WVE14345-7	29035	WVE14345	7/28/08 18:19	294.9981	7
WVE14345-8	29103	WVE14345	7/29/08 12:21	295.0005	8
WVE14345-9	29681	WVE14345	8/7/08 19:52	294.9947	9
WVE14345-10	29850	WVE14345	8/14/08 15:44	294.9871	10
WVE14345-11	30020	WVE14345	8/21/08 9:52	294.9862	11
WVE14345-12	30275	WVE14345	8/28/08 9:28	294.9889	12
WVE14345-13	30496	WVE14345	9/3/08 14:33	294.9944	13
WVE14695-1	27731	WVE14695	7/11/08 18:30	291.6971	1
WVE14695-2	27778	WVE14695	7/12/08 13:07	291.6778	2

WVE14695-3	27806	WVE14695	7/13/08 15:02	291.6716	3
WVE14695-4	27937	WVE14695	7/14/08 14:24	291.6748	4
WVE14695-5	27996	WVE14695	7/15/08 13:33	291.697	5
WVE14695-6	28022	WVE14695	7/15/08 19:20	291.692	6
WVE14695-7	28085	WVE14695	7/16/08 19:24	291.6776	7
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WVE14695-12	29259	WVE14695	7/30/08 12:33	291.6782	12
WVE14695-13	29658	WVE14695	8/7/08 19:34	291.6824	13
WVE14695-14	29930	WVE14695	8/14/08 16:42	291.6804	14
WVE14695-15	30101	WVE14695	8/21/08 10:55	291.6831	15
WVE14695-16	30355	WVE14695	8/28/08 10:33	291.6842	16
WVE14695-17	30581	WVE14695	9/3/08 17:01	291.6894	17
WVE14696-1	27732	WVE14696	7/11/08 18:31	291.4131	1
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WVE14696-3	27807	WVE14696	7/13/08 15:03	291.3959	3
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WVE14696-7	28086	WVE14696	7/16/08 19:25	291.3936	7
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WVE14696-13	29659	WVE14696	8/7/08 19:35	291.398	13
WVE14696-14	29935	WVE14696	8/14/08 16:46	291.3998	14
WVE14696-15	30106	WVE14696	8/21/08 10:58	291.4009	15
WVE14696-16	30360	WVE14696	8/28/08 10:37	291.4044	16
WVE14696-17	30582	WVE14696	9/3/08 17:02	291.4013	17
WVE14697-1	27733	WVE14697	7/11/08 18:32	293.2072	1
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WVE14697-12	29261	WVE14697	7/30/08 12:35	293.1979	12
WVE14697-13	29660	WVE14697	8/7/08 19:36	293.1967	13
WVE14697-14	29936	WVE14697	8/14/08 16:47	293.2024	14
WVE14697-15	30107	WVE14697	8/21/08 10:59	293.207	15
WVE14697-16	30361	WVE14697	8/28/08 10:37	293.2121	16
WVE14697-17	30583	WVE14697	9/3/08 17:03	293.2154	17

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WVE14698-7	28088	WVE14698	7/16/08 19:27	285.9351	7
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WVE14698-11	28747	WVE14698	7/25/08 13:27	285.9424	11
WVE14698-12	29262	WVE14698	7/30/08 12:35	285.9589	12
WVE14698-13	29661	WVE14698	8/7/08 19:36	285.9567	13
WVE14698-14	29937	WVE14698	8/14/08 16:47	285.9651	14
WVE14698-15	30108	WVE14698	8/21/08 10:59	285.9713	15
WVE14698-16	30362	WVE14698	8/28/08 10:38	285.9773	16
WVE14698-17	30584	WVE14698	9/3/08 17:04	285.9668	17
WVE14699-1	27735	WVE14699	7/11/08 18:34	286.5916	1
WVE14699-2	27772	WVE14699	7/12/08 13:03	286.5835	2
WVE14699-3	27810	WVE14699	7/13/08 15:05	286.5777	3
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WVE14699-7	28089	WVE14699	7/16/08 19:27	286.5718	7
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WVE14699-9	28268	WVE14699	7/18/08 15:35	286.5772	9
WVE14699-10	28400	WVE14699	7/21/08 11:24	286.5754	10
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WVE14699-12	29263	WVE14699	7/30/08 12:36	286.5893	12
WVE14699-13	29662	WVE14699	8/7/08 19:37	286.5947	13
WVE14699-14	29938	WVE14699	8/14/08 16:48	286.602	14
WVE14699-15	30109	WVE14699	8/21/08 11:00	286.6001	15
WVE14699-16	30363	WVE14699	8/28/08 10:39	286.6116	16
WVE14699-17	30585	WVE14699	9/3/08 17:04	286.6167	17
WVE14700-1	27736	WVE14700	7/11/08 18:35	291.5435	1
WVE14700-2	27773	WVE14700	7/12/08 13:04	291.531	2
WVE14700-3	27811	WVE14700	7/13/08 15:06	291.5333	3
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WVE14700-7	28090	WVE14700	7/16/08 19:29	291.5287	7
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WVE14700-12	29264	WVE14700	7/30/08 12:37	291.5419	12
WVE14700-13	29663	WVE14700	8/7/08 19:38	291.5462	13
WVE14700-14	29939	WVE14700	8/14/08 16:48	291.5495	14
WVE14700-15	30110	WVE14700	8/21/08 11:01	291.5552	15

WVE14700-16	30364	WVE14700	8/28/08 10:40	291.5622	16
WVE14700-17	30586	WVE14700	9/3/08 17:06	291.567	17
WVE14821-1	28298	WVE14821	7/18/08 16:09	285.5108	1
WVE14821-2	28430	WVE14821	7/21/08 11:55	285.4954	2
WVE14821-3	28512	WVE14821	7/22/08 12:28	285.5078	3
WVE14821-4	28586	WVE14821	7/23/08 11:42	285.4965	4
WVE14821-5	28648	WVE14821	7/24/08 12:20	285.4928	5
WVE14821-6	28692	WVE14821	7/24/08 18:11	285.4884	6
WVE14821-7	28723	WVE14821	7/25/08 13:09	285.4881	7
WVE14821-8	28910	WVE14821	7/26/08 14:59	285.487	8
WVE14821-9	29702	WVE14821	8/7/08 20:07	285.4895	9
WVE14821-10	29902	WVE14821	8/14/08 16:24	285.4924	10
WVE14821-11	30073	WVE14821	8/21/08 10:33	285.4896	11
WVE14821-12	30328	WVE14821	8/28/08 10:09	285.4933	12
WVE14821-13	30545	WVE14821	9/3/08 15:22	285.4976	13
WVE14822-1	28299	WVE14822	7/18/08 16:09	282.6592	1
WVE14822-2	28431	WVE14822	7/21/08 11:56	282.6526	2
WVE14822-3	28513	WVE14822	7/22/08 12:29	282.6675	3
WVE14822-4	28587	WVE14822	7/23/08 11:43	282.6557	4
WVE14822-5	28936	WVE14822	7/26/08 15:31	282.5968	5
WVE14822-6	29004	WVE14822	7/27/08 14:39	282.5972	6
WVE14822-7	29059	WVE14822	7/28/08 18:36	282.5945	7
WVE14822-8	29127	WVE14822	7/29/08 12:38	282.5934	8
WVE14822-9	29297	WVE14822	7/31/08 15:30	281.7015	9
WVE14822-10	29321	WVE14822	8/1/08 13:48	281.704	10
WVE14822-11	29390	WVE14822	8/2/08 14:36	281.7148	11
WVE14822-12	29438	WVE14822	8/3/08 12:43	281.7215	12
WVE14822-13	29715	WVE14822	8/7/08 20:16	281.7414	13
WVE14822-14	29846	WVE14822	8/14/08 15:41	281.7667	14
WVE14822-15	30016	WVE14822	8/21/08 9:49	281.7838	15
WVE14822-16	30271	WVE14822	8/28/08 9:25	281.7927	16
WVE14822-17	30492	WVE14822	9/3/08 14:30	281.8031	17
WVE14823-1	28300	WVE14823	7/18/08 16:10	286.0018	1
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WVE14823-3	28514	WVE14823	7/22/08 12:30	285.9876	3
WVE14823-4	28588	WVE14823	7/23/08 11:43	285.9876	4
WVE14823-5	28929	WVE14823	7/26/08 15:25	285.9405	5
WVE14823-6	29001	WVE14823	7/27/08 14:37	285.9395	6
WVE14823-7	29056	WVE14823	7/28/08 18:34	285.9367	7
WVE14823-8	29124	WVE14823	7/29/08 12:36	285.9389	8
WVE14823-9	29298	WVE14823	7/31/08 15:31	285.2066	9
WVE14823-10	29322	WVE14823	8/1/08 13:49	285.2166	10
WVE14823-11	29391	WVE14823	8/2/08 14:37	285.2241	11
WVE14823-12	29437	WVE14823	8/3/08 12:42	285.2315	12
WVE14823-13	29714	WVE14823	8/7/08 20:15	285.2526	13
WVE14823-14	29851	WVE14823	8/14/08 15:44	285.2948	14
WVE14823-15	30021	WVE14823	8/21/08 9:52	285.3174	15
WVE14823-16	30276	WVE14823	8/28/08 9:29	285.3478	16
WVE14823-17	30497	WVE14823	9/3/08 14:34	285.367	17

WVE14824-1	28301	WVE14824	7/18/08 16:11	288.7015	1
WVE14824-2	28433	WVE14824	7/21/08 11:57	288.69	2
WVE14824-3	28515	WVE14824	7/22/08 12:31	288.6886	3
WVE14824-4	28589	WVE14824	7/23/08 11:44	288.6898	4
WVE14824-5	28928	WVE14824	7/26/08 15:24	288.6514	5
WVE14824-6	29002	WVE14824	7/27/08 14:37	288.6541	6
WVE14824-7	29057	WVE14824	7/28/08 18:34	288.6469	7
WVE14824-8	29125	WVE14824	7/29/08 12:36	288.6502	8
WVE14824-9	29299	WVE14824	7/31/08 15:33	287.8741	9
WVE14824-10	29323	WVE14824	8/1/08 13:50	287.8865	10
WVE14824-11	29392	WVE14824	8/2/08 14:38	287.8977	11
WVE14824-12	29436	WVE14824	8/3/08 12:42	287.9013	12
WVE14824-13	29710	WVE14824	8/7/08 20:12	287.9209	13
WVE14824-14	29852	WVE14824	8/14/08 15:45	287.9416	14
WVE14824-15	30022	WVE14824	8/21/08 9:53	287.9751	15
WVE14824-16	30277	WVE14824	8/28/08 9:30	288.0164	16
WVE14824-17	30498	WVE14824	9/3/08 14:35	288.0443	17
WVE14825-1	28302	WVE14825	7/18/08 16:12	287.7571	1
WVE14825-2	28434	WVE14825	7/21/08 11:58	287.7454	2
WVE14825-3	28516	WVE14825	7/22/08 12:32	287.7444	3
WVE14825-4	28590	WVE14825	7/23/08 11:45	287.7468	4
WVE14825-5	28931	WVE14825	7/26/08 15:27	287.6959	5
WVE14825-6	28999	WVE14825	7/27/08 14:35	287.6942	6
WVE14825-7	29054	WVE14825	7/28/08 18:32	287.6903	7
WVE14825-8	29122	WVE14825	7/29/08 12:34	287.6949	8
WVE14825-9	29300	WVE14825	7/31/08 15:34	286.9288	9
WVE14825-10	29324	WVE14825	8/1/08 13:51	286.9369	10
WVE14825-11	29393	WVE14825	8/2/08 14:39	286.9514	11
WVE14825-12	29435	WVE14825	8/3/08 12:41	286.9579	12
WVE14825-13	29711	WVE14825	8/7/08 20:13	286.9796	13
WVE14825-14	29853	WVE14825	8/14/08 15:46	286.9917	14
WVE14825-15	30023	WVE14825	8/21/08 9:54	287.0235	15
WVE14825-16	30278	WVE14825	8/28/08 9:31	287.0526	16
WVE14825-17	30499	WVE14825	9/3/08 14:36	287.0833	17
WVE14826-1	28303	WVE14826	7/18/08 16:13	284.5549	1
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WVE14826-3	28517	WVE14826	7/22/08 12:33	284.5424	3
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WVE14826-5	28933	WVE14826	7/26/08 15:28	284.4806	5
WVE14826-6	29007	WVE14826	7/27/08 14:40	284.4852	6
WVE14826-7	29062	WVE14826	7/28/08 18:38	284.4858	7
WVE14826-8	29130	WVE14826	7/29/08 12:39	284.4805	8
WVE14826-9	29301	WVE14826	7/31/08 15:34	283.7075	9
WVE14826-10	29327	WVE14826	8/1/08 13:54	283.7148	10
WVE14826-11	29396	WVE14826	8/2/08 14:43	283.7386	11
WVE14826-12	29442	WVE14826	8/3/08 12:46	283.747	12
WVE14826-13	29717	WVE14826	8/7/08 20:17	283.7699	13
WVE14826-14	29854	WVE14826	8/14/08 15:46	283.7972	14
WVE14826-15	30024	WVE14826	8/21/08 9:55	283.8273	15

WVE14826-16	30279	WVE14826	8/28/08 9:32	283.8596	16
WVE14826-17	30500	WVE14826	9/3/08 14:36	283.8884	17
WVE14827-1	28304	WVE14827	7/18/08 16:13	285.434	1
WVE14827-2	28436	WVE14827	7/21/08 11:59	285.4239	2
WVE14827-3	28518	WVE14827	7/22/08 12:33	285.4251	3
WVE14827-4	28592	WVE14827	7/23/08 11:46	285.4237	4
WVE14827-5	28934	WVE14827	7/26/08 15:29	285.3871	5
WVE14827-6	29006	WVE14827	7/27/08 14:40	285.3829	6
WVE14827-7	29061	WVE14827	7/28/08 18:37	285.3807	7
WVE14827-8	29129	WVE14827	7/29/08 12:39	285.3807	8
WVE14827-9	29302	WVE14827	7/31/08 15:35	284.6726	9
WVE14827-10	29328	WVE14827	8/1/08 13:55	284.6889	10
WVE14827-11	29397	WVE14827	8/2/08 14:43	284.6976	11
WVE14827-12	29443	WVE14827	8/3/08 12:47	284.704	12
WVE14827-13	29718	WVE14827	8/7/08 20:18	284.7256	13
WVE14827-14	29855	WVE14827	8/14/08 15:47	284.7671	14
WVE14827-15	30025	WVE14827	8/21/08 9:55	284.809	15
WVE14827-16	30280	WVE14827	8/28/08 9:32	284.846	16
WVE14827-17	30501	WVE14827	9/3/08 14:37	284.8668	17
WVE14828-1	28305	WVE14828	7/18/08 16:14	284.7373	1
WVE14828-2	28437	WVE14828	7/21/08 12:00	284.7231	2
WVE14828-3	28519	WVE14828	7/22/08 12:35	284.7227	3
WVE14828-4	28593	WVE14828	7/23/08 11:47	284.7209	4
WVE14828-5	28657	WVE14828	7/24/08 12:28	284.7021	5
WVE14828-6	28702	WVE14828	7/24/08 18:18	284.6989	6
WVE14828-7	28737	WVE14828	7/25/08 13:20	284.6987	7
WVE14828-8	28919	WVE14828	7/26/08 15:05	284.7042	8
WVE14828-9	29333	WVE14828	8/1/08 14:00	283.9405	9
WVE14828-10	29402	WVE14828	8/2/08 14:48	283.9496	10
WVE14828-11	29448	WVE14828	8/3/08 12:51	283.9542	11
WVE14828-12	29472	WVE14828	8/4/08 13:04	283.9641	12
WVE14828-13	29723	WVE14828	8/7/08 20:22	283.9799	13
WVE14828-14	29882	WVE14828	8/14/08 16:06	284.0111	14
WVE14828-15	30052	WVE14828	8/21/08 10:15	284.0425	15
WVE14828-16	30307	WVE14828	8/28/08 9:52	284.0723	16
WVE14828-17	30528	WVE14828	9/3/08 15:06	284.0982	17
WVE14829-1	28308	WVE14829	7/18/08 16:18	286.1398	1
WVE14829-2	28440	WVE14829	7/21/08 12:03	286.1316	2
WVE14829-3	28522	WVE14829	7/22/08 12:38	286.1288	3
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WVE14829-5	28658	WVE14829	7/24/08 12:29	286.1224	5
WVE14829-6	28703	WVE14829	7/24/08 18:19	286.1166	6
WVE14829-7	28732	WVE14829	7/25/08 13:16	286.1134	7
WVE14829-8	28918	WVE14829	7/26/08 15:04	286.1128	8
WVE14829-9	29334	WVE14829	8/1/08 14:00	285.354	9
WVE14829-10	29403	WVE14829	8/2/08 14:49	285.3669	10
WVE14829-11	29449	WVE14829	8/3/08 12:52	285.3745	11
WVE14829-12	29473	WVE14829	8/4/08 13:05	285.3841	12
WVE14829-13	29726	WVE14829	8/7/08 20:23	285.3977	13

WVE14829-14	29887	WVE14829	8/14/08 16:11	285.432	14
WVE14829-15	30057	WVE14829	8/21/08 10:19	285.4539	15
WVE14829-16	30312	WVE14829	8/28/08 9:56	285.4739	16
WVE14829-17	30533	WVE14829	9/3/08 15:10	285.4922	17
WVE14830-1	28309	WVE14830	7/18/08 16:18	286.4115	1
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WVE14830-4	28597	WVE14830	7/23/08 11:51	286.3977	4
WVE14830-5	28659	WVE14830	7/24/08 12:29	286.3909	5
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WVE14830-7	28733	WVE14830	7/25/08 13:17	286.3831	7
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WVE14830-10	29404	WVE14830	8/2/08 14:50	285.6358	10
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WVE14830-12	29474	WVE14830	8/4/08 13:05	285.6538	12
WVE14830-13	29727	WVE14830	8/7/08 20:24	285.6781	13
WVE14830-14	29888	WVE14830	8/14/08 16:11	285.7055	14
WVE14830-15	30058	WVE14830	8/21/08 10:21	285.7342	15
WVE14830-16	30313	WVE14830	8/28/08 9:57	285.7717	16
WVE14830-17	30534	WVE14830	9/3/08 15:11	285.7995	17
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WVE14877-7	29053	WVE14877	7/28/08 18:32	287.6983	7
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WVE14878-1	28312	WVE14878	7/18/08 16:21	284.4293	1
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WVE14878-12	29515	WVE14878	8/5/08 13:00	283.5677	12
WVE14878-13	29737	WVE14878	8/7/08 20:36	283.5851	13
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WVE14879-12	29516	WVE14879	8/5/08 13:01	282.1791	12
WVE14879-13	29736	WVE14879	8/7/08 20:35	282.1905	13
WVE14879-14	29875	WVE14879	8/14/08 16:02	282.2176	14
WVE14879-15	30045	WVE14879	8/21/08 10:10	282.2513	15
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WVE14879-17	30521	WVE14879	9/3/08 14:58	282.3437	17
WVE14880-1	28314	WVE14880	7/18/08 16:22	282.6169	1
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WVE14880-3	28528	WVE14880	7/22/08 12:44	282.6227	3
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WVE14880-6	28990	WVE14880	7/27/08 14:28	282.5891	6
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WVE14880-12	29517	WVE14880	8/5/08 13:01	281.7853	12
WVE14880-13	29734	WVE14880	8/7/08 20:33	281.8028	13
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WVE14880-15	30046	WVE14880	8/21/08 10:11	281.8612	15
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WVE14880-17	30522	WVE14880	9/3/08 14:59	281.9055	17

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WVE14881-14	29877	WVE14881	8/14/08 16:03	287.2634	14
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WVE14881-17	30523	WVE14881	9/3/08 15:00	287.374	17
WVE14882-1	28316	WVE14882	7/18/08 16:24	291.3378	1
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WVE14882-12	29520	WVE14882	8/5/08 13:03	290.4737	12
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WVE14882-14	29878	WVE14882	8/14/08 16:04	290.5222	14
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WVE14991-1	28320	WVE14991	7/18/08 16:29	280.104	1
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WVE14991-10	29903	WVE14991	8/14/08 16:25	280.1175	10
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WVE14991-12	30324	WVE14991	8/28/08 10:06	280.1181	12
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WVE14992-4	28609	WVE14992	7/23/08 11:59	278.7356	4
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WVE14992-8	28925	WVE14992	7/26/08 15:10	278.7368	8
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WVE14992-10	29867	WVE14992	8/14/08 15:56	278.7436	10
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WVE14992-13	30513	WVE14992	9/3/08 14:48	278.7663	13
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WVE14993-3	28536	WVE14993	7/22/08 12:53	280.8279	3
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WVE14993-9	29382	WVE14993	8/2/08 14:29	280.0287	9
WVE14993-10	29427	WVE14993	8/3/08 12:36	280.0394	10
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WVE14993-12	29519	WVE14993	8/5/08 13:02	280.0625	12
WVE14993-13	29738	WVE14993	8/7/08 20:36	280.0748	13
WVE14993-14	29879	WVE14993	8/14/08 16:05	280.1014	14
WVE14993-15	30049	WVE14993	8/21/08 10:13	280.1563	15
WVE14993-16	30304	WVE14993	8/28/08 9:51	280.1972	16
WVE14993-17	30525	WVE14993	9/3/08 15:02	280.2239	17
WVE14994-1	28323	WVE14994	7/18/08 16:32	280.2367	1
WVE14994-2	28455	WVE14994	7/21/08 12:16	280.2215	2
WVE14994-3	28537	WVE14994	7/22/08 12:54	280.2238	3
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WVE14994-6	28705	WVE14994	7/24/08 18:20	280.1867	6
WVE14994-7	28734	WVE14994	7/25/08 13:18	280.1799	7
WVE14994-8	28913	WVE14994	7/26/08 15:02	280.1822	8

WVE14994-9	29336	WVE14994	8/1/08 14:02	279.4304	9
WVE14994-10	29405	WVE14994	8/2/08 14:51	279.4432	10
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WVE14994-13	29728	WVE14994	8/7/08 20:25	279.4737	13
WVE14994-14	29889	WVE14994	8/14/08 16:12	279.5073	14
WVE14994-15	30059	WVE14994	8/21/08 10:21	279.536	15
WVE14994-16	30314	WVE14994	8/28/08 9:57	279.5757	16
WVE14994-17	30535	WVE14994	9/3/08 15:12	279.6023	17
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WVE14995-4	28612	WVE14995	7/23/08 12:01	281.4476	4
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WVE14995-6	28706	WVE14995	7/24/08 18:21	281.4499	6
WVE14995-7	28735	WVE14995	7/25/08 13:19	281.4493	7
WVE14995-8	28914	WVE14995	7/26/08 15:02	281.4477	8
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WVE14995-10	29408	WVE14995	8/2/08 14:53	280.7474	10
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WVE14995-12	29476	WVE14995	8/4/08 13:07	280.7697	12
WVE14995-13	29729	WVE14995	8/7/08 20:26	280.7835	13
WVE14995-14	29890	WVE14995	8/14/08 16:13	280.8144	14
WVE14995-15	30060	WVE14995	8/21/08 10:22	280.8391	15
WVE14995-16	30315	WVE14995	8/28/08 9:58	280.8735	16
WVE14995-17	30536	WVE14995	9/3/08 15:14	280.9	17
WVE14996-1	28325	WVE14996	7/18/08 16:33	281.3381	1
WVE14996-2	28457	WVE14996	7/21/08 12:18	281.3317	2
WVE14996-3	28539	WVE14996	7/22/08 12:56	281.3324	3
WVE14996-4	28613	WVE14996	7/23/08 12:02	281.3319	4
WVE14996-5	28662	WVE14996	7/24/08 12:32	281.3319	5
WVE14996-6	28707	WVE14996	7/24/08 18:22	281.3302	6
WVE14996-7	28736	WVE14996	7/25/08 13:20	281.3291	7
WVE14996-8	28922	WVE14996	7/26/08 15:08	281.3306	8
WVE14996-9	29340	WVE14996	8/1/08 14:06	280.6133	9
WVE14996-10	29409	WVE14996	8/2/08 14:54	280.6217	10
WVE14996-11	29455	WVE14996	8/3/08 12:56	280.6275	11
WVE14996-12	29477	WVE14996	8/4/08 13:08	280.6337	12
WVE14996-13	29730	WVE14996	8/7/08 20:26	280.6448	13
WVE14996-14	29891	WVE14996	8/14/08 16:14	280.6829	14
WVE14996-15	30061	WVE14996	8/21/08 10:23	280.7177	15
WVE14996-16	30316	WVE14996	8/28/08 9:59	280.7534	16
WVE14996-17	30537	WVE14996	9/3/08 15:15	280.7749	17
WVE14997-1	28326	WVE14997	7/18/08 16:34	281.8902	1
WVE14997-2	28458	WVE14997	7/21/08 12:19	281.8856	2
WVE14997-3	28540	WVE14997	7/22/08 12:57	281.8891	3
WVE14997-4	28614	WVE14997	7/23/08 12:02	281.8911	4
WVE14997-5	28960	WVE14997	7/26/08 15:48	281.8836	5
WVE14997-6	28980	WVE14997	7/27/08 14:21	281.8808	6

WVE14997-7	29034	WVE14997	7/28/08 18:19	281.8788	7
WVE14997-8	29102	WVE14997	7/29/08 12:21	281.8796	8
WVE14997-9	29329	WVE14997	8/1/08 13:57	281.1353	9
WVE14997-10	29398	WVE14997	8/2/08 14:45	281.1456	10
WVE14997-11	29444	WVE14997	8/3/08 12:48	281.1531	11
WVE14997-12	29468	WVE14997	8/4/08 13:01	281.1565	12
WVE14997-13	29719	WVE14997	8/7/08 20:18	281.173	13
WVE14997-14	29871	WVE14997	8/14/08 15:59	281.2144	14
WVE14997-15	30043	WVE14997	8/21/08 10:09	281.2433	15
WVE14997-16	30296	WVE14997	8/28/08 9:43	281.2774	16
WVE14997-17	30517	WVE14997	9/3/08 14:54	281.2954	17
WVE14998-1	28327	WVE14998	7/18/08 16:35	282.549	1
WVE14998-2	28459	WVE14998	7/21/08 12:19	282.5408	2
WVE14998-3	28541	WVE14998	7/22/08 12:58	282.5464	3
WVE14998-4	28615	WVE14998	7/23/08 12:03	282.543	4
WVE14998-5	28959	WVE14998	7/26/08 15:47	282.5482	5
WVE14998-6	28979	WVE14998	7/27/08 14:20	282.5442	6
WVE14998-7	29033	WVE14998	7/28/08 18:18	282.541	7
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WVE14998-12	29469	WVE14998	8/4/08 13:02	281.8545	12
WVE14998-13	29720	WVE14998	8/7/08 20:19	281.8658	13
WVE14998-14	29872	WVE14998	8/14/08 16:00	281.8931	14
WVE14998-15	30042	WVE14998	8/21/08 10:08	281.9246	15
WVE14998-16	30297	WVE14998	8/28/08 9:44	281.9574	16
WVE14998-17	30518	WVE14998	9/3/08 14:55	281.9827	17
WVE14999-1	28328	WVE14999	7/18/08 16:36	278.4425	1
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WVE14999-15	30041	WVE14999	8/21/08 10:07	277.8504	15
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WVE15000-13	29722	WVE15000	8/7/08 20:21	279.8739	13
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WVE15000-15	30040	WVE15000	8/21/08 10:06	279.9439	15
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WVE15000-17	30520	WVE15000	9/3/08 14:57	279.9992	17
WVE15601-1	27727	WVE15601	7/11/08 18:26	275.2965	1
WVE15601-2	27774	WVE15601	7/12/08 13:04	275.2871	2
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WVE15601-7	28081	WVE15601	7/16/08 19:20	275.2895	7
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WVE15601-10	28392	WVE15601	7/21/08 11:19	275.2871	10
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WVE15601-12	29255	WVE15601	7/30/08 12:30	275.287	12
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WVE15601-14	29931	WVE15601	8/14/08 16:43	275.2896	14
WVE15601-15	30102	WVE15601	8/21/08 10:55	275.2882	15
WVE15601-16	30356	WVE15601	8/28/08 10:33	275.2857	16
WVE15601-17	30580	WVE15601	9/3/08 17:00	275.2915	17
WVE15602-1	27728	WVE15602	7/11/08 18:27	278.7718	1
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WVE15602-7	28082	WVE15602	7/16/08 19:21	278.768	7
WVE15602-8	28116	WVE15602	7/17/08 14:41	278.7697	8
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WVE15602-13	29655	WVE15602	8/7/08 19:33	278.7704	13
WVE15602-14	29932	WVE15602	8/14/08 16:44	278.7749	14
WVE15602-15	30103	WVE15602	8/21/08 10:56	278.7758	15
WVE15602-16	30357	WVE15602	8/28/08 10:34	278.7811	16
WVE15602-17	30579	WVE15602	9/3/08 17:00	278.7861	17
WVE15603-1	27729	WVE15603	7/11/08 18:28	278.1081	1
WVE15603-2	27776	WVE15603	7/12/08 13:05	278.1016	2

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WVE15603-7	28083	WVE15603	7/16/08 19:22	278.1115	7
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WVE15603-9	28262	WVE15603	7/18/08 15:30	278.113	9
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WVE15603-15	30104	WVE15603	8/21/08 10:57	278.1188	15
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WVE15604-1	27730	WVE15604	7/11/08 18:29	279.4398	1
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WVE15604-13	29657	WVE15604	8/7/08 19:34	279.4426	13
WVE15604-14	29934	WVE15604	8/14/08 16:45	279.4445	14
WVE15604-15	30105	WVE15604	8/21/08 10:57	279.4487	15
WVE15604-16	30359	WVE15604	8/28/08 10:36	279.4584	16
WVE15604-17	30577	WVE15604	9/3/08 16:58	279.4632	17
WVE15652-1	27744	WVE15652	7/11/08 18:44	292.0444	1
WVE15652-2	27781	WVE15652	7/12/08 13:09	292.0355	2
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WVE15652-7	28098	WVE15652	7/16/08 19:39	291.2414	7
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WVE15652-10	28404	WVE15652	7/21/08 11:28	291.2997	10
WVE15652-11	28752	WVE15652	7/25/08 13:31	291.3289	11
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WVE15652-13	29666	WVE15652	8/7/08 19:40	291.381	13
WVE15652-14	29906	WVE15652	8/14/08 16:26	291.3992	14
WVE15652-15	30076	WVE15652	8/21/08 10:35	291.4113	15
WVE15652-16	30331	WVE15652	8/28/08 10:12	291.4374	16
WVE15652-17	30553	WVE15652	9/3/08 16:36	291.4562	17

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WVE15653-13	29667	WVE15653	8/7/08 19:41	287.6239	13
WVE15653-14	29907	WVE15653	8/14/08 16:27	287.6349	14
WVE15653-15	30077	WVE15653	8/21/08 10:36	287.6568	15
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WVE15654-5	28001	WVE15654	7/15/08 13:36	282.1559	5
WVE15654-6	28032	WVE15654	7/15/08 19:29	282.1726	6
WVE15654-7	28100	WVE15654	7/16/08 19:41	282.2002	7
WVE15654-8	28129	WVE15654	7/17/08 14:52	282.2168	8
WVE15654-9	28274	WVE15654	7/18/08 15:42	282.2335	9
WVE15654-10	28406	WVE15654	7/21/08 11:30	282.268	10
WVE15654-11	28754	WVE15654	7/25/08 13:32	282.3054	11
WVE15654-12	29269	WVE15654	7/30/08 12:41	282.3441	12
WVE15654-13	29668	WVE15654	8/7/08 19:42	282.3787	13
WVE15654-14	29908	WVE15654	8/14/08 16:28	282.4009	14
WVE15654-15	30078	WVE15654	8/21/08 10:37	282.4236	15
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WVE15654-17	30555	WVE15654	9/3/08 16:38	282.4655	17
WVE15655-1	27747	WVE15655	7/11/08 18:47	283.1308	1
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WVE15655-4	27948	WVE15655	7/14/08 14:35	283.1195	4
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WVE15655-7	28101	WVE15655	7/16/08 19:42	282.3219	7
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WVE15655-10	28407	WVE15655	7/21/08 11:30	282.3844	10
WVE15655-11	28755	WVE15655	7/25/08 13:33	282.4244	11
WVE15655-12	29270	WVE15655	7/30/08 12:42	282.4638	12
WVE15655-13	29669	WVE15655	8/7/08 19:42	282.4942	13
WVE15655-14	29909	WVE15655	8/14/08 16:29	282.5218	14
WVE15655-15	30079	WVE15655	8/21/08 10:37	282.5407	15

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WVE15655-17	30556	WVE15655	9/3/08 16:39	282.586	17
WVE15656-1	27748	WVE15656	7/11/08 18:48	278.685	1
WVE15656-2	27785	WVE15656	7/12/08 13:12	278.6789	2
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WVE15656-5	28003	WVE15656	7/15/08 13:38	277.8463	5
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WVE15656-7	28102	WVE15656	7/16/08 19:43	277.8745	7
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WVE15656-13	29670	WVE15656	8/7/08 19:43	278.0642	13
WVE15656-14	29910	WVE15656	8/14/08 16:29	278.0846	14
WVE15656-15	30080	WVE15656	8/21/08 10:38	278.107	15
WVE15656-16	30335	WVE15656	8/28/08 10:14	278.1349	16
WVE15656-17	30557	WVE15656	9/3/08 16:40	278.1548	17
WVE15657-1	27739	WVE15657	7/11/08 18:39	278.9541	1
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WVE15657-6	28035	WVE15657	7/15/08 19:32	278.1923	6
WVE15657-7	28093	WVE15657	7/16/08 19:33	278.2021	7
WVE15657-8	28132	WVE15657	7/17/08 14:54	278.2225	8
WVE15657-9	28277	WVE15657	7/18/08 15:44	278.228	9
WVE15657-10	28409	WVE15657	7/21/08 11:32	278.2474	10
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WVE15657-12	29272	WVE15657	7/30/08 12:43	278.3425	12
WVE15657-13	29671	WVE15657	8/7/08 19:44	278.3615	13
WVE15657-14	29911	WVE15657	8/14/08 16:30	278.3878	14
WVE15657-15	30081	WVE15657	8/21/08 10:39	278.3986	15
WVE15657-16	30336	WVE15657	8/28/08 10:15	278.408	16
WVE15657-17	30558	WVE15657	9/3/08 16:40	278.4312	17
WVE15658-1	27740	WVE15658	7/11/08 18:40	279.8038	1
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WVE15658-3	27820	WVE15658	7/13/08 15:12	279.7998	3
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WVE15658-5	28005	WVE15658	7/15/08 13:40	278.9259	5
WVE15658-6	28036	WVE15658	7/15/08 19:33	278.929	6
WVE15658-7	28094	WVE15658	7/16/08 19:35	278.9539	7
WVE15658-8	28133	WVE15658	7/17/08 14:55	278.9723	8
WVE15658-9	28278	WVE15658	7/18/08 15:45	278.9898	9
WVE15658-10	28410	WVE15658	7/21/08 11:32	279.0174	10
WVE15658-11	28758	WVE15658	7/25/08 13:36	279.0566	11
WVE15658-12	29273	WVE15658	7/30/08 12:44	279.1054	12
WVE15658-13	29672	WVE15658	8/7/08 19:45	279.1226	13

WVE15658-14	29912	WVE15658	8/14/08 16:31	279.1464	14
WVE15658-15	30082	WVE15658	8/21/08 10:39	279.1653	15
WVE15658-16	30337	WVE15658	8/28/08 10:16	279.1779	16
WVE15658-17	30559	WVE15658	9/3/08 16:41	279.1981	17
WVE15659-1	27741	WVE15659	7/11/08 18:41	281.6841	1
WVE15659-2	27788	WVE15659	7/12/08 13:14	281.6766	2
WVE15659-3	27821	WVE15659	7/13/08 15:13	281.6758	3
WVE15659-4	27952	WVE15659	7/14/08 14:39	281.6798	4
WVE15659-5	28006	WVE15659	7/15/08 13:40	280.8491	5
WVE15659-6	28037	WVE15659	7/15/08 19:34	280.8553	6
WVE15659-7	28095	WVE15659	7/16/08 19:36	280.8787	7
WVE15659-8	28134	WVE15659	7/17/08 14:56	280.8939	8
WVE15659-9	28279	WVE15659	7/18/08 15:46	280.9145	9
WVE15659-10	28411	WVE15659	7/21/08 11:33	280.9487	10
WVE15659-11	28759	WVE15659	7/25/08 13:36	280.9882	11
WVE15659-12	29274	WVE15659	7/30/08 12:45	281.0438	12
WVE15659-13	29673	WVE15659	8/7/08 19:46	281.0642	13
WVE15659-14	29913	WVE15659	8/14/08 16:31	281.087	14
WVE15659-15	30083	WVE15659	8/21/08 10:40	281.1077	15
WVE15659-16	30338	WVE15659	8/28/08 10:17	281.1287	16
WVE15659-17	30560	WVE15659	9/3/08 16:42	281.1471	17
WVE15660-1	27742	WVE15660	7/11/08 18:42	282.6451	1
WVE15660-2	27789	WVE15660	7/12/08 13:15	282.6393	2
WVE15660-3	27822	WVE15660	7/13/08 15:14	282.6403	3
WVE15660-4	27953	WVE15660	7/14/08 14:40	282.6426	4
WVE15660-5	28007	WVE15660	7/15/08 13:41	281.8397	5
WVE15660-6	28038	WVE15660	7/15/08 19:35	281.848	6
WVE15660-7	28096	WVE15660	7/16/08 19:37	281.8684	7
WVE15660-8	28135	WVE15660	7/17/08 14:57	281.8891	8
WVE15660-9	28280	WVE15660	7/18/08 15:47	281.91	9
WVE15660-10	28412	WVE15660	7/21/08 11:34	281.9493	10
WVE15660-11	28760	WVE15660	7/25/08 13:37	281.978	11
WVE15660-12	29275	WVE15660	7/30/08 12:45	282.0214	12
WVE15660-13	29674	WVE15660	8/7/08 19:47	282.0575	13
WVE15660-14	29914	WVE15660	8/14/08 16:32	282.0791	14
WVE15660-15	30084	WVE15660	8/21/08 10:41	282.101	15
WVE15660-16	30339	WVE15660	8/28/08 10:17	282.1277	16
WVE15660-17	30561	WVE15660	9/3/08 16:43	282.151	17
WVE15661-1	27743	WVE15661	7/11/08 18:43	280.7273	1
WVE15661-2	27790	WVE15661	7/12/08 13:16	280.7192	2
WVE15661-3	27823	WVE15661	7/13/08 15:15	280.7234	3
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WVE15661-5	28008	WVE15661	7/15/08 13:42	279.8041	5
WVE15661-6	28039	WVE15661	7/15/08 19:35	279.8105	6
WVE15661-7	28097	WVE15661	7/16/08 19:38	279.835	7
WVE15661-8	28136	WVE15661	7/17/08 14:57	279.85	8
WVE15661-9	28281	WVE15661	7/18/08 15:48	279.8711	9
WVE15661-10	28413	WVE15661	7/21/08 11:35	279.9106	10
WVE15661-11	28761	WVE15661	7/25/08 13:38	279.9572	11

WVE15661-12	29276	WVE15661	7/30/08 12:46	279.9932	12
WVE15661-13	29675	WVE15661	8/7/08 19:48	280.029	13
WVE15661-14	29915	WVE15661	8/14/08 16:33	280.0441	14
WVE15661-15	30085	WVE15661	8/21/08 10:42	280.0641	15
WVE15661-16	30340	WVE15661	8/28/08 10:18	280.0834	16
WVE15661-17	30562	WVE15661	9/3/08 16:43	280.1018	17
WVE15831-1	26649	WVE15831	7/2/08 13:31	300.563	1
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WVE15831-4	26965	WVE15831	7/7/08 9:00	300.552	4
WVE15831-5	27134	WVE15831	7/8/08 9:34	300.5518	5
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WVE15831-8	27596	WVE15831	7/11/08 9:39	300.5513	8
WVE15831-9	27837	WVE15831	7/14/08 12:14	300.5515	9
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WVE15831-12	29159	WVE15831	7/30/08 11:10	300.5535	12
WVE15831-13	29557	WVE15831	8/7/08 17:22	300.5567	13
WVE15831-14	29923	WVE15831	8/14/08 16:38	300.5605	14
WVE15831-15	30094	WVE15831	8/21/08 10:50	300.5601	15
WVE15831-16	30349	WVE15831	8/28/08 10:26	300.5619	16
WVE15831-17	30570	WVE15831	9/3/08 16:51	300.5654	17
WVE15832-1	26650	WVE15832	7/2/08 13:32	302.0723	1
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WVE15832-3	26861	WVE15832	7/3/08 14:09	302.0698	3
WVE15832-4	26966	WVE15832	7/7/08 9:00	302.0657	4
WVE15832-5	27135	WVE15832	7/8/08 9:35	302.0641	5
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WVE15832-7	27487	WVE15832	7/10/08 15:05	302.064	7
WVE15832-8	27595	WVE15832	7/11/08 9:38	302.0651	8
WVE15832-9	27838	WVE15832	7/14/08 12:15	302.0632	9
WVE15832-10	28158	WVE15832	7/18/08 13:20	302.0634	10
WVE15832-11	28765	WVE15832	7/25/08 13:40	302.0638	11
WVE15832-12	29160	WVE15832	7/30/08 11:11	302.0633	12
WVE15832-13	29558	WVE15832	8/7/08 17:23	302.067	13
WVE15832-14	29924	WVE15832	8/14/08 16:39	302.0704	14
WVE15832-15	30095	WVE15832	8/21/08 10:51	302.0717	15
WVE15832-16	30350	WVE15832	8/28/08 10:27	302.0749	16
WVE15832-17	30571	WVE15832	9/3/08 16:52	302.0809	17
WVE15833-1	26651	WVE15833	7/2/08 13:33	301.3339	1
WVE15833-2	26758	WVE15833	7/3/08 9:27	301.3318	2
WVE15833-3	26862	WVE15833	7/3/08 14:10	301.3292	3
WVE15833-4	26967	WVE15833	7/7/08 9:01	301.3291	4
WVE15833-5	27136	WVE15833	7/8/08 9:36	301.3265	5
WVE15833-6	27357	WVE15833	7/9/08 9:47	301.3263	6
WVE15833-7	27488	WVE15833	7/10/08 15:06	301.3255	7
WVE15833-8	27594	WVE15833	7/11/08 9:38	301.3251	8
WVE15833-9	27839	WVE15833	7/14/08 12:16	301.3242	9

WVE15833-10	28159	WVE15833	7/18/08 13:21	301.3271	10
WVE15833-11	28766	WVE15833	7/25/08 13:41	301.326	11
WVE15833-12	29161	WVE15833	7/30/08 11:12	301.3273	12
WVE15833-13	29559	WVE15833	8/7/08 17:23	301.3282	13
WVE15833-14	29925	WVE15833	8/14/08 16:40	301.3327	14
WVE15833-15	30096	WVE15833	8/21/08 10:52	301.3297	15
WVE15833-16	30351	WVE15833	8/28/08 10:28	301.3361	16
WVE15833-17	30572	WVE15833	9/3/08 16:52	301.3441	17
WVE15834-1	26652	WVE15834	7/2/08 13:34	302.0524	1
WVE15834-2	26759	WVE15834	7/3/08 9:27	302.0478	2
WVE15834-3	26863	WVE15834	7/3/08 14:10	302.0461	3
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WVE15834-5	27137	WVE15834	7/8/08 9:37	302.0421	5
WVE15834-6	27358	WVE15834	7/9/08 9:48	302.0417	6
WVE15834-7	27489	WVE15834	7/10/08 15:07	302.0414	7
WVE15834-8	27593	WVE15834	7/11/08 9:37	302.0418	8
WVE15834-9	27840	WVE15834	7/14/08 12:17	302.0445	9
WVE15834-10	28160	WVE15834	7/18/08 13:22	302.0455	10
WVE15834-11	28767	WVE15834	7/25/08 13:42	302.0453	11
WVE15834-12	29162	WVE15834	7/30/08 11:13	302.0442	12
WVE15834-13	29560	WVE15834	8/7/08 17:24	302.0448	13
WVE15834-14	29926	WVE15834	8/14/08 16:40	302.046	14
WVE15834-15	30097	WVE15834	8/21/08 10:52	302.047	15
WVE15834-16	30352	WVE15834	8/28/08 10:28	302.053	16
WVE15834-17	30573	WVE15834	9/3/08 16:53	302.0606	17
WVE15835-1	26653	WVE15835	7/2/08 13:35	304.4663	1
WVE15835-2	26760	WVE15835	7/3/08 9:28	304.4644	2
WVE15835-3	26864	WVE15835	7/3/08 14:11	304.4626	3
WVE15835-4	26969	WVE15835	7/7/08 9:03	304.4566	4
WVE15835-5	27138	WVE15835	7/8/08 9:37	304.4542	5
WVE15835-6	27359	WVE15835	7/9/08 9:48	304.455	6
WVE15835-7	27490	WVE15835	7/10/08 15:08	304.4557	7
WVE15835-8	27597	WVE15835	7/11/08 9:40	304.4555	8
WVE15835-9	27841	WVE15835	7/14/08 12:18	304.4545	9
WVE15835-10	28161	WVE15835	7/18/08 13:22	304.4563	10
WVE15835-11	28768	WVE15835	7/25/08 13:42	304.4569	11
WVE15835-12	29163	WVE15835	7/30/08 11:13	304.4557	12
WVE15835-13	29561	WVE15835	8/7/08 17:25	304.4596	13
WVE15835-14	29927	WVE15835	8/14/08 16:41	304.459	14
WVE15835-15	30093	WVE15835	8/21/08 10:49	304.4592	15
WVE15835-16	30348	WVE15835	8/28/08 10:25	304.4606	16
WVE15835-17	30574	WVE15835	9/3/08 16:54	304.4642	17
WVE15836-1	26654	WVE15836	7/2/08 13:36	302.9846	1
WVE15836-2	26761	WVE15836	7/3/08 9:29	302.9838	2
WVE15836-3	26865	WVE15836	7/3/08 14:12	302.9829	3
WVE15836-4	26970	WVE15836	7/7/08 9:04	302.978	4
WVE15836-5	27203	WVE15836	7/8/08 14:31	302.9983	5
WVE15836-6	27276	WVE15836	7/8/08 21:03	302.9915	6
WVE15836-7	27360	WVE15836	7/9/08 9:49	302.9858	7

WVE15836-8	27491	WVE15836	7/10/08 15:09	302.9845	8
WVE15836-9	27598	WVE15836	7/11/08 9:41	302.9812	9
WVE15836-10	27842	WVE15836	7/14/08 12:19	302.9791	10
WVE15836-11	28162	WVE15836	7/18/08 13:24	302.9793	11
WVE15836-12	28769	WVE15836	7/25/08 13:43	302.9766	12
WVE15836-13	29164	WVE15836	7/30/08 11:14	302.9811	13
WVE15836-14	29562	WVE15836	8/7/08 17:26	302.9795	14
WVE15836-15	29918	WVE15836	8/14/08 16:35	302.9838	15
WVE15836-16	30088	WVE15836	8/21/08 10:45	302.9833	16
WVE15836-17	30343	WVE15836	8/28/08 10:21	302.9877	17
WVE15836-18	30565	WVE15836	9/3/08 16:46	302.9868	18
WVE15837-1	26655	WVE15837	7/2/08 13:37	298.0392	1
WVE15837-2	26762	WVE15837	7/3/08 9:30	298.0355	2
WVE15837-3	26866	WVE15837	7/3/08 14:12	298.0356	3
WVE15837-4	27011	WVE15837	7/7/08 9:40	298.0348	4
WVE15837-5	27204	WVE15837	7/8/08 14:32	298.0455	5
WVE15837-6	27275	WVE15837	7/8/08 21:02	298.0372	6
WVE15837-7	27361	WVE15837	7/9/08 9:50	298.0329	7
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WVE15837-9	27599	WVE15837	7/11/08 9:41	298.0274	9
WVE15837-10	27843	WVE15837	7/14/08 12:20	298.0292	10
WVE15837-11	28163	WVE15837	7/18/08 13:24	298.0257	11
WVE15837-12	28770	WVE15837	7/25/08 13:44	298.0218	12
WVE15837-13	29165	WVE15837	7/30/08 11:15	298.0248	13
WVE15837-14	29563	WVE15837	8/7/08 17:27	298.0276	14
WVE15837-15	29919	WVE15837	8/14/08 16:35	298.0296	15
WVE15837-16	30089	WVE15837	8/21/08 10:46	298.0296	16
WVE15837-17	30344	WVE15837	8/28/08 10:22	298.0318	17
WVE15837-18	30566	WVE15837	9/3/08 16:47	298.0359	18
WVE15838-1	26656	WVE15838	7/2/08 13:38	293.5489	1
WVE15838-2	26763	WVE15838	7/3/08 9:31	293.5454	2
WVE15838-3	26867	WVE15838	7/3/08 14:13	293.5452	3
WVE15838-4	26971	WVE15838	7/7/08 9:04	293.5398	4
WVE15838-5	27205	WVE15838	7/8/08 14:32	293.5531	5
WVE15838-6	27274	WVE15838	7/8/08 21:01	293.5466	6
WVE15838-7	27362	WVE15838	7/9/08 9:51	293.5438	7
WVE15838-8	27493	WVE15838	7/10/08 15:10	293.5395	8
WVE15838-9	27600	WVE15838	7/11/08 9:42	293.5372	9
WVE15838-10	27844	WVE15838	7/14/08 12:21	293.5381	10
WVE15838-11	28164	WVE15838	7/18/08 13:25	293.5343	11
WVE15838-12	28771	WVE15838	7/25/08 13:44	293.5321	12
WVE15838-13	29166	WVE15838	7/30/08 11:15	293.5361	13
WVE15838-14	29564	WVE15838	8/7/08 17:28	293.5359	14
WVE15838-15	29920	WVE15838	8/14/08 16:36	293.5378	15
WVE15838-16	30090	WVE15838	8/21/08 10:47	293.5368	16
WVE15838-17	30345	WVE15838	8/28/08 10:23	293.5365	17
WVE15838-18	30567	WVE15838	9/3/08 16:48	293.5414	18
WVE15839-1	26657	WVE15839	7/2/08 13:39	293.209	1
WVE15839-2	26764	WVE15839	7/3/08 9:31	293.2041	2

WVE15839-3	26868	WVE15839	7/3/08 14:14	293.2015	3
WVE15839-4	26972	WVE15839	7/7/08 9:05	293.2016	4
WVE15839-5	27206	WVE15839	7/8/08 14:33	293.2192	5
WVE15839-6	27273	WVE15839	7/8/08 21:00	293.2109	6
WVE15839-7	27363	WVE15839	7/9/08 9:52	293.2079	7
WVE15839-8	27494	WVE15839	7/10/08 15:11	293.2048	8
WVE15839-9	27601	WVE15839	7/11/08 9:43	293.2026	9
WVE15839-10	27845	WVE15839	7/14/08 12:22	293.2011	10
WVE15839-11	28165	WVE15839	7/18/08 13:26	293.1996	11
WVE15839-12	28772	WVE15839	7/25/08 13:45	293.2	12
WVE15839-13	29167	WVE15839	7/30/08 11:16	293.2005	13
WVE15839-14	29565	WVE15839	8/7/08 17:30	293.203	14
WVE15839-15	29921	WVE15839	8/14/08 16:37	293.2048	15
WVE15839-16	30091	WVE15839	8/21/08 10:47	293.2058	16
WVE15839-17	30346	WVE15839	8/28/08 10:24	293.2108	17
WVE15839-18	30568	WVE15839	9/3/08 16:48	293.2158	18
WVE15840-1	26658	WVE15840	7/2/08 13:39	302.0644	1
WVE15840-2	26765	WVE15840	7/3/08 9:32	302.0654	2
WVE15840-3	26869	WVE15840	7/3/08 14:15	302.0591	3
WVE15840-4	26973	WVE15840	7/7/08 9:06	302.0578	4
WVE15840-5	27207	WVE15840	7/8/08 14:35	302.0747	5
WVE15840-6	27272	WVE15840	7/8/08 20:59	302.0667	6
WVE15840-7	27364	WVE15840	7/9/08 9:52	302.0636	7
WVE15840-8	27495	WVE15840	7/10/08 15:12	302.0556	8
WVE15840-9	27602	WVE15840	7/11/08 9:43	302.0538	9
WVE15840-10	27846	WVE15840	7/14/08 12:22	302.0514	10
WVE15840-11	28166	WVE15840	7/18/08 13:27	302.0468	11
WVE15840-12	28773	WVE15840	7/25/08 13:46	302.0455	12
WVE15840-13	29168	WVE15840	7/30/08 11:17	302.0454	13
WVE15840-14	29566	WVE15840	8/7/08 17:31	302.0454	14
WVE15840-15	29922	WVE15840	8/14/08 16:38	302.0472	15
WVE15840-16	30092	WVE15840	8/21/08 10:48	302.0496	16
WVE15840-17	30347	WVE15840	8/28/08 10:24	302.0532	17
WVE15840-18	30569	WVE15840	9/3/08 16:49	302.0589	18
WVE15841-1	26661	WVE15841	7/2/08 13:44	299.104	1
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WVE15841-3	26872	WVE15841	7/3/08 14:18	299.0976	3
WVE15841-4	26974	WVE15841	7/7/08 9:06	299.0915	4
WVE15841-5	27208	WVE15841	7/8/08 14:36	298.8631	5
WVE15841-6	27271	WVE15841	7/8/08 20:58	298.8645	6
WVE15841-7	27367	WVE15841	7/9/08 9:55	298.8673	7
WVE15841-8	27498	WVE15841	7/10/08 15:17	298.8723	8
WVE15841-9	27605	WVE15841	7/11/08 9:46	298.8726	9
WVE15841-10	27849	WVE15841	7/14/08 12:27	298.8806	10
WVE15841-11	28168	WVE15841	7/18/08 13:31	298.8881	11
WVE15841-12	28785	WVE15841	7/25/08 15:14	298.8972	12
WVE15841-13	29171	WVE15841	7/30/08 11:19	298.9068	13
WVE15841-14	29569	WVE15841	8/7/08 17:35	298.9117	14
WVE15842-1	26662	WVE15842	7/2/08 13:45	291.8841	1

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WVE15842-3	26873	WVE15842	7/3/08 14:19	291.8808	3
WVE15842-4	26977	WVE15842	7/7/08 9:11	291.8761	4
WVE15842-5	27209	WVE15842	7/8/08 14:37	291.656	5
WVE15842-6	27270	WVE15842	7/8/08 20:57	291.6564	6
WVE15842-7	27370	WVE15842	7/9/08 9:58	291.6623	7
WVE15842-8	27499	WVE15842	7/10/08 15:19	291.6656	8
WVE15842-9	27606	WVE15842	7/11/08 9:47	291.6673	9
WVE15842-10	27850	WVE15842	7/14/08 12:28	291.6733	10
WVE15842-11	28169	WVE15842	7/18/08 13:32	291.6765	11
WVE15842-12	28786	WVE15842	7/25/08 15:15	291.6864	12
WVE15842-13	29172	WVE15842	7/30/08 11:20	291.6939	13
WVE15842-14	29570	WVE15842	8/7/08 17:37	291.6973	14
WVE15843-1	26663	WVE15843	7/2/08 13:46	291.4473	1
WVE15843-2	26770	WVE15843	7/3/08 9:37	291.4423	2
WVE15843-3	26874	WVE15843	7/3/08 14:20	291.4407	3
WVE15843-4	26978	WVE15843	7/7/08 9:12	291.4376	4
WVE15843-5	27210	WVE15843	7/8/08 14:37	291.243	5
WVE15843-6	27269	WVE15843	7/8/08 20:56	291.2444	6
WVE15843-7	27371	WVE15843	7/9/08 9:59	291.2505	7
WVE15843-8	27500	WVE15843	7/10/08 15:20	291.2516	8
WVE15843-9	27607	WVE15843	7/11/08 9:48	291.2558	9
WVE15843-10	27851	WVE15843	7/14/08 12:29	291.2625	10
WVE15843-11	28170	WVE15843	7/18/08 13:34	291.2663	11
WVE15843-12	28787	WVE15843	7/25/08 15:17	291.2744	12
WVE15843-13	29173	WVE15843	7/30/08 11:21	291.2814	13
WVE15843-14	29571	WVE15843	8/7/08 17:38	291.288	14
WVE15844-1	26664	WVE15844	7/2/08 13:47	292.0032	1
WVE15844-2	26771	WVE15844	7/3/08 9:38	291.9991	2
WVE15844-3	26875	WVE15844	7/3/08 14:21	291.9968	3
WVE15844-4	26979	WVE15844	7/7/08 9:12	291.9939	4
WVE15844-5	27211	WVE15844	7/8/08 14:39	291.7771	5
WVE15844-6	27268	WVE15844	7/8/08 20:55	291.7797	6
WVE15844-7	27372	WVE15844	7/9/08 9:59	291.7834	7
WVE15844-8	27501	WVE15844	7/10/08 15:21	291.7855	8
WVE15844-9	27608	WVE15844	7/11/08 9:49	291.7899	9
WVE15844-10	27852	WVE15844	7/14/08 12:30	291.7971	10
WVE15844-11	28171	WVE15844	7/18/08 13:35	291.803	11
WVE15844-12	28788	WVE15844	7/25/08 15:18	291.8094	12
WVE15844-13	29174	WVE15844	7/30/08 11:22	291.8168	13
WVE15844-14	29572	WVE15844	8/7/08 17:38	291.8237	14
WVE15845-1	26665	WVE15845	7/2/08 13:48	299.9256	1
WVE15845-2	26772	WVE15845	7/3/08 9:39	299.9214	2
WVE15845-3	26876	WVE15845	7/3/08 14:21	299.9198	3
WVE15845-4	26980	WVE15845	7/7/08 9:13	299.9138	4
WVE15845-5	27212	WVE15845	7/8/08 14:40	299.7087	5
WVE15845-6	27267	WVE15845	7/8/08 20:54	299.7079	6
WVE15845-7	27373	WVE15845	7/9/08 10:00	299.7133	7
WVE15845-8	27502	WVE15845	7/10/08 15:22	299.7148	8

WVE15845-9	27611	WVE15845	7/11/08 9:52	299.7196	9
WVE15845-10	27853	WVE15845	7/14/08 12:31	299.7297	10
WVE15845-11	28172	WVE15845	7/18/08 13:36	299.7297	11
WVE15845-12	28789	WVE15845	7/25/08 15:19	299.7369	12
WVE15845-13	29175	WVE15845	7/30/08 11:22	299.7501	13
WVE15845-14	29573	WVE15845	8/7/08 17:40	299.7573	14
WVE15846-1	26666	WVE15846	7/2/08 13:49	304.36	1
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WVE15846-3	26877	WVE15846	7/3/08 14:22	304.3542	3
WVE15846-4	26981	WVE15846	7/7/08 9:14	304.3498	4
WVE15846-5	27215	WVE15846	7/8/08 14:47	303.4594	5
WVE15846-6	27284	WVE15846	7/8/08 21:16	303.4606	6
WVE15846-7	27374	WVE15846	7/9/08 10:01	303.4572	7
WVE15846-8	27503	WVE15846	7/10/08 15:23	303.4544	8
WVE15846-9	27612	WVE15846	7/11/08 9:52	303.4537	9
WVE15846-10	27854	WVE15846	7/14/08 12:32	303.4594	10
WVE15846-11	28173	WVE15846	7/18/08 13:37	303.4593	11
WVE15846-12	28790	WVE15846	7/25/08 15:20	303.4647	12
WVE15846-13	29176	WVE15846	7/30/08 11:23	303.4718	13
WVE15846-14	29574	WVE15846	8/7/08 17:40	303.4776	14
WVE15847-1	26667	WVE15847	7/2/08 13:50	308.1919	1
WVE15847-2	26774	WVE15847	7/3/08 9:41	308.1874	2
WVE15847-3	26878	WVE15847	7/3/08 14:23	308.1858	3
WVE15847-4	26982	WVE15847	7/7/08 9:15	308.1796	4
WVE15847-5	27216	WVE15847	7/8/08 14:48	307.63	5
WVE15847-6	27285	WVE15847	7/8/08 21:17	307.6316	6
WVE15847-7	27375	WVE15847	7/9/08 10:02	307.6301	7
WVE15847-8	27504	WVE15847	7/10/08 15:24	307.6224	8
WVE15847-9	27613	WVE15847	7/11/08 9:53	307.6214	9
WVE15847-10	27855	WVE15847	7/14/08 12:32	307.6234	10
WVE15847-11	28174	WVE15847	7/18/08 13:38	307.6223	11
WVE15847-12	28791	WVE15847	7/25/08 15:21	307.6295	12
WVE15847-13	29177	WVE15847	7/30/08 11:24	307.6348	13
WVE15847-14	29575	WVE15847	8/7/08 17:41	307.6376	14
WVE15848-1	26668	WVE15848	7/2/08 13:51	307.4319	1
WVE15848-2	26775	WVE15848	7/3/08 9:41	307.4278	2
WVE15848-3	26879	WVE15848	7/3/08 14:24	307.426	3
WVE15848-4	26983	WVE15848	7/7/08 9:16	307.422	4
WVE15848-5	27217	WVE15848	7/8/08 14:49	306.8073	5
WVE15848-6	27286	WVE15848	7/8/08 21:18	306.8079	6
WVE15848-7	27376	WVE15848	7/9/08 10:03	306.8054	7
WVE15848-8	27505	WVE15848	7/10/08 15:25	306.8013	8
WVE15848-9	27614	WVE15848	7/11/08 9:54	306.8	9
WVE15848-10	27856	WVE15848	7/14/08 12:33	306.803	10
WVE15848-11	28175	WVE15848	7/18/08 13:38	306.7999	11
WVE15848-12	28792	WVE15848	7/25/08 15:22	306.8071	12
WVE15848-13	29178	WVE15848	7/30/08 11:24	306.8123	13
WVE15848-14	29576	WVE15848	8/7/08 17:42	306.8167	14
WVE15849-1	26669	WVE15849	7/2/08 13:51	306.6688	1

WVE15849-2	26776	WVE15849	7/3/08 9:42	306.6572	2
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WVE15849-4	26984	WVE15849	7/7/08 9:17	306.648	4
WVE15849-5	27218	WVE15849	7/8/08 14:49	305.9353	5
WVE15849-6	27287	WVE15849	7/8/08 21:19	305.9341	6
WVE15849-7	27377	WVE15849	7/9/08 10:03	305.9353	7
WVE15849-8	27506	WVE15849	7/10/08 15:25	305.93	8
WVE15849-9	27615	WVE15849	7/11/08 9:54	305.9274	9
WVE15849-10	27857	WVE15849	7/14/08 12:34	305.9296	10
WVE15849-11	28176	WVE15849	7/18/08 13:39	305.9277	11
WVE15849-12	28793	WVE15849	7/25/08 15:23	305.9345	12
WVE15849-13	29179	WVE15849	7/30/08 11:25	305.941	13
WVE15849-14	29577	WVE15849	8/7/08 17:43	305.9433	14
WVE15850-1	26670	WVE15850	7/2/08 13:52	307.4325	1
WVE15850-2	26777	WVE15850	7/3/08 9:43	307.4281	2
WVE15850-3	26881	WVE15850	7/3/08 14:25	307.4272	3
WVE15850-4	26985	WVE15850	7/7/08 9:18	307.4242	4
WVE15850-5	27219	WVE15850	7/8/08 14:50	306.6602	5
WVE15850-6	27288	WVE15850	7/8/08 21:20	306.656	6
WVE15850-7	27378	WVE15850	7/9/08 10:04	306.6541	7
WVE15850-8	27507	WVE15850	7/10/08 15:26	306.6494	8
WVE15850-9	27616	WVE15850	7/11/08 9:55	306.6476	9
WVE15850-10	27858	WVE15850	7/14/08 12:35	306.6516	10
WVE15850-11	28177	WVE15850	7/18/08 13:40	306.6457	11
WVE15850-12	28794	WVE15850	7/25/08 15:24	306.6584	12
WVE15850-13	29180	WVE15850	7/30/08 11:26	306.6626	13
WVE15850-14	29578	WVE15850	8/7/08 17:44	306.6682	14
WVE15851-1	26673	WVE15851	7/2/08 13:55	305.9663	1
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WVE15851-3	26884	WVE15851	7/3/08 14:29	305.9598	3
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WVE15851-5	27070	WVE15851	7/7/08 17:45	306.7565	5
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WVE15851-7	27381	WVE15851	7/9/08 10:08	306.7583	7
WVE15851-8	27510	WVE15851	7/10/08 15:31	306.7593	8
WVE15851-9	27619	WVE15851	7/11/08 9:59	306.7588	9
WVE15851-10	27861	WVE15851	7/14/08 12:40	306.7617	10
WVE15851-11	28180	WVE15851	7/18/08 13:44	306.7562	11
WVE15851-12	28797	WVE15851	7/25/08 15:30	306.7603	12
WVE15851-13	29183	WVE15851	7/30/08 11:28	306.7629	13
WVE15851-14	29581	WVE15851	8/7/08 17:47	306.7632	14
WVE15852-1	26674	WVE15852	7/2/08 13:56	303.6411	1
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WVE15852-5	27071	WVE15852	7/7/08 17:46	304.5129	5
WVE15852-6	27140	WVE15852	7/8/08 9:39	304.5098	6
WVE15852-7	27382	WVE15852	7/9/08 10:09	304.5111	7
WVE15852-8	27511	WVE15852	7/10/08 15:32	304.5094	8

WVE15852-9	27620	WVE15852	7/11/08 10:00	304.5085	9
WVE15852-10	27862	WVE15852	7/14/08 12:41	304.5078	10
WVE15852-11	28181	WVE15852	7/18/08 13:45	304.5042	11
WVE15852-12	28798	WVE15852	7/25/08 15:31	304.5042	12
WVE15852-13	29184	WVE15852	7/30/08 11:29	304.5055	13
WVE15852-14	29582	WVE15852	8/7/08 17:48	304.5067	14
WVE15853-1	26675	WVE15853	7/2/08 13:57	307.8383	1
WVE15853-2	26782	WVE15853	7/3/08 9:48	307.8348	2
WVE15853-3	26886	WVE15853	7/3/08 14:30	307.8322	3
WVE15853-4	26991	WVE15853	7/7/08 9:24	307.8278	4
WVE15853-5	27072	WVE15853	7/7/08 17:47	308.2858	5
WVE15853-6	27141	WVE15853	7/8/08 9:40	308.2829	6
WVE15853-7	27383	WVE15853	7/9/08 10:09	308.2847	7
WVE15853-8	27512	WVE15853	7/10/08 15:32	308.2832	8
WVE15853-9	27621	WVE15853	7/11/08 10:01	308.2831	9
WVE15853-10	27863	WVE15853	7/14/08 12:42	308.2832	10
WVE15853-11	28182	WVE15853	7/18/08 13:46	308.2804	11
WVE15853-12	28799	WVE15853	7/25/08 15:32	308.2821	12
WVE15853-13	29185	WVE15853	7/30/08 11:29	308.2843	13
WVE15853-14	29583	WVE15853	8/7/08 17:49	308.2874	14
WVE15854-1	26676	WVE15854	7/2/08 13:58	309.5539	1
WVE15854-2	26783	WVE15854	7/3/08 9:49	309.5477	2
WVE15854-3	26887	WVE15854	7/3/08 14:31	309.546	3
WVE15854-4	26992	WVE15854	7/7/08 9:24	309.5423	4
WVE15854-5	27073	WVE15854	7/7/08 17:47	310.4699	5
WVE15854-6	27142	WVE15854	7/8/08 9:41	310.4651	6
WVE15854-7	27384	WVE15854	7/9/08 10:10	310.4674	7
WVE15854-8	27513	WVE15854	7/10/08 15:33	310.4656	8
WVE15854-9	27622	WVE15854	7/11/08 10:02	310.4646	9
WVE15854-10	27864	WVE15854	7/14/08 12:43	310.4654	10
WVE15854-11	28183	WVE15854	7/18/08 13:47	310.462	11
WVE15854-12	28800	WVE15854	7/25/08 15:32	310.4631	12
WVE15854-13	29186	WVE15854	7/30/08 11:30	310.466	13
WVE15854-14	29584	WVE15854	8/7/08 17:50	310.467	14
WVE15855-1	26677	WVE15855	7/2/08 13:59	305.5694	1
WVE15855-2	26784	WVE15855	7/3/08 9:50	305.5693	2
WVE15855-3	26888	WVE15855	7/3/08 14:32	305.568	3
WVE15855-4	26993	WVE15855	7/7/08 9:25	305.5622	4
WVE15855-5	27074	WVE15855	7/7/08 17:48	305.7833	5
WVE15855-6	27143	WVE15855	7/8/08 9:42	305.78	6
WVE15855-7	27385	WVE15855	7/9/08 10:11	305.7836	7
WVE15855-8	27514	WVE15855	7/10/08 15:34	305.7777	8
WVE15855-9	27623	WVE15855	7/11/08 10:02	305.7793	9
WVE15855-10	27865	WVE15855	7/14/08 12:44	305.7804	10
WVE15855-11	28184	WVE15855	7/18/08 13:48	305.7812	11
WVE15855-12	28801	WVE15855	7/25/08 15:34	305.7841	12
WVE15855-13	29187	WVE15855	7/30/08 11:31	305.7862	13
WVE15855-14	29585	WVE15855	8/7/08 17:51	305.7927	14
WVE15856-1	26678	WVE15856	7/2/08 13:59	299.1227	1

WVE15856-2	26785	WVE15856	7/3/08 9:51	299.1205	2
WVE15856-3	26889	WVE15856	7/3/08 14:32	299.1192	3
WVE15856-4	26994	WVE15856	7/7/08 9:26	299.1139	4
WVE15856-5	27077	WVE15856	7/7/08 17:49	299.2306	5
WVE15856-6	27146	WVE15856	7/8/08 9:45	299.2335	6
WVE15856-7	27386	WVE15856	7/9/08 10:12	299.2347	7
WVE15856-8	27515	WVE15856	7/10/08 15:35	299.234	8
WVE15856-9	27624	WVE15856	7/11/08 10:03	299.234	9
WVE15856-10	27866	WVE15856	7/14/08 12:45	299.2362	10
WVE15856-11	28185	WVE15856	7/18/08 13:49	299.2318	11
WVE15856-12	28802	WVE15856	7/25/08 15:34	299.2372	12
WVE15856-13	29188	WVE15856	7/30/08 11:32	299.2398	13
WVE15856-14	29586	WVE15856	8/7/08 17:52	299.2406	14
WVE15857-1	26679	WVE15857	7/2/08 14:00	295.3658	1
WVE15857-2	26786	WVE15857	7/3/08 9:52	295.3627	2
WVE15857-3	26890	WVE15857	7/3/08 14:33	295.3617	3
WVE15857-4	26995	WVE15857	7/7/08 9:27	295.3582	4
WVE15857-5	27078	WVE15857	7/7/08 17:50	295.8547	5
WVE15857-6	27147	WVE15857	7/8/08 9:46	295.8575	6
WVE15857-7	27387	WVE15857	7/9/08 10:12	295.8577	7
WVE15857-8	27516	WVE15857	7/10/08 15:36	295.8553	8
WVE15857-9	27625	WVE15857	7/11/08 10:04	295.8553	9
WVE15857-10	27867	WVE15857	7/14/08 12:46	295.8559	10
WVE15857-11	28186	WVE15857	7/18/08 13:50	295.8528	11
WVE15857-12	28803	WVE15857	7/25/08 15:35	295.856	12
WVE15857-13	29189	WVE15857	7/30/08 11:32	295.859	13
WVE15857-14	29587	WVE15857	8/7/08 17:53	295.8619	14
WVE15858-1	26680	WVE15858	7/2/08 14:01	297.7641	1
WVE15858-2	26787	WVE15858	7/3/08 9:52	297.7629	2
WVE15858-3	26891	WVE15858	7/3/08 14:34	297.7603	3
WVE15858-4	26996	WVE15858	7/7/08 9:27	297.756	4
WVE15858-5	27079	WVE15858	7/7/08 17:51	297.9078	5
WVE15858-6	27148	WVE15858	7/8/08 9:47	297.9111	6
WVE15858-7	27388	WVE15858	7/9/08 10:13	297.9105	7
WVE15858-8	27517	WVE15858	7/10/08 15:37	297.909	8
WVE15858-9	27626	WVE15858	7/11/08 10:04	297.9088	9
WVE15858-10	27868	WVE15858	7/14/08 12:47	297.9096	10
WVE15858-11	28187	WVE15858	7/18/08 13:51	297.9073	11
WVE15858-12	28804	WVE15858	7/25/08 15:36	297.9089	12
WVE15858-13	29190	WVE15858	7/30/08 11:33	297.9117	13
WVE15858-14	29588	WVE15858	8/7/08 17:54	297.9149	14
WVE15859-1	26681	WVE15859	7/2/08 14:02	306.5764	1
WVE15859-2	26788	WVE15859	7/3/08 9:53	306.5765	2
WVE15859-3	26892	WVE15859	7/3/08 14:34	306.5724	3
WVE15859-4	26997	WVE15859	7/7/08 9:28	306.5708	4
WVE15859-5	27080	WVE15859	7/7/08 17:52	306.7431	5
WVE15859-6	27149	WVE15859	7/8/08 9:48	306.7497	6
WVE15859-7	27389	WVE15859	7/9/08 10:14	306.7504	7
WVE15859-8	27518	WVE15859	7/10/08 15:38	306.7471	8

WVE15859-9	27627	WVE15859	7/11/08 10:05	306.7475	9
WVE15859-10	27869	WVE15859	7/14/08 12:48	306.7499	10
WVE15859-11	28188	WVE15859	7/18/08 13:52	306.7472	11
WVE15859-12	28805	WVE15859	7/25/08 15:37	306.7485	12
WVE15859-13	29191	WVE15859	7/30/08 11:34	306.7511	13
WVE15859-14	29589	WVE15859	8/7/08 17:55	306.7546	14
WVE15860-1	26682	WVE15860	7/2/08 14:03	304.5032	1
WVE15860-2	26789	WVE15860	7/3/08 9:54	304.5	2
WVE15860-3	26893	WVE15860	7/3/08 14:35	304.4988	3
WVE15860-4	26998	WVE15860	7/7/08 9:29	304.4942	4
WVE15860-5	27081	WVE15860	7/7/08 17:52	304.6185	5
WVE15860-6	27150	WVE15860	7/8/08 9:48	304.6225	6
WVE15860-7	27390	WVE15860	7/9/08 10:14	304.6236	7
WVE15860-8	27519	WVE15860	7/10/08 15:39	304.621	8
WVE15860-9	27628	WVE15860	7/11/08 10:06	304.6219	9
WVE15860-10	27870	WVE15860	7/14/08 12:49	304.6226	10
WVE15860-11	28189	WVE15860	7/18/08 13:53	304.6174	11
WVE15860-12	28806	WVE15860	7/25/08 15:38	304.6207	12
WVE15860-13	29192	WVE15860	7/30/08 11:35	304.6236	13
WVE15860-14	29590	WVE15860	8/7/08 17:56	304.627	14
WVE15861-1	26685	WVE15861	7/2/08 14:06	305.3732	1
WVE15861-2	26792	WVE15861	7/3/08 9:58	305.3684	2
WVE15861-3	26896	WVE15861	7/3/08 14:39	305.3676	3
WVE15861-4	26999	WVE15861	7/7/08 9:30	305.3626	4
WVE15861-5	27121	WVE15861	7/7/08 19:57	305.0224	5
WVE15861-6	27151	WVE15861	7/8/08 9:49	305.0584	6
WVE15861-7	27279	WVE15861	7/8/08 21:10	305.0681	7
WVE15861-8	27393	WVE15861	7/9/08 10:18	305.0778	8
WVE15861-9	27527	WVE15861	7/10/08 15:47	305.0915	9
WVE15861-10	27631	WVE15861	7/11/08 10:09	305.0962	10
WVE15861-11	27873	WVE15861	7/14/08 13:08	305.1187	11
WVE15861-12	28192	WVE15861	7/18/08 13:58	305.1294	12
WVE15861-13	28809	WVE15861	7/25/08 15:42	305.1558	13
WVE15861-14	29195	WVE15861	7/30/08 11:37	305.1674	14
WVE15861-15	29593	WVE15861	8/7/08 17:59	305.1843	15
WVE15862-1	26686	WVE15862	7/2/08 14:07	304.9263	1
WVE15862-2	26793	WVE15862	7/3/08 9:58	304.9233	2
WVE15862-3	26897	WVE15862	7/3/08 14:39	304.9219	3
WVE15862-4	27002	WVE15862	7/7/08 9:34	304.9148	4
WVE15862-5	27120	WVE15862	7/7/08 19:56	304.5712	5
WVE15862-6	27152	WVE15862	7/8/08 9:50	304.6091	6
WVE15862-7	27280	WVE15862	7/8/08 21:11	304.6216	7
WVE15862-8	27394	WVE15862	7/9/08 10:19	304.6287	8
WVE15862-9	27528	WVE15862	7/10/08 15:48	304.6393	9
WVE15862-10	27632	WVE15862	7/11/08 10:09	304.6439	10
WVE15862-11	27874	WVE15862	7/14/08 13:09	304.6658	11
WVE15862-12	28193	WVE15862	7/18/08 13:59	304.6777	12
WVE15862-13	28810	WVE15862	7/25/08 15:42	304.7	13
WVE15862-14	29196	WVE15862	7/30/08 11:38	304.7112	14

WVE15862-15	29594	WVE15862	8/7/08 18:00	304.7281	15
WVE15863-1	26687	WVE15863	7/2/08 14:08	305.219	1
WVE15863-2	26794	WVE15863	7/3/08 9:59	305.2181	2
WVE15863-3	26898	WVE15863	7/3/08 14:40	305.215	3
WVE15863-4	27003	WVE15863	7/7/08 9:35	305.2095	4
WVE15863-5	27119	WVE15863	7/7/08 19:56	304.8777	5
WVE15863-6	27153	WVE15863	7/8/08 9:51	304.9142	6
WVE15863-7	27281	WVE15863	7/8/08 21:12	304.9259	7
WVE15863-8	27395	WVE15863	7/9/08 10:20	304.9358	8
WVE15863-9	27529	WVE15863	7/10/08 15:49	304.9482	9
WVE15863-10	27633	WVE15863	7/11/08 10:10	304.9537	10
WVE15863-11	27875	WVE15863	7/14/08 13:10	304.9731	11
WVE15863-12	28194	WVE15863	7/18/08 14:00	304.9876	12
WVE15863-13	28811	WVE15863	7/25/08 15:43	305.009	13
WVE15863-14	29197	WVE15863	7/30/08 11:39	305.0196	14
WVE15863-15	29595	WVE15863	8/7/08 18:01	305.037	15
WVE15864-1	26688	WVE15864	7/2/08 14:09	308.0564	1
WVE15864-2	26795	WVE15864	7/3/08 10:01	308.0533	2
WVE15864-3	26899	WVE15864	7/3/08 14:41	308.0515	3
WVE15864-4	27004	WVE15864	7/7/08 9:36	308.0464	4
WVE15864-5	27118	WVE15864	7/7/08 19:55	307.692	5
WVE15864-6	27154	WVE15864	7/8/08 9:52	307.7283	6
WVE15864-7	27282	WVE15864	7/8/08 21:14	307.7375	7
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WVE15864-9	27530	WVE15864	7/10/08 15:50	307.7618	9
WVE15864-10	27634	WVE15864	7/11/08 10:11	307.7667	10
WVE15864-11	27876	WVE15864	7/14/08 13:11	307.7857	11
WVE15864-12	28195	WVE15864	7/18/08 14:01	307.801	12
WVE15864-13	28812	WVE15864	7/25/08 15:45	307.8244	13
WVE15864-14	29198	WVE15864	7/30/08 11:39	307.8341	14
WVE15864-15	29596	WVE15864	8/7/08 18:02	307.8527	15
WVE15865-1	26689	WVE15865	7/2/08 14:10	302.2394	1
WVE15865-2	26796	WVE15865	7/3/08 10:01	302.2351	2
WVE15865-3	26900	WVE15865	7/3/08 14:42	302.2343	3
WVE15865-4	27005	WVE15865	7/7/08 9:36	302.2328	4
WVE15865-5	27117	WVE15865	7/7/08 19:55	301.878	5
WVE15865-6	27155	WVE15865	7/8/08 9:52	301.9071	6
WVE15865-7	27283	WVE15865	7/8/08 21:15	301.9181	7
WVE15865-8	27397	WVE15865	7/9/08 10:21	301.9287	8
WVE15865-9	27531	WVE15865	7/10/08 15:51	301.9468	9
WVE15865-10	27635	WVE15865	7/11/08 10:12	301.9495	10
WVE15865-11	27877	WVE15865	7/14/08 13:12	301.9667	11
WVE15865-12	28196	WVE15865	7/18/08 14:01	301.9806	12
WVE15865-13	28813	WVE15865	7/25/08 15:45	302.0041	13
WVE15865-14	29199	WVE15865	7/30/08 11:40	302.0142	14
WVE15865-15	29597	WVE15865	8/7/08 18:03	302.0331	15
WVE15866-1	26690	WVE15866	7/2/08 14:10	298.7877	1
WVE15866-2	26797	WVE15866	7/3/08 10:02	298.7892	2
WVE15866-3	26901	WVE15866	7/3/08 14:43	298.7868	3

WVE15866-4	27006	WVE15866	7/7/08 9:37	298.7796	4
WVE15866-5	27114	WVE15866	7/7/08 19:53	298.4656	5
WVE15866-6	27158	WVE15866	7/8/08 9:55	298.5002	6
WVE15866-7	27296	WVE15866	7/8/08 21:34	298.5123	7
WVE15866-8	27398	WVE15866	7/9/08 10:22	298.5225	8
WVE15866-9	27522	WVE15866	7/10/08 15:43	298.5317	9
WVE15866-10	27636	WVE15866	7/11/08 10:12	298.5379	10
WVE15866-11	27878	WVE15866	7/14/08 13:13	298.558	11
WVE15866-12	28197	WVE15866	7/18/08 14:02	298.575	12
WVE15866-13	28814	WVE15866	7/25/08 15:46	298.5942	13
WVE15866-14	29200	WVE15866	7/30/08 11:41	298.6049	14
WVE15866-15	29598	WVE15866	8/7/08 18:04	298.6221	15
WVE15867-1	26691	WVE15867	7/2/08 14:11	303.7236	1
WVE15867-2	26798	WVE15867	7/3/08 10:03	303.7211	2
WVE15867-3	26902	WVE15867	7/3/08 14:44	303.7189	3
WVE15867-4	27007	WVE15867	7/7/08 9:38	303.7116	4
WVE15867-5	27113	WVE15867	7/7/08 19:52	303.3524	5
WVE15867-6	27159	WVE15867	7/8/08 9:56	303.3899	6
WVE15867-7	27297	WVE15867	7/8/08 21:35	303.3994	7
WVE15867-8	27399	WVE15867	7/9/08 10:22	303.4096	8
WVE15867-9	27523	WVE15867	7/10/08 15:44	303.4204	9
WVE15867-10	27637	WVE15867	7/11/08 10:13	303.4259	10
WVE15867-11	27879	WVE15867	7/14/08 13:14	303.4434	11
WVE15867-12	28198	WVE15867	7/18/08 14:03	303.4624	12
WVE15867-13	28815	WVE15867	7/25/08 15:47	303.4813	13
WVE15867-14	29201	WVE15867	7/30/08 11:41	303.4924	14
WVE15867-15	29599	WVE15867	8/7/08 18:05	303.5084	15
WVE15868-1	26692	WVE15868	7/2/08 14:12	301.3992	1
WVE15868-2	26799	WVE15868	7/3/08 10:04	301.3987	2
WVE15868-3	26903	WVE15868	7/3/08 14:44	301.3981	3
WVE15868-4	27008	WVE15868	7/7/08 9:38	301.3922	4
WVE15868-5	27112	WVE15868	7/7/08 19:52	301.0618	5
WVE15868-6	27160	WVE15868	7/8/08 9:57	301.0988	6
WVE15868-7	27298	WVE15868	7/8/08 21:36	301.1082	7
WVE15868-8	27400	WVE15868	7/9/08 10:23	301.118	8
WVE15868-9	27524	WVE15868	7/10/08 15:45	301.1301	9
WVE15868-10	27638	WVE15868	7/11/08 10:14	301.1359	10
WVE15868-11	27880	WVE15868	7/14/08 13:15	301.1581	11
WVE15868-12	28199	WVE15868	7/18/08 14:04	301.1743	12
WVE15868-13	28816	WVE15868	7/25/08 15:48	301.1927	13
WVE15868-14	29202	WVE15868	7/30/08 11:42	301.2028	14
WVE15868-15	29600	WVE15868	8/7/08 18:05	301.2208	15
WVE15869-1	26693	WVE15869	7/2/08 14:13	304.6352	1
WVE15869-2	26800	WVE15869	7/3/08 10:05	304.6313	2
WVE15869-3	26904	WVE15869	7/3/08 14:45	304.6303	3
WVE15869-4	27009	WVE15869	7/7/08 9:39	304.623	4
WVE15869-5	27111	WVE15869	7/7/08 19:51	304.3037	5
WVE15869-6	27161	WVE15869	7/8/08 9:57	304.3393	6
WVE15869-7	27299	WVE15869	7/8/08 21:38	304.3508	7

WVE15869-8	27401	WVE15869	7/9/08 10:24	304.3597	8
WVE15869-9	27525	WVE15869	7/10/08 15:45	304.3736	9
WVE15869-10	27639	WVE15869	7/11/08 10:14	304.3774	10
WVE15869-11	27881	WVE15869	7/14/08 13:16	304.3957	11
WVE15869-12	28200	WVE15869	7/18/08 14:05	304.4107	12
WVE15869-13	28817	WVE15869	7/25/08 15:49	304.4329	13
WVE15869-14	29203	WVE15869	7/30/08 11:43	304.445	14
WVE15869-15	29601	WVE15869	8/7/08 18:06	304.4625	15
WVE15870-1	26694	WVE15870	7/2/08 14:14	306.4046	1
WVE15870-2	26801	WVE15870	7/3/08 10:05	306.4021	2
WVE15870-3	26905	WVE15870	7/3/08 14:46	306.4	3
WVE15870-4	27010	WVE15870	7/7/08 9:39	306.3941	4
WVE15870-5	27110	WVE15870	7/7/08 19:50	306.0669	5
WVE15870-6	27162	WVE15870	7/8/08 9:58	306.1064	6
WVE15870-7	27300	WVE15870	7/8/08 21:38	306.1157	7
WVE15870-8	27402	WVE15870	7/9/08 10:25	306.1238	8
WVE15870-9	27526	WVE15870	7/10/08 15:46	306.1369	9
WVE15870-10	27640	WVE15870	7/11/08 10:15	306.1391	10
WVE15870-11	27882	WVE15870	7/14/08 13:17	306.1572	11
WVE15870-12	28201	WVE15870	7/18/08 14:05	306.1722	12
WVE15870-13	28818	WVE15870	7/25/08 15:50	306.1933	13
WVE15870-14	29204	WVE15870	7/30/08 11:44	306.204	14
WVE15870-15	29602	WVE15870	8/7/08 18:07	306.2242	15
WVE15871-1	26697	WVE15871	7/2/08 14:18	429.9967	1
WVE15871-2	26804	WVE15871	7/3/08 10:10	429.9874	2
WVE15871-3	26907	WVE15871	7/3/08 14:51	429.988	3
WVE15871-4	27014	WVE15871	7/7/08 9:44	429.9843	4
WVE15871-5	27165	WVE15871	7/8/08 10:01	429.9862	5
WVE15871-6	27405	WVE15871	7/9/08 10:29	429.9892	6
WVE15871-7	27539	WVE15871	7/10/08 16:00	429.9861	7
WVE15871-8	27643	WVE15871	7/11/08 10:19	429.9869	8
WVE15871-9	27885	WVE15871	7/14/08 13:21	429.9888	9
WVE15871-10	28204	WVE15871	7/18/08 14:09	429.9919	10
WVE15871-11	28821	WVE15871	7/25/08 15:53	429.9963	11
WVE15871-12	29207	WVE15871	7/30/08 11:47	430.0036	12
WVE15871-13	29605	WVE15871	8/7/08 18:52	430.0118	13
WVE15872-1	26698	WVE15872	7/2/08 14:19	429.8105	1
WVE15872-2	26805	WVE15872	7/3/08 10:11	429.8114	2
WVE15872-3	26908	WVE15872	7/3/08 14:52	429.8106	3
WVE15872-4	27015	WVE15872	7/7/08 9:45	429.8046	4
WVE15872-5	27166	WVE15872	7/8/08 10:02	429.8038	5
WVE15872-6	27406	WVE15872	7/9/08 10:29	429.808	6
WVE15872-7	27540	WVE15872	7/10/08 16:01	429.8075	7
WVE15872-8	27644	WVE15872	7/11/08 10:20	429.8093	8
WVE15872-9	27886	WVE15872	7/14/08 13:22	429.8134	9
WVE15872-10	28205	WVE15872	7/18/08 14:10	429.8119	10
WVE15872-11	28822	WVE15872	7/25/08 15:54	429.8138	11
WVE15872-12	29208	WVE15872	7/30/08 11:48	429.8176	12
WVE15872-13	29606	WVE15872	8/7/08 18:52	429.8258	13

WVE15873-1	26699	WVE15873	7/2/08 14:20	444.196	1
WVE15873-2	26806	WVE15873	7/3/08 10:13	444.1894	2
WVE15873-3	26909	WVE15873	7/3/08 14:53	444.189	3
WVE15873-4	27016	WVE15873	7/7/08 9:46	444.1817	4
WVE15873-5	27167	WVE15873	7/8/08 10:03	444.1861	5
WVE15873-6	27407	WVE15873	7/9/08 10:30	444.1856	6
WVE15873-7	27541	WVE15873	7/10/08 16:02	444.1875	7
WVE15873-8	27645	WVE15873	7/11/08 10:20	444.1858	8
WVE15873-9	27887	WVE15873	7/14/08 13:23	444.1895	9
WVE15873-10	28206	WVE15873	7/18/08 14:11	444.1906	10
WVE15873-11	28823	WVE15873	7/25/08 15:55	444.196	11
WVE15873-12	29209	WVE15873	7/30/08 11:48	444.1987	12
WVE15873-13	29607	WVE15873	8/7/08 18:54	444.2055	13
WVE15874-1	26700	WVE15874	7/2/08 14:21	431.1215	1
WVE15874-2	26807	WVE15874	7/3/08 10:13	431.1183	2
WVE15874-3	26910	WVE15874	7/3/08 14:53	431.1172	3
WVE15874-4	27017	WVE15874	7/7/08 9:47	431.111	4
WVE15874-5	27168	WVE15874	7/8/08 10:04	431.1114	5
WVE15874-6	27408	WVE15874	7/9/08 10:31	431.1165	6
WVE15874-7	27542	WVE15874	7/10/08 16:03	431.1136	7
WVE15874-8	27646	WVE15874	7/11/08 10:21	431.1145	8
WVE15874-9	27888	WVE15874	7/14/08 13:24	431.1161	9
WVE15874-10	28207	WVE15874	7/18/08 14:12	431.1162	10
WVE15874-11	28824	WVE15874	7/25/08 15:56	431.1265	11
WVE15874-12	29210	WVE15874	7/30/08 11:49	431.1296	12
WVE15874-13	29608	WVE15874	8/7/08 18:54	431.1336	13
WVE15875-1	26701	WVE15875	7/2/08 14:22	434.3362	1
WVE15875-2	26808	WVE15875	7/3/08 10:14	434.3228	2
WVE15875-3	26911	WVE15875	7/3/08 14:54	434.3384	3
WVE15875-4	27018	WVE15875	7/7/08 9:48	434.3078	4
WVE15875-5	27169	WVE15875	7/8/08 10:05	434.3081	5
WVE15875-6	27409	WVE15875	7/9/08 10:32	434.3109	6
WVE15875-7	27543	WVE15875	7/10/08 16:04	434.3147	7
WVE15875-8	27647	WVE15875	7/11/08 10:22	434.3202	8
WVE15875-9	27889	WVE15875	7/14/08 13:25	434.3327	9
WVE15875-10	28208	WVE15875	7/18/08 14:14	434.3319	10
WVE15875-11	28825	WVE15875	7/25/08 15:57	434.3215	11
WVE15875-12	29211	WVE15875	7/30/08 11:50	434.3279	12
WVE15875-13	29609	WVE15875	8/7/08 18:55	434.3313	13
WVE15876-1	26702	WVE15876	7/2/08 14:23	429.5883	1
WVE15876-2	26809	WVE15876	7/3/08 10:16	429.5814	2
WVE15876-3	26912	WVE15876	7/3/08 14:55	429.5837	3
WVE15876-4	27019	WVE15876	7/7/08 9:49	429.5757	4
WVE15876-5	27220	WVE15876	7/8/08 14:50	429.5915	5
WVE15876-6	27291	WVE15876	7/8/08 21:28	429.5924	6
WVE15876-7	27410	WVE15876	7/9/08 10:33	429.5945	7
WVE15876-8	27534	WVE15876	7/10/08 15:55	429.5976	8
WVE15876-9	27648	WVE15876	7/11/08 10:23	429.5895	9
WVE15876-10	27890	WVE15876	7/14/08 13:26	429.5919	10

WVE15876-11	28209	WVE15876	7/18/08 14:15	429.5957	11
WVE15876-12	28826	WVE15876	7/25/08 15:58	429.5947	12
WVE15876-13	29212	WVE15876	7/30/08 11:51	429.6052	13
WVE15876-14	29610	WVE15876	8/7/08 18:56	429.6103	14
WVE15877-1	26703	WVE15877	7/2/08 14:23	432.0483	1
WVE15877-2	26810	WVE15877	7/3/08 10:16	432.0427	2
WVE15877-3	26913	WVE15877	7/3/08 14:56	432.0469	3
WVE15877-4	27020	WVE15877	7/7/08 9:50	432.0434	4
WVE15877-5	27221	WVE15877	7/8/08 14:51	432.0563	5
WVE15877-6	27292	WVE15877	7/8/08 21:30	432.0498	6
WVE15877-7	27411	WVE15877	7/9/08 10:34	432.0505	7
WVE15877-8	27535	WVE15877	7/10/08 15:56	432.0512	8
WVE15877-9	27649	WVE15877	7/11/08 10:24	432.047	9
WVE15877-10	27891	WVE15877	7/14/08 13:28	432.0438	10
WVE15877-11	28210	WVE15877	7/18/08 14:17	432.0472	11
WVE15877-12	28827	WVE15877	7/25/08 15:59	432.048	12
WVE15877-13	29213	WVE15877	7/30/08 11:52	432.0577	13
WVE15877-14	29611	WVE15877	8/7/08 18:57	432.0597	14
WVE15878-1	26704	WVE15878	7/2/08 14:24	420.2935	1
WVE15878-2	26811	WVE15878	7/3/08 10:18	420.2898	2
WVE15878-3	26914	WVE15878	7/3/08 14:57	420.2884	3
WVE15878-4	27021	WVE15878	7/7/08 9:51	420.2841	4
WVE15878-5	27222	WVE15878	7/8/08 14:52	420.3018	5
WVE15878-6	27293	WVE15878	7/8/08 21:31	420.2979	6
WVE15878-7	27412	WVE15878	7/9/08 10:34	420.2946	7
WVE15878-8	27536	WVE15878	7/10/08 15:57	420.2918	8
WVE15878-9	27650	WVE15878	7/11/08 10:25	420.2902	9
WVE15878-10	27892	WVE15878	7/14/08 13:29	420.2929	10
WVE15878-11	28211	WVE15878	7/18/08 14:18	420.2919	11
WVE15878-12	28828	WVE15878	7/25/08 16:00	420.2955	12
WVE15878-13	29214	WVE15878	7/30/08 11:53	420.3044	13
WVE15878-14	29612	WVE15878	8/7/08 18:57	420.3078	14
WVE15879-1	26705	WVE15879	7/2/08 14:25	429.0905	1
WVE15879-2	26812	WVE15879	7/3/08 10:18	429.0895	2
WVE15879-3	26915	WVE15879	7/3/08 14:58	429.0869	3
WVE15879-4	27022	WVE15879	7/7/08 9:52	428.9944	4
WVE15879-5	27223	WVE15879	7/8/08 14:53	429.0134	5
WVE15879-6	27294	WVE15879	7/8/08 21:32	429.0066	6
WVE15879-7	27413	WVE15879	7/9/08 10:36	429.0022	7
WVE15879-8	27537	WVE15879	7/10/08 15:58	428.9997	8
WVE15879-9	27651	WVE15879	7/11/08 10:25	428.9987	9
WVE15879-10	27893	WVE15879	7/14/08 13:30	429.0016	10
WVE15879-11	28212	WVE15879	7/18/08 14:19	428.999	11
WVE15879-12	28829	WVE15879	7/25/08 16:01	429.0008	12
WVE15879-13	29215	WVE15879	7/30/08 11:54	429.0086	13
WVE15879-14	29613	WVE15879	8/7/08 18:58	429.0088	14
WVE15880-1	26706	WVE15880	7/2/08 14:26	434.1802	1
WVE15880-2	26813	WVE15880	7/3/08 10:19	434.1631	2
WVE15880-3	26916	WVE15880	7/3/08 14:59	434.1629	3

WVE15880-4	27023	WVE15880	7/7/08 9:53	434.1588	4
WVE15880-5	27224	WVE15880	7/8/08 14:54	434.1725	5
WVE15880-6	27295	WVE15880	7/8/08 21:33	434.1657	6
WVE15880-7	27414	WVE15880	7/9/08 10:36	434.1651	7
WVE15880-8	27538	WVE15880	7/10/08 15:59	434.1615	8
WVE15880-9	27652	WVE15880	7/11/08 10:27	434.1599	9
WVE15880-10	27894	WVE15880	7/14/08 13:31	434.1618	10
WVE15880-11	28213	WVE15880	7/18/08 14:21	434.1629	11
WVE15880-12	28830	WVE15880	7/25/08 16:02	434.1661	12
WVE15880-13	29216	WVE15880	7/30/08 11:55	434.1765	13
WVE15880-14	29614	WVE15880	8/7/08 18:59	434.1764	14
WVE15881-1	26709	WVE15881	7/2/08 14:31	430.0748	1
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WVE15881-3	26923	WVE15881	7/3/08 15:10	430.0679	3
WVE15881-4	27026	WVE15881	7/7/08 9:57	430.0687	4
WVE15881-5	27227	WVE15881	7/8/08 14:56	429.9324	5
WVE15881-6	27308	WVE15881	7/8/08 21:51	429.9324	6
WVE15881-7	27417	WVE15881	7/9/08 10:39	429.9408	7
WVE15881-8	27546	WVE15881	7/10/08 16:07	429.9527	8
WVE15881-9	27655	WVE15881	7/11/08 10:30	429.9511	9
WVE15881-10	27897	WVE15881	7/14/08 13:36	429.9639	10
WVE15881-11	28216	WVE15881	7/18/08 14:25	429.9683	11
WVE15881-12	28833	WVE15881	7/25/08 16:06	429.9856	12
WVE15881-13	29219	WVE15881	7/30/08 11:58	430.0002	13
WVE15881-14	29617	WVE15881	8/7/08 19:01	430.0083	14
WVE15882-1	26710	WVE15882	7/2/08 14:32	442.7305	1
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WVE15882-3	26922	WVE15882	7/3/08 15:09	442.7246	3
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WVE15882-7	27418	WVE15882	7/9/08 10:40	442.5641	7
WVE15882-8	27547	WVE15882	7/10/08 16:08	442.5762	8
WVE15882-9	27656	WVE15882	7/11/08 10:31	442.583	9
WVE15882-10	27898	WVE15882	7/14/08 13:37	442.6015	10
WVE15882-11	28217	WVE15882	7/18/08 14:27	442.6049	11
WVE15882-12	28834	WVE15882	7/25/08 16:07	442.6265	12
WVE15882-13	29220	WVE15882	7/30/08 11:59	442.6425	13
WVE15882-14	29618	WVE15882	8/7/08 19:02	442.6518	14
WVE15883-1	26711	WVE15883	7/2/08 14:33	434.6571	1
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WVE15883-3	26921	WVE15883	7/3/08 15:08	434.6538	3
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WVE15883-5	27229	WVE15883	7/8/08 14:58	434.4381	5
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WVE15883-7	27419	WVE15883	7/9/08 10:41	434.4587	7
WVE15883-8	27548	WVE15883	7/10/08 16:09	434.4679	8
WVE15883-9	27657	WVE15883	7/11/08 10:31	434.4675	9
WVE15883-10	27899	WVE15883	7/14/08 13:38	434.4849	10

WVE15883-11	28218	WVE15883	7/18/08 14:28	434.4957	11
WVE15883-12	28835	WVE15883	7/25/08 16:08	434.5084	12
WVE15883-13	29221	WVE15883	7/30/08 12:00	434.5225	13
WVE15883-14	29619	WVE15883	8/7/08 19:03	434.5328	14
WVE15884-1	26712	WVE15884	7/2/08 14:34	436.7236	1
WVE15884-2	26819	WVE15884	7/3/08 10:27	436.7197	2
WVE15884-3	26920	WVE15884	7/3/08 15:07	436.7193	3
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WVE15884-5	27230	WVE15884	7/8/08 15:01	436.5385	5
WVE15884-6	27311	WVE15884	7/8/08 21:54	436.5398	6
WVE15884-7	27420	WVE15884	7/9/08 10:42	436.5533	7
WVE15884-8	27549	WVE15884	7/10/08 16:10	436.5638	8
WVE15884-9	27658	WVE15884	7/11/08 10:32	436.567	9
WVE15884-10	27900	WVE15884	7/14/08 13:39	436.5816	10
WVE15884-11	28219	WVE15884	7/18/08 14:29	436.6076	11
WVE15884-12	28836	WVE15884	7/25/08 16:09	436.6107	12
WVE15884-13	29222	WVE15884	7/30/08 12:01	436.6163	13
WVE15884-14	29620	WVE15884	8/7/08 19:03	436.6296	14
WVE15885-1	26713	WVE15885	7/2/08 14:35	432.241	1
WVE15885-2	26820	WVE15885	7/3/08 10:28	432.2381	2
WVE15885-3	26919	WVE15885	7/3/08 15:06	432.2335	3
WVE15885-4	27030	WVE15885	7/7/08 10:00	432.2288	4
WVE15885-5	27231	WVE15885	7/8/08 15:02	432.0762	5
WVE15885-6	27312	WVE15885	7/8/08 21:56	432.0732	6
WVE15885-7	27421	WVE15885	7/9/08 10:43	432.09	7
WVE15885-8	27550	WVE15885	7/10/08 16:12	432.0954	8
WVE15885-9	27659	WVE15885	7/11/08 10:34	432.1084	9
WVE15885-10	27901	WVE15885	7/14/08 13:41	432.1182	10
WVE15885-11	28220	WVE15885	7/18/08 14:31	432.1289	11
WVE15885-12	28837	WVE15885	7/25/08 16:10	432.1393	12
WVE15885-13	29223	WVE15885	7/30/08 12:02	432.1541	13
WVE15885-14	29621	WVE15885	8/7/08 19:04	432.1647	14
WVE15886-1	26714	WVE15886	7/2/08 14:36	433.5625	1
WVE15886-2	26821	WVE15886	7/3/08 10:29	433.553	2
WVE15886-3	26928	WVE15886	7/3/08 15:14	433.5524	3
WVE15886-4	27031	WVE15886	7/7/08 10:01	433.5516	4
WVE15886-5	27232	WVE15886	7/8/08 15:02	431.6898	5
WVE15886-6	27303	WVE15886	7/8/08 21:45	431.6827	6
WVE15886-7	27422	WVE15886	7/9/08 10:44	431.6896	7
WVE15886-8	27551	WVE15886	7/10/08 16:12	431.6911	8
WVE15886-9	27660	WVE15886	7/11/08 10:35	431.6903	9
WVE15886-10	27902	WVE15886	7/14/08 13:42	431.6931	10
WVE15886-11	28221	WVE15886	7/18/08 14:32	431.6979	11
WVE15886-12	28838	WVE15886	7/25/08 16:11	431.7009	12
WVE15886-13	29224	WVE15886	7/30/08 12:03	431.7057	13
WVE15886-14	29622	WVE15886	8/7/08 19:05	431.7137	14
WVE15887-1	26715	WVE15887	7/2/08 14:38	433.9369	1
WVE15887-2	26822	WVE15887	7/3/08 10:30	433.9303	2
WVE15887-3	26927	WVE15887	7/3/08 15:13	433.9279	3

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WVE15887-5	27233	WVE15887	7/8/08 15:03	432.9231	5
WVE15887-6	27304	WVE15887	7/8/08 21:47	432.918	6
WVE15887-7	27423	WVE15887	7/9/08 10:45	432.9191	7
WVE15887-8	27552	WVE15887	7/10/08 16:13	432.9213	8
WVE15887-9	27661	WVE15887	7/11/08 10:35	432.9192	9
WVE15887-10	27903	WVE15887	7/14/08 13:43	432.9217	10
WVE15887-11	28222	WVE15887	7/18/08 14:34	432.9238	11
WVE15887-12	28839	WVE15887	7/25/08 16:12	432.928	12
WVE15887-13	29225	WVE15887	7/30/08 12:03	432.9375	13
WVE15887-14	29623	WVE15887	8/7/08 19:06	432.9444	14
WVE15888-1	26716	WVE15888	7/2/08 14:39	434.9739	1
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WVE15888-5	27234	WVE15888	7/8/08 15:04	433.2275	5
WVE15888-6	27305	WVE15888	7/8/08 21:47	433.2247	6
WVE15888-7	27424	WVE15888	7/9/08 10:46	433.2288	7
WVE15888-8	27553	WVE15888	7/10/08 16:15	433.2293	8
WVE15888-9	27662	WVE15888	7/11/08 10:36	433.225	9
WVE15888-10	27904	WVE15888	7/14/08 13:44	433.2297	10
WVE15888-11	28223	WVE15888	7/18/08 14:35	433.2353	11
WVE15888-12	28840	WVE15888	7/25/08 16:13	433.2368	12
WVE15888-13	29226	WVE15888	7/30/08 12:04	433.2454	13
WVE15888-14	29624	WVE15888	8/7/08 19:07	433.2504	14
WVE15889-1	26717	WVE15889	7/2/08 14:40	437.6277	1
WVE15889-2	26824	WVE15889	7/3/08 10:32	437.6218	2
WVE15889-3	26925	WVE15889	7/3/08 15:11	437.6177	3
WVE15889-4	27034	WVE15889	7/7/08 10:04	437.6157	4
WVE15889-5	27235	WVE15889	7/8/08 15:05	436.2116	5
WVE15889-6	27306	WVE15889	7/8/08 21:48	436.2063	6
WVE15889-7	27425	WVE15889	7/9/08 10:47	436.206	7
WVE15889-8	27554	WVE15889	7/10/08 16:16	436.2067	8
WVE15889-9	27663	WVE15889	7/11/08 10:37	436.2027	9
WVE15889-10	27905	WVE15889	7/14/08 13:45	436.2051	10
WVE15889-11	28224	WVE15889	7/18/08 14:36	436.2057	11
WVE15889-12	28841	WVE15889	7/25/08 16:14	436.2139	12
WVE15889-13	29227	WVE15889	7/30/08 12:05	436.2196	13
WVE15889-14	29625	WVE15889	8/7/08 19:08	436.2228	14
WVE15890-1	26718	WVE15890	7/2/08 14:41	436.9581	1
WVE15890-2	26825	WVE15890	7/3/08 10:32	436.9521	2
WVE15890-3	26924	WVE15890	7/3/08 15:11	436.9478	3
WVE15890-4	27035	WVE15890	7/7/08 10:04	436.9465	4
WVE15890-5	27236	WVE15890	7/8/08 15:06	435.5688	5
WVE15890-6	27307	WVE15890	7/8/08 21:50	435.562	6
WVE15890-7	27426	WVE15890	7/9/08 10:49	435.5645	7
WVE15890-8	27555	WVE15890	7/10/08 16:17	435.5651	8
WVE15890-9	27664	WVE15890	7/11/08 10:39	435.5643	9
WVE15890-10	27906	WVE15890	7/14/08 13:46	435.5683	10

WVE15890-11	28225	WVE15890	7/18/08 14:37	435.5703	11
WVE15890-12	28842	WVE15890	7/25/08 16:15	435.5785	12
WVE15890-13	29228	WVE15890	7/30/08 12:06	435.587	13
WVE15890-14	29626	WVE15890	8/7/08 19:09	435.5897	14
WVE15891-1	26722	WVE15891	7/2/08 14:48	429.9524	1
WVE15891-2	26828	WVE15891	7/3/08 10:36	429.9458	2
WVE15891-3	26931	WVE15891	7/3/08 15:17	429.9407	3
WVE15891-4	27037	WVE15891	7/7/08 10:08	429.9408	4
WVE15891-5	27084	WVE15891	7/7/08 17:54	430.1475	5
WVE15891-6	27170	WVE15891	7/8/08 10:06	430.1501	6
WVE15891-7	27429	WVE15891	7/9/08 10:51	430.153	7
WVE15891-8	27563	WVE15891	7/10/08 16:26	430.1505	8
WVE15891-9	27667	WVE15891	7/11/08 10:41	430.1513	9
WVE15891-10	27909	WVE15891	7/14/08 13:50	430.1531	10
WVE15891-11	28228	WVE15891	7/18/08 14:42	430.156	11
WVE15891-12	28850	WVE15891	7/25/08 16:24	430.1616	12
WVE15891-13	29231	WVE15891	7/30/08 12:09	430.1678	13
WVE15891-14	29629	WVE15891	8/7/08 19:11	430.1696	14
WVE15892-1	26723	WVE15892	7/2/08 14:49	429.9182	1
WVE15892-2	26829	WVE15892	7/3/08 10:37	429.9122	2
WVE15892-3	26932	WVE15892	7/3/08 15:18	429.9085	3
WVE15892-4	27038	WVE15892	7/7/08 10:09	429.9082	4
WVE15892-5	27085	WVE15892	7/7/08 17:55	430.1844	5
WVE15892-6	27171	WVE15892	7/8/08 10:06	430.1892	6
WVE15892-7	27430	WVE15892	7/9/08 10:52	430.1899	7
WVE15892-8	27564	WVE15892	7/10/08 16:27	430.1865	8
WVE15892-9	27668	WVE15892	7/11/08 10:42	430.189	9
WVE15892-10	27910	WVE15892	7/14/08 13:51	430.1917	10
WVE15892-11	28229	WVE15892	7/18/08 14:44	430.1934	11
WVE15892-12	28851	WVE15892	7/25/08 16:25	430.1945	12
WVE15892-13	29232	WVE15892	7/30/08 12:09	430.1976	13
WVE15892-14	29630	WVE15892	8/7/08 19:12	430.1968	14
WVE15893-1	26724	WVE15893	7/2/08 14:50	427.8988	1
WVE15893-2	26830	WVE15893	7/3/08 10:38	427.8928	2
WVE15893-3	26933	WVE15893	7/3/08 15:19	427.8883	3
WVE15893-4	27039	WVE15893	7/7/08 10:10	427.8919	4
WVE15893-5	27086	WVE15893	7/7/08 17:56	428.0319	5
WVE15893-6	27172	WVE15893	7/8/08 10:07	428.0356	6
WVE15893-7	27431	WVE15893	7/9/08 10:53	428.035	7
WVE15893-8	27565	WVE15893	7/10/08 16:28	428.0365	8
WVE15893-9	27669	WVE15893	7/11/08 10:43	428.0351	9
WVE15893-10	27911	WVE15893	7/14/08 13:52	428.0396	10
WVE15893-11	28230	WVE15893	7/18/08 14:45	428.0394	11
WVE15893-12	28852	WVE15893	7/25/08 16:27	428.0404	12
WVE15893-13	29233	WVE15893	7/30/08 12:10	428.049	13
WVE15893-14	29631	WVE15893	8/7/08 19:13	428.0534	14
WVE15894-1	26725	WVE15894	7/2/08 14:51	422.4391	1
WVE15894-2	26831	WVE15894	7/3/08 10:39	422.4375	2
WVE15894-3	26934	WVE15894	7/3/08 15:20	422.4341	3

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WVE15894-5	27087	WVE15894	7/7/08 17:56	422.6802	5
WVE15894-6	27173	WVE15894	7/8/08 10:08	422.6813	6
WVE15894-7	27432	WVE15894	7/9/08 10:54	422.6865	7
WVE15894-8	27566	WVE15894	7/10/08 16:29	422.6824	8
WVE15894-9	27670	WVE15894	7/11/08 10:43	422.6813	9
WVE15894-10	27912	WVE15894	7/14/08 13:53	422.6847	10
WVE15894-11	28231	WVE15894	7/18/08 14:46	422.6864	11
WVE15894-12	28853	WVE15894	7/25/08 16:28	422.6893	12
WVE15894-13	29234	WVE15894	7/30/08 12:11	422.6966	13
WVE15894-14	29632	WVE15894	8/7/08 19:14	422.6996	14
WVE15895-1	26726	WVE15895	7/2/08 14:52	425.6377	1
WVE15895-2	26832	WVE15895	7/3/08 10:40	425.6466	2
WVE15895-3	26935	WVE15895	7/3/08 15:21	425.635	3
WVE15895-4	27041	WVE15895	7/7/08 10:12	425.6358	4
WVE15895-5	27088	WVE15895	7/7/08 17:57	425.7695	5
WVE15895-6	27174	WVE15895	7/8/08 10:09	425.7696	6
WVE15895-7	27433	WVE15895	7/9/08 10:55	425.7768	7
WVE15895-8	27567	WVE15895	7/10/08 16:30	425.7701	8
WVE15895-9	27671	WVE15895	7/11/08 10:44	425.7702	9
WVE15895-10	27913	WVE15895	7/14/08 13:54	425.7734	10
WVE15895-11	28232	WVE15895	7/18/08 14:48	425.7723	11
WVE15895-12	28854	WVE15895	7/25/08 16:29	425.7828	12
WVE15895-13	29235	WVE15895	7/30/08 12:12	425.7934	13
WVE15895-14	29633	WVE15895	8/7/08 19:15	425.7942	14
WVE15896-1	26721	WVE15896	7/2/08 14:45	433.0251	1
WVE15896-2	26833	WVE15896	7/3/08 10:41	433.0203	2
WVE15896-3	26936	WVE15896	7/3/08 15:22	433.0165	3
WVE15896-4	27042	WVE15896	7/7/08 10:13	433.0169	4
WVE15896-5	27091	WVE15896	7/7/08 17:59	433.1268	5
WVE15896-6	27177	WVE15896	7/8/08 10:13	433.1301	6
WVE15896-7	27434	WVE15896	7/9/08 10:55	433.1304	7
WVE15896-8	27558	WVE15896	7/10/08 16:21	433.1291	8
WVE15896-9	27672	WVE15896	7/11/08 10:45	433.1278	9
WVE15896-10	27914	WVE15896	7/14/08 13:55	433.1326	10
WVE15896-11	28233	WVE15896	7/18/08 14:49	433.1341	11
WVE15896-12	28845	WVE15896	7/25/08 16:19	433.1393	12
WVE15896-13	29236	WVE15896	7/30/08 12:13	433.1481	13
WVE15896-14	29634	WVE15896	8/7/08 19:16	433.1508	14
WVE15897-1	26727	WVE15897	7/2/08 14:52	433.588	1
WVE15897-2	26834	WVE15897	7/3/08 10:42	433.5804	2
WVE15897-3	26937	WVE15897	7/3/08 15:23	433.5787	3
WVE15897-4	27043	WVE15897	7/7/08 10:14	433.582	4
WVE15897-5	27092	WVE15897	7/7/08 18:00	433.7459	5
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WVE15897-7	27435	WVE15897	7/9/08 10:56	433.7477	7
WVE15897-8	27559	WVE15897	7/10/08 16:22	433.7482	8
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WVE15897-14	29635	WVE15897	8/7/08 19:17	433.7594	14
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WVE15904-13	28860	WVE15904	7/25/08 16:37	426.0816	13
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WVE15908-13	28864	WVE15908	7/25/08 16:42	428.8025	13
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WVE15910-14	29252	WVE15910	7/30/08 12:26	424.5146	14
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WVREF623-29	28778	WVREF623	7/25/08 15:08	299.8636	29
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WVREF623-34	29092	WVREF623	7/29/08 12:14	299.8656	34
WVREF623-35	29147	WVREF623	7/30/08 11:02	299.8692	35
WVREF623-36	29156	WVREF623	7/30/08 11:08	299.8671	36
WVREF623-37	29283	WVREF623	7/31/08 15:22	299.8729	37
WVREF623-38	29309	WVREF623	8/1/08 13:38	299.87	38
WVREF623-39	29374	WVREF623	8/2/08 14:23	299.8724	39
WVREF623-40	29416	WVREF623	8/3/08 12:27	299.8694	40
WVREF623-41	29463	WVREF623	8/4/08 12:56	299.8739	41
WVREF623-42	29509	WVREF623	8/5/08 12:56	299.873	42
WVREF623-43	29551	WVREF623	8/7/08 17:16	299.8753	43

WVREF623-44	29840	WVREF623	8/14/08 15:35	299.8827	44
WVREF623-45	30013	WVREF623	8/21/08 9:46	299.8774	45
WVREF623-46	30265	WVREF623	8/28/08 9:21	299.8826	46
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