UNIVERSIDAD DEL AZUAY

FACULTAD DE CIENCIA Y TECNOLOGIA

ESCUELA DE INGENIERIA CIVIL

Calibración del sector de distribución de agua potable 3.2 del sistema Cebollar, de la ciudad de Cuenca.

Trabajo de graduación previo a la obtención del título de Ingeniero Civil

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Cuenca, Ecuador

2024

DEDICATORIA

A mi Victoria Angelica y a mi Salem Asrael, gracias por ser el pilar fundamental de mi vida y mi gran compañía durante los desvelos y malas noches en estos años, por quererme mucho, apoyarme y estar presente en todas las etapas de mi vida.

A mi madre, a mis tíos y a mi abuelita Madita, por el cariño, la preocupación y el apoyo constante para lograr terminar esta etapa.

INDICE DE CONTENIDOS

INDICE DE FIGURAS

INDICE DE TABLAS

INDICE DE ANEXOS

RESUMEN

El presente proyecto abarca la modelación y calibración del sector de distribución de agua potable 3.2 del sistema del Cebollar en la ciudad de Cuenca. El modelo se desarrolla a partir de la información proporcionada por la empresa ETAPA EP, incluyendo el catastro de la infraestructura de agua potable, los datos de micro y macro medición, además de información demográfica, cartográfica y topográfica del sector. Para el cálculo de la población servida y la demanda se utilizó una proyección del número de conexiones por sector y para la validación del modelo se utilizaron valores de presiones levantados por ETAPA EP. Para llevar a cabo el proyecto, se utilizaron herramientas informáticas como AutoCAD y QGIS para procesar los datos preliminares, y se utilizó un software especializado en modelación hidráulica, WaterGEMS para la elaboración, simulación y calibración del modelo hidráulico.

Palabras claves: modelación hidráulica, abastecimiento de agua, validación, proyección de población, capacidad de tuberías.

ABSTRACT

This project includes the modeling and calibration of the drinking water distribution sector 3.2 of the Cebollar system in the city of Cuenca. The model is developed based on the information provided by the company ETAPA EP, including the cadastre of the drinking water infrastructure, micro and macro measurement data, as well as demographic, cartographic and topographic information of the sector. A projection of the number of connections per sector was used for the calculation of the population served and the pressure values raised by STAGE EP were used for the validation of the model. To carry out the project, computer tools such as AutoCAD and QGIS were used to process the preliminary data, and specialized hydraulic modeling software, WaterGEMS, was used for the elaboration, simulation and calibration of the hydraulic model.

Keywords: Hydraulic Modeling, Water Supply, Validation, Population Projection, Pipeline Capacity.

INTRODUCIÓN

El crecimiento de la población y la contaminación descontrolada de fuentes de agua son desafíos significativos. La demanda cada vez mayor de agua junto con la contaminación ha llevado a una escasez creciente de este recurso vital. Por esta razón es fundamental implementar medidas para conservar el agua, gestionarla de manera más eficiente y reducir la contaminación para preservar este recurso invaluable para las generaciones futuras.

A pesar de contar con extensas redes de distribución y tecnología avanzada, hay una notable pérdida de agua en los sistemas de distribución actuales. Las fugas en las tuberías, la falta de mantenimiento adecuado y la infraestructura antigua son algunas de las razones por las cuales se pierde una cantidad significativa de agua en el proceso de distribución. Además, la falta de conciencia sobre el uso eficiente del agua también contribuye a este problema.

Implementar programas de mantenimiento regulares, modernizar la infraestructura, utilizar tecnologías más avanzadas para detectar fugas y promover la conciencia sobre el uso responsable del agua son pasos fundamentales para reducir estas pérdidas y asegurar un suministro más eficiente y sostenible. (Toro, 2007)

Este trabajo de titulación consiste en elaborar un modelo hidráulico y calibrar el mismo a partir de las mediciones de campo para las conducciones del sistema de agua potable del sector 3.2 de la planta del Cebollar, de la ciudad de Cuenca. El modelo se ha desarrollado utilizando herramientas computacionales del campo de los Sistemas de Información Geográfica y programas especializados en modelación hidráulica; empleando información brindada por la Empresa Pública Municipal de Telecomunicaciones, Agua Potable, Alcantarillado y Saneamiento, ETAPA EP.

La calibración del modelo hidráulico permite evaluar el funcionamiento actual de las tuberías de agua potable, con la finalidad de analizar los problemas que presentan dentro del sistema y proponer posibles soluciones a la empresa encargada para que pueda mejorar el servicio y garantizar la calidad de este.

Antecedentes

Según la Constitución de la República del Ecuador (2021): "El derecho humano al agua es fundamental e irrenunciable. El agua constituye patrimonio nacional estratégico de uso público, inalienable, imprescriptible, inembargable y esencial para la vida." (pg.13)

El agua potable es una necesidad crucial para la humanidad. En Ecuador, ya en 1949, era obligación de las municipalidades prestar servicios de agua potable, sin embargo, no todas lo hacían. Por esta razón, se buscó apoyo internacional, y a finales de los años 40, con el gobierno de los Estados Unidos, se implementaron el diseño, la construcción y el mejoramiento de los sistemas de agua potable en las principales ciudades del país. En 1999, se observó un incremento en las coberturas de agua potable en todo el país, alcanzando un 82% en las zonas urbanas y un 39% en las zonas rurales. (Loaiza & Palacios, 2017)

Para asegurar una buena calidad del servicio y un buen suministro de agua, la Empresa Pública Municipal de Telecomunicaciones, Agua Potable, Alcantarillado y Saneamiento de Cuenca, ETAPA EP, cuenta con 33 reservorios localizados estratégicamente en varios sectores dentro de la ciudad y una capacidad total de 120,000 metros cúbicos para abastecer a la misma. En el área rural, cada planta tiene la cantidad de reserva necesaria y suficiente para la población abastecida. En el área urbana, las redes de distribución de agua potable alcanzan una cobertura del 96%, mientras que en el área rural cubren un 88%, siendo una de las mejores coberturas del país. (ETAPA EP, 2022)

Justificación

En la ciudad de Cuenca, uno de los sistemas hidráulicos más significativos es la planta de agua del Cebollar. Debido a la gran demanda de agua que existe en la ciudad, la empresa pública ETAPA EP debe realizar una reevaluación y considerar una calibración cada cierto tiempo de su sistema de distribución, asegurando una buena calidad del servicio.

Alcance

Una vez obtenida la información catastral brindada por la Empresa Pública ETAPA EP, se procede a elaborar la modelación del sistema de distribución de agua potable del sector 3.2 de la planta del Cebollar; se realiza el análisis y evaluación del funcionamiento actual de las tuberías en orden de proponer alternativas para solventar los problemas que se presenten en la red.

Objetivos

Objetivo general

Realizar un análisis de los parámetros en la red de distribución de agua potable 3.2 de la planta del Cebollar, para llevar a cabo la modelación del sistema.

Objetivos específicos

1. Recopilación de la información del modelo hidráulico.
2. Elaboración del modelo hidráulico.
3. Calibración y validación hidráulica.

CAPITULO I

1. RECOPILACIÓN DE INFORMACIÓN

1.1 Antecedentes de la planta de agua del Cebollar.

Desde 1949, la Planta de Agua del Cebollar potabiliza el agua haciéndola útil para los moradores. Con el tiempo, su capacidad se triplicó a medida que la necesidad de este fluido vital en la ciudad crecía rápidamente. Su capacidad máxima es de 1.000 l/s, aunque actualmente procesa una media de 850 l/s.

Dicha planta de agua cuenta con un sistema de tratamiento convencional, es decir: captación, conducción, mezcla rápida, floculación, sedimentación, filtración, desinfección; así como también, cuenta con cinco tanques de almacenamiento de agua tratada, con una capacidad total de 9500 m^3.

El agua tratada es transportada a través de un sistema de canales para luego ser almacenada en los tanques mencionados antes de ser distribuida a tanques externos ubicados en puntos estratégicos de la ciudad.

Todos los tanques mencionados están conectados entre sí y también están integrados en la red de distribución y zonas de presión específicas diseñadas para atender distintos sectores de la ciudad. (Molina, 2015)

1.2 Información preliminar

1.2.1 Área de estudio

La planta de agua de El Cebollar, está ubicado al noreste de la ciudad de Cuenca, provincia del Azuay. El sector 3.2, sector de estudio, está dividido en 3 subsectores: Norte, Centro y Sur, con un área de 1824763.1942 m^2, 2646124.081 m^2 y 3888669.6095 m^2, respectivamente, como se pueden observar en las figuras siguientes: Figura 1.1 delimitación de todo el sector 3.2 de la planta de agua de El Cebollar, Figura 1.2 delimitación del subsector 3.2 Norte, Figura 1.3 delimitación del subsector 3.2 Centro y Figura 1.4 delimitación del subsector 3.2 Sur.

Figura 1.1

Delimitación del sector 3.2 de la planta de agua del Cebollar.

Fuente: Elaboración propia, adaptado de ETAPA EP.

Figura 1.2

Limites sectoriales del subsector 3.2 Norte

Fuente: Elaboración propia, adaptado de ETAPA EP.

Figura 1.3

Limites sectoriales del subsector 3.2 Centro

Fuente: Elaboración propia, adaptado de ETAPA EP.

Figura 1.4

Limites sectoriales del subsector 3.2 Sur

Fuente: Elaboración propia, adaptado de ETAPA EP.

1.2.1 Zona de estudio

La red de agua se extiende a lo largo de la ciudad en un total de 219.07 km, teniendo 49.33 km en el subsector de El Cebollar Norte, 68.09 km en el subsector de El Cebollar Centro y 101.65 km en el subsector de El Cebollar Sur, como se observa en la Tabla 1.1, y se abastecen de los tanques ubicados en la planta de agua potable de El Cebollar ubicada a 2639 msnm, la cual utiliza un área total de 89720 m^2. En la Figura 1.5 se puede observar cómo se distribuyen las redes de agua, las de conducción y de distribución a lo largo del sector.

Tabla 1.1

Red de agua del sector 3.2 de El Cebollar

REDES	
	Km
Cebollar Norte	49.33
Cebollar Centro	68.09
Cebollar Sur	101.65
TOTAL	219.07

Fuente: Elaboración propia, adaptado de ETAPA EP.

Figura 1.5

Mapa de la red de agua potable, conducciones y distribución del sector 3.2

Fuente: Elaboración propia, adaptado de ETAPA EP.

Figura 1.6

Ubicación de nodos en el sector 3.2
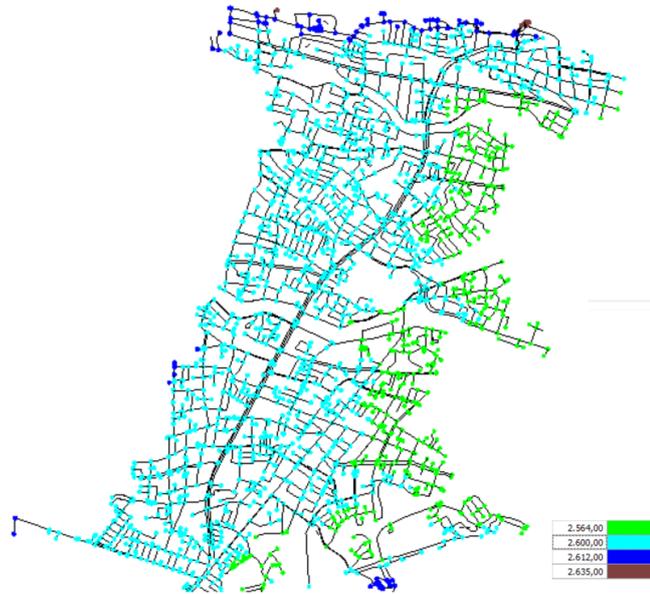
Fuente: Elaboración propia, adaptado de ETAPA EP.

Tabla 1.2

Ejemplificación de la información de los nodos

Nudo	Cota	Caudal	Presión
943	2.575,75	0,2852	55,60
944	2.575,79	0,1669	55,60
946	2.552,37	0,4264	71,00
947	2.552,50	0,3106	70,90
949	2.559,81	0,2528	73,00
950	2.559,81	0,3662	73,00
952	2.566,82	0,0668	66,00
953	2.566,82	0,0537	66,00

Fuente: Elaboración propia, adaptado de ETAPA EP.

1.3 Generalidades

Mediante la modelación se pretende mejorar la comprensión de la información en un sistema, al conceptualizarlo y simplificarlo, partiendo del entendimiento de sus componentes y del sistema funcionando como un todo. Cuantas menos variables de incertidumbre tenga el modelo, más se aproximará a la realidad, lo que garantiza que las decisiones tomadas al evaluarlo frente a diferentes escenarios sean más acertadas.

En el ámbito de la ingeniería hidráulica, la modelación implica la representación de los sistemas de suministro de agua potable con el fin de reflejar con precisión la realidad de la red instalada. En el mercado existen diversos programas informáticos que facilitan este tipo de modelación. En el caso de los sistemas de distribución de agua potable, basándose en datos fundamentales, la modelación hidráulica permite diseñar, evaluar y optimizar las redes de distribución para garantizar el suministro en condiciones óptimas de cantidad y calidad. (Romero, 2015)

Este estudio se fundamenta en el uso del software de modelación WaterGEMS, esta herramienta es completa y fácil de usar, y permite entender de manera más detallada y profunda el comportamiento de un sistema de distribución y cómo debe expandirse conforme la población crece; permite importar datos desde distintos programas maximizando su productividad al automatizar los datos de entrada y gestiona eficientemente el modelo para que se pueda tomar siempre la decisión correcta.

1.3.1 Agua potable

Es aquella que puede ser consumida sin limitaciones debido a su calidad, la cual no representa ningún riesgo para la salud. Esto se debe a que cumple con las normas de calidad establecidas por las autoridades locales e internacionales. (Idrovo, 2023)

1.3.2 Sistema de abastecimiento de agua potable

"El sistema incluye las obras y trabajos auxiliares construidos para la captación, conducción, tratamiento, almacenamiento y sistema de distribución." (NTE INEN 1 108, 2014, pag.2)

1.3.3 Sistema de distribución

"Comprende las obras y trabajos auxiliares construidos desde la salida de la planta de tratamiento hasta la acometida domiciliaria." (NTE INEN 1 108, 2014, pag.2)

1.3.3.1 Componentes de un sistema de distribución

o Red principal

Consiste en el conjunto de tuberías que se extienden directamente desde el tanque de almacenamiento. En esta red, es crucial asegurar los caudales y presiones establecidas en el diseño. Es importante destacar que ninguna tubería principal llega directamente a una conexión residencial.

o Red secundaria

Se trata de la red de distribución secundaria, que comprende el conjunto de tuberías que se alimentan desde la red principal. En esta red, generalmente no se permiten conexiones directas a domicilios, a menos que se trate de grandes consumidores u otras excepciones específicas.

o Conexión domiciliaria

La conexión que se establece desde la red menor hasta cada predio es crucial para evaluar la eficacia del sistema de distribución. En este punto, se revela claramente la eficiencia del sistema en su conjunto.

1.3.3.2 Accesorios de distribución

o Hidrantes

Este dispositivo instalado para combatir incendios está separado de la red principal mediante una válvula de corte.

o Nodos

Los nodos son puntos donde convergen tuberías y pueden servir como puntos de paso o de determinación para una tubería. Esto incluye elementos como tapones, uniones y cambios de sección.

La Figura 1.6 muestra la distribución de los nodos a lo largo del sector 3.2, así como también podemos observar la Tabla 1.2 , la cual resume la información obtenida en el Anexo 7 y el Anexo 8 para cada año, respectivamente, teniendo información

como la cota, el caudal y la presión de todos los nodos establecidos en el sector de estudio.

    o   Válvulas de control

Este mecanismo permite controlar si el flujo debe continuar a través de una tubería o detenerse antes de pasar por ella

    o   Válvulas de operación

Son válvulas que pueden abrirse y cerrarse para permitir el seccionamiento de la red en sectores de distribución específicos. (Romero, 2015)

1.4 Vida útil

Las redes de distribución tienen restricciones en cuanto a las presiones de servicio. Se establece un valor mínimo de presión, que varía según la importancia y el desarrollo de la ciudad, así como un valor máximo limitado para evitar incomodidades y daños en las instalaciones domiciliarias. Es importante tener en cuenta que la presión puede variar a lo largo del día debido al consumo de la red. Por lo tanto, establecer una presión mínima garantiza que, incluso en condiciones críticas, este valor se mantenga gracias a la presión proporcionada por un tanque de almacenamiento. (Moscoso, 2023)

1.5 Parámetros de diseño

1.5.1 Población actual

La cantidad actual de habitantes se determina considerando la cantidad de usuarios registrados en el censo y el promedio de personas por hogar.

$$PA = Usuarios * No.\ per/hog \qquad\qquad (1)$$

Donde:

PA: Población actual.

No. per/hog: Número de personas por hogar.

1.5.2 Población futura

Se refiere a la población estimada al término del periodo de diseño. Se asume que el sector 3.2 está completamente desarrollado, lo que lo clasifica como parte de una zona urbana con un crecimiento poblacional bajo. Se calcula utilizando el método geométrico definido por la siguiente formula:

$$PF = PA * (1 + r)^n \tag{2}$$

Donde:

PF: Población futura.

PA: Población actual.

r: Tasa de crecimiento.

n: Intervalo en número de años para la proyección.

1.5.3 Caudal de diseño

El caudal de diseño debe cumplir con la demanda de agua proyectada al final del periodo de diseño. De acuerdo con la Norma CO 10.07 - 601 (1992), el caudal de diseño para tuberías superficiales será igual al caudal máximo diario (QMD) más un 10%.

1.5.4 Dotación

Es un parámetro variable según el número de habitantes por ciudad. Dentro de este parámetro tenemos la dotación bruta y la dotación neta.

o La dotación bruta se define como la cantidad mínima de agua necesaria para cubrir las necesidades básicas de una persona, teniendo en cuenta las pérdidas en el sistema de conducción, distribución, bombeo y almacenamiento en tanques.

o La dotación neta se refiere a la cantidad mínima de agua necesaria para satisfacer las necesidades básicas de una persona, sin tomar en cuenta las pérdidas en el sistema de conducción, distribución, bombeo o almacenamiento en tanques.

1.5.5 Caudal medio diario

Corresponde al promedio del consumo de los usuarios a lo largo del año y se calcula utilizando la siguiente fórmula:

$$q = \frac{D*Pd}{86400} \tag{3}$$

Donde:

q: Caudal medio diario.

D: Dotación bruta.

Pd: Población de diseño.

1.5.6 Caudal máximo diario

Se refiere al mayor caudal consumido durante 1 día a lo largo del año, y se obtiene mediante la siguiente expresión:

$$QMD = k_1 * q \tag{4}$$

Donde:

QMD: Caudal máximo diario.

q: Caudal medio diario.

k1: factor del día de máximo consumo (k1=1.30)

1.5.7   Caudal máximo horario

Se refiere a la hora de mayor consumo durante el día de máxima demanda del año, y está determinado por la siguiente expresión:

$$QMH = k_2 * q \tag{5}$$

Donde:

QMH: Caudal máximo horario.

q: Caudal medio diario.

K2: factor máximo horario (k2=1.82)

1.6 Disposiciones especificas

1.6.1 Conexiones domiciliarias

La conexión domiciliaria de agua potable se refiere a los elementos utilizados para conectar la tubería principal de suministro, ubicada en la vía, con el medidor. Consiste en un conjunto de accesorios que permiten unir la toma de incorporación a la tubería principal. (Moscoso, 2023)

1.7 Conceptos hidráulicos

La hidráulica se refiere al estudio científico y técnico que examina las leyes que gobiernan el comportamiento y desplazamiento de los líquidos, así como los desafíos asociados con su aplicación. Esta disciplina investiga las propiedades, principios y consecuencias de los líquidos cuando están en reposo o en movimiento.

En términos generales, esta disciplina se dedica a resolver una variedad de problemas, como el flujo de líquidos en sistemas de tuberías, ríos y canales, así como a analizar las fuerzas generadas por líquidos confinados en depósitos naturales, como lagos, estanques y estuarios, o en estructuras artificiales, como tanques, pilas y recipientes de almacenamiento en general.

Los principios fundamentales que se utilizan para analizar el flujo de líquidos son la conservación de la masa, la conservación de la energía y la conservación de la cantidad de movimiento. (Moscoso, 2023)

1.7.1 Conservación de la masa y la energía.

Basándose en el principio de conservación de la masa, se establece la ecuación de continuidad para una corriente líquida a lo largo de un conducto.

$$Q = VA = V_1 A_1 = V_2 A_2 = \cdots V_n A_n \tag{6}$$

Donde:

Q: Caudal

V: Velocidad media del flujo

A: Área de la sección transversal del flujo

1.7.2 Calculo hidráulico

La ecuación de la energía se deriva a partir de la ecuación anterior, teniendo en cuenta las pérdidas de energía que ocurren debido al desplazamiento de un fluido a lo largo de un conducto. Esta ecuación es una extensión de la ecuación de Bernoulli, que no tiene en cuenta las pérdidas de energía y está limitada a fluidos ideales no viscosos con flujo permanente e incompresible.

$$Z_1 + \frac{P_1}{\gamma} + \frac{V_1}{2g} = Z_2 + \frac{P_2}{\gamma} + \frac{V_2}{2g} + hf \tag{7}$$

Donde:

Z: Elevación (m)

P: Presión (kPa)

γ: Peso específico del agua (kN/m^3)

V: Velocidad media (m/s)

g: Gravedad (m/s^2)

hf: Perdida de carga por fricción (N.m/N)

1.7.3 Perdidas de carga

Las pérdidas de carga se calculan con Hazen Williams, mediante la siguiente ecuación:

$$hf = 10.64 * \left[\frac{Q^{1.852}}{C^{1.852} * D^{4.871}}\right] * L \tag{8}$$

Donde:

Q: Caudal (m3/s)

C: Coeficiente de Hazen Williams

D: Diámetro de la tubería (m)

L: Longitud de la tubería (m)

Tabla 1.3

Coeficiente de Hazen Williams (C)

Material de la tubería	Tubería	
	Nueva	Usada
Hierro Dúctil	140	135
PVC	150	125
Acero Soldado	120	90
Acero con Revestimiento	140	135

Fuente: Elaboración propia, adaptado de ETAPA EP.

1.7.4 Diámetros

En las redes de distribución de los sistemas de abastecimiento de agua en zonas urbanas, generalmente se requiere un diámetro mínimo de 63 mm. No obstante, en circunstancias específicas o en ramificaciones de menor importancia, se pueden emplear tramos de 32 mm y en áreas de alta densidad poblacional, incluso se debería considerar un diámetro mínimo de 90 mm. (Moscoso, 2023)

Se puede observar en la Tabla 1.4, Tabla 1.5 y Tabla 1.6 que el diámetro mínimo de toda la red de tuberías es de 50 mm y el diámetro máximo es de 700 mm, 600 mm y 500 mm, para el subsector norte, subsector centro y subsector sur, respectivamente.

La información detallada de cada una de las tuberías, la podrá encontrar en los siguientes anexos para cada subsector respectivamente: Anexo 1, Anexo 2 y Anexo 3.

Tabla 1.4

Información de la tubería del subsector norte

Subsector	Diámetro	Sum. Longitud	Material
	50	6237,497	PVC
	63	19336,36	PVC
	100	2286,103	PVC
	110	6849,533	PVC
	150	243,8392	PVC
	160	1936,264	PVC
NORTE	200	2079,522	AC
	250	2234,085	PVC
	300	1980,151	AC
	400	975,0761	HF
	500	539,0850	HD
	700	397,0843	HD

Fuente: Elaboración propia, adaptado de ETAPA EP.

Tabla 1.5

Información de la tubería del subsector centro

Subsector	Diámetro	Sum. Longitud	Material
	50	5372,8919	PVC
	63	33298,683	PVC
	100	2283,4233	PVC
	110	7904,3666	PVC
	160	1419,6301	PVC
CENTRO	200	5151,3177	PVC
	250	2119,5941	PVC
	300	2101,9014	AC
	500	1979,4648	HD
	600	3119,9722	HD

Fuente: Elaboración propia, adaptado de ETAPA EP.

Tabla 1.6

Información de la tubería del subsector sur.

Subsector	Diámetro	Sum. Longitud	Material
	50	251,93700	PVC
	63	56700,015	PVC
	90	346,67610	PVC
	100	441,15480	PVC
	110	9566,104	PVC
	150	8,152400	PVC
SUR	160	5798,043	PVC
	200	6304,420	AC
	350	953,0567	PVC
	400	215,5282	HD
	450	585,8573	HD
	500	1290,785	HD

Fuente: Elaboración propia, adaptado de ETAPA EP.

CAPITULO II

2. DESARROLLO DEL MODELO HIDRÁULICO

2.1 Parámetros de diseño para la modelación hidráulica

2.1.1. Población de diseño

Para analizar el comportamiento de la población del sector, se puede emplear la información del catastro de usuarios de ETAPA EP. Al revisar todos los datos, es crucial filtrarlos para analizar y proyectar la población con la menor cantidad de errores. Los criterios aplicados fueron los siguientes:

o Se excluyeron todos los consumos que no fueran de tipo residencial.

o Se excluyeron los consumos que fueran iguales a cero.

Después de aplicar estos filtros, la distribución de usuarios quedó de la siguiente manera:

Tabla 2.1

Conexiones en el Sector 3.2

CONEXIONES	USUARIOS		
	Total Conexiones	C. Residenciales	Con Alcantarillado
Cebollar Norte	6061	5472	6055
Cebollar Centro	8165	6891	8135
Cebollar Sur	11053	9748	10841
TOTAL	**25279**	**22111**	**25031**

Fuente: Elaboración propia, adaptado de ETAPA EP.

Se consideró un promedio de 3.12, 3.14 y 3.15 personas por hogar respectivamente para cada subsector, según los datos proporcionados por el INEC.

Con esta información ya filtrada y usando una tasa de crecimiento del 1%, valor tomado de la Norma CO 10.07 – 601 (1992) se proyectó la población para el año 2034 usando el método geométrico.

En la Tabla 2.2 se presenta la población proyectada con los criterios expuestos:

Tabla 2.2

Proyección de población según datos INEC

Subsector	N. Usuarios	Promedio personas por hogar	Población	
			2024	2034
Norte	5472	3.12	17073	18859
Centro	6891	3.14	21638	23902
Sur	9748	3.15	30706	33919

Fuente: Elaboración propia, adaptado de ETAPA EP.

Así mismo, se puede analizar utilizando la información de la densidad poblacional proporcionada por ETAPA EP correspondiente al año 2024 y 2034, así como el área correspondiente para cada subsector.

Para la obtención de la población se procede a utilizar la fórmula de:

$$Densidad\ Poblacional = \frac{Población}{Área} \tag{7}$$

De esta manera se obtiene el valor de la población obtenido en la Tabla 2.3

Tabla 2.3

Proyección de población

Subsector	Población 2024	Población 2034
Norte	18178	20713
Centro	30398	35551
Sur	37789	45653

Fuente: Elaboración propia, adaptado de ETAPA EP.

Con el objetivo de obtener datos más precisos, se decidió trabajar con la información proporcionada por ETAPA EP.

2.1.2 Dotación

Los factores principales que afectan el consumo de agua en una localidad son los siguientes: calidad del agua, tarifas del servicio, presión en la red, pérdidas en el sistema, tipos de consumo, ubicación y otros.

En el Plan Maestro de Agua Potable y Saneamiento para la ciudad de Cuenca, se estableció la dotación como se muestra a continuación:

Tabla 2.4

Dotación en el sector 3.2 de El Cebollar.

DOTACIÓN	DOT. RESID	DOT. COM	DOT. INDUST	DOT. ESPEC	DOT. NETA TOTAL
	lt/hab. d	lt/hab. d	lt/hab. d	lt/hab. d	lt/hab. d
Cebollar Norte	167.41	18.22	0.00	4.98	190.61
Cebollar Centro	106.59	11.18	1.30	1.11	120.18
Cebollar Sur	106.33	15.68	0.09	8.63	130.73
PROMEDIO	**126.78**	**15.03**	**0.46**	**4.91**	**147.17**

DOTACIÓN	PERDIDAS 2024	PERDIDAS 2034	DOT. BRUTA TOTAL 2024	DOT. BRUTA TOTAL 2034
	%	%	lt/hab. d	lt/hab. d
Cebollar Norte	0.284	0.244	266.22	252.13
Cebollar Centro	0.284	0.244	167.85	158.97
Cebollar Sur	0.284	0.244	182.58	172.92
PROMEDIO			**205.55**	**194.67**

Fuente: Elaboración propia, adaptado de ETAPA EP.

2.1.3 Definición de la demanda

Con los criterios establecidos sobre población y dotación, es posible determinar la demanda expresada en caudal para el año actual y proyectada para el 2034 utilizando las fórmulas (3), (4) y (5) establecidas en el capítulo anterior.

Tabla 2.5

Población actual y futura del sector 3.2

Subsector	Año 2024			
	Población (hab)	Qmd (l/s)	QMD (l/s)	QMH (l/s)
Norte	18178	56.010	72.813	78.414
Centro	30398	64.238	83.510	116.914
Sur	37789	73.825	95.973	134.362
Subsector	Año 2034			
	Población (hab)	Qmd (l/s)	QMD (l/s)	QMH (l/s)
Norte	18178	60.444	78.577	84.622
Centro	30398	71.153	92.499	129.498
Sur	37789	83.997	109.197	152.875

Fuente: Elaboración propia, adaptado de ETAPA EP.

La información detallada de la dotación, población, área, caudal medio diario, caudal máximo diario y caudal máximo horario, la podrá encontrar en los siguientes anexos para cada subsector respectivamente: Anexo 4, Anexo 5 y Anexo 6.

2.1.4 Presiones de campo

Figura 2.1

Presiones de campo a lo largo de la red
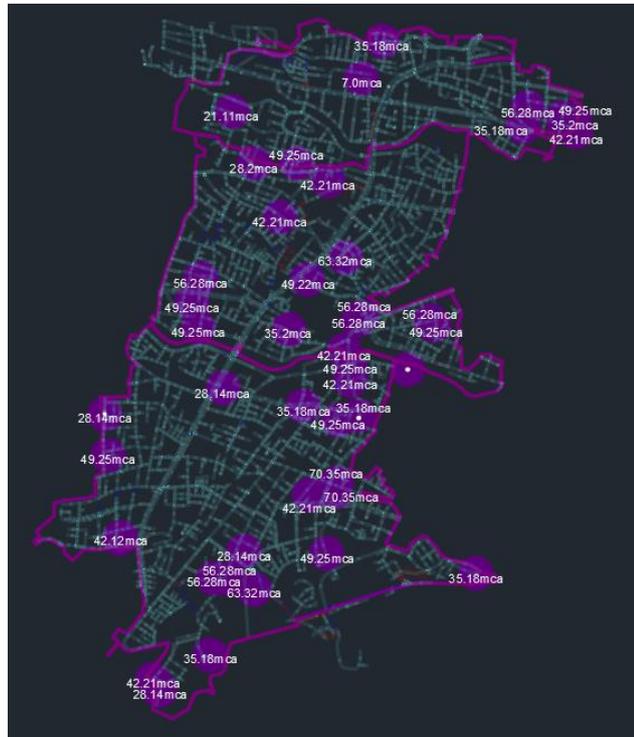
Fuente: Elaboración propia, adaptado de AutoCAD.

La calibración del sistema se realiza utilizando la herramienta Darwin Calibrator, que permite evaluar el estado de la red, a través de la información brindada por la empresa ETAPA EP observada en la Figura 2.1, esta herramienta ajusta las presiones del sistema para que la simulación del modelo funcione de manera similar a la red real de cada uno de los sectores.

2.2 Desarrollo del modelo hidraulico en QGIS

Toda la información de la conducción proporcionada por ETAPA EP se encuentra en archivos shapefile, formato de almacenamiento digital que contiene datos sobre los atributos y la localización geométrica de la línea de conducción. Esta

información se procesa en el software QGIS para organizar, distribuir, gestionar y analizar los datos. Para ello, se llevó a cabo el siguiente procedimiento.

Primero, se cargaron en QGIS los archivos shapefile de las conducciones. Utilizando como guía el catastro del sistema entregado en formato CAD, se eliminaron las tuberías que no estaban contempladas en el área de estudio. También se ingresó el archivo de válvulas para analizar sus propiedades y posteriormente evaluarlas en WATERGEMS.

En segundo lugar, para exportar el esquema de QGIS a WATERGEMS, es necesario que las tuberías tengan un punto inicial y final. Para esto, se definieron los nodos iniciales y finales de cada tubería agregando dos campos llamados ID_X1Y1 e ID_X2Y2, donde se concatenó el campo "fid" con un texto denominado "3.2_T_NORTE_","3.2_T_CENTRO_" Y "3.2_T_SUR_", respectivamente para cada subsector.

Para lograr esto, se abrió la tabla de atributos de la capa de conducción del sistema y se crearon dos nuevos campos de texto utilizando la opción "Calculadora de Campos". Luego, se ingresaron los datos como se muestra en las Figura 2.2 y Figura 2.3 para cada subsector, con el objetivo de organizar la nomenclatura de los nodos y evitar errores en WATERGEMS al realizar el modelo. Se puede observar la tabla de atributos con los dos nuevos campos añadidos en la Figura 2.4.

Figura 2.2

Fiel Calculator para nodos iniciales del subsector sur
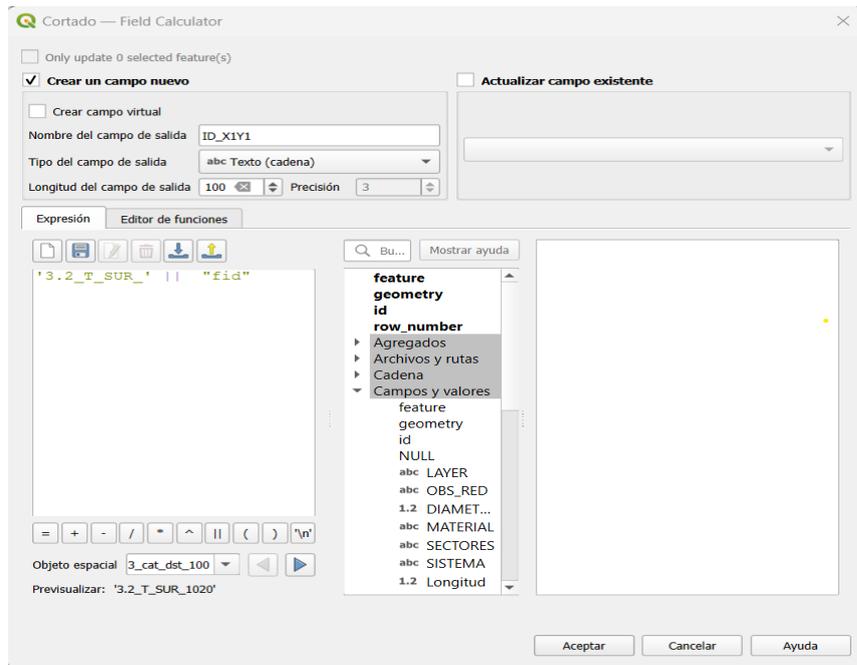
Fuente: Elaboración propia, tomada de QGIS.

Figura 2.3

Fiel Calculator para nodos finales del subsector sur
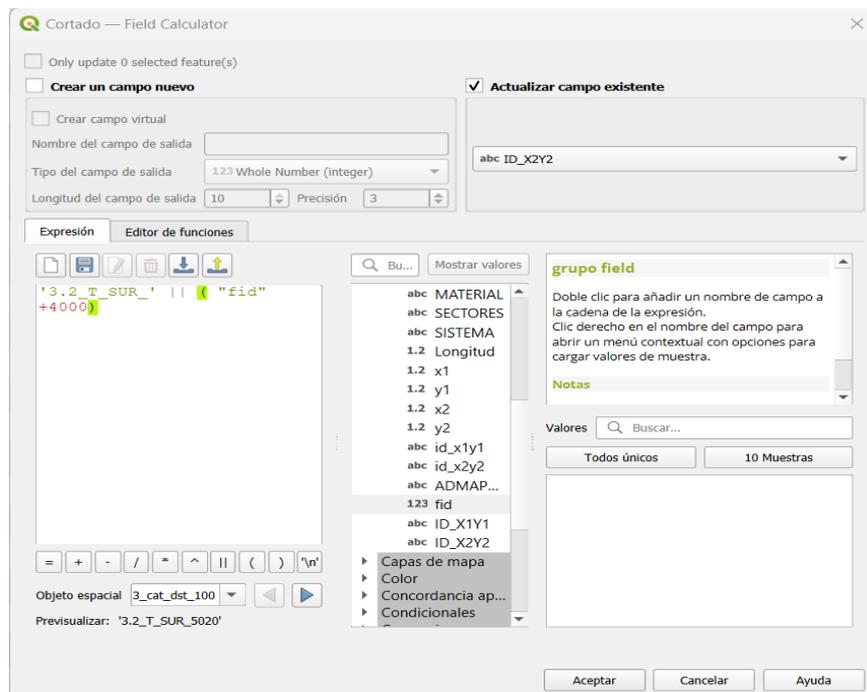
Fuente: Elaboración propia, tomada de QGIS.

Figura 2.4

Tabla de atributos de los nodos de la tubería de conducción del subsector sur

Cortado— Objetos Totales: 1253, Filtrados: 1253, Seleccionados: 1

	LAYER	fid	BS_RI	MET	ATERI	CTOR	TE	ngitu	x1	y1	x2	y2	l_x1y1	l_x2y	MAP	ID_X1Y1	ID_X2Y2
1	3_cat_dst_63 ⊗				P...	N...	Y...	4...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_131	3.2_T_SUR_4131
2	1...	137	N...	1...	P...	N...	Y...	1...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_137	3.2_T_SUR_4137
3	1...	138	N...	1...	P...	N...	Y...	1...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_138	3.2_T_SUR_4138
4	1...	139	N...	1...	P...	N...	Y...	1...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_139	3.2_T_SUR_4139
5	1...	145	N...	6...	P...	N...	Y...	3...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_145	3.2_T_SUR_4145
6	1...	146	N...	6...	P...	N...	Y...	3...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_146	3.2_T_SUR_4146
7	1...	1...	N...	1...	P...	N...	Y...	6...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1689	3.2_T_SUR_5689
8	1...	1...	N...	6...	P...	C...	T...	3...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1002	3.2_T_SUR_5002
9	1...	1...	N...	6...	P...	C...	T...	2...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1003	3.2_T_SUR_5003
10	1...	1...	N...	6...	P...	C...	T...	9...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1004	3.2_T_SUR_5004
11	1...	1...	N...	6...	P...	C...	T...	1...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1005	3.2_T_SUR_5005
12	1...	1...	N...	6...	P...	C...	T...	3...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1006	3.2_T_SUR_5006
13	1...	1...	N...	6...	P...	C...	T...	4...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1007	3.2_T_SUR_5007
14	1...	1...	N...	6...	P...	C...	T...	4...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1008	3.2_T_SUR_5008
15	1...	1...	N...	6...	P...	C...	T...	7...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1009	3.2_T_SUR_5009
16	1...	1...	N...	6...	P...	C...	T...	4...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1010	3.2_T_SUR_5010
17	1...	1...	N...	6...	P...	C...	T...	3...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1011	3.2_T_SUR_5011
18	1...	1...	N...	6...	P...	C...	T...	4...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1012	3.2_T_SUR_5012
19	1...	1...	N...	6...	P...	C...	T...	5...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1013	3.2_T_SUR_5013
20	1...	1...	N...	6...	P...	C...	T...	9...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1014	3.2_T_SUR_5014
21	1...	1...	N...	6...	P...	C...	T...	7...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1015	3.2_T_SUR_5015
22	1...	1...	N...	6...	P...	C...	T...	5...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1017	3.2_T_SUR_5017
23	1...	1...	N...	6...	P...	C...	T...	8...	7...	9...	7...	9...	3....	3....	3....	3.2_T_SUR_1018	3.2_T_SUR_5018

Mostrar todos los objetos espaciales

Fuente: Elaboración propia, tomada de QGIS.

2.3 Desarrollo del modelo hidraulico en WATERGEMS

Con toda la información organizada en QGIS, se puede desarrollar el modelo en WATERGEMS para evaluar el estado actual del sistema.

Primero, se ingresa la topología de la conducción, que se encuentra en formato shapefile, utilizando la herramienta "ModelBuilder".

Figura 2.5

Herramienta ModelBuilder
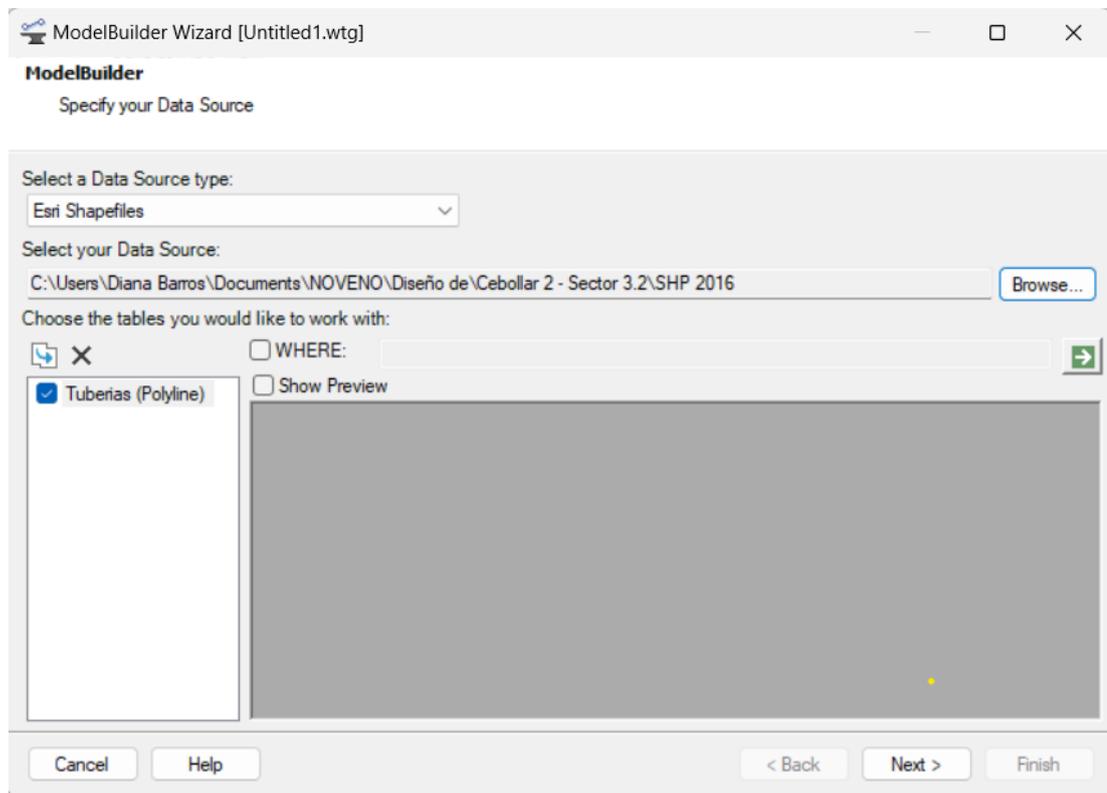
Fuente: Elaboración propia, adaptado de WATERGEMS.

Como se observa en la Figura 2.5, se selecciona el tipo de archivo y su ubicación. Luego, se asignan el inicio y el final de cada tubería utilizando los campos creados previamente en QGIS.

Figura 2.6

Herramienta ModelBuilder para asignación de nodos y propiedades

Como se observa en la Figura 2.6, los pasos a seguir para la asignacion de nodos y propiedades es la siguiente: en el apartado de Key Fields, se selecciona <label> y en Start y Stop se eligen los atributos de nodo inicial y final creados previamente en el programa QGIS. En la parte inferior, se asignan las propiedades que tendrá el modelo en el programa según los campos presentes en el archivo shapefile. En este caso, el programa tomará los valores para los diámetros del campo "DIAMETRO".

De esta manera, como podemos observar en la Figura 2.7, la topología ya estaría ingresada en el programa con sus respectivas propiedades. La longitud de las tuberías se calcula automáticamente debido a que el archivo shapefile está georreferenciado.

Figura 2.7

Conducción del sector 3.2 ingresada en WATERGEMS

Fuente: Elaboración propia, adaptado de WATERGEMS.

El segundo paso es ingresar la topografía utilizando la herramienta TRex. En la ventana emergente mostrada en la Figura 2.8, se selecciona el tipo de archivo, que en este caso son curvas de nivel en formato DXF, y se especifica su ubicación. Además, se selecciona el campo donde se encuentran los datos de elevación, se indican las unidades correspondientes y se elige la opción para actualizar todos los nodos.

Figura 2.8

Herramiento TRex para el ingreso de la topografia
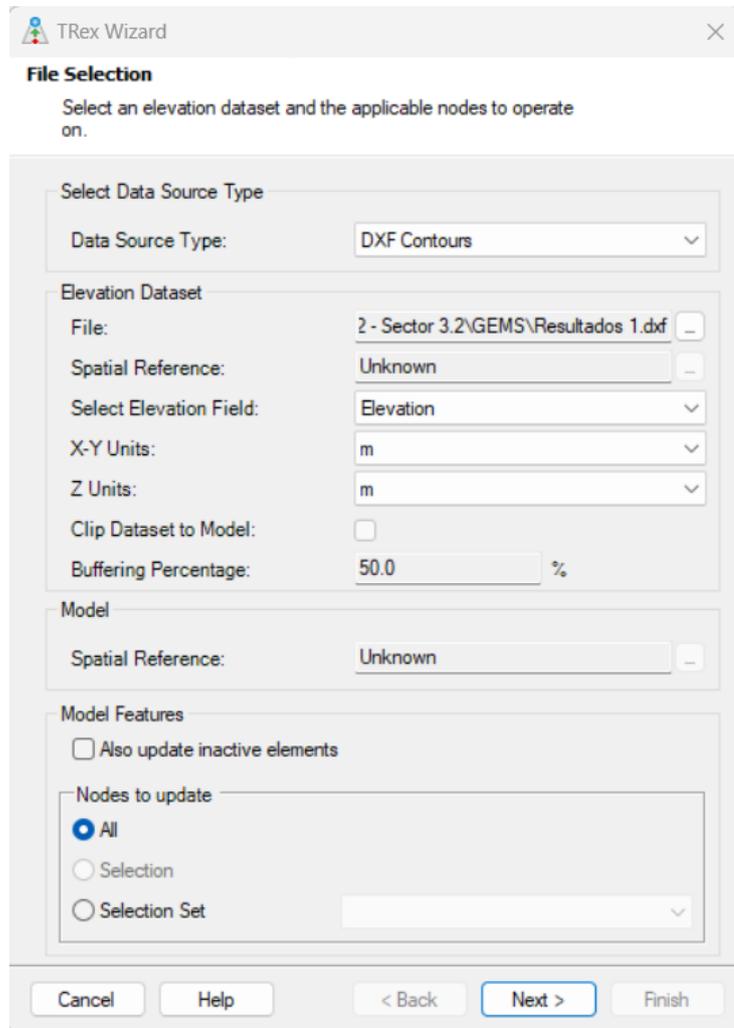
Fuente: Elaboración propia, adaptado de WATERGEMS.

Finalmente, se reemplazan ciertos nodos para ubicar el reservorio que actuara como salida de la planta de tratamiento asi como las válvulas reguladoras de presion.

CAPITULO III

3. MODELACIÓN HIDRÁULICA

3.1 Simulación del modelo hidráulico

Una vez que se han actualizado los datos del caudal del modelo, se procede a simular la conducción de agua potable para evaluar su respuesta. Para llevar a cabo la simulación en WATERGEMS, se utilizó la herramienta "compute", y los resultados obtenidos se pueden observar en la Figura 3.1 y Figura 3.2 para el año 2024 y 2034 respectivamente. Estas figuras indican, al ejecutarse correctamente la simulación, no arrojando ningún error de cálculo ni mensajes de advertencia, que la modelación es correcta; así también, permite validar los modelos ya que el caudal obtenido en la simulación es igual al calculado en el capítulo anterior.

Figura 3.1

Resultados de la simulacion 2024

Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.2

Resultados de la simulacion 2034
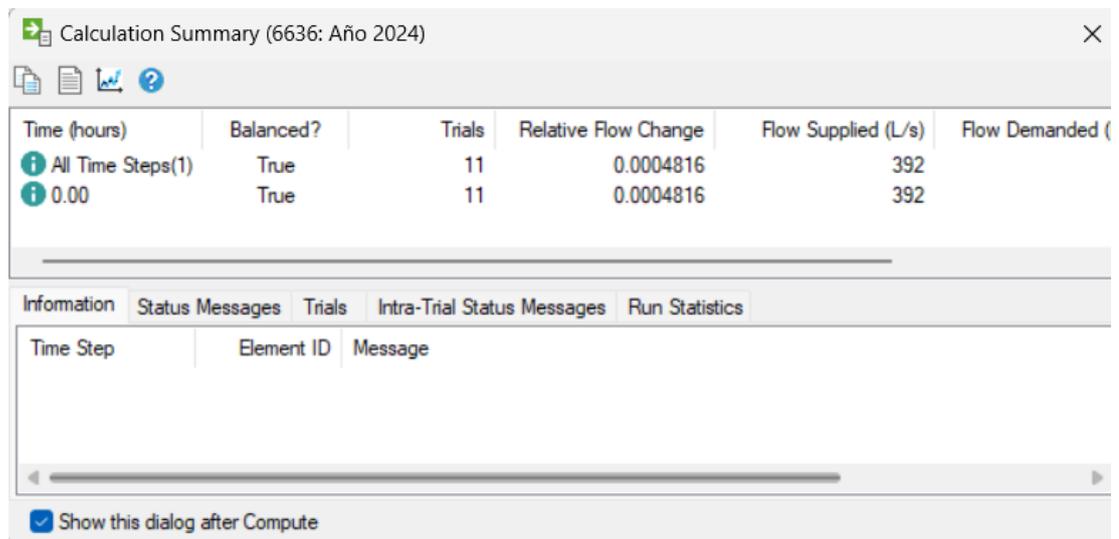
Fuente: Elaboración propia, adaptado de WATERGEMS.

3.2 Disposición de los accesorios existentes en la red

Una vez realizada la simulación de la conducción y sin presentar ningún error, se procede a colocar en el modelo las válvulas que existen actualmente en el sistema. Se cuenta con válvulas reguladoras de presión, de aislamiento, de descarga y válvulas de aire, cuya simbología se detalla en la Figura 3.3 y cuyas tablas de atributos se puede observar en las figuras: Figura 3.4, Figura 3.5, Figura 3.6 y Figura 3.7.

Figura 3.3

Válvulas

Tipos de válvulas	Denominación	Simbología
Válvula reguladora de presión	PRV	
Válvula de aislamiento	Isolation Valve	
Válvula de descarga	Discharge to Atmosphere	
Válvula de aire	Air Valve	

Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.4

FlexTable de la válvula reguladora de presión

Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.5

FlexTable de la válvula de aislamiento

Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.6

FlexTable de la válvula de aire

	ID	Label	Elevation (m)	Zone	Air Valve Type	Diameter (Air Inflow Orifice) (mm)	Diameter (Air Outflow Orifice) (mm)	Diameter (Large Air Outflow Orifice) (mm)	Diameter (Small Air Outflow Orifice) (mm)	Transition Volume (L)
920: 3.2_VA_10	920	3.2_VA_1001	2,558.11	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
921: 3.2_VA_10	921	3.2_VA_1002	2,562.02	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
922: 3.2_VA_10	922	3.2_VA_1003	2,559.69	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
923: 3.2_VA_10	923	3.2_VA_1004	2,575.64	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
924: 3.2_VA_10	924	3.2_VA_1005	2,550.64	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
925: 3.2_VA_10	925	3.2_VA_1006	2,563.41	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
926: 3.2_VA_10	926	3.2_VA_1007	2,564.84	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
927: 3.2_VA_10	927	3.2_VA_1008	2,575.48	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
928: 3.2_VA_10	928	3.2_VA_1009	2,557.81	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
929: 3.2_VA_10	929	3.2_VA_1010	2,567.39	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
930: 3.2_VA_10	930	3.2_VA_1011	2,571.26	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
931: 3.2_VA_10	931	3.2_VA_1012	2,577.68	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
932: 3.2_VA_10	932	3.2_VA_1013	2,562.48	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
933: 3.2_VA_10	933	3.2_VA_1014	2,547.73	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
934: 3.2_VA_10	934	3.2_VA_1015	2,576.41	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
935: 3.2_VA_10	935	3.2_VA_1016	2,565.74	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
936: 3.2_VA_10	936	3.2_VA_1017	2,564.10	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
937: 3.2_VA_10	937	3.2_VA_1018	2,566.38	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
938: 3.2_VA_10	938	3.2_VA_1019	2,563.09	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
939: 3.2_VA_10	939	3.2_VA_1020	2,584.97	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
940: 3.2_VA_10	940	3.2_VA_1021	2,603.87	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0
941: 3.2_VA_10	941	3.2_VA_1022	2,598.15	<None>	Double Acting	0.0	0.0	0.0	0.0	0.0

22 of 22 elements displayed

Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.7

FlexTable de la válvula de descarga

	ID	Label	Elevation (m)	Zone	Discharge Element Type	Flow (Typical) (L/s)	Pressure Drop (Typical) (m H2O)	Pressure Head vs. Flow	Valve Initial Status	Time to Start Operating (sec)	Time to Fully Open or Close (sec)
81: 3.2_VP_100	81	3.2_VP_1001	2,582.14	<None>	Orifice	0	0.0	<Collection:	Open	0.0	0.0
82: 3.2_VP_100	82	3.2_VP_1002	2,582.45	<None>	Orifice	0	0.0	<Collection:	Open	0.0	0.0
83: 3.2_VP_100	83	3.2_VP_1003	2,580.14	<None>	Orifice	0	0.0	<Collection:	Open	0.0	0.0
84: 3.2_VP_100	84	3.2_VP_1004	2,571.89	<None>	Orifice	0	0.0	<Collection:	Open	0.0	0.0
85: 3.2_VP_100	85	3.2_VP_1005	2,572.27	<None>	Orifice	0	0.0	<Collection:	Open	0.0	0.0
86: 3.2_VP_100	86	3.2_VP_1006	2,554.39	<None>	Orifice	0	0.0	<Collection:	Open	0.0	0.0
87: 3.2_VP_100	87	3.2_VP_1007	2,569.55	<None>	Orifice	0	0.0	<Collection:	Open	0.0	0.0
88: 3.2_VP_100	88	3.2_VP_1008	2,569.48	<None>	Orifice	0	0.0	<Collection:	Open	0.0	0.0
89: 3.2_VP_100	89	3.2_VP_1009	2,586.08	<None>	Orifice	0	0.0	<Collection:	Open	0.0	0.0
90: 3.2_VP_101	90	3.2_VP_1010	2,575.55	<None>	Orifice	0	0.0	<Collection:	Open	0.0	0.0
91: 3.2_VP_101	91	3.2_VP_1011	2,602.05	<None>	Orifice	0	0.0	<Collection:	Open	0.0	0.0
92: 3.2_VP_101	92	3.2_VP_1012	2,562.69	<None>	Orifice	0	0.0	<Collection:	Open	0.0	0.0
93: 3.2_VP_101	93	3.2_VP_1013	2,560.55	<None>	Orifice	0	0.0	<Collection:	Open	0.0	0.0

13 of 13 elements displayed

Fuente: Elaboración propia, adaptado de WATERGEMS.

3.3 Análisis de presión en los nodos y perdidas unitarias en las tuberías

Se diseñó una leyenda con diferentes colores para facilitar el análisis de las presiones a lo largo de toda la conducción como se pueden observar en la Figura 3.15. Las figuras indicadas a continuación: Figura 3.16, Figura 3.17, Figura 3.18, Figura 3.19, Figura 3.20 y Figura 3.21, muestran los nodos de las diferentes subzonas: norte, centro y sur respectivamente para los años 2024 y 2034. Esta representación permite identificar los nodos que presentan presiones negativas y los nodos en los cuáles se supera la presión máxima admisible. En el presente caso de análisis ningún nodo presenta estos problemas.

De igual manera, se utilizó una leyenda con diferentes colores para facilitar el análisis de las perdidas unitarias a lo largo de toda la conducción como se pueden observar en la Figura 3.8. En las figuras indicadas a continuación: Figura 3.9, Figura 3.10, Figura 3.11, Figura 3.12, Figura 3.13 y Figura 3.14 se muestran las tuberías de las subzonas norte, centro y sur respectivamente para los años 2024 y 2034.

Figura 3.8

Leyenda de color utilizado para clasificar perdidas unitarias en tuberias

Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.9

Tuberías subsector norte año 2024

Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.10

Tuberias subsector centro año 2024
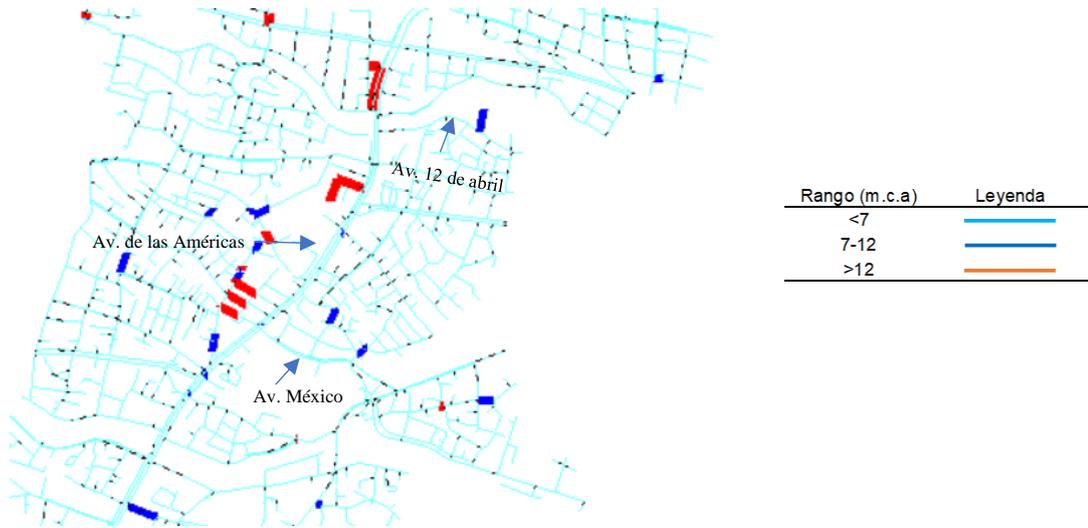
Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.11

Tuberias subsector sur año 2024
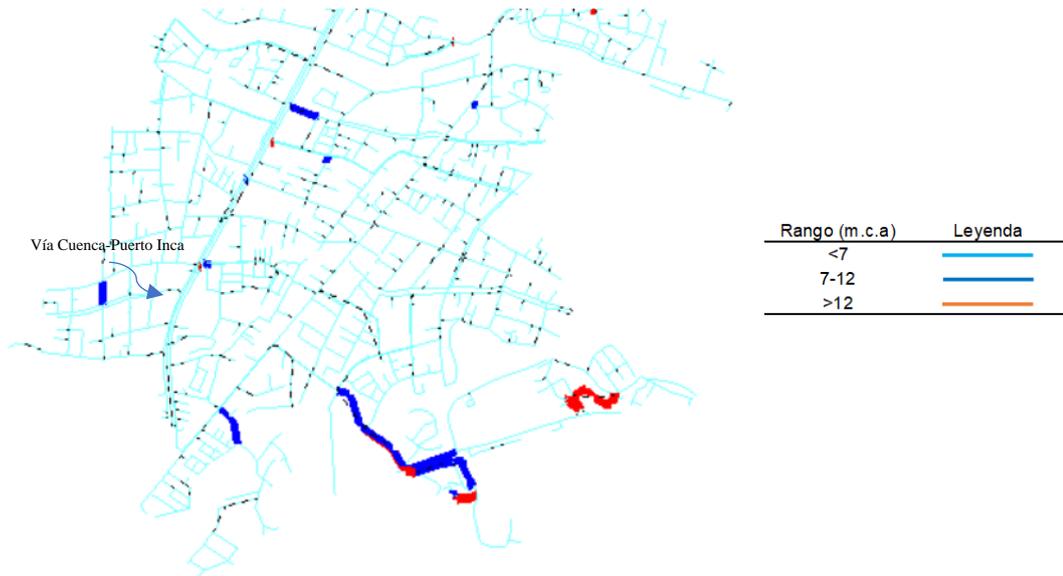
Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.12

Tuberias subsector norte año 2034
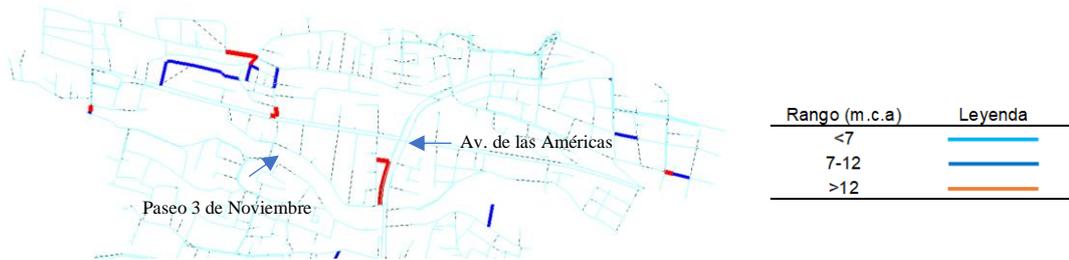
Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.13

Tuberias subsector centro año 2034
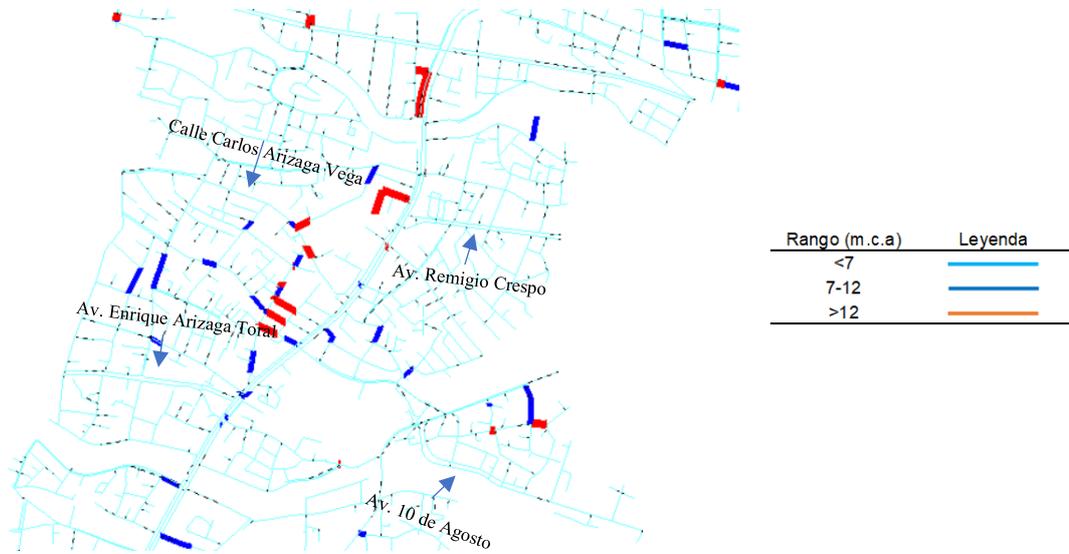
Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.14

Tuberias subsector sur año 2034
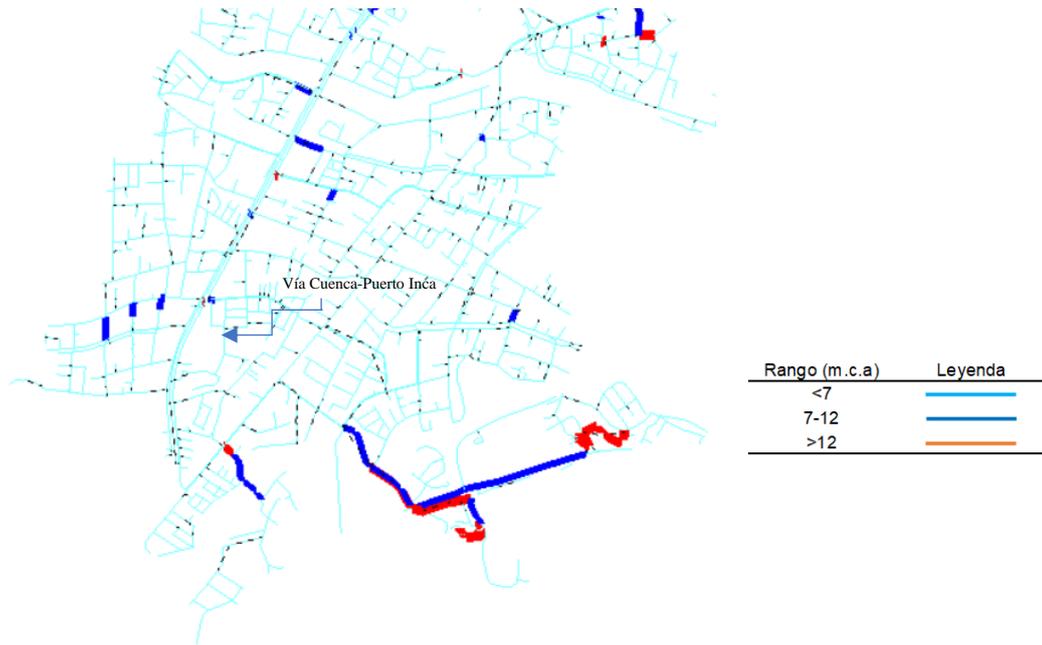
Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.15

Leyenda de color utilizado para clasificar presiones en los nodos

Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.16

Nodos subsector norte año 2024

Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.17

Nodos subsector centro año 2024
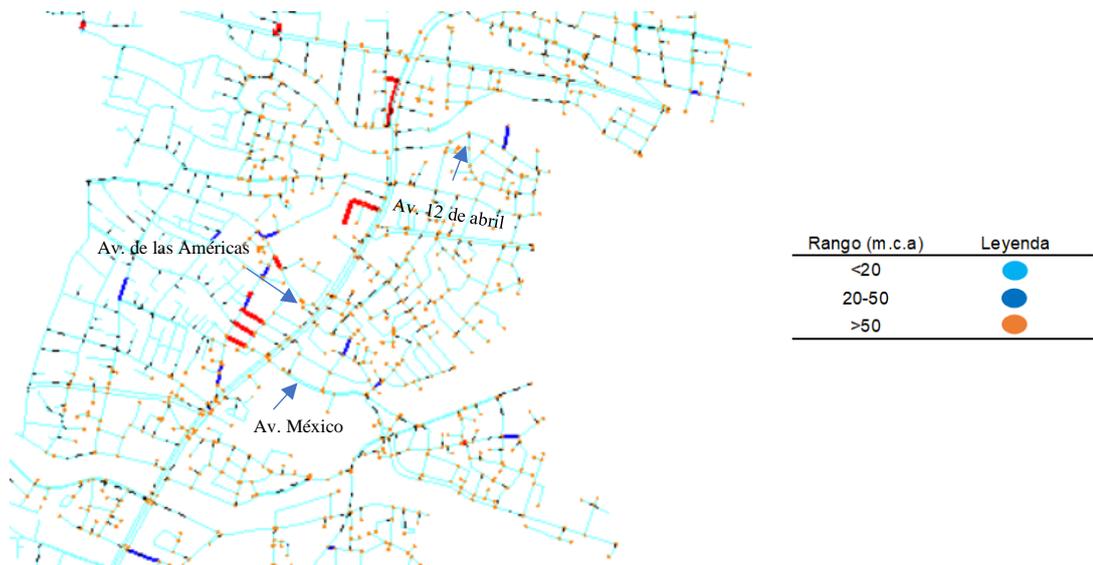
Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.18

Nodos subsector sur año 2024
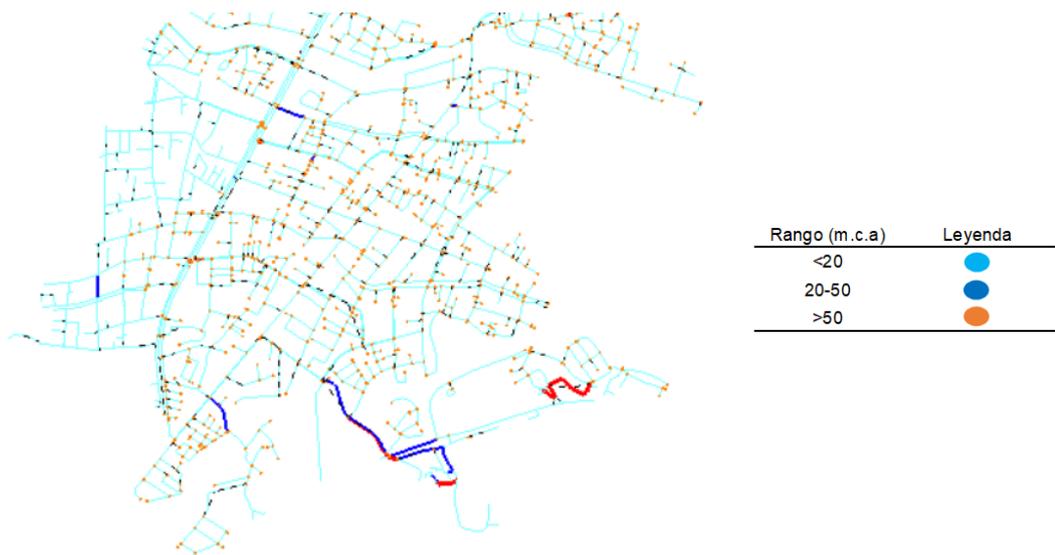
Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.19

Nodos subsector norte año 2034
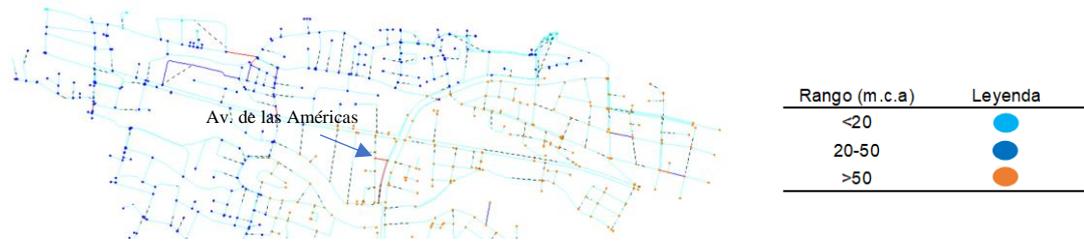
Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.20

Nodos subsector centro año 2034
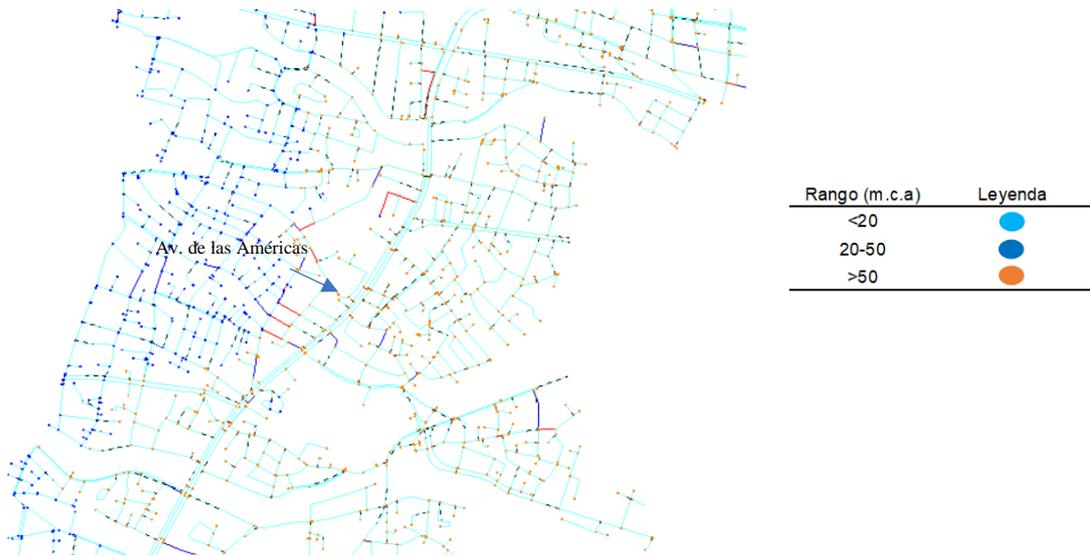
Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.21

Nodos subsector sur año 2034
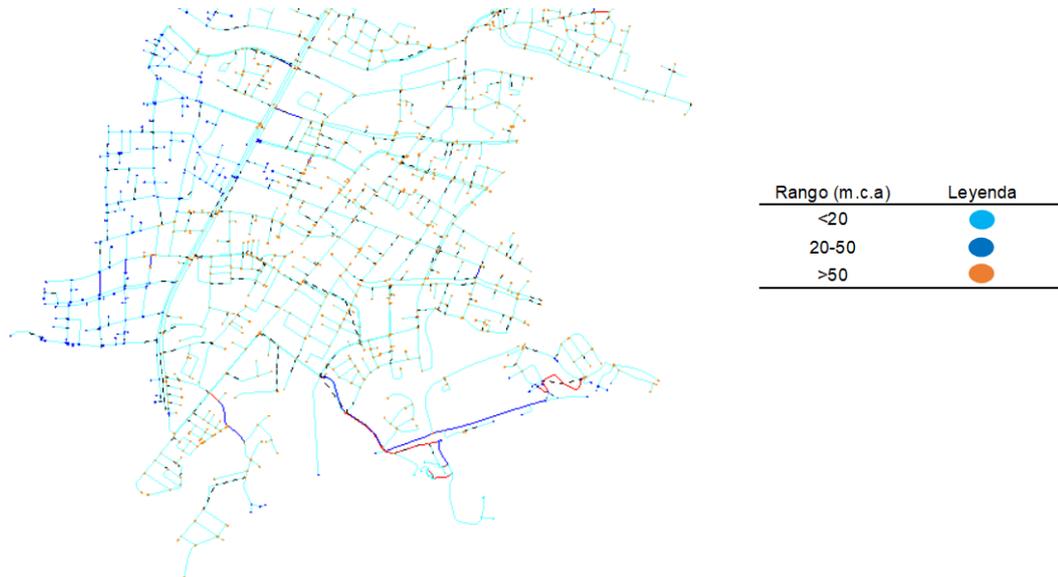
Fuente: Elaboración propia, adaptado de WATERGEMS.

Figura 3.22

Simulación del sistema 2024 georreferenciado
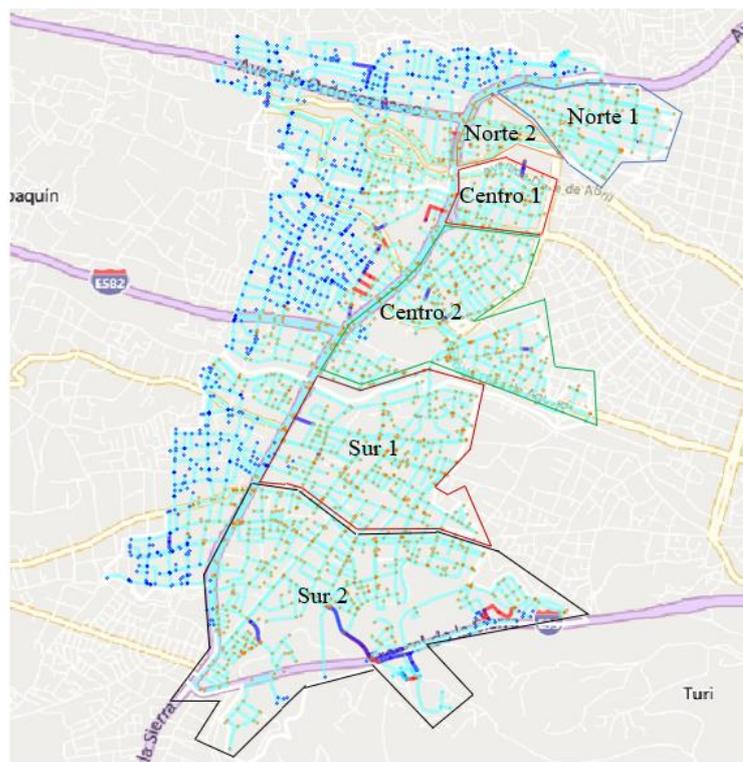
Fuente: Elaboración propia, adaptado de AutoCAD.

Figura 3.23

Simulación del sistema 2034 georreferenciado
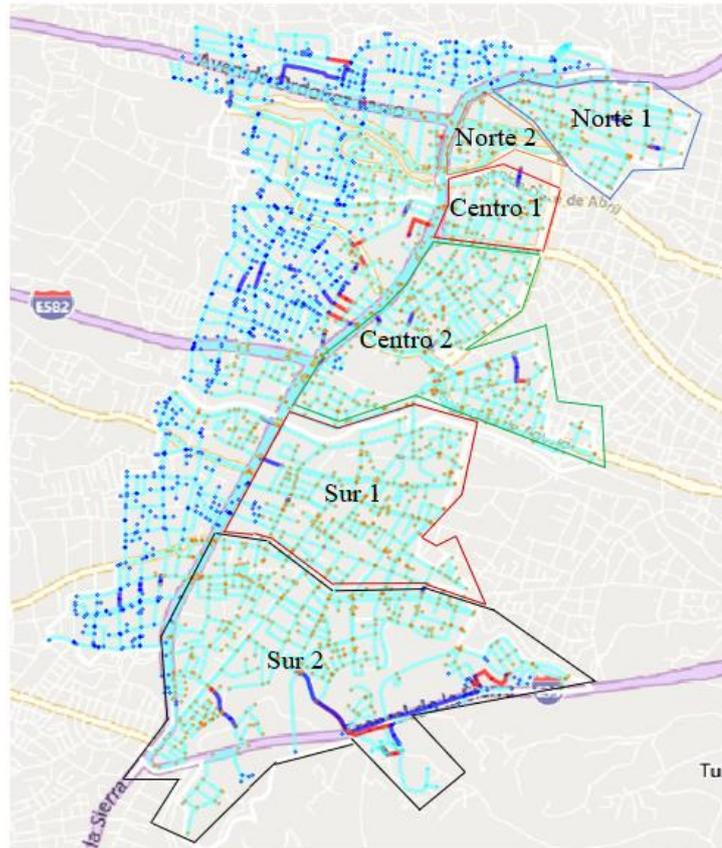
Fuente: Elaboración propia, adaptado de AutoCAD.

En la Tabla 3.1 se puede observar la cantidad de nodos que se encuentran dentro de los diferentes rangos de presiones detallados en la Figura 3.15. Además, se indica la variación de las cantidades existentes en cada rango de presiones y el porcentaje que esto representa dentro de la red.

La información detallada de los nodos, su demanda y presión, la podrá encontrar en los anexos expuestos a continuación, para los escenarios 2024 y 2034, respectivamente: Anexo 7 y Anexo 8.

Tabla 3.1

Cantidad de nodos entre los diferentes rangos

Rango (m.c.a)	Cantidad de nodos por escenario			
	2024		2034	
<20	29	1.2%	33	1.3%
20-50	734	30.0%	820	33.5%
>50	1686	68.8%	1596	65.2%
TOTAL	**2449**	**100%**	**2449**	**100%**

Fuente: Elaboración propia, adaptado de WATERGEMS.

En la Tabla 3.2 se puede observar la cantidad de tuberías que se encuentran dentro de los diferentes rangos de perdidas unitarias detallados en la Figura 3.8. Además, se indica la variación de las cantidades existentes en cada rango de pérdidas y el porcentaje que esto representa dentro de la red.

La información detallada de las tuberías, sus longitudes y gradiente de perdida de carga, la podrá encontrar en el Anexo 9 y Anexo 10, para los escenarios 2024 y 2034, respectivamente.

Tabla 3.2

Longitud de tuberías entre los diferentes rangos

Rango (m.c.a)	Cantidad de tuberías por escenario			
	2024		2034	
<7	182624.46	97.5%	180157.26	96.2%
07-12	2807.6300	1.5%	4570.7100	2.4%
>12	1813.2100	1.0%	2517.3300	1.3%
TOTAL	**187245.3**	**100%**	**187245.3**	**100%**

Fuente: Elaboración propia, adaptado de WATERGEMS.

3.4 Resultados

Como se puede observar en la Tabla 3.1, para el año 2024 las presiones tienen un porcentaje de nodos menores a 20 m.c.a igual a 1.2% mientras que para el año 2034 el porcentaje de nodos menores a 20 m.c.a aumenta a 1.3%, esto se debe al aumento de población, por lo tanto aumenta la demanda en nodos y disminuye la presión.

En el caso de la Tabla 3.2, podemos identificar que existen 1813.21 m de tuberias mayores a 12 m/km para el año 2024 y 2517.33 m de tuberias mayores a 12

m/km para el año 2034 que deberían ser cambiadas para asegurar el buen funcionamiento del sistema.

Asi mismo podemos observar en las Figura 3.22 y Figura 3.23, que a partir de la Av. De las Americas, sobretodo hacia la parte este de la red, ya que a la vista podemos divisar que ahí es donde se encuentran los nodos menores a 20 m.c.a, es necesario realizar un control de la presion, para esto, se deberia desarrollar un programa de reduccion de presion para evitar el incremento de perdidas para ambos escenarios. De igual forma, se propone la implementación de 6 nuevos subsectores para el control de presiones.

De igual forma podemos observar que el caudal obtenido para ambos escenarios que se muestra en la Figura 3.1 y Figura 3.2, respectivamente es menor al del Plan Maestro.

Es por estas razones que la simulacion obtenida se encuentra funcionando de manera correcta.

CONCLUSIONES

- Toda la información topográfica, demográfica y catastral proporcionada por la empresa ETAPA EP fue analizada y organizada para ser procesada posteriormente en el software QGIS. El objetivo fue detallar las características de todos los elementos que componen el sistema de conducción de agua potable. Además, se recopilaron datos en campo y se realizaron los ajustes necesarios para asegurar la correcta actualización del modelo con el que contaba la empresa.

- Se desarrolló y evaluó el comportamiento de la conducción en el software WATERGEMS, el mismo que se construyó utilizando los caudales obtenidos en el software QGIS y se ajustó a las presiones de campo proporcionadas por la empresa ETAPA EP. Todos los resultados del modelo fueron verificados con los técnicos de ETAPA EP para asegurar que las presiones fueran cercanas a las reales y que el modelo funcionara correctamente. De esta manera, se puede afirmar que el modelo es una herramienta útil para realizar cualquier simulación y así conocer cómo varían las presiones y las perdidas en el sistema.

- Se identificó las tuberías con falta de capacidad, así como los sectores que poseen presiones mayores a las recomendadas. Se proponen alternativas de sectorización y reducir la presión a valores aceptables en los diferentes sectores que conforman el sistema.

- Se realizó la validación de resultados en función de las presiones levantadas que fueron entregadas por la empresa ETAPA EP, la calibración del sector no fue posible debido a que para poder hablar de calibración del modelo era necesario al menos realizar un 5% de levantamiento de presiones y el sector tiene más de 25 mil conexiones, por eso del trabajo se puede decir que solo se realizó una validación en función de presiones

- Se realizó una proyección de conexiones por sector de la población y los caudales, y se asignó un número de personas por vivienda, siendo esta la metodología que la empresa ETAPA EP a utilizado en los últimos estudios realizados.

RECOMENDACIONES

- Se recomienda actualizar de manera constante los catastros tanto de los componentes de la red, así como de los usuarios que se alimentan de ella, conforme se realicen modificaciones en el sistema. De esta manera, se obtendrán resultados confiables y se podrá visualizar el funcionamiento de la red.

- Realizar el diseño de las tuberías a sustituirse, así como de las cámaras reductoras de presión para los sectores de reducción propuestos.

- Por último, se espera que la empresa ETAPA EP considere los resultados del presente trabajo para futuras modificaciones, actualizaciones y estudios en la red.

ANEXOS

Anexo 1. Red de tuberías subsector norte 3.2

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	50	1,496	PVC	50	59,006	PVC
	50	2,069	PVC	50	60,524	PVC
	50	2,837	PVC	50	60,667	PVC
	50	4,015	PVC	50	61,016	PVC
	50	5,681	PVC	50	61,209	PVC
	50	6,317	PVC	50	61,810	PVC
	50	7,150	PVC	50	64,884	PVC
	50	15,517	PVC	50	66,823	PVC
	50	15,887	PVC	50	68,142	PVC
	50	18,976	PVC	50	70,657	PVC
	50	19,914	PVC	50	72,270	PVC
	50	21,431	PVC	50	75,932	PVC
	50	27,573	PVC	50	76,320	PVC
	50	27,958	PVC	50	79,577	PVC
	50	28,299	PVC	50	80,247	PVC
	50	28,922	PVC	50	80,414	PVC
	50	29,714	PVC	50	83,352	PVC
	50	31,627	PVC	50	83,821	PVC
	50	33,217	PVC	50	88,516	PVC
NORTE	50	33,891	PVC	50	91,351	PVC
	50	35,239	PVC	50	93,118	PVC
	50	35,415	PVC	50	94,346	PVC
	50	35,459	PVC	50	95,053	PVC
	50	36,101	PVC	50	96,141	PVC
	50	36,120	PVC	50	100,213	PVC
	50	36,207	PVC	50	104,413	PVC
	50	36,968	PVC	50	104,556	PVC
	50	42,121	PVC	50	104,601	PVC
	50	42,460	PVC	50	106,786	PVC
	50	44,521	PVC	50	107,256	PVC
	50	46,262	PVC	50	113,270	PVC
	50	46,536	PVC	50	114,436	PVC
	50	47,859	PVC	50	115,593	PVC
	50	49,497	PVC	50	116,988	PVC
	50	49,944	PVC	50	117,093	PVC
	50	51,687	PVC	50	124,658	PVC
	50	51,883	PVC	50	127,796	PVC
	50	52,625	PVC	50	137,239	PVC
	50	53,459	PVC	50	137,260	PVC

	50	54,272	PVC	50	141,498	PVC
	50	54,422	PVC	50	153,083	PVC
	50	56,073	PVC	50	171,504	PVC
	50	56,866	PVC	50	182,353	PVC
	50	57,940	PVC	50	199,814	PVC
	50	58,155	PVC	50	301,316	PVC

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	63	0,366	PVC	63	48,666	PVC
	63	0,805	PVC	63	49,113	PVC
	63	0,903	PVC	63	49,726	PVC
	63	0,955	PVC	63	50,039	PVC
	63	1,218	PVC	63	50,392	PVC
	63	1,226	PVC	63	50,441	PVC
	63	1,234	PVC	63	50,474	PVC
	63	1,251	PVC	63	50,496	PVC
	63	1,306	PVC	63	51,136	PVC
	63	1,347	PVC	63	51,694	PVC
	63	1,358	PVC	63	51,781	PVC
	63	1,496	PVC	63	53,599	PVC
	63	1,576	PVC	63	53,873	PVC
	63	1,630	PVC	63	54,000	PVC
	63	1,836	PVC	63	54,123	PVC
	63	1,899	PVC	63	54,468	PVC
	63	2,135	PVC	63	54,825	PVC
NORTE	63	2,188	PVC	63	55,212	PVC
	63	2,251	PVC	63	55,246	PVC
	63	2,271	PVC	63	55,348	PVC
	63	2,333	PVC	63	55,522	PVC
	63	2,373	PVC	63	56,138	PVC
	63	2,570	PVC	63	57,067	PVC
	63	2,605	PVC	63	57,379	PVC
	63	2,638	PVC	63	57,572	PVC
	63	2,644	PVC	63	58,092	PVC
	63	2,688	PVC	63	58,167	PVC
	63	2,891	PVC	63	59,219	PVC
	63	2,950	PVC	63	59,230	PVC
	63	3,299	PVC	63	59,268	PVC
	63	3,382	PVC	63	59,888	PVC
	63	3,728	PVC	63	60,369	PVC
	63	3,857	PVC	63	60,979	PVC
	63	4,010	PVC	63	61,059	PVC
	63	4,173	PVC	63	61,118	PVC

63	4,241	PVC	63	62,178	PVC
63	4,341	PVC	63	62,751	PVC
63	4,393	PVC	63	62,856	PVC
63	4,562	PVC	63	63,086	PVC
63	4,824	PVC	63	63,276	PVC
63	4,824	PVC	63	63,582	PVC
63	4,950	PVC	63	65,019	PVC
63	5,342	PVC	63	66,123	PVC
63	5,416	PVC	63	66,977	PVC
63	5,952	PVC	63	67,154	PVC
63	6,000	PVC	63	67,472	PVC
63	6,000	PVC	63	67,669	PVC
63	6,373	PVC	63	68,056	PVC
63	6,529	PVC	63	68,318	PVC
63	6,579	PVC	63	68,400	PVC
63	6,687	PVC	63	68,965	PVC
63	6,731	PVC	63	69,394	PVC
63	6,857	PVC	63	69,534	PVC
63	6,866	PVC	63	69,931	PVC
63	7,228	PVC	63	71,734	PVC
63	7,375	PVC	63	72,216	PVC
63	7,433	PVC	63	72,377	PVC
63	7,754	PVC	63	73,601	PVC
63	7,940	PVC	63	73,811	PVC
63	8,092	PVC	63	74,263	PVC
63	8,106	PVC	63	74,928	PVC
63	8,725	PVC	63	75,961	PVC
63	8,788	PVC	63	76,109	PVC
63	9,144	PVC	63	76,394	PVC
63	9,804	PVC	63	76,502	PVC
63	9,909	PVC	63	77,930	PVC
63	10,138	PVC	63	79,231	PVC
63	10,614	PVC	63	79,985	PVC
63	10,650	PVC	63	80,278	PVC
63	11,100	PVC	63	81,659	PVC
63	11,487	PVC	63	81,784	PVC
63	11,547	PVC	63	83,278	PVC
63	11,641	PVC	63	83,888	PVC
63	12,000	PVC	63	84,391	PVC
63	12,037	PVC	63	86,045	PVC
63	12,315	PVC	63	86,990	PVC
63	12,370	PVC	63	87,353	PVC
63	12,565	PVC	63	88,735	PVC
63	12,710	PVC	63	89,796	PVC

47

63	12,783	PVC	63	92,417	PVC
63	12,994	PVC	63	92,695	PVC
63	13,228	PVC	63	93,269	PVC
63	13,678	PVC	63	93,361	PVC
63	14,734	PVC	63	94,286	PVC
63	15,445	PVC	63	94,822	PVC
63	15,713	PVC	63	95,303	PVC
63	17,315	PVC	63	97,380	PVC
63	17,430	PVC	63	98,084	PVC
63	17,509	PVC	63	99,790	PVC
63	19,172	PVC	63	99,894	PVC
63	19,275	PVC	63	100,648	PVC
63	19,999	PVC	63	103,321	PVC
63	20,321	PVC	63	103,498	PVC
63	20,903	PVC	63	103,636	PVC
63	22,352	PVC	63	103,909	PVC
63	22,586	PVC	63	105,867	PVC
63	22,891	PVC	63	106,923	PVC
63	23,158	PVC	63	107,684	PVC
63	23,763	PVC	63	108,602	PVC
63	23,890	PVC	63	111,636	PVC
63	24,838	PVC	63	112,337	PVC
63	25,955	PVC	63	114,425	PVC
63	26,431	PVC	63	118,408	PVC
63	26,456	PVC	63	119,187	PVC
63	26,872	PVC	63	120,580	PVC
63	27,897	PVC	63	123,785	PVC
63	28,244	PVC	63	124,085	PVC
63	28,900	PVC	63	124,995	PVC
63	29,924	PVC	63	128,183	PVC
63	29,998	PVC	63	128,359	PVC
63	30,697	PVC	63	128,618	PVC
63	30,734	PVC	63	129,378	PVC
63	31,089	PVC	63	129,739	PVC
63	31,178	PVC	63	129,777	PVC
63	31,311	PVC	63	133,419	PVC
63	31,353	PVC	63	139,231	PVC
63	31,940	PVC	63	141,566	PVC
63	32,093	PVC	63	143,222	PVC
63	32,218	PVC	63	152,638	PVC
63	32,736	PVC	63	153,473	PVC
63	33,114	PVC	63	154,593	PVC
63	34,026	PVC	63	156,651	PVC
63	34,092	PVC	63	158,677	PVC

	63	34,195	PVC	63	159,563	PVC
	63	35,710	PVC	63	168,103	PVC
	63	35,945	PVC	63	168,349	PVC
	63	36,827	PVC	63	168,506	PVC
	63	37,205	PVC	63	168,743	PVC
	63	37,767	PVC	63	169,316	PVC
	63	37,900	PVC	63	171,721	PVC
	63	38,780	PVC	63	181,590	PVC
	63	38,796	PVC	63	185,359	PVC
	63	39,409	PVC	63	193,595	PVC
	63	40,125	PVC	63	200,022	PVC
	63	42,019	PVC	63	207,191	PVC
	63	42,438	PVC	63	215,362	PVC
	63	42,530	PVC	63	220,239	PVC
	63	42,621	PVC	63	221,026	PVC
	63	43,234	PVC	63	224,539	PVC
	63	43,385	PVC	63	236,861	PVC
	63	43,769	PVC	63	257,163	PVC
	63	44,492	PVC	63	261,502	PVC
	63	45,052	PVC	63	263,418	PVC
	63	45,119	PVC	63	266,514	PVC
	63	45,274	PVC	63	272,591	PVC
	63	45,518	PVC	63	273,288	PVC
	63	45,597	PVC	63	277,188	PVC
	63	45,622	PVC	63	366,584	PVC
	63	45,622	PVC	63	371,765	PVC
	63	47,259	PVC	63	432,114	PVC
	63	48,342	PVC			

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	110	0,696	PVC	110	48,310	PVC
	110	0,831	PVC	110	49,699	PVC
	110	0,919	PVC	110	52,124	PVC
	110	0,944	PVC	110	53,623	PVC
	110	0,977	PVC	110	56,760	PVC
	110	1,726	PVC	110	58,115	PVC
NORTE	110	2,130	PVC	110	59,235	PVC
	110	2,467	PVC	110	61,295	PVC
	110	2,482	PVC	110	61,748	PVC
	110	2,960	PVC	110	61,977	PVC
	110	3,175	PVC	110	62,554	PVC
	110	3,442	PVC	110	63,524	PVC
	110	4,348	PVC	110	63,796	PVC

110	4,684	PVC	110	65,136	PVC
110	4,905	PVC	110	65,233	PVC
110	4,949	PVC	110	65,940	PVC
110	4,995	PVC	110	66,216	PVC
110	5,000	PVC	110	66,333	PVC
110	5,011	PVC	110	66,761	PVC
110	5,364	PVC	110	70,593	PVC
110	6,138	PVC	110	72,661	PVC
110	6,484	PVC	110	73,087	PVC
110	6,839	PVC	110	75,059	PVC
110	8,213	PVC	110	77,750	PVC
110	8,760	PVC	110	83,686	PVC
110	10,696	PVC	110	84,204	PVC
110	11,678	PVC	110	84,357	PVC
110	13,247	PVC	110	88,228	PVC
110	13,576	PVC	110	89,554	PVC
110	14,717	PVC	110	91,058	PVC
110	16,920	PVC	110	96,489	PVC
110	17,385	PVC	110	100,800	PVC
110	18,650	PVC	110	102,834	PVC
110	20,060	PVC	110	103,667	PVC
110	22,730	PVC	110	104,775	PVC
110	23,901	PVC	110	108,616	PVC
110	25,004	PVC	110	109,966	PVC
110	27,656	PVC	110	110,333	PVC
110	34,962	PVC	110	111,954	PVC
110	34,997	PVC	110	117,805	PVC
110	35,556	PVC	110	121,236	PVC
110	36,021	PVC	110	122,550	PVC
110	36,776	PVC	110	126,163	PVC
110	37,662	PVC	110	126,974	PVC
110	38,180	PVC	110	140,778	PVC
110	38,866	PVC	110	152,513	PVC
110	42,598	PVC	110	192,706	PVC
110	42,893	PVC	110	221,333	PVC
110	43,464	PVC	110	243,539	PVC
110	45,325	PVC	110	274,044	PVC
110	46,512	PVC	110	322,817	PVC
110	46,873	PVC	110	364,998	PVC
110	47,200	PVC	110	391,492	PVC

Subsector	Diámetro	Longitud	Material
	150	0,761	PVC
	150	37,751	PVC
NORTE	150	61,776	PVC
	150	64,820	PVC
	150	78,731	PVC

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	160	2,733	PVC	160	90,585	PVC
	160	2,746	PVC	160	107,543	PVC
	160	4,204	PVC	160	111,356	PVC
	160	7,748	PVC	160	114,867	PVC
	160	30,782	PVC	160	125,052	PVC
NORTE	160	71,145	PVC	160	132,426	PVC
	160	72,435	PVC	160	132,547	PVC
	160	78,695	PVC	160	147,949	PVC
	160	79,926	PVC	160	200,353	PVC
	160	82,275	PVC	160	258,008	PVC
	160	82,889	PVC			

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	200	0,776	AC	200	47,088	AC
	200	1,977	AC	200	47,400	AC
	200	1,984	AC	200	54,480	AC
	200	3,072	AC	200	61,656	AC
	200	3,137	AC	200	68,370	AC
NORTE	200	5,704	AC	200	68,582	AC
	200	5,919	AC	200	104,583	AC
	200	12,265	AC	200	164,653	AC
	200	14,309	AC	200	388,976	AC
	200	19,344	AC	200	458,132	AC
	200	23,826	AC	200	486,881	AC
	200	36,411	AC			

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	250	2,794	PVC	250	60,730	PVC
	250	3,281	PVC	250	60,900	PVC
	250	3,331	PVC	250	63,503	PVC
NORTE	250	21,883	PVC	250	70,262	PVC
	250	29,987	PVC	250	85,618	PVC
	250	39,689	PVC	250	107,907	PVC
	250	41,500	PVC	250	116,332	PVC

250	44,069	PVC		250	122,202	PVC
250	47,167	PVC		250	123,332	PVC
250	48,471	PVC		250	136,149	PVC
250	52,644	PVC		250	223,208	PVC
250	54,327	PVC		250	227,124	PVC
250	54,496	PVC		250	334,724	PVC
250	58,455	PVC				

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	300	0,782	AC	300	38,712	AC
	300	0,793	AC	300	44,316	AC
	300	1,587	AC	300	57,367	AC
	300	3,553	AC	300	127,576	AC
	300	8,632	AC	300	143,219	AC
NORTE	300	10,083	AC	300	182,738	AC
	300	18,443	AC	300	187,288	AC
	300	24,380	AC	300	187,383	AC
	300	24,446	AC	300	225,988	AC
	300	27,920	AC	300	289,048	AC
	300	29,597	AC	300	315,157	AC
	300	31,143	AC			

Subsector	Diámetro	Longitud	Material
	400	0,84300	HF
	400	0,87200	HF
	400	3,58600	HF
	400	4,57300	HF
	400	22,7240	HF
NORTE	400	60,5380	HF
	400	68,1020	HF
	400	96,8900	HF
	400	106,195	HF
	400	119,888	HF
	400	156,430	HF
	400	334,436	HF

Subsector	Diámetro	Longitud	Material
	700	0,577	HD
	700	0,594	HD
NORTE	700	0,598	HD
	700	0,700	HD
	700	394,615	HD

Anexo 2. Red de tuberías subsector centro 3.2

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	50	0,964	PVC	50	66,924	PVC
	50	1,063	PVC	50	70,117	PVC
	50	4,721	PVC	50	70,536	PVC
	50	4,914	PVC	50	72,842	PVC
	50	5,139	PVC	50	73,172	PVC
	50	10,066	PVC	50	73,750	PVC
	50	21,105	PVC	50	75,368	PVC
	50	21,753	PVC	50	75,487	PVC
	50	24,503	PVC	50	77,782	PVC
	50	26,601	PVC	50	78,662	PVC
	50	30,220	PVC	50	81,878	PVC
	50	30,427	PVC	50	84,099	PVC
	50	30,827	PVC	50	84,943	PVC
	50	35,894	PVC	50	84,957	PVC
	50	39,999	PVC	50	85,910	PVC
	50	40,869	PVC	50	86,451	PVC
	50	42,423	PVC	50	86,783	PVC
	50	43,130	PVC	50	89,593	PVC
	50	44,047	PVC	50	92,067	PVC
CENTRO	50	46,475	PVC	50	92,956	PVC
	50	47,443	PVC	50	95,706	PVC
	50	47,876	PVC	50	97,751	PVC
	50	51,480	PVC	50	98,755	PVC
	50	51,738	PVC	50	105,076	PVC
	50	52,838	PVC	50	113,065	PVC
	50	53,325	PVC	50	113,203	PVC
	50	54,761	PVC	50	114,658	PVC
	50	54,909	PVC	50	115,991	PVC
	50	55,923	PVC	50	117,296	PVC
	50	56,937	PVC	50	117,373	PVC
	50	57,092	PVC	50	120,559	PVC
	50	57,796	PVC	50	120,569	PVC
	50	58,773	PVC	50	122,870	PVC
	50	58,871	PVC	50	134,763	PVC
	50	60,630	PVC	50	141,498	PVC
	50	61,789	PVC	50	145,868	PVC
	50	62,559	PVC	50	147,886	PVC
	50	63,159	PVC	50	168,714	PVC
	50	63,978	PVC			

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	63	0,560	PVC	63	47,050	PVC
	63	0,566	PVC	63	47,198	PVC
	63	0,768	PVC	63	47,224	PVC
	63	0,782	PVC	63	47,303	PVC
	63	0,811	PVC	63	47,353	PVC
	63	0,886	PVC	63	47,529	PVC
	63	0,906	PVC	63	47,600	PVC
	63	0,917	PVC	63	47,663	PVC
	63	0,924	PVC	63	47,723	PVC
	63	0,951	PVC	63	47,860	PVC
	63	1,121	PVC	63	47,898	PVC
	63	1,127	PVC	63	47,905	PVC
	63	1,208	PVC	63	47,984	PVC
	63	1,261	PVC	63	48,098	PVC
	63	1,291	PVC	63	48,247	PVC
	63	1,303	PVC	63	48,286	PVC
	63	1,321	PVC	63	48,614	PVC
	63	1,583	PVC	63	48,743	PVC
	63	1,593	PVC	63	48,837	PVC
	63	1,777	PVC	63	49,014	PVC
	63	1,789	PVC	63	49,026	PVC
CENTRO	63	1,921	PVC	63	49,049	PVC
	63	1,960	PVC	63	49,077	PVC
	63	2,000	PVC	63	49,328	PVC
	63	2,163	PVC	63	49,400	PVC
	63	2,260	PVC	63	49,418	PVC
	63	2,302	PVC	63	49,426	PVC
	63	2,383	PVC	63	49,456	PVC
	63	2,427	PVC	63	49,462	PVC
	63	2,638	PVC	63	49,729	PVC
	63	2,668	PVC	63	49,986	PVC
	63	2,720	PVC	63	50,161	PVC
	63	2,735	PVC	63	50,334	PVC
	63	2,861	PVC	63	50,352	PVC
	63	3,300	PVC	63	50,444	PVC
	63	3,353	PVC	63	50,551	PVC
	63	3,401	PVC	63	50,724	PVC
	63	3,557	PVC	63	50,893	PVC
	63	3,576	PVC	63	50,902	PVC
	63	3,577	PVC	63	51,284	PVC
	63	3,653	PVC	63	51,427	PVC
	63	3,772	PVC	63	51,672	PVC

63	3,952	PVC	63	51,923	PVC
63	4,013	PVC	63	52,228	PVC
63	4,091	PVC	63	52,360	PVC
63	4,103	PVC	63	52,425	PVC
63	4,674	PVC	63	52,524	PVC
63	4,682	PVC	63	52,624	PVC
63	4,706	PVC	63	52,691	PVC
63	4,803	PVC	63	52,739	PVC
63	4,832	PVC	63	52,850	PVC
63	4,836	PVC	63	53,070	PVC
63	4,972	PVC	63	53,177	PVC
63	5,081	PVC	63	53,297	PVC
63	5,256	PVC	63	53,368	PVC
63	5,274	PVC	63	53,419	PVC
63	5,634	PVC	63	53,621	PVC
63	5,701	PVC	63	53,696	PVC
63	5,729	PVC	63	53,847	PVC
63	5,756	PVC	63	54,000	PVC
63	5,968	PVC	63	54,126	PVC
63	6,000	PVC	63	54,673	PVC
63	6,000	PVC	63	54,876	PVC
63	6,000	PVC	63	54,963	PVC
63	6,000	PVC	63	54,986	PVC
63	6,000	PVC	63	55,062	PVC
63	6,000	PVC	63	55,095	PVC
63	6,000	PVC	63	55,130	PVC
63	6,001	PVC	63	55,334	PVC
63	6,002	PVC	63	55,648	PVC
63	6,130	PVC	63	55,771	PVC
63	6,302	PVC	63	55,964	PVC
63	6,428	PVC	63	56,006	PVC
63	6,468	PVC	63	56,033	PVC
63	6,494	PVC	63	56,404	PVC
63	6,548	PVC	63	56,516	PVC
63	6,985	PVC	63	56,604	PVC
63	7,394	PVC	63	56,827	PVC
63	7,547	PVC	63	56,944	PVC
63	7,573	PVC	63	57,022	PVC
63	7,657	PVC	63	57,089	PVC
63	7,742	PVC	63	57,412	PVC
63	8,166	PVC	63	57,635	PVC
63	8,398	PVC	63	57,660	PVC
63	8,452	PVC	63	57,914	PVC

63	8,586	PVC	63	58,010	PVC
63	8,656	PVC	63	58,048	PVC
63	8,745	PVC	63	58,188	PVC
63	8,766	PVC	63	58,319	PVC
63	8,787	PVC	63	58,425	PVC
63	8,902	PVC	63	58,444	PVC
63	9,044	PVC	63	58,626	PVC
63	9,072	PVC	63	58,800	PVC
63	9,078	PVC	63	58,840	PVC
63	9,401	PVC	63	59,043	PVC
63	9,458	PVC	63	59,285	PVC
63	9,509	PVC	63	59,974	PVC
63	9,615	PVC	63	59,977	PVC
63	9,738	PVC	63	60,000	PVC
63	10,048	PVC	63	60,349	PVC
63	10,213	PVC	63	60,566	PVC
63	10,361	PVC	63	60,614	PVC
63	10,366	PVC	63	60,955	PVC
63	10,393	PVC	63	61,077	PVC
63	10,783	PVC	63	61,418	PVC
63	11,177	PVC	63	62,026	PVC
63	11,714	PVC	63	62,390	PVC
63	11,895	PVC	63	62,523	PVC
63	12,000	PVC	63	62,593	PVC
63	12,337	PVC	63	63,452	PVC
63	12,449	PVC	63	63,508	PVC
63	12,453	PVC	63	63,825	PVC
63	12,766	PVC	63	63,886	PVC
63	12,882	PVC	63	63,903	PVC
63	13,008	PVC	63	64,169	PVC
63	13,424	PVC	63	64,304	PVC
63	13,959	PVC	63	64,401	PVC
63	14,094	PVC	63	65,174	PVC
63	14,151	PVC	63	65,233	PVC
63	14,462	PVC	63	65,259	PVC
63	14,516	PVC	63	65,712	PVC
63	14,540	PVC	63	66,552	PVC
63	14,777	PVC	63	66,585	PVC
63	14,953	PVC	63	67,049	PVC
63	15,084	PVC	63	67,179	PVC
63	15,161	PVC	63	67,527	PVC
63	15,301	PVC	63	67,679	PVC
63	16,918	PVC	63	68,004	PVC

63	17,148	PVC	63	68,216	PVC
63	17,218	PVC	63	68,253	PVC
63	17,271	PVC	63	68,585	PVC
63	17,563	PVC	63	68,636	PVC
63	17,655	PVC	63	68,988	PVC
63	17,747	PVC	63	69,053	PVC
63	17,984	PVC	63	69,081	PVC
63	18,073	PVC	63	70,004	PVC
63	18,251	PVC	63	70,080	PVC
63	18,303	PVC	63	70,595	PVC
63	18,405	PVC	63	70,903	PVC
63	18,599	PVC	63	71,188	PVC
63	18,810	PVC	63	71,212	PVC
63	18,831	PVC	63	71,832	PVC
63	18,884	PVC	63	71,887	PVC
63	18,931	PVC	63	72,094	PVC
63	18,990	PVC	63	72,328	PVC
63	19,026	PVC	63	72,482	PVC
63	19,183	PVC	63	72,993	PVC
63	19,259	PVC	63	73,601	PVC
63	19,404	PVC	63	73,794	PVC
63	19,467	PVC	63	74,735	PVC
63	19,568	PVC	63	74,759	PVC
63	19,611	PVC	63	75,007	PVC
63	20,053	PVC	63	75,691	PVC
63	20,100	PVC	63	76,033	PVC
63	20,180	PVC	63	76,394	PVC
63	20,272	PVC	63	76,493	PVC
63	20,743	PVC	63	76,679	PVC
63	20,761	PVC	63	76,776	PVC
63	21,550	PVC	63	77,382	PVC
63	21,580	PVC	63	77,566	PVC
63	22,344	PVC	63	77,905	PVC
63	22,578	PVC	63	78,691	PVC
63	22,662	PVC	63	78,700	PVC
63	23,153	PVC	63	79,582	PVC
63	23,366	PVC	63	79,838	PVC
63	23,374	PVC	63	80,042	PVC
63	23,392	PVC	63	80,738	PVC
63	23,417	PVC	63	81,295	PVC
63	23,566	PVC	63	81,302	PVC
63	23,618	PVC	63	81,457	PVC
63	23,705	PVC	63	81,884	PVC

63	23,783	PVC	63	83,075	PVC
63	24,306	PVC	63	83,610	PVC
63	24,478	PVC	63	83,798	PVC
63	24,483	PVC	63	83,958	PVC
63	24,978	PVC	63	84,014	PVC
63	25,471	PVC	63	84,276	PVC
63	25,585	PVC	63	84,806	PVC
63	26,409	PVC	63	84,825	PVC
63	26,885	PVC	63	85,174	PVC
63	27,104	PVC	63	85,464	PVC
63	27,108	PVC	63	85,524	PVC
63	27,316	PVC	63	85,675	PVC
63	27,726	PVC	63	85,793	PVC
63	27,804	PVC	63	85,884	PVC
63	28,010	PVC	63	86,308	PVC
63	28,119	PVC	63	87,009	PVC
63	28,206	PVC	63	87,051	PVC
63	28,321	PVC	63	87,728	PVC
63	28,597	PVC	63	87,799	PVC
63	28,989	PVC	63	88,194	PVC
63	29,413	PVC	63	88,685	PVC
63	29,711	PVC	63	88,840	PVC
63	29,773	PVC	63	88,982	PVC
63	29,968	PVC	63	89,461	PVC
63	30,347	PVC	63	89,507	PVC
63	30,415	PVC	63	90,268	PVC
63	30,497	PVC	63	90,638	PVC
63	30,622	PVC	63	91,637	PVC
63	30,649	PVC	63	91,644	PVC
63	30,711	PVC	63	91,673	PVC
63	31,140	PVC	63	91,907	PVC
63	31,596	PVC	63	92,236	PVC
63	31,651	PVC	63	93,013	PVC
63	31,741	PVC	63	93,578	PVC
63	31,810	PVC	63	93,833	PVC
63	32,222	PVC	63	93,855	PVC
63	32,270	PVC	63	93,911	PVC
63	32,363	PVC	63	93,930	PVC
63	32,622	PVC	63	94,042	PVC
63	32,682	PVC	63	94,196	PVC
63	33,445	PVC	63	94,575	PVC
63	33,457	PVC	63	94,742	PVC
63	33,639	PVC	63	94,794	PVC

63	33,709	PVC	63	95,127	PVC
63	33,847	PVC	63	95,465	PVC
63	34,465	PVC	63	95,573	PVC
63	34,478	PVC	63	95,646	PVC
63	34,810	PVC	63	95,726	PVC
63	35,088	PVC	63	95,917	PVC
63	35,289	PVC	63	96,307	PVC
63	35,491	PVC	63	96,364	PVC
63	35,648	PVC	63	96,410	PVC
63	35,702	PVC	63	97,580	PVC
63	35,869	PVC	63	98,648	PVC
63	36,332	PVC	63	99,620	PVC
63	36,976	PVC	63	100,273	PVC
63	37,105	PVC	63	100,492	PVC
63	37,613	PVC	63	100,516	PVC
63	37,707	PVC	63	101,467	PVC
63	37,833	PVC	63	102,052	PVC
63	38,048	PVC	63	102,380	PVC
63	38,166	PVC	63	102,441	PVC
63	38,263	PVC	63	102,859	PVC
63	38,293	PVC	63	103,303	PVC
63	38,385	PVC	63	103,346	PVC
63	38,400	PVC	63	104,917	PVC
63	38,686	PVC	63	105,000	PVC
63	38,796	PVC	63	105,033	PVC
63	38,860	PVC	63	106,692	PVC
63	39,107	PVC	63	107,147	PVC
63	39,175	PVC	63	107,540	PVC
63	39,297	PVC	63	108,537	PVC
63	39,331	PVC	63	110,755	PVC
63	39,453	PVC	63	110,993	PVC
63	39,737	PVC	63	111,001	PVC
63	39,777	PVC	63	111,438	PVC
63	39,812	PVC	63	111,517	PVC
63	40,034	PVC	63	112,082	PVC
63	40,070	PVC	63	112,627	PVC
63	40,636	PVC	63	112,926	PVC
63	40,700	PVC	63	114,628	PVC
63	40,731	PVC	63	114,810	PVC
63	40,786	PVC	63	116,650	PVC
63	40,892	PVC	63	116,742	PVC
63	40,991	PVC	63	117,896	PVC
63	41,038	PVC	63	118,878	PVC

63	41,209	PVC	63	119,748	PVC
63	41,857	PVC	63	119,925	PVC
63	42,000	PVC	63	120,893	PVC
63	42,000	PVC	63	121,248	PVC
63	42,110	PVC	63	122,059	PVC
63	42,209	PVC	63	124,270	PVC
63	42,316	PVC	63	124,994	PVC
63	42,603	PVC	63	126,370	PVC
63	42,621	PVC	63	130,133	PVC
63	42,634	PVC	63	135,076	PVC
63	42,723	PVC	63	135,886	PVC
63	42,808	PVC	63	138,646	PVC
63	42,931	PVC	63	142,018	PVC
63	43,104	PVC	63	142,911	PVC
63	43,130	PVC	63	143,400	PVC
63	43,469	PVC	63	143,720	PVC
63	43,610	PVC	63	145,239	PVC
63	43,689	PVC	63	145,839	PVC
63	43,826	PVC	63	145,850	PVC
63	43,848	PVC	63	148,924	PVC
63	43,875	PVC	63	148,966	PVC
63	43,938	PVC	63	150,669	PVC
63	43,964	PVC	63	151,455	PVC
63	44,045	PVC	63	152,263	PVC
63	44,139	PVC	63	152,618	PVC
63	44,195	PVC	63	155,835	PVC
63	44,398	PVC	63	156,360	PVC
63	44,495	PVC	63	157,044	PVC
63	44,679	PVC	63	157,371	PVC
63	44,702	PVC	63	158,508	PVC
63	44,812	PVC	63	158,580	PVC
63	44,854	PVC	63	158,831	PVC
63	44,948	PVC	63	159,580	PVC
63	45,000	PVC	63	162,798	PVC
63	45,068	PVC	63	163,042	PVC
63	45,113	PVC	63	167,771	PVC
63	45,319	PVC	63	168,869	PVC
63	45,350	PVC	63	170,110	PVC
63	45,458	PVC	63	174,303	PVC
63	45,533	PVC	63	180,884	PVC
63	45,673	PVC	63	185,309	PVC
63	45,699	PVC	63	190,336	PVC
63	45,703	PVC	63	194,786	PVC

Diámetro	Longitud	Material	Diámetro	Longitud	Material
63	46,071	PVC	63	198,435	PVC
63	46,177	PVC	63	202,347	PVC
63	46,218	PVC	63	213,275	PVC
63	46,225	PVC	63	243,568	PVC
63	46,511	PVC	63	249,702	PVC
63	46,940	PVC	63	280,444	PVC
63	47,044	PVC			

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	100	3,515	PVC	100	45,837	PVC
	100	3,724	PVC	100	47,050	PVC
	100	3,885	PVC	100	48,249	PVC
	100	5,082	PVC	100	51,936	PVC
	100	7,743	PVC	100	55,501	PVC
	100	13,425	PVC	100	60,796	PVC
	100	23,426	PVC	100	61,756	PVC
	100	28,125	PVC	100	74,130	PVC
	100	29,037	PVC	100	78,677	PVC
CENTRO	100	29,211	PVC	100	79,360	PVC
	100	30,522	PVC	100	82,552	PVC
	100	33,457	PVC	100	83,769	PVC
	100	36,019	PVC	100	92,521	PVC
	100	38,842	PVC	100	96,013	PVC
	100	39,706	PVC	100	107,637	PVC
	100	40,352	PVC	100	134,498	PVC
	100	42,247	PVC	100	159,118	PVC
	100	42,820	PVC	100	213,464	PVC
	100	44,536	PVC	100	214,889	PVC

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	110	0,581	PVC	110	41,031	PVC
	110	0,753	PVC	110	41,139	PVC
	110	0,753	PVC	110	42,063	PVC
	110	0,776	PVC	110	44,220	PVC
	110	0,777	PVC	110	44,354	PVC
CENTRO	110	0,804	PVC	110	47,218	PVC
	110	0,934	PVC	110	47,722	PVC
	110	1,026	PVC	110	48,130	PVC
	110	1,117	PVC	110	49,210	PVC
	110	1,411	PVC	110	49,596	PVC
	110	1,592	PVC	110	50,564	PVC

110	2,307	PVC	110	50,864	PVC
110	2,893	PVC	110	51,191	PVC
110	3,002	PVC	110	52,562	PVC
110	3,067	PVC	110	54,120	PVC
110	3,152	PVC	110	54,645	PVC
110	3,743	PVC	110	54,946	PVC
110	4,112	PVC	110	55,321	PVC
110	4,295	PVC	110	56,252	PVC
110	4,606	PVC	110	56,679	PVC
110	5,045	PVC	110	58,025	PVC
110	5,122	PVC	110	58,536	PVC
110	5,135	PVC	110	58,718	PVC
110	5,175	PVC	110	59,194	PVC
110	5,924	PVC	110	59,313	PVC
110	6,592	PVC	110	59,924	PVC
110	7,040	PVC	110	60,147	PVC
110	7,158	PVC	110	61,578	PVC
110	7,446	PVC	110	61,794	PVC
110	8,101	PVC	110	63,520	PVC
110	8,299	PVC	110	67,026	PVC
110	8,828	PVC	110	68,047	PVC
110	8,968	PVC	110	68,663	PVC
110	9,931	PVC	110	70,044	PVC
110	10,125	PVC	110	71,661	PVC
110	10,429	PVC	110	72,167	PVC
110	11,591	PVC	110	75,613	PVC
110	11,694	PVC	110	75,917	PVC
110	11,912	PVC	110	78,190	PVC
110	11,938	PVC	110	78,806	PVC
110	12,414	PVC	110	79,742	PVC
110	12,546	PVC	110	80,766	PVC
110	12,766	PVC	110	80,920	PVC
110	12,923	PVC	110	81,921	PVC
110	14,130	PVC	110	85,532	PVC
110	14,292	PVC	110	86,654	PVC
110	15,020	PVC	110	87,497	PVC
110	16,334	PVC	110	88,225	PVC
110	17,522	PVC	110	88,905	PVC
110	18,228	PVC	110	90,059	PVC
110	18,374	PVC	110	94,103	PVC
110	20,616	PVC	110	95,173	PVC
110	21,199	PVC	110	98,218	PVC
110	22,177	PVC	110	102,483	PVC

110	23,754	PVC	110	103,675	PVC
110	23,901	PVC	110	103,841	PVC
110	24,221	PVC	110	106,155	PVC
110	24,904	PVC	110	106,501	PVC
110	25,686	PVC	110	106,627	PVC
110	26,690	PVC	110	109,523	PVC
110	27,075	PVC	110	110,045	PVC
110	27,121	PVC	110	112,362	PVC
110	30,135	PVC	110	115,933	PVC
110	30,487	PVC	110	116,119	PVC
110	30,677	PVC	110	126,010	PVC
110	31,189	PVC	110	131,922	PVC
110	31,424	PVC	110	151,246	PVC
110	32,517	PVC	110	158,360	PVC
110	35,430	PVC	110	164,273	PVC
110	35,975	PVC	110	166,507	PVC
110	36,817	PVC	110	168,512	PVC
110	36,975	PVC	110	175,198	PVC
110	36,994	PVC	110	205,354	PVC
110	38,352	PVC	110	315,296	PVC
110	39,311	PVC	110	364,998	PVC
110	40,675	PVC			

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	160	1,378	PVC	160	44,692	PVC
	160	2,521	PVC	160	45,281	PVC
	160	3,531	PVC	160	48,072	PVC
	160	4,495	PVC	160	54,360	PVC
	160	9,919	PVC	160	59,526	PVC
	160	11,399	PVC	160	64,341	PVC
CENTRO	160	12,359	PVC	160	64,996	PVC
	160	12,751	PVC	160	71,484	PVC
	160	17,422	PVC	160	71,642	PVC
	160	27,121	PVC	160	92,099	PVC
	160	33,070	PVC	160	103,082	PVC
	160	37,826	PVC	160	137,937	PVC
	160	41,300	PVC	160	139,851	PVC
	160	44,353	PVC	160	162,821	PVC

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	200	0,134	PVC	200	32,691	PVC
	200	0,537	PVC	200	34,056	PVC
	200	0,835	PVC	200	34,864	PVC
	200	0,847	PVC	200	35,776	PVC
	200	0,941	PVC	200	41,114	PVC
	200	0,949	PVC	200	41,971	PVC
	200	0,964	PVC	200	42,045	PVC
	200	1,165	PVC	200	42,653	PVC
	200	1,216	PVC	200	44,058	PVC
	200	2,764	PVC	200	44,214	PVC
	200	3,145	PVC	200	44,814	PVC
	200	3,171	PVC	200	45,099	PVC
	200	3,499	PVC	200	45,230	PVC
	200	4,170	PVC	200	47,190	PVC
	200	4,841	PVC	200	47,817	PVC
	200	5,444	PVC	200	47,980	PVC
	200	6,550	PVC	200	49,361	PVC
	200	7,195	PVC	200	49,520	PVC
	200	8,001	PVC	200	50,669	PVC
	200	8,033	PVC	200	53,474	PVC
	200	8,132	PVC	200	55,288	PVC
CENTRO	200	8,175	PVC	200	68,159	PVC
	200	9,467	PVC	200	68,712	PVC
	200	10,411	PVC	200	69,983	PVC
	200	10,713	PVC	200	73,997	PVC
	200	12,266	PVC	200	77,242	PVC
	200	12,420	PVC	200	83,034	PVC
	200	13,127	PVC	200	83,625	PVC
	200	13,170	PVC	200	84,215	PVC
	200	14,013	PVC	200	88,011	PVC
	200	14,085	PVC	200	88,756	PVC
	200	14,123	PVC	200	96,539	PVC
	200	14,678	PVC	200	115,819	PVC
	200	14,699	PVC	200	124,222	PVC
	200	14,742	PVC	200	130,564	PVC
	200	17,278	PVC	200	135,754	PVC
	200	17,379	PVC	200	145,831	PVC
	200	17,755	PVC	200	146,312	PVC
	200	18,697	PVC	200	150,006	PVC
	200	19,025	PVC	200	154,646	PVC
	200	19,344	PVC	200	164,861	PVC
	200	19,411	PVC	200	172,605	PVC

	200	21,210	PVC	200	198,688	PVC
	200	24,698	PVC	200	203,374	PVC
	200	24,830	PVC	200	223,279	PVC
	200	31,352	PVC	200	228,148	PVC
	200	32,208	PVC	200	240,257	PVC
	200	32,293	PVC	200	260,700	PVC

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	250	0,983	PVC	250	65,896	PVC
	250	0,999	PVC	250	78,012	PVC
	250	3,237	PVC	250	78,178	PVC
	250	8,337	PVC	250	80,278	PVC
	250	9,036	PVC	250	82,741	PVC
	250	9,083	PVC	250	87,781	PVC
	250	13,030	PVC	250	91,044	PVC
	250	14,229	PVC	250	97,273	PVC
CENTRO	250	14,616	PVC	250	104,412	PVC
	250	26,499	PVC	250	126,096	PVC
	250	29,973	PVC	250	129,476	PVC
	250	38,415	PVC	250	134,211	PVC
	250	45,142	PVC	250	159,133	PVC
	250	50,625	PVC	250	178,303	PVC
	250	57,045	PVC	250	246,627	PVC
	250	58,886	PVC	250		PVC

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	300	6,145	AC	300	63,381	AC
	300	9,094	AC	300	74,342	AC
	300	11,390	AC	300	79,782	AC
	300	17,178	AC	300	86,633	AC
	300	36,877	AC	300	90,928	AC
	300	40,024	AC	300	92,052	AC
CENTRO	300	46,020	AC	300	139,274	AC
	300	47,896	AC	300	178,043	AC
	300	56,339	AC	300	179,523	AC
	300	57,102	AC	300	293,892	AC
	300	58,805	AC	300	374,510	AC
	300	62,672	AC			

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	500	0,590	HD	500	24,579	HD
	500	0,807	HD	500	36,971	HD
	500	0,818	HD	500	38,793	HD
	500	0,953	HD	500	49,562	HD
	500	0,987	HD	500	69,498	HD
CENTRO	500	1,023	HD	500	70,031	HD
	500	1,035	HD	500	109,365	HD
	500	1,043	HD	500	113,571	HD
	500	1,059	HD	500	190,507	HD
	500	5,939	HD	500	291,831	HD
	500	7,932	HD	500	962,571	HD

Subsector	Diámetro	Longitud	Material
	600	6,947	HD
	600	13,361	HD
	600	31,958	HD
	600	100,267	HD
CENTRO	600	177,796	HD
	600	261,822	HD
	600	297,296	HD
	600	337,804	HD
	600	632,939	HD
	600	1,259,784	HD

Anexo 3. Red de tuberías subsector sur 3.2

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	63	0,200	PVC	63	45,170	PVC
	63	0,392	PVC	63	45,188	PVC
	63	0,410	PVC	63	45,337	PVC
	63	0,617	PVC	63	45,357	PVC
	63	0,673	PVC	63	45,439	PVC
	63	0,800	PVC	63	45,484	PVC
	63	0,852	PVC	63	45,561	PVC
	63	0,877	PVC	63	45,640	PVC
	63	0,895	PVC	63	45,651	PVC
	63	0,897	PVC	63	45,665	PVC
	63	0,907	PVC	63	45,948	PVC
	63	1,057	PVC	63	45,959	PVC
	63	1,234	PVC	63	46,104	PVC
	63	1,242	PVC	63	46,215	PVC
	63	1,250	PVC	63	46,240	PVC
	63	1,277	PVC	63	46,296	PVC
	63	1,321	PVC	63	46,538	PVC
	63	1,416	PVC	63	46,539	PVC
	63	1,446	PVC	63	46,598	PVC
SUR	63	1,451	PVC	63	46,784	PVC
	63	1,549	PVC	63	46,875	PVC
	63	1,578	PVC	63	47,083	PVC
	63	1,617	PVC	63	47,324	PVC
	63	1,620	PVC	63	47,331	PVC
	63	1,695	PVC	63	47,369	PVC
	63	1,705	PVC	63	47,383	PVC
	63	1,752	PVC	63	47,664	PVC
	63	1,864	PVC	63	47,723	PVC
	63	1,888	PVC	63	47,879	PVC
	63	1,934	PVC	63	47,988	PVC
	63	1,993	PVC	63	47,995	PVC
	63	2,031	PVC	63	48,277	PVC
	63	2,071	PVC	63	48,382	PVC
	63	2,370	PVC	63	48,661	PVC
	63	2,452	PVC	63	48,767	PVC
	63	2,477	PVC	63	48,914	PVC
	63	2,588	PVC	63	48,917	PVC
	63	2,638	PVC	63	48,917	PVC
	63	2,783	PVC	63	48,924	PVC
	63	3,061	PVC	63	48,966	PVC

63	3,121	PVC	63	49,035	PVC
63	3,128	PVC	63	49,208	PVC
63	3,237	PVC	63	49,542	PVC
63	3,242	PVC	63	49,640	PVC
63	3,347	PVC	63	49,655	PVC
63	3,349	PVC	63	49,675	PVC
63	3,400	PVC	63	49,771	PVC
63	3,424	PVC	63	49,780	PVC
63	3,424	PVC	63	49,796	PVC
63	3,500	PVC	63	49,954	PVC
63	3,696	PVC	63	50,121	PVC
63	3,727	PVC	63	50,179	PVC
63	3,757	PVC	63	50,292	PVC
63	3,767	PVC	63	50,369	PVC
63	3,786	PVC	63	50,450	PVC
63	3,848	PVC	63	50,613	PVC
63	3,898	PVC	63	50,642	PVC
63	3,952	PVC	63	50,960	PVC
63	3,992	PVC	63	50,975	PVC
63	4,000	PVC	63	51,540	PVC
63	4,027	PVC	63	51,620	PVC
63	4,028	PVC	63	51,693	PVC
63	4,066	PVC	63	51,713	PVC
63	4,442	PVC	63	51,762	PVC
63	4,464	PVC	63	52,078	PVC
63	4,481	PVC	63	52,138	PVC
63	4,560	PVC	63	52,245	PVC
63	4,573	PVC	63	52,373	PVC
63	4,667	PVC	63	52,377	PVC
63	4,708	PVC	63	52,512	PVC
63	4,718	PVC	63	52,581	PVC
63	4,723	PVC	63	52,637	PVC
63	4,769	PVC	63	52,660	PVC
63	4,877	PVC	63	52,684	PVC
63	4,919	PVC	63	52,871	PVC
63	4,923	PVC	63	52,902	PVC
63	4,956	PVC	63	52,926	PVC
63	5,000	PVC	63	53,202	PVC
63	5,032	PVC	63	53,209	PVC
63	5,040	PVC	63	53,239	PVC
63	5,143	PVC	63	53,507	PVC
63	5,304	PVC	63	53,649	PVC
63	5,325	PVC	63	53,733	PVC

63	5,332	PVC	63	53,839	PVC
63	5,361	PVC	63	54,016	PVC
63	5,457	PVC	63	54,218	PVC
63	5,472	PVC	63	54,532	PVC
63	5,501	PVC	63	54,756	PVC
63	5,537	PVC	63	54,857	PVC
63	5,559	PVC	63	54,908	PVC
63	5,680	PVC	63	55,064	PVC
63	5,686	PVC	63	55,066	PVC
63	5,698	PVC	63	55,100	PVC
63	5,719	PVC	63	55,107	PVC
63	5,762	PVC	63	55,273	PVC
63	5,800	PVC	63	55,354	PVC
63	5,807	PVC	63	55,416	PVC
63	5,831	PVC	63	55,547	PVC
63	5,836	PVC	63	55,615	PVC
63	5,876	PVC	63	55,785	PVC
63	5,880	PVC	63	55,794	PVC
63	5,956	PVC	63	56,237	PVC
63	5,991	PVC	63	56,303	PVC
63	6,000	PVC	63	56,419	PVC
63	6,000	PVC	63	56,498	PVC
63	6,000	PVC	63	56,662	PVC
63	6,000	PVC	63	56,690	PVC
63	6,000	PVC	63	56,926	PVC
63	6,000	PVC	63	57,162	PVC
63	6,000	PVC	63	57,198	PVC
63	6,004	PVC	63	57,541	PVC
63	6,026	PVC	63	57,549	PVC
63	6,075	PVC	63	57,574	PVC
63	6,089	PVC	63	57,588	PVC
63	6,129	PVC	63	57,607	PVC
63	6,137	PVC	63	57,612	PVC
63	6,183	PVC	63	57,740	PVC
63	6,240	PVC	63	57,817	PVC
63	6,426	PVC	63	57,833	PVC
63	6,479	PVC	63	57,848	PVC
63	6,479	PVC	63	57,854	PVC
63	6,542	PVC	63	58,000	PVC
63	6,559	PVC	63	58,017	PVC
63	6,765	PVC	63	58,101	PVC
63	6,816	PVC	63	58,166	PVC
63	6,893	PVC	63	58,337	PVC

63	6,894	PVC	63	58,368	PVC
63	7,080	PVC	63	58,631	PVC
63	7,172	PVC	63	58,676	PVC
63	7,261	PVC	63	58,692	PVC
63	7,334	PVC	63	58,748	PVC
63	7,401	PVC	63	58,995	PVC
63	7,418	PVC	63	59,005	PVC
63	7,526	PVC	63	59,084	PVC
63	7,556	PVC	63	59,338	PVC
63	7,598	PVC	63	59,427	PVC
63	7,622	PVC	63	59,429	PVC
63	7,643	PVC	63	59,579	PVC
63	7,651	PVC	63	59,585	PVC
63	8,027	PVC	63	59,633	PVC
63	8,066	PVC	63	59,720	PVC
63	8,183	PVC	63	59,838	PVC
63	8,413	PVC	63	59,924	PVC
63	8,475	PVC	63	60,013	PVC
63	8,634	PVC	63	60,305	PVC
63	8,752	PVC	63	60,447	PVC
63	9,135	PVC	63	60,447	PVC
63	9,237	PVC	63	60,633	PVC
63	9,284	PVC	63	60,741	PVC
63	9,451	PVC	63	60,851	PVC
63	9,549	PVC	63	60,861	PVC
63	9,575	PVC	63	60,957	PVC
63	9,596	PVC	63	61,041	PVC
63	9,603	PVC	63	61,094	PVC
63	9,610	PVC	63	61,124	PVC
63	9,756	PVC	63	61,153	PVC
63	9,851	PVC	63	61,240	PVC
63	9,935	PVC	63	61,250	PVC
63	10,061	PVC	63	61,337	PVC
63	10,082	PVC	63	61,347	PVC
63	10,086	PVC	63	61,422	PVC
63	10,100	PVC	63	61,443	PVC
63	10,123	PVC	63	61,445	PVC
63	10,256	PVC	63	61,600	PVC
63	10,323	PVC	63	61,627	PVC
63	10,331	PVC	63	61,757	PVC
63	10,331	PVC	63	61,972	PVC
63	10,444	PVC	63	61,987	PVC
63	10,475	PVC	63	62,030	PVC

63	10,482	PVC	63	62,166	PVC
63	10,497	PVC	63	62,193	PVC
63	10,742	PVC	63	62,475	PVC
63	10,783	PVC	63	62,574	PVC
63	10,968	PVC	63	62,797	PVC
63	11,025	PVC	63	62,962	PVC
63	11,032	PVC	63	63,523	PVC
63	11,130	PVC	63	63,540	PVC
63	11,186	PVC	63	63,628	PVC
63	11,424	PVC	63	63,739	PVC
63	11,453	PVC	63	64,034	PVC
63	11,565	PVC	63	64,230	PVC
63	11,631	PVC	63	64,290	PVC
63	11,650	PVC	63	64,322	PVC
63	11,780	PVC	63	64,384	PVC
63	11,813	PVC	63	64,416	PVC
63	11,867	PVC	63	64,422	PVC
63	11,901	PVC	63	64,666	PVC
63	11,998	PVC	63	65,051	PVC
63	12,000	PVC	63	65,150	PVC
63	12,000	PVC	63	65,310	PVC
63	12,009	PVC	63	65,381	PVC
63	12,011	PVC	63	65,494	PVC
63	12,044	PVC	63	65,579	PVC
63	12,203	PVC	63	65,662	PVC
63	12,536	PVC	63	66,067	PVC
63	12,609	PVC	63	66,144	PVC
63	12,702	PVC	63	66,228	PVC
63	12,925	PVC	63	66,556	PVC
63	13,100	PVC	63	66,676	PVC
63	13,161	PVC	63	66,682	PVC
63	13,610	PVC	63	66,843	PVC
63	13,615	PVC	63	66,991	PVC
63	13,623	PVC	63	67,140	PVC
63	13,740	PVC	63	67,184	PVC
63	13,774	PVC	63	67,336	PVC
63	13,947	PVC	63	67,369	PVC
63	14,039	PVC	63	67,376	PVC
63	14,151	PVC	63	67,498	PVC
63	14,152	PVC	63	67,521	PVC
63	14,169	PVC	63	67,609	PVC
63	14,305	PVC	63	67,662	PVC
63	14,545	PVC	63	67,668	PVC

63	14,642	PVC	63	67,733	PVC
63	14,842	PVC	63	67,789	PVC
63	15,306	PVC	63	67,893	PVC
63	15,404	PVC	63	67,939	PVC
63	15,567	PVC	63	68,011	PVC
63	15,699	PVC	63	68,212	PVC
63	15,764	PVC	63	68,281	PVC
63	15,772	PVC	63	68,455	PVC
63	15,904	PVC	63	68,543	PVC
63	15,988	PVC	63	68,769	PVC
63	16,458	PVC	63	69,153	PVC
63	16,495	PVC	63	69,165	PVC
63	16,498	PVC	63	69,261	PVC
63	16,619	PVC	63	69,320	PVC
63	16,626	PVC	63	69,392	PVC
63	16,805	PVC	63	69,455	PVC
63	16,988	PVC	63	69,655	PVC
63	17,055	PVC	63	69,683	PVC
63	17,149	PVC	63	69,874	PVC
63	17,193	PVC	63	69,878	PVC
63	17,294	PVC	63	70,662	PVC
63	17,747	PVC	63	70,780	PVC
63	17,868	PVC	63	70,899	PVC
63	17,976	PVC	63	71,001	PVC
63	18,103	PVC	63	71,034	PVC
63	18,205	PVC	63	71,310	PVC
63	18,252	PVC	63	71,759	PVC
63	18,435	PVC	63	71,911	PVC
63	19,241	PVC	63	71,930	PVC
63	19,479	PVC	63	72,013	PVC
63	19,551	PVC	63	72,274	PVC
63	19,653	PVC	63	72,532	PVC
63	20,037	PVC	63	72,624	PVC
63	20,145	PVC	63	73,059	PVC
63	20,174	PVC	63	73,479	PVC
63	20,272	PVC	63	74,394	PVC
63	20,299	PVC	63	74,674	PVC
63	20,371	PVC	63	74,678	PVC
63	20,412	PVC	63	74,711	PVC
63	20,523	PVC	63	74,912	PVC
63	20,527	PVC	63	74,947	PVC
63	20,684	PVC	63	74,991	PVC
63	20,735	PVC	63	74,996	PVC

63	20,785	PVC	63	75,757	PVC
63	20,876	PVC	63	75,902	PVC
63	20,890	PVC	63	75,999	PVC
63	20,922	PVC	63	76,154	PVC
63	21,011	PVC	63	76,369	PVC
63	21,067	PVC	63	76,785	PVC
63	21,206	PVC	63	77,372	PVC
63	21,256	PVC	63	77,417	PVC
63	21,307	PVC	63	77,440	PVC
63	21,459	PVC	63	77,457	PVC
63	21,546	PVC	63	77,471	PVC
63	21,679	PVC	63	77,668	PVC
63	21,764	PVC	63	77,736	PVC
63	21,780	PVC	63	77,782	PVC
63	21,831	PVC	63	78,262	PVC
63	21,882	PVC	63	78,345	PVC
63	21,919	PVC	63	78,619	PVC
63	21,976	PVC	63	78,644	PVC
63	22,049	PVC	63	78,997	PVC
63	22,279	PVC	63	79,095	PVC
63	22,369	PVC	63	79,154	PVC
63	22,457	PVC	63	79,671	PVC
63	22,495	PVC	63	79,710	PVC
63	22,629	PVC	63	79,795	PVC
63	22,715	PVC	63	80,414	PVC
63	22,997	PVC	63	80,987	PVC
63	23,009	PVC	63	81,066	PVC
63	23,036	PVC	63	81,086	PVC
63	23,099	PVC	63	81,293	PVC
63	23,254	PVC	63	81,514	PVC
63	23,610	PVC	63	81,765	PVC
63	23,669	PVC	63	82,255	PVC
63	23,701	PVC	63	82,622	PVC
63	23,772	PVC	63	82,733	PVC
63	23,927	PVC	63	83,203	PVC
63	23,965	PVC	63	83,294	PVC
63	24,098	PVC	63	83,558	PVC
63	24,122	PVC	63	83,764	PVC
63	24,145	PVC	63	83,787	PVC
63	24,149	PVC	63	84,538	PVC
63	24,256	PVC	63	85,203	PVC
63	24,297	PVC	63	85,273	PVC
63	24,619	PVC	63	85,325	PVC

63	24,833	PVC	63	85,702	PVC
63	24,913	PVC	63	86,215	PVC
63	25,231	PVC	63	86,577	PVC
63	25,238	PVC	63	87,730	PVC
63	25,365	PVC	63	88,080	PVC
63	25,401	PVC	63	88,140	PVC
63	25,497	PVC	63	88,285	PVC
63	25,976	PVC	63	88,430	PVC
63	25,978	PVC	63	88,481	PVC
63	26,258	PVC	63	88,520	PVC
63	26,362	PVC	63	88,773	PVC
63	26,403	PVC	63	89,223	PVC
63	26,453	PVC	63	89,272	PVC
63	26,557	PVC	63	89,803	PVC
63	26,920	PVC	63	89,892	PVC
63	27,071	PVC	63	89,968	PVC
63	27,220	PVC	63	90,012	PVC
63	27,279	PVC	63	90,237	PVC
63	27,413	PVC	63	90,300	PVC
63	27,425	PVC	63	90,483	PVC
63	27,547	PVC	63	90,729	PVC
63	27,607	PVC	63	90,957	PVC
63	27,671	PVC	63	91,034	PVC
63	27,915	PVC	63	91,236	PVC
63	28,118	PVC	63	91,532	PVC
63	28,245	PVC	63	91,540	PVC
63	28,395	PVC	63	91,770	PVC
63	28,424	PVC	63	91,784	PVC
63	28,480	PVC	63	92,104	PVC
63	28,599	PVC	63	92,219	PVC
63	28,929	PVC	63	93,234	PVC
63	28,983	PVC	63	93,554	PVC
63	29,082	PVC	63	93,640	PVC
63	29,116	PVC	63	93,798	PVC
63	29,126	PVC	63	93,997	PVC
63	29,301	PVC	63	94,190	PVC
63	29,347	PVC	63	94,359	PVC
63	29,611	PVC	63	94,395	PVC
63	29,719	PVC	63	94,586	PVC
63	29,866	PVC	63	94,781	PVC
63	30,031	PVC	63	94,997	PVC
63	30,099	PVC	63	95,105	PVC
63	30,105	PVC	63	95,621	PVC

63	30,207	PVC	63	95,734	PVC
63	30,315	PVC	63	96,053	PVC
63	30,388	PVC	63	96,146	PVC
63	30,414	PVC	63	96,530	PVC
63	30,530	PVC	63	96,947	PVC
63	30,560	PVC	63	97,349	PVC
63	30,581	PVC	63	97,636	PVC
63	30,803	PVC	63	97,911	PVC
63	30,924	PVC	63	98,391	PVC
63	30,935	PVC	63	98,560	PVC
63	31,043	PVC	63	98,726	PVC
63	31,073	PVC	63	98,823	PVC
63	31,287	PVC	63	99,156	PVC
63	31,366	PVC	63	99,611	PVC
63	31,396	PVC	63	99,757	PVC
63	31,515	PVC	63	99,824	PVC
63	31,624	PVC	63	99,975	PVC
63	32,018	PVC	63	99,999	PVC
63	32,441	PVC	63	100,007	PVC
63	32,591	PVC	63	100,125	PVC
63	32,629	PVC	63	100,222	PVC
63	32,695	PVC	63	100,428	PVC
63	32,806	PVC	63	100,533	PVC
63	32,835	PVC	63	100,600	PVC
63	32,915	PVC	63	100,743	PVC
63	32,988	PVC	63	101,045	PVC
63	33,040	PVC	63	101,275	PVC
63	33,055	PVC	63	101,278	PVC
63	33,070	PVC	63	101,439	PVC
63	33,093	PVC	63	101,706	PVC
63	33,204	PVC	63	102,199	PVC
63	33,228	PVC	63	102,393	PVC
63	33,451	PVC	63	102,470	PVC
63	33,464	PVC	63	102,640	PVC
63	33,678	PVC	63	102,670	PVC
63	33,711	PVC	63	102,778	PVC
63	33,844	PVC	63	102,820	PVC
63	34,016	PVC	63	102,939	PVC
63	34,095	PVC	63	103,380	PVC
63	34,413	PVC	63	103,737	PVC
63	34,423	PVC	63	103,953	PVC
63	34,627	PVC	63	104,375	PVC
63	34,631	PVC	63	105,050	PVC

63	34,803	PVC	63	105,157	PVC
63	35,099	PVC	63	105,539	PVC
63	35,230	PVC	63	105,925	PVC
63	35,239	PVC	63	106,182	PVC
63	35,402	PVC	63	106,967	PVC
63	35,465	PVC	63	107,017	PVC
63	35,774	PVC	63	108,147	PVC
63	35,792	PVC	63	108,228	PVC
63	35,929	PVC	63	108,416	PVC
63	36,111	PVC	63	108,569	PVC
63	36,121	PVC	63	109,563	PVC
63	36,255	PVC	63	109,753	PVC
63	36,346	PVC	63	109,946	PVC
63	36,506	PVC	63	110,514	PVC
63	36,509	PVC	63	111,327	PVC
63	36,518	PVC	63	111,476	PVC
63	36,624	PVC	63	111,508	PVC
63	36,640	PVC	63	111,677	PVC
63	36,645	PVC	63	112,159	PVC
63	36,652	PVC	63	112,312	PVC
63	36,653	PVC	63	112,330	PVC
63	36,673	PVC	63	112,357	PVC
63	36,692	PVC	63	112,649	PVC
63	36,695	PVC	63	112,713	PVC
63	36,776	PVC	63	112,756	PVC
63	36,798	PVC	63	112,760	PVC
63	36,965	PVC	63	112,930	PVC
63	36,987	PVC	63	113,345	PVC
63	36,987	PVC	63	113,978	PVC
63	37,035	PVC	63	115,265	PVC
63	37,226	PVC	63	115,304	PVC
63	37,311	PVC	63	115,486	PVC
63	37,447	PVC	63	115,787	PVC
63	37,481	PVC	63	116,780	PVC
63	37,485	PVC	63	116,787	PVC
63	37,514	PVC	63	116,839	PVC
63	37,711	PVC	63	116,884	PVC
63	37,747	PVC	63	116,885	PVC
63	37,764	PVC	63	118,086	PVC
63	37,824	PVC	63	119,208	PVC
63	37,850	PVC	63	119,342	PVC
63	38,000	PVC	63	119,989	PVC
63	38,075	PVC	63	120,704	PVC

63	38,079	PVC	63	121,175	PVC
63	38,139	PVC	63	121,652	PVC
63	38,153	PVC	63	122,996	PVC
63	38,195	PVC	63	123,730	PVC
63	38,216	PVC	63	125,984	PVC
63	38,220	PVC	63	126,478	PVC
63	38,235	PVC	63	127,449	PVC
63	38,495	PVC	63	127,703	PVC
63	38,567	PVC	63	127,795	PVC
63	38,726	PVC	63	127,977	PVC
63	38,736	PVC	63	128,027	PVC
63	38,853	PVC	63	128,219	PVC
63	39,019	PVC	63	129,154	PVC
63	39,042	PVC	63	129,298	PVC
63	39,157	PVC	63	129,705	PVC
63	39,164	PVC	63	129,962	PVC
63	39,231	PVC	63	130,116	PVC
63	39,290	PVC	63	130,456	PVC
63	39,290	PVC	63	131,500	PVC
63	39,356	PVC	63	131,533	PVC
63	39,386	PVC	63	132,981	PVC
63	39,585	PVC	63	133,395	PVC
63	39,631	PVC	63	133,426	PVC
63	39,726	PVC	63	134,018	PVC
63	39,738	PVC	63	134,248	PVC
63	39,755	PVC	63	137,065	PVC
63	39,939	PVC	63	137,998	PVC
63	39,967	PVC	63	138,155	PVC
63	40,000	PVC	63	138,432	PVC
63	40,057	PVC	63	138,463	PVC
63	40,082	PVC	63	138,556	PVC
63	40,140	PVC	63	138,873	PVC
63	40,148	PVC	63	139,119	PVC
63	40,162	PVC	63	139,501	PVC
63	40,226	PVC	63	139,517	PVC
63	40,312	PVC	63	140,751	PVC
63	40,313	PVC	63	141,231	PVC
63	40,341	PVC	63	142,260	PVC
63	40,403	PVC	63	142,662	PVC
63	40,533	PVC	63	143,152	PVC
63	40,582	PVC	63	145,201	PVC
63	40,673	PVC	63	145,326	PVC
63	40,843	PVC	63	145,627	PVC

63	40,974	PVC	63	147,453	PVC
63	40,990	PVC	63	147,942	PVC
63	41,026	PVC	63	150,489	PVC
63	41,058	PVC	63	151,072	PVC
63	41,173	PVC	63	151,871	PVC
63	41,211	PVC	63	153,046	PVC
63	41,221	PVC	63	153,076	PVC
63	41,296	PVC	63	156,227	PVC
63	41,483	PVC	63	157,911	PVC
63	41,492	PVC	63	157,952	PVC
63	41,586	PVC	63	158,842	PVC
63	41,841	PVC	63	160,240	PVC
63	42,075	PVC	63	160,734	PVC
63	42,092	PVC	63	160,976	PVC
63	42,404	PVC	63	162,043	PVC
63	42,424	PVC	63	163,254	PVC
63	42,497	PVC	63	165,703	PVC
63	42,505	PVC	63	169,095	PVC
63	42,670	PVC	63	169,099	PVC
63	42,721	PVC	63	171,814	PVC
63	42,813	PVC	63	172,260	PVC
63	42,818	PVC	63	176,260	PVC
63	42,851	PVC	63	177,134	PVC
63	42,888	PVC	63	179,885	PVC
63	42,927	PVC	63	179,945	PVC
63	42,937	PVC	63	181,651	PVC
63	42,963	PVC	63	183,970	PVC
63	43,058	PVC	63	185,739	PVC
63	43,173	PVC	63	188,378	PVC
63	43,383	PVC	63	196,459	PVC
63	43,503	PVC	63	196,907	PVC
63	43,801	PVC	63	201,986	PVC
63	43,866	PVC	63	204,291	PVC
63	43,949	PVC	63	220,384	PVC
63	44,130	PVC	63	226,237	PVC
63	44,292	PVC	63	226,995	PVC
63	44,423	PVC	63	237,683	PVC
63	44,503	PVC	63	249,754	PVC
63	44,593	PVC	63	252,349	PVC
63	44,612	PVC	63	266,822	PVC
63	44,701	PVC	63	287,309	PVC
63	44,738	PVC	63	302,075	PVC
63	44,875	PVC	63	320,195	PVC

	63	45,086	PVC	63	386,244	PVC

Subsector	Diámetro	Longitud	Material
SUR	90	0,682	PVC
	90	8,825	PVC
	90	39,617	PVC
	90	74,864	PVC
	90	81,224	PVC
	90	141,465	PVC

Subsector	Diámetro	Longitud	Material
SUR	100	24,423	PVC
	100	45,758	PVC
	100	101,472	PVC
	100	118,491	PVC
	100	151,011	PVC

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
SUR	110	0,293	PVC	110	38,864	PVC
	110	0,437	PVC	110	41,888	PVC
	110	0,701	PVC	110	42,312	PVC
	110	0,870	PVC	110	43,052	PVC
	110	0,882	PVC	110	44,861	PVC
	110	0,895	PVC	110	45,306	PVC
	110	0,900	PVC	110	46,930	PVC
	110	0,913	PVC	110	47,507	PVC
	110	0,938	PVC	110	47,621	PVC
	110	0,970	PVC	110	48,842	PVC
	110	1,221	PVC	110	49,179	PVC
	110	1,345	PVC	110	49,305	PVC
	110	1,356	PVC	110	51,181	PVC
	110	1,374	PVC	110	51,291	PVC
	110	1,421	PVC	110	51,373	PVC
	110	1,432	PVC	110	52,830	PVC
	110	1,916	PVC	110	54,241	PVC
	110	2,391	PVC	110	55,255	PVC
	110	2,668	PVC	110	55,344	PVC
	110	2,871	PVC	110	55,620	PVC
	110	3,200	PVC	110	56,624	PVC
	110	3,644	PVC	110	57,231	PVC
	110	3,752	PVC	110	57,975	PVC

110	3,987	PVC	110	59,987	PVC
110	4,143	PVC	110	60,913	PVC
110	4,161	PVC	110	61,155	PVC
110	4,488	PVC	110	61,387	PVC
110	4,540	PVC	110	63,138	PVC
110	4,580	PVC	110	64,529	PVC
110	4,995	PVC	110	65,197	PVC
110	5,037	PVC	110	65,247	PVC
110	5,398	PVC	110	73,374	PVC
110	5,431	PVC	110	75,527	PVC
110	5,439	PVC	110	75,716	PVC
110	5,811	PVC	110	80,149	PVC
110	5,834	PVC	110	80,874	PVC
110	5,879	PVC	110	81,277	PVC
110	6,063	PVC	110	83,710	PVC
110	6,356	PVC	110	88,038	PVC
110	6,419	PVC	110	88,982	PVC
110	6,621	PVC	110	90,976	PVC
110	6,797	PVC	110	92,059	PVC
110	6,835	PVC	110	92,774	PVC
110	7,183	PVC	110	95,242	PVC
110	7,772	PVC	110	97,007	PVC
110	7,811	PVC	110	103,054	PVC
110	8,197	PVC	110	104,172	PVC
110	8,388	PVC	110	107,157	PVC
110	8,738	PVC	110	114,664	PVC
110	9,666	PVC	110	115,470	PVC
110	10,699	PVC	110	122,279	PVC
110	10,983	PVC	110	122,325	PVC
110	11,988	PVC	110	122,707	PVC
110	12,101	PVC	110	129,384	PVC
110	12,298	PVC	110	134,637	PVC
110	14,044	PVC	110	138,138	PVC
110	14,439	PVC	110	138,200	PVC
110	16,311	PVC	110	140,015	PVC
110	17,134	PVC	110	149,016	PVC
110	17,672	PVC	110	153,033	PVC
110	17,807	PVC	110	157,217	PVC
110	18,301	PVC	110	158,269	PVC
110	18,875	PVC	110	164,497	PVC
110	19,152	PVC	110	170,403	PVC
110	20,503	PVC	110	173,399	PVC
110	23,004	PVC	110	177,512	PVC

	110	24,090	PVC	110	183,862	PVC
	110	25,722	PVC	110	188,318	PVC
	110	25,962	PVC	110	190,444	PVC
	110	28,153	PVC	110	198,853	PVC
	110	30,661	PVC	110	208,419	PVC
	110	31,692	PVC	110	231,399	PVC
	110	35,220	PVC	110	265,964	PVC
	110	36,831	PVC	110	323,775	PVC
	110	37,167	PVC	110	351,458	PVC
	110	37,258	PVC	110	413,123	PVC
	110	37,436	PVC	110	464,592	PVC

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	160	0,361	PVC	160	39,277	PVC
	160	0,931	PVC	160	40,559	PVC
	160	0,964	PVC	160	40,866	PVC
	160	0,999	PVC	160	42,678	PVC
	160	1,006	PVC	160	42,808	PVC
	160	1,018	PVC	160	46,973	PVC
	160	1,063	PVC	160	47,627	PVC
	160	1,079	PVC	160	47,735	PVC
	160	1,454	PVC	160	51,180	PVC
	160	2,084	PVC	160	51,391	PVC
	160	2,900	PVC	160	51,808	PVC
	160	3,254	PVC	160	53,796	PVC
	160	3,303	PVC	160	54,093	PVC
	160	3,721	PVC	160	54,769	PVC
SUR	160	3,963	PVC	160	58,202	PVC
	160	4,433	PVC	160	61,130	PVC
	160	5,594	PVC	160	63,610	PVC
	160	5,648	PVC	160	63,747	PVC
	160	5,723	PVC	160	70,677	PVC
	160	6,565	PVC	160	76,979	PVC
	160	7,104	PVC	160	77,636	PVC
	160	7,198	PVC	160	78,126	PVC
	160	7,297	PVC	160	87,030	PVC
	160	8,083	PVC	160	89,099	PVC
	160	8,660	PVC	160	91,594	PVC
	160	11,721	PVC	160	92,356	PVC
	160	13,498	PVC	160	97,043	PVC
	160	13,800	PVC	160	98,527	PVC
	160	13,990	PVC	160	99,152	PVC

	160	14,634	PVC	160	108,360	PVC
	160	15,177	PVC	160	115,541	PVC
	160	17,636	PVC	160	123,092	PVC
	160	17,790	PVC	160	123,151	PVC
	160	18,153	PVC	160	129,672	PVC
	160	18,875	PVC	160	134,070	PVC
	160	19,519	PVC	160	135,061	PVC
	160	21,077	PVC	160	137,906	PVC
	160	21,276	PVC	160	141,486	PVC
	160	23,590	PVC	160	142,845	PVC
	160	24,585	PVC	160	147,039	PVC
	160	25,623	PVC	160	157,806	PVC
	160	27,640	PVC	160	158,544	PVC
	160	28,484	PVC	160	162,821	PVC
	160	29,509	PVC	160	192,405	PVC
	160	31,255	PVC	160	195,693	PVC
	160	33,313	PVC	160	211,854	PVC
	160	34,671	PVC	160	212,568	PVC
	160	38,950	PVC	160	266,507	PVC
	160	39,021	PVC	160	282,965	PVC

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	200	0,899	AC	200	30,322	AC
	200	0,905	AC	200	30,515	AC
	200	1,050	AC	200	33,260	AC
	200	1,115	AC	200	37,565	AC
	200	1,124	AC	200	40,238	AC
	200	1,339	AC	200	41,389	AC
	200	1,350	AC	200	41,767	AC
	200	2,210	AC	200	41,787	AC
	200	2,239	AC	200	43,317	AC
SUR	200	2,605	AC	200	44,129	AC
	200	3,204	AC	200	45,467	AC
	200	4,033	AC	200	55,879	AC
	200	4,227	AC	200	59,157	AC
	200	4,500	AC	200	60,859	AC
	200	5,118	AC	200	61,526	AC
	200	6,147	AC	200	64,308	AC
	200	6,173	AC	200	67,843	AC
	200	6,311	AC	200	69,049	AC
	200	6,836	AC	200	74,204	AC
	200	7,542	AC	200	76,781	AC

Diámetro	Longitud	Material	Diámetro	Longitud	Material
200	7,834	AC	200	81,915	AC
200	7,990	AC	200	82,673	AC
200	8,306	AC	200	87,352	AC
200	8,692	AC	200	87,770	AC
200	8,709	AC	200	90,955	AC
200	8,820	AC	200	91,078	AC
200	9,051	AC	200	93,647	AC
200	9,983	AC	200	93,699	AC
200	10,495	AC	200	95,014	AC
200	10,594	AC	200	103,099	AC
200	11,068	AC	200	103,284	AC
200	11,529	AC	200	108,190	AC
200	11,588	AC	200	109,998	AC
200	12,140	AC	200	113,814	AC
200	12,462	AC	200	119,453	AC
200	13,712	AC	200	121,706	AC
200	14,045	AC	200	122,279	AC
200	14,133	AC	200	126,180	AC
200	14,151	AC	200	127,004	AC
200	14,267	AC	200	127,228	AC
200	14,302	AC	200	132,245	AC
200	19,023	AC	200	163,131	AC
200	19,210	AC	200	172,120	AC
200	19,221	AC	200	192,071	AC
200	19,239	AC	200	210,939	AC
200	19,410	AC	200	214,822	AC
200	19,900	AC	200	227,485	AC
200	23,271	AC	200	253,265	AC
200	24,893	AC	200	257,000	AC
200	27,586	AC	200	260,700	AC
200	28,806	AC	200	260,720	AC
200	29,428	AC	200	301,449	AC

Subsector	Diámetro	Longitud	Material	Diámetro	Longitud	Material
	150	8,152	PVC	50	32,149	PVC
	350	8,825	PVC	50	33,829	PVC
	400	30,490	HD	50	63,457	PVC
	400	185,039	HD	50	122,502	PVC
SUR	450	6,392	HD	500	13,193	HD
	450	13,582	HD	500	23,190	HD
	450	113,855	HD	500	291,831	HD
	450	191,303	HD	500	962,571	HD
	450	260,726	HD			

Anexo 4. Datos de densidad, población y caudal para el subsector norte.

PARROQUIA	D_2024	D_2034	AREA_ HA	PROM_PERS_ FMLIA_INEC	POBLACION 2024	POBLACION 2034	DOTACION_ NETA	Perdidas 2024	Qmd 2024	Perdidas 2034	Qmd 2034	QMD_ 2024	QMD _2034	QMH 2024	QMH 2034
SAN SEBASTIAN	222.757	291.512	6.018	3.120	1341.0	1754.0	190.61	0.284	4.132	0.244	5.118	5.371	6.654	7.520	9.316
SAN SEBASTIAN	249.170	309.895	1.291	3.120	322.00	400.00	190.61	0.284	0.992	0.244	1.167	1.290	1.517	6.370	7.781
SAN SEBASTIAN	199.734	257.705	5.686	3.120	1136.0	1465.0	190.61	0.284	3.500	0.244	4.275	4.550	5.558	5.731	6.830
EL BATAN	260.119	297.479	1.288	3.120	335.00	383.00	190.61	0.284	1.032	0.244	1.118	1.342	1.453	4.172	4.822
SAN SEBASTIAN	157.091	209.512	3.296	3.120	518.00	690.00	190.61	0.284	1.596	0.244	2.014	2.075	2.618	4.139	4.509
SAN SEBASTIAN	119.645	170.026	1.871	3.120	224.00	318.00	190.61	0.284	0.690	0.244	0.928	0.897	1.206	3.836	3.452
SAN SEBASTIAN	167.770	204.691	4.436	3.120	744.00	908.00	190.61	0.284	2.292	0.244	2.650	2.980	3.445	3.712	4.222
SAN SEBASTIAN	154.375	194.114	6.623	3.120	1022.0	1286.0	190.61	0.284	3.149	0.244	3.753	4.094	4.879	3.505	3.564
EL BATAN	195.303	217.542	1.646	3.120	322.00	358.00	190.61	0.284	0.992	0.244	1.045	1.290	1.358	3.365	3.914
EL BATAN	163.346	191.783	2.839	3.120	464.00	545.00	190.61	0.284	1.430	0.244	1.590	1.859	2.068	2.905	3.665
SAN SEBASTIAN	152.357	182.986	4.345	3.120	662.00	795.00	190.61	0.284	2.040	0.244	2.320	2.652	3.016	2.866	2.549
SAN SEBASTIAN	140.294	172.193	4.278	3.120	600.00	737.00	190.61	0.284	1.849	0.244	2.151	2.403	2.796	2.686	2.873
SAN SEBASTIAN	184.091	200.962	0.125	3.120	23.000	25.000	190.61	0.284	0.071	0.244	0.073	0.092	0.095	2.658	2.480
SAN SEBASTIAN	158.515	182.521	4.653	3.120	738.00	849.00	190.61	0.284	2.274	0.244	2.478	2.956	3.221	2.641	2.417
EL BATAN	97.2372	137.433	1.315	3.130	128.00	181.00	190.61	0.284	0.394	0.244	0.528	0.513	0.687	2.602	2.815
SAN SEBASTIAN	203.780	206.964	1.903	3.120	388.00	394.00	190.61	0.284	1.196	0.244	1.150	1.554	1.495	2.602	2.895
SAN SEBASTIAN	114.354	147.816	0.054	3.120	6.0000	8.0000	190.61	0.284	0.018	0.244	0.023	0.024	0.030	2.580	3.134
SAN SEBASTIAN	95.1846	132.515	0.697	3.120	66.000	92.000	190.61	0.284	0.203	0.244	0.268	0.264	0.349	2.518	3.261
SAN SEBASTIAN	173.313	186.221	3.605	3.120	625.00	671.00	190.61	0.284	1.926	0.244	1.958	2.503	2.546	2.456	2.087
SAN SEBASTIAN	95.5368	130.684	4.702	3.120	449.00	614.00	190.61	0.284	1.383	0.244	1.792	1.798	2.329	2.423	2.650
SAN SEBASTIAN	202.553	196.351	0.020	3.120	4.0000	4.0000	190.61	0.284	0.012	0.244	0.012	0.016	0.015	2.366	2.332
SAN SEBASTIAN	124.660	144.397	2.424	3.120	302.00	350.00	190.61	0.284	0.931	0.244	1.021	1.210	1.328	2.198	1.992
SAN SEBASTIAN	94.8484	121.787	4.849	3.120	460.00	590.00	190.61	0.284	1.417	0.244	1.722	1.843	2.238	2.176	2.093
EL BATAN	113.716	129.959	4.081	3.120	464.00	530.00	190.61	0.284	1.430	0.244	1.547	1.859	2.011	2.159	1.875

EL BATAN	131.052	137.053	1.546	3.120	203.00	212.00	190.61	0.284	0.625	0.244	0.619	0.813	0.804	1.968	1.705
SAN SEBASTIAN	167.291	152.943	2.098	3.120	351.00	321.00	190.61	0.284	1.081	0.244	0.937	1.406	1.218	1.907	1.694
SAN SEBASTIAN	99.672	112.594	4.808	3.120	479.00	541.00	190.61	0.284	1.476	0.244	1.579	1.919	2.052	1.879	2.034
SAN SEBASTIAN	167.609	150.368	2.611	3.120	438.00	393.00	190.61	0.284	1.350	0.244	1.147	1.754	1.491	1.806	2.124
SAN SEBASTIAN	97.5100	108.750	1.860	3.120	181.00	202.00	190.61	0.284	0.558	0.244	0.589	0.725	0.766	1.806	1.901
SAN SEBASTIAN	144.627	135.533	2.350	3.120	340.00	319.00	190.61	0.284	1.048	0.244	0.931	1.362	1.210	1.694	1.859
EL BATAN	118.832	113.539	3.299	3.120	392.00	375.00	190.61	0.284	1.208	0.244	1.094	1.570	1.423	1.447	1.333
SAN SEBASTIAN	98.1594	96.6600	4.827	3.120	474.00	467.00	190.61	0.284	1.460	0.244	1.363	1.899	1.772	1.256	1.689
SUCRE	70.5393	79.1376	0.191	3.120	13.000	15.000	190.61	0.284	0.040	0.244	0.044	0.052	0.057	1.138	1.126
SAN SEBASTIAN	100.513	97.0193	4.687	3.120	471.00	455.00	190.61	0.284	1.451	0.244	1.328	1.887	1.726	1.049	0.887
SAN SEBASTIAN	60.8265	71.4680	1.704	3.120	104.00	122.00	190.61	0.284	0.320	0.244	0.356	0.417	0.463	1.015	1.073
SAN SEBASTIAN	98.0074	91.3082	0.046	3.120	4.0000	4.0000	190.61	0.284	0.012	0.244	0.012	0.016	0.015	0.965	0.797
SAN SEBASTIAN	67.0990	70.5489	0.262	3.120	18.000	18.000	190.61	0.284	0.055	0.244	0.053	0.072	0.068	0.785	0.929
SAN SEBASTIAN	65.2833	67.8218	6.468	3.120	422.00	439.00	190.61	0.284	1.300	0.244	1.281	1.690	1.665	0.718	0.961
SAN SEBASTIAN	74.3122	72.4429	3.467	3.120	258.00	251.00	190.61	0.284	0.795	0.244	0.732	1.033	0.952	0.583	0.648
SAN SEBASTIAN	77.8035	73.8771	8.797	3.120	684.00	650.00	190.61	0.284	2.108	0.244	1.897	2.740	2.466	0.370	0.489
SAN SEBASTIAN	74.5974	70.2041	0.148	3.120	11.000	10.000	190.61	0.284	0.034	0.244	0.029	0.044	0.038	0.280	0.266
BELLAVISTA	85.9418	76.0409	0.515	3.120	44.000	39.000	190.61	0.284	0.136	0.244	0.114	0.176	0.148	0.252	0.202
SAN SEBASTIAN	63.8472	63.8179	0.776	3.120	50.000	50.000	190.61	0.284	0.154	0.244	0.146	0.200	0.190	0.247	0.207
EL BATAN	36.9874	42.7461	11.68	3.120	432.00	499.00	190.61	0.284	1.331	0.244	1.456	1.730	1.893	0.140	0.106
EL BATAN	47.2602	44.3767	10.81	3.120	511.00	480.00	190.61	0.284	1.574	0.244	1.401	2.047	1.821	0.129	0.133
EL BATAN	37.9960	38.2245	0.031	3.120	1.0000	1.0000	190.61	0.284	0.003	0.244	0.003	0.004	0.004	0.101	0.096
EL BATAN	22.5996	28.3009	6.193	3.200	140.00	175.00	190.61	0.284	0.431	0.244	0.511	0.561	0.664	0.073	0.080
SAN SEBASTIAN	31.7105	29.0298	12.15	3.120	385.00	353.00	190.61	0.284	1.186	0.244	1.030	1.542	1.339	0.062	0.053
SAN SEBASTIAN	33.3610	27.4719	0.741	3.120	25.000	20.000	190.61	0.284	0.077	0.244	0.058	0.100	0.076	0.034	0.042
SAN SEBASTIAN	25.7143	22.9061	7.286	3.120	187.00	167.00	190.61	0.284	0.576	0.244	0.487	0.749	0.634	0.022	0.021
SAN SEBASTIAN	20.4521	17.8311	8.413	3.120	172.00	150.00	190.61	0.284	0.530	0.244	0.438	0.689	0.569	0.022	0.021
SAN SEBASTIAN	17.5569	14.6379	2.588	3.120	45.000	38.000	190.61	0.284	0.139	0.244	0.111	0.180	0.144	0.006	0.005

Anexo 5. Datos de densidad, población y caudal para el subsector centro.

PARROQUIA	D_2024	D_2034	AREA_HA	PROM_PERS_FMLIA_INEC	POBLACION 2024	POBLACION 2034	DOTACION_NETA	Perdidas 2024	Qmd 2024	Perdidas 2034	Qmd 2034	QMD_2024	QMD_2034	QMH 2024	QMH 2034
EL BATAN	193.892	265.407	5.897	3.120	1143.0	1565.0	130.730	0.284	2.415	0.244	3.132	3.140	4.072	1.165	1.115
EL BATAN	278.030	338.266	4.447	3.120	1236.0	1504.0	130.730	0.284	2.612	0.244	3.010	3.396	3.913	3.381	4.080
EL BATAN	96.0057	125.151	11.92	3.120	1145.0	1492.0	130.730	0.284	2.420	0.244	2.986	3.146	3.882	1.558	1.738
SUCRE	157.522	205.938	6.671	3.120	1051.0	1374.0	130.730	0.284	2.221	0.244	2.750	2.887	3.575	2.192	2.426
SUCRE	177.288	229.341	5.749	3.120	1019.0	1318.0	130.730	0.284	2.153	0.244	2.638	2.799	3.429	4.754	5.478
EL BATAN	154.751	206.104	6.358	3.130	984.00	1310.0	130.730	0.284	2.079	0.244	2.622	2.703	3.408	0.296	0.321
EL BATAN	202.917	251.046	5.031	3.120	1021.0	1263.0	130.730	0.284	2.158	0.244	2.528	2.805	3.286	2.123	2.284
SUCRE	70.8758	84.2159	13.79	3.120	978.00	1162.0	130.730	0.284	2.067	0.244	2.326	2.687	3.023	2.362	2.896
EL BATAN	372.996	475.636	2.356	3.120	879.00	1120.0	130.730	0.284	1.858	0.244	2.242	2.415	2.914	3.927	4.601
EL BATAN	158.323	186.402	5.834	3.120	924.00	1087.0	130.730	0.284	1.953	0.244	2.176	2.538	2.828	1.754	1.996
EL BATAN	134.958	158.511	6.687	3.120	902.00	1060.0	130.730	0.284	1.906	0.244	2.122	2.478	2.758	0.596	0.630
EL BATAN	194.068	211.129	4.523	3.120	878.00	955.00	130.730	0.284	1.855	0.244	1.911	2.412	2.485	3.377	3.479
EL BATAN	97.2372	137.433	6.607	3.130	642.00	908.00	130.730	0.284	1.357	0.244	1.817	1.764	2.362	4.396	5.701
EL BATAN	192.015	238.813	3.482	3.120	669.00	832.00	130.730	0.284	1.414	0.244	1.665	1.838	2.165	2.573	3.031
EL BATAN	208.960	270.534	2.939	3.120	614.00	795.00	130.730	0.284	1.298	0.244	1.591	1.687	2.068	3.919	4.801
EL BATAN	96.4824	120.781	6.526	3.230	630.00	788.00	130.730	0.284	1.331	0.244	1.577	1.731	2.050	1.719	1.614
SUCRE	166.243	208.946	3.696	3.120	615.00	772.00	130.730	0.284	1.300	0.244	1.545	1.690	2.009	2.146	2.043
EL BATAN	101.814	118.422	6.113	3.140	622.00	724.00	130.730	0.284	1.314	0.244	1.449	1.709	1.884	2.365	2.812
EL BATAN	122.385	167.152	4.246	3.120	520.00	710.00	130.730	0.284	1.099	0.244	1.421	1.429	1.847	0.612	0.678
EL BATAN	156.874	164.006	4.275	3.120	671.00	701.00	130.730	0.284	1.418	0.244	1.403	1.843	1.824	2.392	2.357
EL BATAN	115.559	141.328	4.800	3.120	555.00	678.00	130.730	0.284	1.173	0.244	1.357	1.525	1.764	0.335	0.364
EL BATAN	280.154	327.059	2.036	3.120	570.00	666.00	130.730	0.284	1.205	0.244	1.333	1.566	1.733	3.554	3.960
SUCRE	160.223	166.582	3.885	3.120	622.00	647.00	130.730	0.284	1.314	0.244	1.295	1.709	1.683	4.042	5.005
EL BATAN	97.4862	105.063	6.003	3.120	585.00	631.00	130.730	0.284	1.236	0.244	1.263	1.607	1.642	2.581	2.553

EL BATAN	216.085	245.188	2.557	3.120	552.00	627.00	130.730	0.284	1.167	0.244	1.255	1.516	1.631	3.785	4.772
EL BATAN	85.5589	92.7598	6.182	3.120	529.00	573.00	130.730	0.284	1.118	0.244	1.147	1.453	1.491	1.992	1.945
EL BATAN	169.344	170.115	3.296	3.120	558.00	561.00	130.730	0.284	1.179	0.244	1.123	1.533	1.460	1.192	1.246
EL BATAN	62.7532	71.9689	7.735	3.120	485.00	557.00	130.730	0.284	1.025	0.244	1.115	1.332	1.449	1.396	1.461
EL BATAN	195.737	235.437	2.329	3.120	456.00	548.00	130.730	0.284	0.964	0.244	1.097	1.253	1.426	1.431	1.534
EL BATAN	152.768	157.648	3.388	3.120	518.00	534.00	130.730	0.284	1.095	0.244	1.069	1.423	1.389	1.354	1.381
EL BATAN	72.9065	72.6359	6.722	3.120	490.00	488.00	130.730	0.284	1.035	0.244	0.977	1.346	1.270	3.469	3.861
EL BATAN	108.439	109.235	4.437	3.120	481.00	485.00	130.730	0.284	1.016	0.244	0.971	1.321	1.262	0.446	0.441
EL BATAN	281.606	331.756	1.437	3.120	405.00	477.00	130.730	0.284	0.856	0.244	0.955	1.113	1.241	0.073	0.095
EL BATAN	128.445	175.643	2.639	3.400	339.00	463.00	130.730	0.284	0.716	0.244	0.927	0.931	1.205	1.304	1.687
EL BATAN	175.980	174.299	2.542	3.120	447.00	443.00	130.730	0.284	0.945	0.244	0.887	1.228	1.153	0.150	0.219
EL BATAN	147.700	167.140	2.519	3.120	372.00	421.00	130.730	0.284	0.786	0.244	0.843	1.022	1.095	1.473	1.464
EL BATAN	50.6454	50.0106	8.238	3.120	417.00	412.00	130.730	0.284	0.881	0.244	0.825	1.146	1.072	2.000	2.586
EL BATAN	123.048	129.374	3.109	3.120	383.00	402.00	130.730	0.284	0.809	0.244	0.805	1.052	1.046	2.135	2.470
EL BATAN	148.397	163.799	2.445	3.120	363.00	401.00	130.730	0.284	0.767	0.244	0.803	0.997	1.043	0.031	0.033
EL BATAN	37.9960	38.2245	10.46	3.120	398.00	400.00	130.730	0.284	0.841	0.244	0.801	1.093	1.041	0.000	0.000
EL BATAN	144.725	155.480	2.435	3.120	352.00	379.00	130.730	0.284	0.744	0.244	0.759	0.967	0.986	1.338	1.297
EL BATAN	69.6676	66.5427	5.391	3.120	376.00	359.00	130.730	0.284	0.795	0.244	0.719	1.033	0.934	1.850	1.767
EL BATAN	108.775	111.151	3.201	3.120	348.00	356.00	130.730	0.284	0.735	0.244	0.713	0.956	0.926	0.000	0.000
EL BATAN	149.537	164.903	2.075	3.120	310.00	342.00	130.730	0.284	0.655	0.244	0.684	0.852	0.890	2.392	2.637
EL BATAN	87.2899	78.0667	4.378	3.120	382.00	342.00	130.730	0.284	0.807	0.244	0.684	1.049	0.890	2.250	2.298
EL BATAN	399.586	403.180	0.758	3.120	303.00	306.00	130.730	0.284	0.640	0.244	0.612	0.832	0.796	2.469	3.307
EL BATAN	17.6704	14.5699	16.62	3.120	294.00	242.00	130.730	0.284	0.621	0.244	0.484	0.808	0.630	2.423	2.870
EL BATAN	74.7302	70.0979	2.744	3.120	205.00	192.00	130.730	0.284	0.433	0.244	0.384	0.563	0.500	4.404	5.435
EL BATAN	61.0491	50.8897	3.749	3.120	229.00	191.00	130.730	0.284	0.484	0.244	0.382	0.629	0.497	0.058	0.058
EL BATAN	163.346	191.783	0.971	3.120	159.00	186.00	130.730	0.284	0.336	0.244	0.372	0.437	0.484	1.469	1.246
EL BATAN	195.303	217.542	0.796	3.120	155.00	173.00	130.730	0.284	0.328	0.244	0.346	0.426	0.450	2.035	2.087
EL BATAN	14.2168	10.6302	13.11	3.120	186.00	139.00	130.730	0.284	0.393	0.244	0.278	0.511	0.362	0.788	0.699
EL BATAN	131.052	137.053	0.885	3.120	116.00	121.00	130.730	0.284	0.245	0.244	0.242	0.319	0.315	1.885	1.778

SUCRE	159.336	183.629	0.547	3.120	87.000	100.00	130.730	0.284	0.184	0.244	0.200	0.239	0.260	3.761	4.233
EL BATAN	260.119	297.479	0.296	3.120	77.000	88.000	130.730	0.284	0.163	0.244	0.176	0.212	0.229	0.000	0.000
EL BATAN	125.890	194.421	0.307	3.550	39.000	60.000	130.730	0.284	0.082	0.244	0.120	0.107	0.156	1.446	1.308
EL BATAN	129.944	178.269	0.146	3.550	19.000	26.000	130.730	0.284	0.040	0.244	0.052	0.052	0.068	0.008	0.011
YANUNCAY	32.3298	26.1430	0.726	3.120	23.000	19.000	130.730	0.284	0.049	0.244	0.038	0.063	0.049	0.004	0.007
YANUNCAY	87.6857	93.7733	0.176	3.120	15.000	16.000	130.730	0.284	0.032	0.244	0.032	0.041	0.042	1.865	2.029
SAN SEBASTIAN	31.7105	29.0298	0.515	3.120	16.000	15.000	130.730	0.284	0.034	0.244	0.030	0.044	0.039	0.881	0.696
YANUNCAY	49.2331	53.8752	0.276	3.120	14.000	15.000	130.730	0.284	0.030	0.244	0.030	0.038	0.039	0.000	0.004
EL BATAN	36.9874	42.7461	0.236	3.120	9.0000	10.000	130.730	0.284	0.019	0.244	0.020	0.025	0.026	1.604	1.501
SUCRE	115.546	125.400	0.071	3.120	8.0000	9.0000	130.730	0.284	0.017	0.244	0.018	0.022	0.023	0.054	0.055
EL BATAN	47.2602	44.3767	0.084	3.120	4.0000	4.0000	130.730	0.284	0.008	0.244	0.008	0.011	0.010	0.015	0.015
YANUNCAY	68.9500	125.477	0.023	3.120	2.0000	3.0000	130.730	0.284	0.004	0.244	0.006	0.005	0.008	1.531	1.457
YANUNCAY	67.7640	72.8303	0.022	3.120	1.0000	2.0000	130.730	0.284	0.002	0.244	0.004	0.003	0.005	0.035	0.036
SAN SEBASTIAN	25.7143	22.9061	0.042	3.120	1.0000	1.0000	130.730	0.284	0.002	0.244	0.002	0.003	0.003	0.088	0.069
YANUNCAY	52.0674	53.9598	0.009	3.120	0.0000	1.0000	130.730	0.284	0.000	0.244	0.002	0.000	0.003	0.062	0.055
SUCRE	70.5393	79.1376	0.000	3.120	0.0000	0.0000	130.730	0.284	0.000	0.244	0.000	0.000	0.000	0.004	0.004
SUCRE	104.568	119.725	0.001	3.120	0.0000	0.0000	130.730	0.284	0.000	0.244	0.000	0.000	0.000	1.131	0.882
SUCRE	113.972	112.213	0.001	3.120	0.0000	0.0000	130.730	0.284	0.000	0.244	0.000	0.000	0.000	0.715	0.506

Anexo 6. Datos de densidad, población y caudal para el subsector sur.

PARROQUIA	D_2024	D_2034	AREA_HA	PROM_PERS_FMLIA_INEC	POBLACION 2024	POBLACION 2034	DOTACION_NETA	Perdidas 2024	Qmd 2024	Perdidas 2034	Qmd 2034	QMD_2024	QMD_2034	QMH 2024	QMH 2034
SUCRE	70.876	84.216	0.072	3.120	5.0000	6.0000	120.18	0.288	0.010	0.244	0.011	0.013	0.014	0.018	0.020
EL BATAN	62.753	71.969	0.260	3.120	16.000	19.000	120.18	0.288	0.031	0.244	0.035	0.041	0.045	0.057	0.064
EL BATAN	96.006	125.15	0.101	3.120	10.000	13.000	120.18	0.288	0.020	0.244	0.024	0.025	0.031	0.036	0.044
EL BATAN	96.482	120.78	0.004	3.230	0.0000	0.0000	120.18	0.288	0.000	0.244	0.000	0.000	0.000	0.000	0.000
YANUNCAY	68.950	125.48	0.838	3.120	58.000	105.00	120.18	0.288	0.113	0.244	0.193	0.147	0.251	0.206	0.352
YANUNCAY	86.382	97.243	1.805	3.120	156.00	176.00	120.18	0.288	0.305	0.244	0.324	0.396	0.421	0.555	0.589
YANUNCAY	167.83	225.94	3.611	3.120	606.00	816.00	120.18	0.288	1.184	0.244	1.501	1.539	1.952	2.155	2.732
YANUNCAY	32.348	41.716	0.567	3.210	18.000	24.000	120.18	0.288	0.035	0.244	0.044	0.046	0.057	0.064	0.080
YANUNCAY	153.29	183.41	0.364	3.120	56.000	67.000	120.18	0.288	0.109	0.244	0.123	0.142	0.160	0.199	0.224
YANUNCAY	86.817	96.324	4.623	3.120	401.00	445.00	120.18	0.288	0.783	0.244	0.819	1.018	1.064	1.426	1.490
YANUNCAY	105.51	128.96	6.753	3.120	712.00	871.00	120.18	0.288	1.391	0.244	1.603	1.808	2.083	2.532	2.917
YANUNCAY	245.22	285.59	3.196	3.120	784.00	913.00	120.18	0.288	1.532	0.244	1.680	1.991	2.184	2.788	3.057
YANUNCAY	44.682	39.148	5.484	3.120	245.00	215.00	120.18	0.288	0.479	0.244	0.396	0.622	0.514	0.871	0.720
YANUNCAY	93.960	110.75	6.934	3.120	651.00	768.00	120.18	0.288	1.272	0.244	1.413	1.653	1.837	2.315	2.572
YANUNCAY	67.764	72.830	6.264	3.120	424.00	456.00	120.18	0.288	0.828	0.244	0.839	1.077	1.091	1.508	1.527
YANUNCAY	135.13	146.55	7.215	3.120	975.00	1057.0	120.18	0.288	1.905	0.244	1.945	2.476	2.528	3.467	3.540
YANUNCAY	49.233	53.875	10.21	3.120	503.00	550.00	120.18	0.288	0.983	0.244	1.012	1.277	1.316	1.788	1.842
YANUNCAY	87.686	93.773	8.136	3.120	713.00	763.00	120.18	0.288	1.393	0.244	1.404	1.811	1.825	2.535	2.555
YANUNCAY	116.32	132.35	6.492	3.120	755.00	859.00	120.18	0.288	1.475	0.244	1.580	1.917	2.055	2.684	2.876
YANUNCAY	193.52	228.88	5.303	3.120	1026.0	1214.0	120.18	0.288	2.004	0.244	2.234	2.606	2.904	3.648	4.065
YANUNCAY	108.08	125.51	8.002	3.120	865.00	1004.0	120.18	0.288	1.690	0.244	1.847	2.197	2.401	3.076	3.362
YANUNCAY	115.84	139.53	8.139	3.120	943.00	1136.0	120.18	0.288	1.842	0.244	2.090	2.395	2.717	3.353	3.804
YANUNCAY	32.330	26.143	3.675	3.120	119.00	96.000	120.18	0.288	0.232	0.244	0.177	0.302	0.230	0.423	0.321
YANUNCAY	132.05	137.54	3.331	3.120	440.00	458.00	120.18	0.288	0.860	0.244	0.843	1.117	1.095	1.564	1.534
YANUNCAY	169.02	225.16	3.669	3.120	620.00	826.00	120.18	0.288	1.211	0.244	1.520	1.575	1.976	2.204	2.766

YANUNCAY	143.18	184.29	2.942	3.120	421.00	542.00	120.18	0.288	0.822	0.244	0.997	1.069	1.296	1.497	1.815
YANUNCAY	142.83	174.57	0.242	3.120	35.000	42.000	120.18	0.288	0.068	0.244	0.077	0.089	0.100	0.124	0.141
YANUNCAY	8.8041	7.5064	3.467	3.130	31.000	26.000	120.18	0.288	0.061	0.244	0.048	0.079	0.062	0.110	0.087
YANUNCAY	84.829	92.930	0.001	3.120	0.0000	0.0000	120.18	0.288	0.000	0.244	0.000	0.000	0.000	0.000	0.000
YANUNCAY	61.858	60.170	0.034	3.120	2.0000	2.0000	120.18	0.288	0.004	0.244	0.004	0.005	0.005	0.007	0.007
YANUNCAY	84.045	98.582	7.203	3.120	605.00	710.00	120.18	0.288	1.182	0.244	1.306	1.537	1.698	2.151	2.378
YANUNCAY	39.738	55.992	15.54	3.120	618.00	870.00	120.18	0.288	1.207	0.244	1.601	1.570	2.081	2.197	2.913
YANUNCAY	170.59	205.49	4.356	3.120	743.00	895.00	120.18	0.288	1.452	0.244	1.647	1.887	2.141	2.642	2.997
YANUNCAY	184.58	258.67	5.003	3.120	923.00	1294.0	120.18	0.288	1.803	0.244	2.381	2.344	3.095	3.282	4.333
YANUNCAY	112.79	120.55	3.543	3.120	400.00	427.00	120.18	0.288	0.781	0.244	0.786	1.016	1.021	1.422	1.430
YANUNCAY	100.52	111.55	7.652	3.120	769.00	854.00	120.18	0.288	1.502	0.244	1.571	1.953	2.043	2.734	2.860
YANUNCAY	165.43	187.89	2.387	3.120	395.00	449.00	120.18	0.288	0.772	0.244	0.826	1.003	1.074	1.404	1.504
YANUNCAY	151.80	172.76	1.085	3.120	165.00	187.00	120.18	0.288	0.322	0.244	0.344	0.419	0.447	0.587	0.626
YANUNCAY	152.71	174.16	2.251	3.120	344.00	392.00	120.18	0.288	0.672	0.244	0.721	0.874	0.938	1.223	1.313
YANUNCAY	148.74	173.97	0.350	3.120	52.000	61.000	120.18	0.288	0.102	0.244	0.112	0.132	0.146	0.185	0.204
YANUNCAY	126.50	152.19	7.663	3.120	969.00	1166.0	120.18	0.288	1.893	0.244	2.145	2.461	2.789	3.445	3.905
YANUNCAY	146.11	189.49	7.145	3.120	1044.0	1354.0	120.18	0.288	2.040	0.244	2.491	2.651	3.239	3.712	4.534
YANUNCAY	170.13	232.32	6.663	3.120	1134.0	1548.0	120.18	0.288	2.215	0.244	2.848	2.880	3.703	4.032	5.184
YANUNCAY	72.365	96.118	16.48	3.120	1192.0	1584.0	120.18	0.288	2.329	0.244	2.914	3.027	3.789	4.238	5.304
YANUNCAY	105.00	136.18	10.62	3.120	1115.0	1446.0	120.18	0.288	2.178	0.244	2.661	2.832	3.459	3.964	4.842
YANUNCAY	228.24	268.98	2.381	3.120	543.00	640.00	120.18	0.288	1.061	0.244	1.178	1.379	1.531	1.931	2.143
YANUNCAY	42.202	45.145	12.46	3.130	526.00	563.00	120.18	0.288	1.028	0.244	1.036	1.336	1.347	1.870	1.885
YANUNCAY	349.87	413.34	3.438	3.120	1203.0	1421.0	120.18	0.288	2.350	0.244	2.615	3.055	3.399	4.277	4.758
YANUNCAY	152.74	199.06	7.441	3.120	1137.0	1481.0	120.18	0.288	2.221	0.244	2.725	2.888	3.542	4.043	4.959
YANUNCAY	42.263	51.728	21.61	3.170	913.00	1118.0	120.18	0.288	1.784	0.244	2.057	2.319	2.674	3.246	3.744
YANUNCAY	39.662	35.051	7.632	3.120	303.00	268.00	120.18	0.288	0.592	0.244	0.493	0.770	0.641	1.077	0.897
YANUNCAY	221.07	230.27	1.735	3.120	384.00	399.00	120.18	0.288	0.750	0.244	0.734	0.975	0.954	1.365	1.336
YANUNCAY	258.81	280.07	1.326	3.120	343.00	371.00	120.18	0.288	0.670	0.244	0.683	0.871	0.887	1.220	1.242
YANUNCAY	32.809	27.265	9.461	3.180	310.00	258.00	120.18	0.288	0.606	0.244	0.475	0.787	0.617	1.102	0.864

YANUNCAY	101.67	114.29	2.548	3.120	259.00	291.00	120.18	0.288	0.506	0.244	0.535	0.658	0.696	0.921	0.974
YANUNCAY	156.22	193.03	5.974	3.120	933.00	1153.0	120.18	0.288	1.823	0.244	2.121	2.370	2.758	3.317	3.861
YANUNCAY	164.93	200.15	4.517	3.120	745.00	904.00	120.18	0.288	1.455	0.244	1.663	1.892	2.162	2.649	3.027
YANUNCAY	168.12	209.22	3.562	3.120	599.00	745.00	120.18	0.288	1.170	0.244	1.371	1.521	1.782	2.130	2.495
YANUNCAY	136.37	183.24	8.696	3.120	1186.0	1593.0	120.18	0.288	2.317	0.244	2.931	3.012	3.810	4.217	5.334
YANUNCAY	71.929	83.242	8.596	3.120	618.00	716.00	120.18	0.288	1.207	0.244	1.317	1.570	1.713	2.197	2.398
YANUNCAY	98.994	106.57	3.610	3.120	357.00	385.00	120.18	0.288	0.697	0.244	0.708	0.907	0.921	1.269	1.289
YANUNCAY	136.62	136.74	3.439	3.120	470.00	470.00	120.18	0.288	0.918	0.244	0.865	1.194	1.124	1.671	1.574
YANUNCAY	94.672	111.70	3.343	3.120	317.00	373.00	120.18	0.288	0.619	0.244	0.686	0.805	0.892	1.127	1.249
YANUNCAY	118.86	146.04	3.903	3.120	464.00	570.00	120.18	0.288	0.906	0.244	1.049	1.178	1.363	1.650	1.909
YANUNCAY	165.39	187.35	2.640	3.120	437.00	495.00	120.18	0.288	0.854	0.244	0.911	1.110	1.184	1.554	1.658
YANUNCAY	121.29	128.11	4.133	3.120	501.00	529.00	120.18	0.288	0.979	0.244	0.973	1.272	1.265	1.781	1.771
YANUNCAY	75.045	85.653	5.821	3.120	437.00	499.00	120.18	0.288	0.854	0.244	0.918	1.110	1.194	1.554	1.671
YANUNCAY	96.858	119.38	4.764	3.120	461.00	569.00	120.18	0.288	0.901	0.244	1.047	1.171	1.361	1.639	1.905
YANUNCAY	90.759	130.20	8.088	3.120	734.00	1053.0	120.18	0.288	1.434	0.244	1.937	1.864	2.519	2.610	3.526
YANUNCAY	79.258	114.40	0.812	3.120	64.000	93.000	120.18	0.288	0.125	0.244	0.171	0.163	0.222	0.228	0.311
YANUNCAY	96.240	144.41	5.572	3.120	536.00	805.00	120.18	0.288	1.047	0.244	1.481	1.361	1.925	1.906	2.696
YANUNCAY	79.998	112.96	6.398	3.120	512.00	723.00	120.18	0.288	1.000	0.244	1.330	1.300	1.729	1.820	2.421
YANUNCAY	97.197	140.97	0.333	3.120	32.000	47.000	120.18	0.288	0.063	0.244	0.086	0.081	0.112	0.114	0.157
YANUNCAY	115.02	123.00	0.058	3.120	7.0000	7.0000	120.18	0.288	0.014	0.244	0.013	0.018	0.017	0.025	0.023
YANUNCAY	149.47	233.95	0.035	3.120	5.0000	8.0000	120.18	0.288	0.010	0.244	0.015	0.013	0.019	0.018	0.027
YANUNCAY	22.339	20.819	0.601	3.120	13.000	13.000	120.18	0.288	0.025	0.244	0.024	0.033	0.031	0.046	0.044
YANUNCAY	41.906	42.581	0.133	3.120	6.0000	6.0000	120.18	0.288	0.012	0.244	0.011	0.015	0.014	0.021	0.020
TURI	4.3305	2.5499	14.83	3.560	64.000	38.000	120.18	0.288	0.125	0.244	0.070	0.163	0.091	0.228	0.127
TURI	16.975	14.266	1.686	3.560	29.000	24.000	120.18	0.288	0.057	0.244	0.044	0.074	0.057	0.103	0.080
TURI	57.285	67.435	0.142	3.560	8.0000	10.000	120.18	0.288	0.016	0.244	0.018	0.020	0.024	0.028	0.033
TURI	50.902	69.239	0.416	3.560	21.000	29.000	120.18	0.288	0.041	0.244	0.053	0.053	0.069	0.075	0.097
TURI	36.462	40.152	6.971	3.540	254.00	280.00	120.18	0.288	0.496	0.244	0.515	0.645	0.670	0.903	0.938

Anexo 7. Datos de los nodos año 2024.

Nudos	Cotas	Caudal	Presión	Nudos	Cotas	Caudal	Presión
943	2,575.75	0.2852	55.60	3083	2,559.61	0.0469	70.00
944	2,575.79	0.1669	55.60	3085	2,557.07	0.1039	71.30
946	2,552.37	0.4264	71.00	3086	2,557.75	0.1424	70.60
947	2,552.50	0.3106	70.90	3090	2,560.40	0.1405	69.50
949	2,559.81	0.2528	73.00	3092	2,568.38	0.1546	64.50
950	2,559.81	0.3662	73.00	3094	2,592.53	0.1424	35.30
952	2,566.82	0.0668	66.00	3095	2,589.55	0.1424	38.30
953	2,566.82	0.0537	66.00	3098	2,558.02	0.0849	74.70
955	2,581.58	0.0145	48.30	3100	2,562.51	0.0665	66.60
956	2,581.58	0.0697	48.30	3101	2,562.86	0.0501	66.30
958	2,558.19	0.0740	72.90	3103	2,582.23	0.1671	48.30
959	2,558.18	0.0705	72.90	3105	2,563.24	0.2015	66.90
961	2,594.53	0.2167	39.90	3107	2,563.11	0.0838	67.30
962	2,594.49	0.1100	39.90	3109	2,573.19	0.1191	57.50
964	2,580.59	0.0116	47.70	3110	2,574.21	0.0455	56.50
965	2,580.60	0.0719	47.70	3112	2,571.48	0.1424	60.90
967	2,579.86	0.0742	50.70	3114	2,558.11	0.0174	72.00
968	2,579.85	0.1039	50.70	3116	2,562.29	0.0476	70.50
970	2,589.41	0.1900	40.70	3117	2,561.78	0.1251	71.00
971	2,589.42	0.1398	40.70	3119	2,587.83	0.1461	46.50
973	2,572.07	0.1447	58.30	3120	2,586.16	0.1677	48.20
974	2,572.08	0.2117	58.30	3122	2,581.17	0.0918	50.20
976	2,592.36	0.1422	36.40	3125	2,594.99	0.2608	37.90
977	2,592.37	0.0520	36.40	3127	2,568.83	0.1244	60.10
979	2,635.00	0.1424	0.90	3128	2,570.03	0.1130	58.90
980	2,635.00	0.1424	0.90	3130	2,579.90	0.0378	48.40
982	2,635.00	0.2049	0.90	3132	2,583.40	0.2106	46.30
987	2,601.91	0.1587	33.90	3134	2,569.31	0.1964	61.50
988	2,602.10	0.1424	33.70	3135	2,569.21	0.1874	61.60
990	2,565.50	0.0342	65.40	3137	2,562.09	0.0920	68.60
991	2,565.50	0.1424	65.30	3138	2,558.96	0.0146	71.70
993	2,572.99	0.1424	61.90	3140	2,562.23	0.1310	70.80
994	2,572.99	0.1424	62.00	3141	2,562.16	0.2404	70.90
999	2,569.42	0.0867	59.40	3145	2,582.91	0.0321	47.20
1000	2,569.44	0.0515	59.30	3146	2,583.36	0.0176	46.70
1002	2,599.91	0.0915	30.20	3148	2,567.74	0.0261	62.10
1003	2,599.98	0.0074	30.20	3151	2,559.41	0.2333	70.80
1005	2,589.20	0.0508	41.80	3153	2,558.10	0.0940	71.40
1006	2,589.24	0.0844	41.70	3154	2,561.23	0.1990	68.30
1008	2,605.74	0.0099	24.50	3157	2,580.24	0.0544	48.90
1009	2,605.79	0.0381	24.50	3158	2,580.41	0.2299	48.70
1011	2,583.50	0.0303	46.20	3160	2,574.66	0.1424	60.20
1012	2,583.49	0.0870	46.20	3163	2,558.90	0.0170	71.80
1014	2,576.25	0.2140	54.00	3165	2,562.29	0.0853	70.50

1015	2,576.25	0.1769	54.00	3166	2,562.65	0.1989	70.10
1017	2,575.11	0.1424	55.50	3168	2,553.93	0.0786	75.90
1018	2,575.10	0.0065	55.50	3169	2,550.83	0.1423	79.00
1020	2,564.89	0.0862	66.40	3172	2,579.80	0.0105	52.00
1021	2,564.89	0.0605	66.40	3173	2,579.90	0.0200	51.70
1023	2,581.25	0.1047	49.40	3176	2,569.75	0.1769	61.10
1024	2,581.24	0.1301	49.40	3179	2,558.25	0.0796	70.90
1026	2,556.99	0.1038	72.70	3180	2,556.11	0.1148	73.00
1027	2,556.94	0.0347	72.80	3182	2,571.23	0.1892	59.50
1029	2,552.80	0.0580	76.90	3183	2,567.59	0.1131	63.10
1030	2,552.80	0.1424	76.90	3185	2,590.51	0.1424	38.90
1032	2,582.00	0.1665	48.50	3187	2,562.23	0.0559	67.50
1033	2,582.00	0.0645	48.50	3189	2,574.00	0.0610	56.80
1035	2,561.61	0.0641	69.70	3191	2,573.78	0.1764	60.50
1036	2,561.59	0.0621	69.80	3193	2,562.08	0.1010	67.20
1038	2,594.41	0.1782	36.20	3196	2,572.53	0.0184	59.30
1039	2,594.41	0.3824	36.20	3197	2,573.44	0.0582	58.40
1041	2,581.10	0.2557	48.30	3199	2,567.74	0.2342	64.70
1042	2,581.11	0.0585	48.30	3202	2,572.36	0.1172	56.00
1044	2,560.94	0.1092	71.70	3206	2,594.33	0.0674	35.00
1045	2,560.94	0.1361	71.70	3208	2,580.48	0.0222	49.70
1047	2,567.42	0.0140	64.60	3209	2,579.71	0.0001	50.50
1048	2,567.42	0.0228	64.60	3211	2,575.68	0.0457	55.20
1050	2,562.51	0.1424	70.50	3212	2,575.00	0.1424	55.90
1051	2,562.49	0.1424	70.50	3214	2,548.98	0.3049	80.40
1053	2,576.19	0.1073	54.70	3215	2,548.67	0.0889	80.70
1054	2,576.16	0.1369	54.60	3217	2,581.05	0.0939	48.80
1056	2,557.00	0.0882	75.30	3219	2,583.66	0.1377	44.80
1057	2,557.00	0.2542	75.30	3220	2,583.21	0.4932	45.20
1059	2,635.00	0.0055	0.90	3222	2,585.14	0.1424	44.70
1061	2,554.58	0.0419	74.80	3224	2,595.66	0.0560	37.70
1062	2,554.56	0.0537	74.80	3225	2,596.23	0.1011	37.20
1064	2,581.72	0.1275	48.10	3227	2,559.62	0.1325	71.20
1065	2,581.70	0.0018	48.10	3229	2,577.89	0.1167	53.40
1067	2,586.74	0.3333	44.60	3230	2,577.71	0.0890	53.60
1068	2,586.76	0.1820	44.60	3234	2,578.72	0.0028	51.50
1070	2,587.67	0.2695	40.90	3238	2,573.86	0.0145	54.40
1071	2,587.63	0.0323	40.90	3240	2,564.99	0.0231	63.60
1073	2,581.41	0.1124	50.00	3242	2,593.54	0.0647	39.90
1074	2,581.37	0.0243	50.10	3243	2,593.66	0.1093	39.80
1076	2,572.97	0.2323	62.00	3245	2,602.79	0.0689	28.20
1077	2,572.95	0.1424	62.00	3246	2,606.35	0.0132	24.60
1079	2,584.46	0.1424	44.10	3248	2,574.87	0.1112	56.80
1080	2,584.45	0.0696	44.10	3250	2,568.08	0.0647	62.70
1082	2,600.56	0.0218	30.40	3251	2,568.51	0.1044	62.30
1083	2,600.63	0.1424	30.40	3253	2,582.93	0.0610	47.50
1088	2,567.16	0.0025	63.70	3255	2,558.96	0.1578	73.80

1089	2,567.15	0.0344	63.70	3257	2,560.58	0.4056	70.20
1091	2,561.21	0.1436	68.60	3258	2,560.00	0.2993	70.60
1092	2,561.05	0.1030	68.80	3260	2,569.19	0.0855	60.60
1094	2,574.58	0.0711	53.70	3261	2,569.20	0.2291	60.60
1095	2,574.55	0.3856	53.70	3263	2,567.01	0.0404	65.00
1097	2,570.42	0.2309	64.20	3265	2,581.25	0.0503	48.20
1098	2,570.37	0.5495	64.20	3266	2,581.41	0.0381	48.00
1100	2,599.23	0.1424	29.30	3268	2,564.68	0.0959	64.90
1101	2,599.20	0.1424	29.40	3269	2,566.33	0.0224	63.20
1103	2,581.13	0.0536	48.50	3272	2,609.03	0.0644	21.70
1104	2,581.12	0.1229	48.50	3273	2,608.92	0.3668	21.80
1106	2,572.61	0.0546	57.00	3276	2,560.65	0.0203	69.50
1107	2,572.51	0.1100	57.10	3277	2,559.88	0.1033	70.20
1109	2,567.28	0.0269	63.60	3279	2,563.25	0.0192	66.80
1110	2,567.26	0.2575	63.60	3282	2,556.79	0.0127	68.70
1112	2,563.27	0.1074	69.60	3284	2,606.67	0.1690	23.40
1113	2,563.25	0.0309	69.60	3285	2,607.42	0.1304	22.70
1115	2,548.86	0.5579	80.70	3287	2,554.32	0.1119	75.50
1116	2,548.79	0.1049	80.80	3289	2,594.58	0.1190	40.20
1118	2,562.31	0.1424	67.40	3290	2,592.81	0.2744	42.00
1119	2,562.37	0.0947	67.40	3292	2,560.65	0.0924	69.00
1121	2,576.08	0.1461	54.10	3293	2,561.67	0.0234	67.90
1122	2,576.04	0.0831	54.20	3295	2,559.19	0.0335	73.30
1124	2,543.61	0.1424	66.50	3296	2,559.13	0.2014	73.40
1125	2,543.99	0.1424	66.10	3299	2,610.59	0.1424	10.60
1127	2,578.26	0.0894	50.30	3300	2,611.09	0.1424	9.80
1128	2,578.27	0.0479	50.30	3305	2,552.74	0.1630	76.70
1130	2,580.20	0.2246	54.80	3306	2,552.85	0.0126	76.60
1131	2,580.17	0.0614	54.80	3309	2,611.89	0.0587	22.10
1133	2,572.97	0.1229	58.00	3311	2,583.04	0.0834	47.00
1134	2,572.95	0.0207	58.00	3313	2,567.83	0.0084	65.00
1136	2,588.86	0.0881	41.20	3314	2,567.35	0.1664	65.50
1137	2,588.89	0.0373	41.20	3316	2,567.74	0.1740	65.30
1139	2,561.94	0.2355	71.10	3318	2,608.27	0.0703	26.40
1140	2,561.90	0.0863	71.10	3319	2,602.12	0.0386	32.50
1142	2,564.14	0.0053	65.70	3321	2,575.48	0.1424	52.10
1143	2,564.19	0.1424	65.70	3326	2,583.95	0.1710	46.50
1145	2,572.95	0.3576	57.30	3328	2,562.86	0.1721	69.90
1146	2,572.96	0.3000	57.30	3330	2,577.00	0.4519	52.80
1151	2,578.48	0.0334	50.00	3331	2,577.00	0.0117	52.80
1152	2,578.52	0.3399	49.90	3336	2,574.71	0.1008	54.90
1154	2,557.12	0.0841	74.10	3338	2,562.07	0.2660	70.70
1155	2,557.11	0.1424	74.10	3340	2,577.66	0.1185	54.80
1157	2,582.74	0.0076	46.70	3341	2,578.16	0.1049	54.30
1158	2,582.52	0.1218	46.90	3343	2,556.01	0.1878	76.70
1160	2,580.00	0.0032	51.30	3344	2,555.37	0.1304	77.30
1161	2,580.00	0.0154	51.30	3346	2,579.00	0.1844	53.10

1163	2,564.72	0.5445	69.00	3347	2,579.00	0.1028	53.30
1164	2,564.76	0.1665	68.90	3349	2,579.12	0.0534	50.70
1166	2,563.13	0.1628	66.70	3350	2,584.21	0.2797	45.70
1167	2,563.18	0.0536	66.70	3353	2,560.26	0.2622	69.50
1169	2,561.21	0.0314	71.80	3354	2,559.97	0.1128	69.70
1170	2,561.17	0.0272	71.90	3357	2,569.29	0.1165	62.80
1172	2,590.99	0.1424	38.80	3360	2,552.04	0.1012	71.40
1173	2,591.16	0.1424	38.70	3362	2,587.93	0.1371	42.30
1175	2,570.81	0.2350	61.50	3363	2,587.18	0.0468	43.10
1176	2,570.81	0.3220	61.50	3365	2,579.31	0.1251	55.60
1181	2,564.13	0.1424	68.70	3366	2,578.58	0.1410	56.40
1182	2,564.09	0.0234	68.70	3368	2,587.08	0.1984	41.30
1184	2,574.45	0.0466	55.20	3369	2,587.04	0.1612	41.30
1185	2,574.41	0.0111	55.20	3371	2,583.09	0.3191	45.80
1187	2,560.00	0.0112	68.10	3373	2,574.53	0.0476	53.80
1188	2,560.00	0.0631	68.10	3375	2,559.37	0.0198	71.30
1190	2,587.18	0.1424	42.60	3377	2,574.23	0.0785	56.20
1191	2,587.20	0.2444	42.60	3379	2,581.46	0.1285	49.70
1193	2,591.17	0.1424	38.70	3380	2,582.12	0.1005	49.10
1195	2,585.66	0.0156	44.00	3382	2,550.00	0.1424	79.10
1196	2,585.69	0.1424	44.00	3385	2,609.06	0.1424	6.30
1198	2,563.05	0.0125	70.00	3387	2,566.48	0.0525	63.10
1199	2,563.01	0.0258	70.00	3388	2,566.18	0.1078	63.40
1201	2,580.30	0.0831	49.50	3390	2,579.75	0.0966	50.70
1202	2,580.28	0.0820	49.60	3393	2,589.23	0.1280	46.50
1204	2,559.00	0.1424	74.00	3395	2,582.62	0.0296	48.40
1205	2,559.00	0.1483	74.00	3397	2,560.49	0.0743	68.60
1207	2,571.06	0.0112	56.50	3399	2,574.66	0.0353	55.60
1208	2,571.44	0.0691	56.10	3400	2,574.78	0.2795	55.40
1210	2,573.05	0.1424	61.90	3402	2,583.69	0.1376	44.70
1212	2,601.52	0.0107	31.30	3404	2,568.17	0.1292	63.10
1213	2,601.65	0.0833	31.10	3407	2,562.34	0.4983	70.40
1215	2,590.84	0.8092	39.00	3408	2,561.93	0.0832	70.80
1216	2,590.86	0.1424	39.00	3410	2,572.92	0.0178	58.90
1218	2,574.09	0.2036	54.30	3413	2,563.31	0.0488	64.50
1219	2,574.09	0.0190	54.30	3414	2,561.35	0.0344	66.60
1221	2,573.06	0.0092	61.90	3416	2,572.26	0.1355	56.10
1222	2,572.98	0.1424	61.90	3418	2,572.76	0.5145	57.50
1224	2,562.28	0.0121	68.70	3420	2,610.02	0.1424	10.80
1225	2,562.27	0.0074	68.80	3422	2,568.17	0.1424	64.90
1230	2,580.84	0.0720	50.20	3424	2,586.00	0.1353	46.80
1232	2,599.06	0.0309	29.60	3425	2,585.08	0.1447	47.70
1234	2,577.00	0.1424	54.20	3428	2,596.58	0.0362	32.60
1235	2,577.00	0.1424	54.20	3429	2,595.81	0.0318	33.40
1237	2,580.17	0.0303	54.80	3431	2,576.39	0.4963	54.10
1239	2,594.87	0.2384	35.00	3433	2,584.24	0.0963	44.40
1240	2,594.88	0.1424	34.90	3434	2,582.45	0.2606	46.20

1242	2,599.11	0.1424	30.00	3436	2,591.55	0.3551	37.80
1243	2,599.04	0.0198	30.00	3438	2,573.37	0.0617	55.20
1245	2,580.00	0.0603	49.40	3439	2,572.98	0.0702	55.60
1246	2,580.25	0.1424	49.10	3441	2,585.65	0.2368	44.10
1248	2,560.03	0.1424	69.90	3442	2,584.84	0.1500	45.00
1249	2,559.98	0.1487	70.00	3444	2,575.93	0.1179	55.00
1251	2,558.47	0.0508	72.80	3445	2,576.28	0.1217	54.60
1252	2,558.46	0.0178	72.80	3447	2,576.16	0.2080	52.20
1254	2,603.94	0.0971	30.70	3448	2,575.20	0.1374	53.10
1255	2,603.18	0.1266	31.40	3450	2,582.82	0.2577	48.30
1257	2,561.89	0.1417	70.90	3451	2,583.32	0.3575	48.00
1258	2,561.96	0.1440	70.90	3453	2,577.79	0.1136	57.20
1260	2,549.48	0.3067	80.30	3455	2,589.08	0.0443	39.40
1261	2,549.31	0.1424	80.40	3457	2,589.00	0.1956	40.30
1264	2,599.13	0.2393	29.40	3459	2,568.04	0.1158	64.80
1266	2,592.83	0.0080	35.80	3461	2,583.50	0.0315	45.10
1267	2,592.82	0.1424	35.80	3463	2,575.01	0.1629	56.40
1269	2,554.73	0.3698	55.40	3467	2,573.40	0.0138	59.50
1271	2,571.18	0.1424	61.10	3469	2,608.17	0.1979	22.70
1272	2,571.08	0.1424	61.20	3471	2,574.29	0.0710	56.70
1274	2,576.41	0.0709	56.50	3473	2,582.24	0.1982	47.10
1275	2,576.37	0.2261	56.50	3474	2,581.73	0.0456	47.60
1277	2,566.52	0.0839	63.20	3476	2,565.62	0.1410	65.10
1278	2,566.45	0.1330	63.20	3477	2,565.51	0.1262	65.30
1280	2,565.46	0.0223	65.40	3479	2,584.71	0.0769	45.20
1282	2,560.00	0.0499	69.80	3481	2,576.24	0.0276	55.40
1283	2,560.00	0.1274	69.80	3484	2,581.33	0.0261	48.20
1285	2,578.03	0.0866	50.50	3486	2,546.72	0.1424	63.40
1286	2,578.03	0.1424	50.50	3491	2,566.93	0.0803	62.70
1288	2,581.93	0.1064	53.00	3493	2,569.66	0.1745	61.30
1289	2,581.93	0.0806	53.00	3494	2,568.42	0.0601	62.60
1291	2,578.04	0.1424	50.50	3498	2,609.07	0.0128	22.00
1293	2,594.56	0.0011	38.40	3502	2,587.78	0.0782	47.10
1294	2,594.68	0.1424	38.30	3503	2,587.85	0.2460	47.00
1296	2,593.01	0.1424	38.40	3505	2,561.02	0.0596	71.40
1297	2,592.98	0.0262	38.50	3507	2,564.46	0.0763	66.20
1299	2,586.95	0.1424	44.40	3509	2,561.23	0.2548	71.60
1300	2,586.00	0.0150	45.40	3511	2,571.79	0.0016	59.20
1302	2,580.78	0.1424	54.20	3513	2,578.10	0.1645	53.60
1303	2,580.78	0.0108	54.20	3514	2,580.35	0.1014	51.30
1305	2,554.48	0.1424	55.70	3516	2,547.02	0.0363	82.50
1307	2,585.57	0.1424	44.10	3518	2,566.50	0.2467	66.00
1308	2,585.56	0.1424	44.10	3520	2,565.93	0.0912	64.70
1310	2,583.44	0.1424	47.10	3525	2,579.72	0.0993	51.40
1311	2,583.50	0.1424	47.00	3527	2,582.95	0.0634	47.00
1313	2,589.30	0.0423	42.70	3530	2,587.86	0.1264	43.90
1314	2,589.55	0.0704	42.50	3531	2,587.74	0.2917	44.00

1316	2,559.72	0.1056	73.10	3533	2,582.63	0.0523	48.50
1317	2,559.84	0.2122	73.00	3534	2,583.19	0.0185	48.00
1319	2,556.05	0.1424	76.70	3536	2,558.70	0.0424	72.40
1320	2,556.09	0.2969	76.70	3538	2,573.63	0.1855	55.00
1322	2,585.68	0.3037	44.60	3539	2,574.61	0.0887	54.00
1323	2,585.77	0.0629	44.50	3541	2,578.92	0.2032	49.50
1325	2,583.46	0.1400	51.70	3542	2,578.94	0.2285	49.50
1326	2,583.45	0.0732	51.70	3544	2,602.54	0.2378	30.50
1328	2,598.02	0.1424	30.40	3545	2,605.96	0.4137	27.10
1329	2,598.04	0.3114	30.40	3547	2,578.88	0.1382	53.90
1331	2,574.57	0.0786	56.30	3550	2,577.23	0.1211	51.10
1332	2,574.58	0.0437	56.30	3551	2,576.96	0.1124	51.40
1334	2,582.96	0.1383	47.60	3554	2,590.09	0.2606	44.20
1335	2,582.94	0.1424	47.60	3556	2,583.57	0.0262	46.90
1337	2,565.93	0.3624	64.70	3558	2,573.24	0.1021	56.40
1338	2,565.98	0.0557	64.70	3560	2,579.46	0.1735	53.30
1340	2,589.80	0.2096	38.80	3561	2,582.84	0.1695	50.00
1341	2,589.27	0.0466	39.30	3563	2,555.75	0.1004	74.40
1343	2,591.74	0.0643	39.20	3565	2,579.27	0.1482	52.40
1344	2,592.01	0.1424	38.90	3567	2,588.70	0.1473	43.20
1346	2,583.46	0.1424	46.20	3568	2,588.69	0.1509	43.20
1348	2,576.38	0.0879	54.10	3570	2,581.14	0.0839	50.20
1349	2,576.32	0.1489	54.10	3571	2,581.02	0.3634	50.40
1354	2,581.93	0.0288	47.80	3573	2,580.31	0.0843	50.80
1355	2,581.96	0.0307	47.70	3575	2,577.36	0.1831	54.20
1357	2,570.86	0.3108	59.40	3576	2,577.19	0.2871	54.20
1358	2,570.77	0.2046	59.40	3578	2,584.67	0.2837	46.10
1360	2,564.59	0.0330	66.70	3580	2,570.10	0.1298	62.10
1361	2,564.59	0.0051	66.70	3582	2,581.71	0.4903	46.90
1366	2,594.44	0.3519	38.60	3585	2,591.00	0.0928	37.60
1368	2,559.97	0.1424	70.60	3586	2,586.72	0.2168	41.80
1369	2,559.79	0.0234	70.80	3588	2,563.66	0.1045	69.40
1372	2,577.57	0.0502	50.90	3589	2,563.72	0.0845	69.30
1373	2,577.48	0.3003	51.00	3591	2,568.56	0.1424	64.30
1375	2,574.23	0.1424	60.60	3592	2,569.66	0.1424	63.20
1377	2,557.10	0.0328	75.40	3594	2,570.04	0.1118	60.80
1378	2,557.05	0.1424	75.50	3596	2,560.85	0.0878	69.00
1380	2,579.00	0.0558	51.20	3597	2,560.02	0.1510	69.80
1381	2,579.00	0.0885	51.20	3599	2,558.62	0.1853	71.80
1383	2,589.08	0.0348	39.50	3600	2,557.32	0.0430	73.10
1385	2,594.38	0.0050	35.90	3602	2,587.12	0.1853	44.60
1386	2,594.27	0.0323	36.00	3604	2,567.92	0.3543	64.20
1388	2,572.40	0.0905	56.00	3606	2,577.14	0.1501	53.30
1389	2,572.46	0.0301	55.90	3607	2,578.97	0.2442	51.50
1391	2,583.69	0.1020	47.70	3609	2,564.19	0.0135	46.00
1392	2,583.77	0.0583	47.60	3611	2,602.02	0.0046	29.00
1394	2,575.84	0.2416	55.10	3613	2,572.79	0.0947	61.80

1395	2,575.20	0.0427	55.70	3614	2,572.66	0.1590	62.00
1397	2,595.57	0.0438	35.40	3617	2,582.04	0.1179	49.10
1398	2,595.71	0.1424	35.30	3620	2,560.92	0.0814	71.50
1400	2,594.18	0.0658	38.40	3622	2,568.93	0.1096	61.90
1401	2,594.09	0.1115	38.50	3623	2,572.02	0.1631	58.90
1403	2,583.99	0.0600	45.90	3625	2,579.71	0.1659	51.20
1404	2,583.97	0.1297	45.90	3629	2,574.27	0.1485	54.00
1406	2,591.31	0.1526	38.70	3631	2,572.00	0.4521	58.30
1407	2,591.21	0.0005	38.80	3632	2,571.85	0.3620	58.40
1409	2,580.00	0.1424	52.10	3635	2,568.23	0.1107	62.40
1410	2,580.00	0.1424	52.10	3636	2,567.06	0.1088	63.60
1412	2,580.60	0.1424	47.70	3639	2,572.97	0.3177	45.10
1415	2,582.84	0.1297	49.10	3641	2,576.34	0.2762	52.30
1416	2,582.95	0.1424	49.00	3643	2,565.37	0.1725	68.70
1418	2,571.26	0.0820	58.60	3645	2,603.61	0.0541	31.90
1419	2,571.38	0.2425	58.40	3648	2,595.61	0.1287	39.10
1421	2,580.00	0.3675	49.40	3650	2,558.67	0.0556	72.50
1423	2,554.41	0.0848	55.80	3651	2,560.03	0.1424	71.10
1425	2,585.00	0.0819	50.10	3653	2,594.80	0.1545	37.30
1426	2,585.00	0.0227	50.10	3654	2,597.21	0.1600	34.90
1431	2,566.02	0.0607	64.60	3657	2,598.01	0.0056	33.30
1433	2,575.62	0.0411	54.80	3660	2,568.71	0.1867	62.10
1434	2,575.59	0.0403	54.80	3661	2,567.36	0.0714	63.40
1436	2,580.91	0.1424	48.90	3663	2,629.74	0.1424	6.10
1437	2,580.89	0.0324	48.90	3664	2,635.00	0.1424	1.00
1439	2,581.31	0.0909	50.10	3666	2,558.12	0.1779	74.20
1441	2,562.52	0.0315	68.60	3668	2,550.52	0.1197	78.60
1442	2,562.38	0.0278	68.70	3669	2,551.39	0.1561	77.70
1444	2,595.57	0.0716	35.80	3671	2,583.18	0.2823	45.30
1445	2,595.76	0.0289	35.60	3672	2,584.00	0.0647	44.40
1447	2,565.09	0.0972	64.10	3678	2,570.25	0.1675	60.40
1448	2,565.10	0.1334	64.10	3680	2,571.28	0.1384	59.00
1450	2,574.72	0.0222	56.00	3682	2,553.88	0.0555	71.60
1451	2,574.70	0.0258	56.00	3686	2,582.78	0.0354	48.40
1453	2,580.07	0.0555	51.50	3688	2,551.85	0.0096	78.40
1454	2,580.18	0.0464	51.40	3689	2,551.58	0.1424	78.60
1456	2,577.17	0.0415	51.20	3691	2,580.84	0.0902	50.30
1458	2,583.82	0.0446	45.80	3693	2,581.08	0.0591	53.90
1459	2,583.84	0.0845	45.80	3694	2,579.09	0.2213	55.90
1461	2,570.80	0.0911	60.00	3697	2,598.20	0.1872	36.30
1462	2,570.69	0.2644	60.10	3700	2,587.49	0.0505	43.50
1464	2,583.04	0.0886	48.90	3701	2,589.01	0.0473	41.90
1466	2,576.94	0.1424	51.60	3703	2,572.62	0.1035	57.20
1468	2,580.32	0.1107	50.50	3704	2,569.12	0.2271	60.70
1469	2,580.22	0.0947	50.70	3707	2,568.39	0.1586	64.80
1471	2,566.20	0.2719	68.60	3710	2,557.88	0.0830	74.90
1472	2,566.16	0.2896	68.20	3711	2,558.52	0.1857	74.30

1474	2,595.00	0.2059	34.80	3713	2,577.85	0.0020	54.40
1477	2,567.51	0.2252	64.50	3715	2,558.11	0.4570	74.70
1478	2,567.49	0.0116	64.50	3716	2,558.79	0.2101	74.00
1482	2,569.50	0.0212	61.70	3719	2,567.00	0.1743	63.40
1483	2,569.30	0.0074	61.90	3720	2,565.23	0.1686	65.20
1485	2,581.56	0.0637	49.10	3723	2,575.64	0.2632	53.00
1486	2,581.57	0.1326	49.10	3724	2,576.08	0.2340	52.50
1488	2,580.07	0.1215	50.10	3727	2,579.63	0.1601	51.30
1489	2,580.01	0.1424	50.10	3728	2,579.71	0.0383	51.30
1491	2,585.40	0.0726	44.90	3731	2,561.41	0.1707	68.50
1493	2,565.51	0.0177	64.50	3732	2,561.97	0.0011	68.00
1495	2,600.92	0.0876	34.50	3734	2,585.00	0.1072	42.80
1499	2,565.23	0.0393	67.50	3735	2,580.77	0.0281	47.00
1501	2,573.34	0.3987	61.50	3737	2,581.76	0.1424	38.50
1503	2,567.18	0.1153	63.60	3739	2,588.17	0.2032	42.80
1504	2,567.08	0.0941	63.70	3740	2,587.22	0.2354	43.70
1506	2,547.78	0.1424	62.40	3743	2,562.66	0.0671	67.60
1507	2,547.51	0.0127	62.60	3744	2,564.51	0.1322	65.80
1509	2,575.00	0.0609	55.70	3747	2,586.31	0.0402	45.10
1510	2,575.02	0.2882	55.60	3751	2,564.37	0.0923	68.20
1512	2,556.66	0.0438	73.10	3752	2,564.40	0.1087	68.10
1514	2,561.49	0.2346	69.80	3754	2,571.18	0.4483	61.50
1516	2,588.92	1.3260	40.60	3755	2,570.41	0.1424	62.30
1517	2,588.61	0.1424	40.90	3757	2,562.18	0.3337	66.90
1519	2,591.06	0.0528	43.80	3758	2,562.44	0.1218	66.70
1521	2,600.57	0.0470	34.20	3761	2,574.00	0.1235	56.80
1523	2,574.71	0.1825	56.00	3762	2,574.20	0.1252	56.60
1524	2,574.81	0.0836	55.90	3765	2,554.34	0.1446	75.80
1526	2,580.00	0.0732	51.20	3767	2,567.00	0.1639	62.40
1527	2,580.00	0.1424	51.20	3769	2,574.47	0.0901	60.40
1529	2,583.06	0.0927	46.90	3771	2,575.09	0.2027	55.40
1530	2,583.01	0.1365	46.90	3777	2,580.00	0.0880	49.20
1532	2,575.91	0.1208	52.50	3778	2,580.00	0.0208	49.20
1534	2,566.15	0.2030	66.70	3781	2,580.02	0.0020	49.80
1536	2,551.16	0.0621	81.80	3783	2,570.82	0.0422	59.40
1538	2,583.71	0.2336	47.60	3785	2,555.99	0.2647	76.70
1540	2,575.94	0.1424	56.60	3787	2,580.07	0.1571	51.00
1541	2,575.89	0.0938	56.60	3788	2,580.00	0.1212	51.10
1543	2,570.15	0.1117	64.20	3790	2,579.92	0.0185	51.40
1546	2,565.23	0.0683	67.80	3794	2,576.40	0.1288	53.80
1548	2,575.60	0.1424	57.10	3795	2,577.39	0.0337	52.80
1551	2,588.00	0.0658	40.60	3797	2,559.69	0.1857	70.00
1553	2,581.73	0.1181	46.80	3799	2,582.11	0.1489	49.30
1555	2,585.76	0.1721	47.00	3801	2,560.72	0.0606	69.40
1557	2,586.62	0.0800	45.10	3805	2,590.09	0.0407	40.00
1559	2,543.09	0.0392	67.00	3807	2,566.36	0.4807	66.70
1561	2,573.56	1.5167	53.70	3809	2,561.37	0.2145	71.00

1563	2,573.72	0.0278	55.10	3811	2,597.68	0.1186	33.30
1565	2,569.18	0.0190	61.70	3812	2,594.17	0.1142	36.80
1567	2,554.69	0.0781	75.50	3814	2,561.35	0.2848	71.40
1568	2,554.50	0.0293	75.60	3815	2,560.17	0.1334	72.60
1570	2,580.22	0.1084	51.00	3817	2,567.67	0.0498	62.00
1573	2,574.17	0.1424	57.30	3821	2,564.67	0.2433	66.20
1575	2,591.37	0.2332	38.40	3823	2,583.40	0.0814	47.50
1577	2,575.84	0.2292	59.10	3824	2,582.76	0.0649	48.20
1579	2,608.75	0.1424	26.00	3827	2,600.77	0.1909	28.30
1580	2,608.19	0.1104	26.50	3829	2,575.25	0.2859	53.10
1582	2,584.18	0.0752	45.50	3830	2,576.86	0.1836	51.50
1583	2,584.09	0.0201	45.60	3832	2,557.12	0.1384	72.60
1585	2,581.96	0.1424	47.70	3833	2,559.94	0.0494	69.80
1587	2,582.72	0.1272	45.80	3835	2,552.92	0.0758	77.30
1588	2,582.62	0.4257	45.90	3837	2,586.11	0.0714	44.80
1590	2,576.73	0.2426	54.00	3839	2,574.00	0.0745	56.80
1591	2,576.66	0.1915	54.10	3842	2,570.10	0.3348	59.60
1593	2,557.58	0.0423	75.10	3845	2,571.79	0.0995	57.90
1594	2,557.42	0.0011	75.20	3848	2,566.94	0.1606	63.30
1596	2,558.26	0.0606	74.40	3849	2,566.03	0.2265	64.10
1597	2,558.13	0.0641	74.60	3853	2,581.96	0.1149	49.40
1599	2,586.00	0.0214	42.40	3855	2,567.30	0.2213	63.10
1601	2,578.13	0.0313	50.30	3857	2,555.54	0.3114	75.70
1602	2,578.14	0.0375	50.30	3858	2,554.96	0.1294	76.30
1604	2,584.52	0.2184	44.00	3861	2,580.12	0.0400	50.60
1605	2,584.42	0.0680	44.10	3863	2,591.00	0.0764	37.50
1607	2,552.95	0.3059	77.30	3864	2,590.08	0.1201	38.30
1608	2,552.75	0.1262	77.40	3868	2,574.92	0.0146	60.00
1610	2,572.93	0.1505	56.70	3870	2,577.56	0.2365	53.30
1611	2,572.77	0.0376	56.90	3872	2,569.95	0.0542	62.20
1613	2,567.85	0.1116	65.20	3874	2,544.27	0.1735	65.90
1614	2,567.63	0.0693	65.40	3878	2,569.49	0.3599	59.10
1616	2,562.40	0.0292	68.50	3880	2,564.00	0.1086	66.30
1618	2,566.91	0.0797	66.00	3882	2,554.98	0.1378	74.50
1619	2,567.08	0.0765	65.80	3883	2,554.92	0.1951	74.60
1621	2,554.76	0.0075	75.40	3885	2,565.33	0.1989	64.90
1623	2,583.54	0.1230	47.50	3887	2,591.15	0.1477	37.80
1624	2,583.44	0.0559	47.60	3888	2,591.84	0.1463	37.10
1626	2,564.55	0.1424	64.70	3890	2,600.95	0.1523	31.40
1628	2,572.40	0.1715	62.50	3892	2,576.20	0.1675	52.20
1629	2,573.22	0.0644	61.70	3894	2,571.46	0.2912	60.90
1631	2,607.38	0.0421	23.70	3895	2,572.41	0.1733	59.90
1632	2,607.71	0.0366	23.40	3897	2,565.80	0.0561	68.20
1634	2,578.02	0.0730	50.60	3899	2,568.77	0.2040	63.70
1639	2,580.00	0.0605	52.10	3901	2,574.93	0.2209	56.00
1641	2,579.95	0.1260	52.10	3904	2,556.51	0.0223	69.00
1643	2,573.50	0.0211	58.10	3906	2,552.68	0.0328	57.40

1644	2,573.42	0.1424	58.20	3908	2,568.59	0.0578	64.20
1646	2,595.00	0.1424	34.80	3913	2,563.40	0.0423	69.40
1648	2,562.12	0.1524	67.60	3915	2,602.43	0.0690	30.50
1650	2,565.76	0.0280	64.90	3917	2,581.64	0.1350	48.00
1652	2,587.90	0.0278	40.70	3918	2,581.69	0.0790	48.00
1654	2,576.76	0.0137	54.30	3920	2,567.85	0.0487	61.00
1655	2,576.79	0.1975	54.30	3921	2,568.41	0.0940	60.40
1657	2,554.59	0.0500	55.60	3923	2,564.16	0.1014	65.00
1659	2,576.41	0.1790	54.50	3926	2,562.90	0.0902	67.10
1660	2,576.43	0.2229	54.50	3928	2,558.40	0.0573	72.00
1662	2,577.45	0.0475	56.90	3932	2,575.00	0.0381	55.50
1663	2,578.36	0.1424	55.90	3934	2,559.46	0.1042	70.50
1665	2,580.35	0.0344	49.50	3935	2,560.03	0.0980	69.90
1666	2,580.33	0.0127	49.50	3937	2,566.53	0.1190	64.00
1668	2,580.00	0.1424	51.50	3940	2,583.05	0.2479	52.60
1669	2,579.91	0.1424	51.50	3941	2,587.11	0.1424	48.60
1671	2,558.88	0.1424	70.20	3943	2,555.86	0.2674	73.70
1672	2,558.83	0.1134	70.20	3946	2,572.15	0.0621	58.50
1674	2,566.13	0.0631	64.40	3947	2,570.14	0.1424	60.50
1675	2,566.11	0.0870	64.40	3953	2,580.00	0.1613	48.50
1677	2,582.73	0.1717	47.80	3955	2,560.08	0.2728	70.30
1678	2,582.79	0.0051	47.70	3957	2,563.99	0.1492	66.20
1680	2,565.40	0.3142	67.30	3959	2,568.48	0.1424	64.40
1682	2,565.55	0.1340	65.30	3961	2,579.38	1.4568	50.80
1684	2,570.02	0.1693	59.80	3965	2,564.08	0.0872	68.40
1685	2,569.97	0.0722	59.80	3967	2,563.71	0.1173	69.10
1687	2,572.86	0.0204	57.40	3969	2,558.27	0.1348	74.40
1688	2,572.97	0.1424	57.30	3971	2,579.88	0.0358	51.00
1690	2,583.99	0.0040	45.70	3974	2,585.44	0.3146	46.20
1692	2,581.93	0.2394	47.80	3979	2,563.42	0.1882	69.30
1694	2,569.66	0.0272	65.20	3981	2,555.23	0.0530	77.40
1696	2,588.80	0.0398	42.60	3984	2,583.52	0.0112	47.00
1697	2,587.86	0.0283	43.50	3985	2,582.42	0.1394	48.10
1699	2,566.42	0.2077	64.50	3988	2,556.14	0.0734	73.40
1700	2,566.25	0.0345	64.60	3990	2,583.99	0.0370	45.70
1702	2,567.45	0.1424	64.50	3992	2,580.50	0.4649	48.60
1704	2,562.96	0.0094	68.20	3994	2,568.30	0.1023	62.60
1706	2,603.20	0.1415	26.80	3995	2,568.94	0.0588	61.90
1707	2,603.40	0.0122	26.60	4000	2,562.08	0.1610	70.70
1709	2,561.07	0.0818	72.00	4001	2,563.18	0.0521	69.60
1711	2,575.17	0.0186	55.50	4003	2,579.07	0.4659	49.80
1713	2,589.62	0.0397	46.10	4005	2,573.95	0.1069	56.80
1714	2,588.34	0.1230	47.40	4008	2,572.90	0.1177	55.50
1716	2,554.97	0.1424	75.20	4010	2,573.94	0.0121	58.90
1718	2,553.38	0.0409	75.70	4012	2,582.75	0.1424	48.70
1719	2,553.33	0.0937	75.80	4014	2,558.12	0.0957	74.20
1721	2,559.26	0.1006	70.50	4016	2,573.67	0.1900	55.90

1722	2,559.18	0.0314	70.60	4018	2,575.60	0.0679	56.00
1724	2,586.14	0.1424	43.40	4019	2,574.49	0.0507	57.10
1725	2,586.07	0.2224	43.40	4021	2,575.71	0.1072	54.50
1727	2,579.51	0.1424	51.90	4023	2,575.12	0.1059	59.70
1728	2,579.41	0.1424	52.00	4028	2,570.48	0.0632	58.40
1730	2,599.93	0.0028	30.20	4031	2,578.06	0.0642	52.70
1732	2,585.96	0.1189	42.60	4032	2,578.19	0.1130	52.60
1733	2,585.96	0.0186	42.60	4037	2,574.58	0.0970	57.10
1735	2,586.47	0.0802	42.10	4039	2,609.76	0.1424	11.30
1736	2,586.37	0.0807	42.10	4042	2,565.39	0.1582	67.60
1738	2,572.76	0.1424	56.90	4044	2,589.22	0.0219	40.90
1740	2,575.30	0.1043	53.10	4046	2,590.31	0.0746	39.70
1741	2,575.39	0.1583	53.00	4048	2,587.55	0.1920	44.00
1743	2,582.59	0.0479	47.30	4049	2,588.22	0.1424	43.30
1744	2,582.56	0.0169	47.30	4053	2,583.31	0.3213	47.20
1746	2,582.41	0.1513	47.30	4056	2,561.58	0.1134	68.60
1747	2,582.46	0.1424	47.20	4058	2,579.44	0.1651	51.00
1749	2,570.50	0.0438	59.30	4059	2,579.77	0.0644	50.70
1750	2,570.48	0.0173	59.30	4063	2,592.51	0.0868	37.60
1752	2,584.85	0.4185	50.40	4064	2,592.33	0.1424	37.80
1753	2,584.63	0.2655	50.60	4068	2,579.31	0.1731	51.50
1755	2,575.94	0.1813	54.30	4069	2,579.61	0.2328	51.30
1756	2,575.87	0.0063	54.40	4075	2,559.18	0.2451	73.50
1758	2,605.47	0.0215	24.80	4077	2,555.48	0.2097	74.70
1760	2,583.54	0.0811	47.00	4078	2,554.03	0.0453	76.10
1762	2,562.00	0.1328	68.40	4083	2,556.21	0.1232	73.30
1763	2,562.32	0.0293	68.10	4084	2,555.83	0.0876	73.80
1765	2,583.87	0.1424	46.60	4086	2,586.77	0.1680	43.70
1766	2,583.73	0.0700	46.80	4088	2,556.52	0.3742	72.80
1768	2,573.86	0.3366	54.50	4090	2,578.78	0.1347	49.70
1769	2,573.88	0.1424	54.50	4092	2,579.07	0.1260	52.60
1771	2,579.80	0.0122	51.70	4094	2,571.66	0.0229	56.70
1773	2,568.33	0.0721	64.10	4096	2,561.74	0.0341	71.00
1774	2,568.48	0.0501	64.00	4098	2,563.62	0.0980	69.20
1776	2,563.27	0.3666	66.70	4100	2,592.65	0.0020	36.10
1777	2,563.22	0.2255	66.70	4102	2,565.00	0.0556	68.00
1780	2,585.45	0.0058	44.20	4104	2,560.85	0.1583	69.50
1781	2,585.52	0.0616	44.10	4106	2,576.07	0.1091	56.70
1783	2,568.14	0.0066	60.40	4109	2,576.40	0.1321	54.60
1784	2,568.15	0.1304	60.40	4115	2,559.13	0.1185	71.30
1786	2,580.06	0.1424	52.00	4116	2,557.87	0.1900	72.40
1787	2,579.85	0.1424	52.30	4121	2,558.61	0.1424	74.40
1789	2,560.50	0.2127	68.60	4123	2,552.82	0.1036	77.40
1790	2,560.88	0.1632	68.20	4124	2,552.41	0.1481	77.80
1792	2,580.01	0.1424	52.10	4126	2,600.67	0.1424	30.70
1794	2,580.20	0.1424	50.30	4128	2,591.43	0.0153	39.50
1795	2,579.96	0.0158	50.50	4130	2,589.97	0.2269	39.40

1797	2,594.61	0.1424	35.50	4131	2,589.46	0.1336	39.90
1799	2,562.00	0.0375	70.60	4133	2,565.36	0.1043	67.60
1800	2,563.09	0.0065	69.50	4137	2,570.61	0.1036	59.80
1802	2,595.12	0.1039	36.20	4142	2,577.00	0.0895	54.40
1804	2,556.30	0.0097	73.90	4143	2,579.27	0.0361	52.10
1805	2,556.20	0.2281	74.00	4147	2,577.70	0.0727	50.70
1807	2,566.03	0.1524	69.20	4150	2,570.92	0.0204	57.50
1808	2,566.12	0.2502	69.10	4152	2,574.90	0.3058	56.30
1810	2,589.21	0.0365	39.30	4155	2,555.86	0.1070	73.60
1811	2,588.75	0.0007	39.80	4157	2,584.73	0.0602	46.10
1813	2,564.82	0.0258	63.70	4159	2,554.29	0.1424	63.50
1814	2,564.58	0.0251	64.00	4160	2,562.25	0.1126	55.60
1816	2,575.57	0.0333	55.60	4162	2,570.44	0.0228	58.30
1817	2,575.36	0.0193	55.80	4165	2,564.04	0.0344	68.70
1819	2,576.85	0.1424	55.40	4167	2,565.00	0.2657	65.90
1820	2,576.88	0.1099	55.30	4172	2,565.00	0.1193	65.80
1822	2,566.85	0.0906	63.80	4175	2,603.19	0.2451	30.10
1823	2,566.84	0.0137	63.80	4176	2,604.28	0.2771	29.10
1825	2,569.98	0.0269	60.30	4178	2,574.16	0.1494	57.50
1826	2,569.87	0.1176	60.40	4180	2,581.06	0.0319	49.40
1828	2,600.29	0.1326	34.40	4187	2,569.90	0.1424	62.30
1830	2,554.19	0.0651	71.30	4189	2,566.73	0.2556	64.10
1831	2,554.33	0.0035	71.10	4191	2,593.18	0.2221	40.10
1835	2,560.46	0.0048	69.90	4193	2,554.00	0.0518	76.10
1836	2,560.51	0.0508	69.80	4195	2,553.23	0.2071	76.50
1838	2,577.78	0.1424	53.90	4196	2,557.37	0.2848	72.40
1839	2,577.84	0.1424	53.90	4201	2,583.57	0.3892	45.00
1841	2,575.83	0.0236	54.50	4204	2,592.06	0.0133	43.70
1843	2,550.00	0.1424	79.10	4208	2,555.22	0.0572	75.60
1844	2,550.00	0.1645	79.10	4213	2,564.78	0.2561	66.10
1846	2,579.64	0.0440	51.80	4215	2,569.83	0.1787	61.00
1847	2,579.57	0.1494	51.90	4218	2,558.19	0.2311	72.10
1849	2,568.00	0.0353	60.60	4224	2,570.44	0.1580	48.00
1851	2,571.35	0.1512	58.50	4227	2,581.57	0.0409	48.90
1853	2,575.00	0.2980	55.50	4230	2,599.33	0.0628	35.50
1854	2,575.00	0.1424	55.50	4232	2,559.61	0.1997	69.90
1856	2,556.07	0.1424	73.30	4234	2,562.70	0.1144	70.10
1857	2,555.87	0.0158	73.50	4238	2,573.16	0.0638	57.90
1859	2,569.17	0.1424	64.00	4239	2,575.62	0.0335	55.50
1860	2,569.06	0.1424	64.10	4242	2,569.64	0.0293	52.90
1862	2,587.40	0.1424	42.50	4247	2,573.00	0.0234	55.30
1863	2,587.18	0.1424	42.70	4249	2,582.80	0.3983	47.80
1865	2,576.04	0.1464	54.40	4251	2,554.10	0.4037	76.10
1866	2,575.71	0.2260	54.70	4255	2,608.66	0.0854	21.70
1868	2,560.85	0.0536	70.20	4257	2,572.63	0.0572	58.10
1870	2,599.76	0.1648	30.40	4259	2,605.13	0.1170	25.10
1871	2,599.34	0.2649	30.80	4261	2,595.45	0.2036	33.30

1873	2,547.95	0.1424	62.20	4262	2,596.55	0.0571	32.20
1875	2,555.08	0.0156	70.40	4264	2,603.27	0.0968	31.50
1876	2,555.13	0.0015	70.30	4266	2,593.93	0.1462	39.20
1878	2,574.95	0.1954	54.00	4268	2,568.79	0.0929	61.50
1879	2,575.64	0.1424	53.30	4271	2,575.33	0.3478	59.30
1881	2,580.95	0.1424	50.10	4273	2,580.06	0.1085	48.20
1883	2,583.01	0.1424	48.80	4275	2,579.33	0.1264	52.10
1885	2,580.24	0.0110	51.30	4278	2,568.66	0.2485	62.00
1886	2,580.36	0.0486	51.20	4280	2,579.00	0.1308	52.20
1888	2,586.02	0.1424	45.00	4281	2,580.17	0.0738	51.20
1889	2,585.73	0.0471	45.20	4283	2,591.44	0.0943	37.00
1891	2,564.26	0.0785	68.60	4285	2,566.48	0.1348	66.40
1892	2,564.39	0.2005	68.50	4290	2,580.98	0.0510	54.10
1894	2,566.13	0.0952	64.40	4291	2,582.26	0.1142	52.80
1896	2,591.59	0.0697	43.30	4293	2,556.83	0.2528	75.80
1898	2,586.17	0.0383	42.30	4294	2,558.84	0.1799	73.80
1899	2,586.43	0.0572	42.00	4296	2,589.61	0.2423	41.80
1901	2,592.48	0.0448	36.30	4302	2,573.41	0.1412	56.70
1902	2,592.62	0.0213	36.20	4303	2,575.25	0.2980	54.80
1905	2,572.18	0.0687	57.60	4305	2,576.90	0.1321	53.30
1906	2,571.96	0.1476	57.80	4306	2,576.41	0.1349	53.60
1908	2,564.17	0.2188	68.60	4308	2,584.04	0.2165	45.90
1909	2,563.92	0.0365	68.90	4310	2,561.22	0.1048	71.60
1911	2,583.10	0.0607	48.30	4312	2,578.93	0.1033	52.60
1912	2,583.70	0.1424	47.70	4314	2,583.56	0.0022	36.70
1914	2,545.71	0.0210	64.40	4320	2,580.68	0.2433	47.80
1916	2,580.59	0.1424	49.90	4321	2,581.39	0.1373	47.00
1917	2,580.00	0.0443	50.50	4323	2,585.28	0.4712	45.30
1919	2,572.89	0.2595	62.00	4325	2,559.82	0.3617	73.20
1921	2,581.07	0.0423	48.40	4327	2,565.16	0.2653	64.40
1922	2,581.06	0.0403	48.50	4329	2,575.16	0.1009	55.50
1924	2,579.36	0.0448	52.00	4332	2,575.00	0.1054	53.50
1926	2,557.20	0.0945	75.30	4334	2,564.00	0.1340	68.90
1928	2,557.63	0.1094	75.10	4336	2,564.90	0.1944	65.30
1929	2,557.50	0.1527	75.20	4338	2,587.47	0.0454	43.40
1931	2,583.88	0.1424	45.80	4340	2,555.90	0.0692	74.90
1933	2,583.71	0.0161	45.90	4342	2,573.47	0.2871	58.10
1934	2,583.69	0.0301	46.00	4343	2,574.44	0.1007	57.20
1940	2,584.02	0.1424	46.50	4345	2,576.89	0.0077	54.10
1941	2,583.88	0.0884	46.60	4346	2,577.65	0.1000	53.30
1943	2,560.69	0.0826	72.10	4348	2,566.31	0.1495	66.50
1944	2,560.56	0.2002	72.20	4351	2,580.23	0.0135	48.30
1946	2,577.20	0.1424	54.20	4355	2,576.57	0.1424	33.60
1947	2,577.29	0.1672	54.10	4357	2,570.34	0.0411	61.50
1949	2,579.25	0.0384	50.60	4358	2,567.84	0.0242	64.10
1950	2,579.28	0.1877	50.50	4360	2,588.07	0.0754	40.50
1952	2,578.69	0.0455	52.40	4362	2,583.37	0.0335	46.80

1953	2,578.57	0.1424	52.50	4364	2,597.97	0.0460	33.80
1955	2,575.07	0.0158	55.60	4366	2,574.14	0.1125	56.70
1957	2,574.00	0.0220	56.80	4368	2,577.13	0.1722	51.20
1958	2,574.00	0.1046	56.80	4369	2,575.82	0.2741	52.50
1960	2,579.37	0.0820	55.60	4371	2,551.06	0.0339	78.70
1961	2,579.54	0.0390	55.40	4373	2,572.46	0.0193	60.30
1963	2,571.33	0.0764	57.50	4375	2,587.00	0.4957	43.80
1964	2,571.49	0.0401	57.30	4378	2,578.33	0.1184	54.40
1966	2,567.29	0.0154	64.70	4380	2,574.34	0.2311	56.50
1968	2,557.45	0.1676	75.20	4382	2,584.01	0.1715	47.00
1971	2,581.25	0.3597	50.10	4385	2,561.81	0.1232	71.00
1972	2,581.40	0.2356	50.10	4389	2,577.13	0.1424	48.30
1974	2,578.33	0.0121	50.10	4392	2,557.01	0.2127	73.10
1975	2,578.31	0.0245	50.10	4393	2,558.58	0.1904	71.50
1977	2,592.81	0.0146	40.50	4395	2,592.54	0.4100	36.10
1978	2,592.71	0.1039	40.70	4397	2,583.99	0.0692	47.40
1980	2,580.00	0.1424	51.70	4401	2,563.99	0.1455	66.00
1981	2,580.00	0.2001	51.70	4403	2,580.91	0.1718	50.50
1984	2,598.16	0.1424	30.30	4407	2,601.23	0.0151	32.20
1986	2,557.62	0.2346	72.70	4409	2,589.48	0.1582	38.90
1987	2,557.37	0.1363	72.90	4411	2,555.01	0.2334	75.10
1989	2,560.94	0.2708	71.60	4412	2,554.02	0.1173	76.10
1991	2,602.09	0.1230	27.00	4415	2,563.68	0.0519	69.10
1992	2,602.01	0.1424	27.00	4418	2,568.44	0.1045	63.90
1994	2,574.90	0.0236	55.80	4420	2,561.27	0.0580	68.50
1996	2,576.72	0.0805	51.80	4421	2,562.05	0.1895	67.70
1998	2,578.41	0.1424	41.80	4423	2,575.77	0.0978	55.90
1999	2,578.79	0.1424	40.70	4427	2,575.91	0.1366	55.10
2001	2,575.10	0.2740	54.00	4430	2,582.25	0.0342	48.30
2003	2,585.06	0.1424	50.20	4432	2,595.25	0.1289	33.50
2005	2,574.89	0.0616	56.00	4438	2,581.41	0.1831	47.10
2006	2,574.96	0.0743	55.90	4440	2,563.39	0.0264	65.20
2008	2,591.77	0.1206	37.50	4443	2,562.90	0.0454	67.50
2009	2,591.53	0.0393	37.70	4445	2,559.95	0.1144	72.80
2011	2,581.81	0.1705	50.10	4447	2,578.90	0.1426	52.60
2012	2,581.56	0.0290	50.40	4451	2,546.29	0.3106	63.80
2014	2,570.18	0.0986	62.20	4452	2,541.99	0.2636	68.10
2015	2,570.47	0.3110	61.90	4455	2,571.16	0.1095	60.60
2017	2,587.44	0.0142	43.50	4460	2,574.55	0.0641	54.10
2018	2,587.23	0.1515	43.70	4462	2,582.02	0.4116	48.80
2020	2,593.00	0.1424	35.70	4464	2,574.18	0.1092	56.50
2026	2,542.75	0.1403	67.40	4467	2,592.25	0.1746	36.80
2028	2,580.00	0.1436	51.70	4470	2,575.50	0.1870	56.10
2030	2,576.89	0.1375	56.00	4472	2,580.95	0.0586	49.70
2031	2,576.65	0.1424	56.30	4479	2,597.91	0.0255	31.30
2033	2,609.76	0.0786	20.40	4484	2,574.32	0.0772	58.60
2034	2,609.91	0.1424	20.30	4486	2,572.42	0.1558	58.70

2037	2,573.72	0.0079	57.50	4487	2,570.70	0.1965	60.40
2038	2,573.01	0.1424	58.20	4489	2,585.82	0.1995	42.70
2040	2,574.43	0.1424	56.80	4490	2,586.00	0.3655	42.50
2042	2,555.96	0.0744	76.70	4492	2,579.56	0.3350	52.90
2043	2,555.83	0.0616	76.80	4496	2,583.37	0.1424	48.00
2046	2,567.62	0.1775	65.60	4498	2,576.19	0.1424	55.00
2047	2,567.66	0.3887	65.50	4500	2,575.14	0.1453	55.80
2049	2,570.69	0.2091	61.60	4503	2,578.10	0.0970	50.30
2050	2,570.69	0.0849	61.60	4505	2,559.31	0.2876	73.10
2052	2,580.11	0.0689	51.40	4507	2,580.34	0.0699	54.60
2054	2,602.59	0.0716	30.40	4509	2,570.51	0.1424	57.60
2055	2,603.17	0.0757	29.80	4512	2,557.42	0.0488	75.60
2057	2,560.94	0.1424	71.70	4514	2,567.46	0.2869	65.40
2059	2,563.39	0.1424	69.20	4515	2,568.04	0.0861	64.80
2061	2,568.00	0.0955	60.60	4518	2,582.36	0.2075	46.10
2063	2,563.93	0.0388	68.90	4520	2,580.32	0.2872	48.00
2064	2,563.90	0.1424	68.90	4522	2,577.41	0.2801	53.70
2066	2,567.92	0.2271	65.20	4526	2,587.49	0.1194	47.50
2068	2,560.00	0.0912	69.80	4528	2,586.88	0.0064	44.10
2070	2,573.99	0.3263	54.80	4530	2,561.92	0.0780	68.80
2072	2,572.92	0.0436	58.80	4534	2,568.85	0.2189	61.00
2074	2,563.16	0.1882	67.90	4538	2,581.71	0.0837	49.70
2075	2,563.26	0.0822	67.80	4539	2,579.18	0.3295	52.20
2077	2,573.63	0.0558	56.70	4541	2,572.29	0.1991	58.70
2078	2,573.31	0.0956	57.00	4546	2,589.89	0.1424	39.90
2080	2,572.73	0.0618	59.00	4551	2,572.15	0.1053	56.70
2082	2,562.71	0.1295	68.40	4554	2,575.44	0.2095	55.70
2084	2,594.79	0.0791	36.20	4557	2,557.00	0.1342	75.50
2086	2,558.02	0.0637	73.00	4560	2,570.70	0.0399	62.40
2089	2,563.16	0.1424	66.90	4566	2,555.29	0.0143	74.50
2090	2,563.16	0.0669	66.90	4569	2,565.00	0.0669	66.90
2092	2,564.38	0.1953	68.50	4572	2,573.04	0.1423	56.80
2093	2,564.23	0.1424	68.60	4574	2,557.31	0.0673	73.90
2095	2,564.44	0.0458	65.40	4584	2,563.27	0.4032	67.50
2099	2,567.61	0.0558	64.70	4589	2,550.21	0.2393	79.10
2100	2,567.70	0.1259	64.70	4594	2,575.58	0.0305	55.30
2102	2,561.68	0.0293	68.90	4596	2,576.40	0.1505	52.00
2103	2,561.89	0.1098	68.70	4597	2,575.55	0.1108	52.90
2105	2,575.43	0.1110	57.30	4602	2,577.30	0.1485	51.20
2107	2,563.00	0.0128	67.00	4605	2,552.04	0.1560	77.20
2108	2,563.00	0.0624	67.00	4606	2,552.65	0.1334	76.60
2110	2,573.32	0.0861	54.20	4609	2,578.30	0.1424	53.10
2111	2,572.21	0.0291	55.30	4613	2,566.01	0.0760	63.70
2113	2,586.46	0.3149	45.20	4614	2,571.73	0.0224	58.00
2115	2,568.85	0.0611	59.30	4616	2,576.04	0.1232	52.40
2117	2,570.97	0.2827	59.90	4618	2,565.70	0.2714	64.10
2118	2,570.83	0.1366	60.00	4619	2,566.21	0.1830	63.70

2120	2,582.00	0.1037	47.40	4621	2,579.00	0.9440	49.70
2122	2,577.00	0.0120	53.50	4623	2,565.14	0.1088	67.40
2123	2,577.00	0.3815	53.50	4624	2,566.78	0.1424	65.70
2125	2,581.63	0.0720	47.80	4626	2,564.09	0.1424	64.00
2127	2,573.43	0.0927	57.40	4630	2,602.62	0.1682	31.30
2128	2,573.29	0.1587	57.60	4631	2,603.67	0.1776	30.40
2131	2,566.11	0.1424	63.50	4634	2,577.44	0.1518	53.20
2132	2,566.08	0.1424	63.60	4639	2,551.72	0.3348	77.50
2134	2,559.62	0.0478	71.00	4645	2,589.04	0.1119	41.20
2135	2,559.46	0.1424	71.10	4647	2,558.09	0.1116	72.00
2137	2,586.66	0.1263	45.10	4649	2,568.65	0.0540	64.20
2138	2,586.92	0.1976	44.90	4651	2,566.09	0.1497	64.80
2140	2,563.38	0.1424	67.70	4653	2,557.40	0.0902	72.10
2142	2,560.03	0.1424	70.60	4656	2,586.68	0.1360	44.30
2144	2,558.35	0.1451	72.90	4659	2,561.37	0.0179	71.40
2149	2,557.29	0.1545	75.00	4662	2,567.86	0.2308	63.00
2151	2,561.71	0.0826	68.40	4665	2,541.00	0.0709	69.10
2152	2,560.85	0.1424	69.30	4667	2,575.00	0.2173	53.40
2154	2,579.86	0.0708	51.70	4670	2,594.04	0.1954	34.70
2155	2,580.03	0.0371	51.60	4672	2,577.00	0.1000	57.80
2157	2,574.73	0.0976	54.80	4675	2,577.60	0.2681	53.80
2158	2,574.71	0.0079	54.90	4677	2,583.12	0.0256	47.30
2160	2,572.19	0.0030	58.10	4679	2,587.59	0.4434	42.60
2161	2,572.45	0.0230	57.80	4681	2,588.84	0.0766	41.40
2163	2,588.99	0.1424	39.60	4685	2,568.16	0.1025	62.70
2165	2,563.15	0.1543	69.70	4687	2,571.51	0.2951	56.60
2166	2,563.18	0.1688	69.70	4688	2,571.74	0.1338	56.40
2170	2,570.10	0.0774	60.10	4690	2,575.50	0.0502	55.00
2172	2,572.82	0.0574	58.10	4693	2,574.87	0.4567	53.70
2174	2,566.94	0.1424	63.90	4695	2,590.75	0.4788	39.60
2175	2,567.20	0.0418	63.60	4699	2,559.27	0.1630	64.20
2177	2,560.05	0.3726	69.80	4700	2,565.54	0.0021	57.60
2178	2,559.85	0.2008	70.00	4702	2,598.56	0.1129	30.20
2180	2,570.78	0.1424	59.70	4704	2,580.85	0.1188	54.10
2181	2,570.61	0.0042	59.90	4706	2,587.75	0.1156	42.50
2183	2,610.31	0.1424	6.00	4709	2,558.59	1.0729	74.10
2184	2,610.39	0.1424	5.90	4710	2,557.76	0.2089	74.90
2186	2,577.00	0.2325	53.50	4712	2,583.26	0.2645	47.70
2188	2,555.56	0.5828	54.60	4720	2,552.97	0.2486	80.00
2190	2,557.54	0.0671	67.90	4727	2,554.93	0.2122	74.80
2191	2,557.34	0.0087	68.10	4729	2,557.46	0.2339	72.40
2193	2,577.31	0.0859	51.10	4733	2,555.62	0.1424	62.20
2195	2,550.80	0.0028	82.20	4735	2,585.63	0.1238	44.30
2196	2,550.07	0.1424	82.90	4740	2,602.91	0.2744	27.60
2198	2,579.96	0.2003	51.30	4742	2,579.57	0.2578	53.00
2200	2,568.38	0.0933	61.50	4745	2,583.64	0.2278	46.90
2201	2,568.40	0.0258	61.40	4747	2,566.15	0.1116	64.60

2203	2,588.77	0.0649	39.60	4749	2,561.22	0.0846	69.60
2204	2,589.27	0.0701	39.10	4751	2,576.13	0.2939	54.90
2206	2,567.44	0.0073	64.40	4752	2,576.86	0.1862	54.10
2207	2,566.95	0.1424	64.90	4755	2,591.03	0.1000	37.50
2210	2,582.44	0.0959	48.00	4758	2,591.58	0.4474	42.20
2211	2,582.80	0.0754	47.60	4765	2,556.36	0.3461	76.30
2213	2,567.28	0.0093	55.90	4767	2,595.83	0.1015	34.00
2214	2,568.54	0.1424	54.60	4770	2,567.60	0.2084	63.20
2216	2,571.34	0.0302	59.10	4771	2,567.27	0.2106	63.60
2217	2,571.14	0.0210	59.30	4775	2,583.29	0.0868	46.60
2219	2,564.76	0.1424	63.80	4779	2,598.57	0.0365	30.60
2221	2,580.07	0.1424	51.00	4788	2,581.83	0.1322	46.40
2222	2,580.11	0.0773	51.00	4790	2,606.62	0.1424	14.30
2224	2,566.95	0.0115	65.90	4791	2,606.02	0.1424	14.80
2225	2,566.49	0.1424	66.40	4795	2,562.43	0.0115	67.30
2227	2,594.73	0.1010	35.30	4797	2,570.20	0.1849	60.60
2229	2,556.76	0.1095	73.40	4801	2,555.64	0.0837	74.10
2230	2,556.37	0.1123	73.70	4804	2,583.04	0.2328	47.10
2232	2,592.45	0.1424	37.10	4809	2,576.56	0.4011	58.30
2233	2,592.24	0.1424	37.30	4811	2,550.68	0.1424	78.90
2236	2,579.19	0.2590	50.70	4815	2,574.19	0.1527	57.50
2237	2,579.07	0.1424	50.80	4817	2,576.18	0.0313	56.70
2239	2,593.28	0.0844	37.70	4818	2,577.35	0.1812	55.50
2240	2,594.39	0.0198	36.60	4820	2,559.56	0.1061	73.10
2242	2,556.48	0.1005	73.70	4821	2,560.58	0.3249	72.10
2244	2,581.52	0.1160	48.30	4825	2,557.84	0.1931	74.90
2245	2,581.44	0.0232	48.40	4826	2,556.53	0.0891	76.20
2247	2,574.82	0.0101	54.10	4828	2,561.17	0.0455	68.70
2248	2,574.97	0.1052	53.90	4832	2,576.33	0.1680	54.50
2252	2,598.57	0.0225	32.40	4834	2,558.88	0.2010	73.70
2253	2,598.76	0.0279	32.20	4837	2,587.50	0.3151	40.90
2255	2,565.00	0.4145	66.80	4839	2,575.67	0.2195	55.90
2256	2,565.00	0.1424	66.80	4841	2,581.83	0.0532	47.60
2258	2,579.31	0.1318	53.20	4843	2,575.70	0.0636	55.20
2259	2,579.63	0.1584	52.80	4845	2,575.39	0.0990	58.80
2261	2,568.15	0.1255	62.50	4846	2,575.67	0.1914	58.50
2262	2,568.22	0.0463	62.40	4849	2,585.00	0.0001	35.70
2264	2,566.57	0.0320	66.20	4850	2,592.35	0.1424	28.40
2265	2,566.37	0.2267	66.40	4856	2,583.00	0.2932	47.50
2267	2,563.80	0.1348	66.40	4859	2,574.65	0.2877	58.10
2268	2,563.60	0.0186	66.50	4861	2,600.44	0.4735	35.10
2270	2,577.00	0.1456	55.80	4865	2,555.98	0.4934	76.70
2272	2,567.02	0.0812	65.80	4867	2,584.65	0.1399	45.00
2273	2,566.69	0.2107	66.10	4869	2,583.81	0.2790	46.80
2275	2,596.41	0.0419	35.00	4871	2,579.53	0.1428	51.60
2277	2,561.27	0.0192	68.00	4873	2,567.88	0.1424	63.80
2278	2,560.93	0.0236	68.40	4875	2,558.24	0.1045	74.40

2280	2,578.22	0.1424	52.60	4878	2,575.00	0.2919	57.50
2281	2,578.25	0.1465	52.60	4879	2,575.09	0.1989	57.90
2283	2,581.88	0.0186	48.60	4882	2,588.97	0.2519	46.80
2284	2,581.60	0.0347	48.90	4884	2,579.00	0.2622	52.00
2286	2,563.59	0.1160	66.50	4886	2,582.10	0.0800	52.90
2288	2,568.79	0.1424	59.80	4888	2,554.25	0.4059	78.70
2289	2,568.56	0.0028	60.00	4890	2,585.09	0.1424	44.80
2291	2,610.22	0.1682	23.00	4891	2,584.18	0.1251	45.70
2292	2,609.20	0.0494	24.10	4893	2,583.69	0.0353	51.30
2294	2,580.43	0.0286	49.30	4899	2,588.82	0.1788	41.60
2295	2,580.32	0.0738	49.40	4902	2,588.69	0.0095	39.80
2297	2,583.89	0.3431	47.40	4905	2,596.59	0.1093	38.30
2299	2,606.11	0.1424	24.10	4907	2,593.55	0.1384	36.50
2301	2,577.73	0.2251	54.50	4909	2,544.43	0.0700	65.70
2302	2,576.30	0.1417	55.90	4916	2,573.54	0.6826	54.10
2305	2,592.34	0.0668	42.50	4920	2,566.51	0.3637	64.30
2307	2,571.83	0.1424	60.70	4922	2,559.20	0.2801	70.40
2308	2,571.85	0.1424	60.70	4923	2,557.80	0.3489	71.80
2310	2,575.24	0.0586	55.50	4926	2,595.09	0.0236	35.00
2311	2,574.94	0.1406	55.70	4928	2,585.74	0.2070	45.70
2313	2,609.10	0.0275	24.20	4931	2,551.82	0.2003	81.10
2315	2,578.26	0.1535	53.20	4932	2,556.53	0.2538	76.40
2316	2,578.21	0.0558	53.20	4935	2,577.00	0.1554	51.40
2319	2,587.37	0.0979	42.50	4937	2,561.69	0.1829	71.10
2321	2,596.97	0.1248	32.00	4939	2,565.00	0.2035	67.90
2322	2,597.20	0.1123	31.70	4946	2,583.93	0.2697	47.60
2324	2,568.17	0.0199	62.70	4947	2,585.16	0.1556	46.30
2325	2,569.79	0.1424	61.10	4951	2,563.27	0.0870	67.90
2327	2,570.00	0.1037	62.10	4954	2,575.82	0.3967	54.00
2328	2,569.13	0.0888	63.00	4955	2,576.03	0.2321	53.80
2331	2,574.20	0.1350	56.50	4958	2,575.44	0.1424	55.40
2332	2,574.84	0.0043	55.90	4961	2,585.89	0.7795	42.70
2334	2,590.06	0.1365	38.40	4963	2,593.67	0.2340	35.30
2335	2,590.08	0.0350	38.40	4967	2,589.08	0.1688	41.10
2337	2,547.00	0.1424	63.10	4969	2,587.25	0.3029	43.70
2339	2,592.27	0.0516	37.30	4970	2,586.70	0.1451	44.20
2341	2,564.95	0.0961	68.10	4972	2,555.00	0.1424	77.80
2343	2,568.70	0.0987	62.20	4975	2,574.44	0.2347	53.20
2345	2,578.36	0.2369	50.10	4976	2,576.01	0.2377	51.70
2347	2,563.90	0.2725	64.70	4979	2,577.69	0.0150	50.70
2348	2,563.63	0.0212	64.90	4983	2,580.68	0.0500	54.60
2351	2,590.32	0.1424	39.80	4984	2,576.86	0.0975	58.40
2352	2,590.63	0.0286	39.50	4988	2,573.28	0.0699	58.50
2355	2,566.18	0.1951	63.40	4993	2,583.79	0.3477	47.00
2356	2,567.64	0.0566	62.00	4996	2,562.95	0.1575	67.40
2360	2,581.89	0.1424	48.60	4998	2,593.21	0.0395	36.80
2361	2,581.58	0.1424	48.90	5002	2,553.27	0.0983	79.70

2363	2,568.70	0.2448	64.50	5003	2,552.02	0.0950	80.90
2368	2,566.55	0.0603	63.20	5006	2,571.69	0.0870	63.20
2369	2,566.27	0.0471	63.50	5008	2,581.36	0.0996	46.90
2371	2,573.37	0.0495	55.10	5013	2,581.91	0.7217	49.40
2372	2,573.23	0.3831	55.20	5017	2,576.07	0.1624	58.20
2374	2,583.24	0.2407	47.70	5020	2,563.70	0.3566	69.00
2375	2,583.65	0.0768	47.30	5023	2,572.29	0.1590	60.60
2377	2,570.04	0.1424	62.30	5025	2,582.88	0.0244	46.80
2378	2,570.39	0.1424	62.00	5030	2,582.75	0.1654	47.80
2380	2,542.28	0.1424	67.80	5032	2,560.84	0.2263	69.00
2381	2,543.23	0.1424	66.80	5036	2,568.88	0.1369	61.40
2383	2,565.73	0.1892	64.30	5038	2,584.40	0.1444	45.30
2385	2,580.34	0.1424	41.80	5042	2,590.12	1.2130	38.80
2386	2,579.96	0.1424	42.20	5043	2,591.95	0.0222	37.00
2388	2,576.80	0.1424	56.10	5048	2,583.78	0.2155	44.70
2391	2,562.31	0.3249	70.90	5055	2,569.60	0.2685	61.30
2392	2,560.76	0.1528	72.40	5060	2,580.01	0.3121	48.50
2394	2,579.83	0.2676	52.30	5068	2,567.42	0.1361	61.30
2396	2,575.77	0.2391	52.60	5069	2,567.66	0.0297	61.00
2398	2,608.31	0.1424	22.80	5071	2,584.00	0.4594	47.70
2399	2,607.58	0.0656	23.50	5073	2,578.67	0.1049	53.80
2402	2,576.45	0.1424	55.80	5075	2,566.89	0.0999	61.70
2405	2,568.47	0.1201	61.80	5078	2,560.48	0.4087	69.40
2406	2,568.33	0.1409	62.00	5080	2,575.76	0.0524	54.80
2408	2,571.58	0.0423	58.80	5083	2,559.19	0.0950	73.50
2410	2,573.48	0.2084	56.90	5085	2,566.38	0.0731	66.50
2412	2,580.63	0.0648	49.10	5090	2,600.90	0.2388	32.90
2413	2,580.72	0.0315	49.00	5093	2,573.35	0.1281	57.00
2415	2,565.96	0.1400	65.80	5096	2,558.43	0.1430	74.30
2416	2,565.88	0.0437	65.80	5098	2,578.52	0.1521	52.20
2418	2,571.43	0.1915	61.10	5100	2,579.62	0.0108	54.60
2419	2,571.83	0.1424	60.80	5105	2,564.00	0.1350	68.80
2421	2,584.06	0.0386	45.60	5109	2,573.58	0.3049	54.80
2423	2,582.98	0.1424	49.00	5111	2,558.39	0.0632	72.60
2425	2,563.90	0.1788	67.40	5113	2,566.87	0.3350	63.90
2427	2,567.90	0.0024	65.40	5115	2,560.71	0.2410	69.40
2429	2,580.00	0.1424	51.80	5117	2,595.55	0.1385	33.80
2431	2,580.25	0.0580	51.00	5121	2,551.68	0.0915	77.80
2432	2,580.15	0.0203	51.10	5123	2,593.91	0.1246	35.10
2434	2,572.18	0.1535	58.10	5127	2,585.04	0.2334	45.90
2436	2,590.65	0.0473	37.80	5132	2,580.14	0.0943	55.10
2437	2,589.98	0.1424	38.40	5137	2,570.02	0.0886	60.20
2439	2,585.01	0.4326	46.00	5139	2,572.37	0.3749	58.40
2440	2,585.29	0.0868	45.70	5142	2,571.48	0.1027	63.80
2442	2,561.04	0.0248	72.00	5143	2,570.51	0.3936	64.60
2445	2,573.67	0.0279	59.40	5146	2,589.44	0.1967	39.00
2446	2,573.80	0.3935	59.20	5149	2,584.93	0.0101	44.70

2449	2,570.64	0.0675	59.60	5151	2,564.33	0.1500	65.80
2450	2,570.55	0.0482	59.70	5155	2,609.29	0.2796	21.20
2453	2,577.53	0.0141	53.80	5157	2,560.96	0.0732	66.60
2455	2,608.69	0.1424	22.30	5158	2,560.99	0.0654	66.50
2456	2,608.08	0.1424	22.90	5162	2,560.28	0.0790	69.80
2459	2,583.00	0.0186	47.50	5165	2,564.21	0.0655	65.50
2460	2,582.91	0.0209	47.60	5167	2,618.00	0.1197	12.50
2462	2,570.00	0.3454	64.30	5170	2,576.75	0.3872	52.20
2464	2,608.66	0.1067	22.40	5172	2,557.81	0.1424	71.80
2465	2,608.07	0.1424	23.00	5176	2,574.02	0.2202	56.50
2467	2,575.32	0.1424	56.10	5177	2,571.95	0.0804	58.60
2468	2,575.64	0.0226	55.80	5180	2,574.33	0.4448	54.10
2470	2,560.93	0.0784	69.00	5182	2,583.68	0.2005	47.30
2471	2,560.81	0.1743	69.10	5184	2,568.88	0.3470	61.70
2476	2,586.94	0.0755	43.90	5187	2,569.25	0.0556	62.90
2477	2,586.28	0.0784	44.50	5189	2,570.03	0.8656	57.30
2479	2,572.55	0.1424	60.10	5191	2,582.47	0.0436	52.50
2481	2,592.88	0.1424	35.80	5195	2,563.33	0.1610	69.70
2483	2,562.67	0.4143	70.30	5199	2,578.63	0.3211	52.10
2485	2,577.41	0.0258	55.30	5200	2,577.58	0.5247	53.10
2486	2,577.55	0.1424	55.20	5203	2,580.17	0.1272	51.50
2489	2,569.56	0.1424	63.50	5205	2,562.23	0.0165	66.10
2491	2,581.60	0.0079	48.70	5208	2,570.00	0.1602	60.90
2492	2,581.67	0.1049	48.90	5210	2,582.24	0.3358	48.90
2494	2,564.40	0.0187	68.50	5213	2,557.00	0.0436	71.40
2496	2,564.14	0.0380	66.50	5214	2,556.68	0.0072	71.70
2497	2,564.38	0.2375	66.30	5216	2,578.50	0.1709	52.90
2499	2,579.00	0.0422	51.80	5217	2,579.15	0.2933	52.30
2500	2,579.00	0.1276	51.80	5221	2,558.77	0.5553	73.80
2502	2,566.96	0.1100	62.60	5224	2,569.47	0.0972	61.10
2503	2,566.98	0.0339	62.60	5228	2,576.89	0.2164	53.60
2505	2,562.75	0.2873	69.80	5229	2,576.32	0.1269	54.20
2506	2,562.84	0.1911	69.70	5233	2,571.48	0.1707	60.30
2508	2,590.92	0.0236	40.20	5236	2,576.79	0.0622	57.40
2509	2,590.77	0.1619	40.30	5240	2,576.83	0.0951	53.90
2511	2,554.89	0.0760	55.30	5243	2,579.45	0.2050	51.70
2513	2,572.82	0.1566	57.40	5245	2,575.67	0.0403	55.20
2515	2,554.35	0.1505	75.50	5247	2,579.43	0.1653	51.70
2516	2,554.60	0.3088	75.30	5249	2,562.60	0.1188	70.50
2518	2,569.93	0.0397	48.30	5251	2,582.98	0.2046	47.60
2519	2,570.81	0.0693	47.40	5253	2,586.78	0.0678	41.60
2521	2,576.14	0.1120	58.10	5256	2,565.68	1.6108	51.90
2522	2,576.78	0.2614	57.40	5259	2,553.82	0.0091	75.70
2524	2,571.50	0.1525	58.20	5263	2,583.62	0.0040	44.90
2526	2,562.58	0.0171	67.80	5266	2,577.33	0.1297	57.60
2527	2,562.54	0.0330	67.90	5272	2,583.16	0.1241	51.20
2529	2,601.84	0.3866	33.90	5275	2,569.61	0.2411	63.50

2531	2,580.92	0.0396	48.60	5277	2,572.19	0.3929	58.60
2533	2,573.89	0.2266	57.90	5279	2,571.80	0.0578	57.00
2534	2,575.46	0.1424	56.30	5283	2,571.07	0.0760	59.30
2536	2,592.98	0.1424	36.60	5289	2,584.52	0.2607	46.00
2538	2,563.86	0.1763	66.80	5292	2,610.10	0.1399	21.00
2539	2,564.77	0.0452	65.80	5294	2,570.40	0.0923	59.40
2541	2,574.81	0.0173	56.10	5298	2,575.11	0.1424	57.60
2544	2,563.81	0.0630	67.00	5300	2,580.00	0.4349	49.40
2545	2,563.71	0.0734	67.10	5301	2,580.00	0.2823	49.30
2548	2,553.07	0.3645	78.20	5303	2,576.02	0.0461	54.50
2549	2,552.90	0.0416	78.40	5305	2,564.10	0.0516	66.60
2551	2,573.00	0.0071	45.40	5310	2,561.23	0.1460	71.50
2553	2,565.74	0.1424	67.10	5312	2,563.76	0.7533	69.80
2554	2,564.90	0.1483	67.90	5314	2,582.08	0.1713	49.10
2557	2,565.40	0.0514	67.60	5317	2,596.86	0.1803	31.90
2558	2,565.00	0.2214	67.90	5319	2,579.53	0.1079	51.10
2560	2,594.53	0.1424	35.20	5321	2,575.75	0.1424	53.90
2562	2,610.77	0.1424	5.10	5323	2,559.07	0.0813	71.00
2564	2,577.49	0.1424	54.20	5328	2,591.72	0.2215	41.30
2565	2,577.14	0.1424	54.60	5332	2,575.99	0.1208	54.50
2567	2,560.58	0.0143	69.30	5334	2,587.46	0.2641	44.20
2569	2,576.61	0.0991	53.10	5336	2,560.93	0.3231	71.80
2570	2,576.46	0.2124	53.40	5340	2,574.59	0.0846	53.80
2572	2,570.71	0.1214	61.60	5342	2,559.03	0.1869	70.40
2574	2,578.30	0.1749	50.10	5344	2,573.14	0.0898	58.50
2575	2,578.57	0.0085	49.90	5346	2,564.96	0.1424	45.20
2577	2,574.35	0.0923	56.60	5348	2,548.11	0.1424	69.70
2578	2,574.16	0.0874	56.70	5353	2,576.17	0.1188	54.00
2580	2,568.75	0.0779	64.20	5359	2,558.65	0.5171	71.70
2581	2,567.93	0.0526	65.00	5363	2,571.56	0.3943	60.60
2583	2,593.88	0.1424	35.50	5365	2,551.07	0.0611	78.00
2584	2,594.03	0.0514	35.40	5370	2,596.40	0.1458	38.00
2587	2,581.09	0.0882	50.10	5372	2,556.05	0.1160	76.70
2588	2,581.09	0.0535	50.10	5377	2,585.23	0.1781	43.20
2590	2,594.59	0.1424	35.10	5382	2,550.75	0.1424	59.40
2592	2,583.26	0.0064	47.20	5384	2,595.81	0.0295	38.30
2593	2,583.39	0.0229	47.10	5387	2,562.24	0.3181	68.30
2595	2,583.28	0.1155	45.60	5391	2,595.40	0.2015	36.00
2596	2,584.11	0.2176	44.80	5393	2,588.50	0.1122	42.50
2598	2,582.82	0.1424	48.90	5401	2,568.08	0.0733	61.90
2603	2,565.00	0.2123	67.70	5405	2,566.78	0.0333	66.00
2605	2,568.46	0.0185	60.10	5409	2,579.52	0.0025	50.90
2607	2,575.78	0.1403	54.80	5413	2,589.27	0.1308	45.10
2608	2,575.57	0.0392	55.00	5415	2,592.93	0.1870	41.40
2610	2,585.11	0.1424	44.70	5417	2,575.00	0.2001	54.50
2611	2,585.10	0.0486	44.70	5423	2,556.36	0.1424	76.30
2614	2,578.40	0.1040	52.70	5425	2,564.77	0.1424	67.10

2615	2,577.99	0.0349	53.10	5433	2,576.38	0.0988	55.30
2617	2,579.00	0.0144	51.60	5440	2,582.48	0.1424	48.60
2618	2,578.99	0.2385	51.70	5442	2,565.16	0.0408	62.40
2620	2,573.47	0.1921	57.40	5447	2,556.47	0.0772	73.70
2621	2,573.34	0.0489	57.60	5453	2,575.63	0.1424	53.90
2623	2,584.44	0.2705	46.20	5455	2,575.86	0.6220	54.60
2624	2,584.04	0.1887	46.50	5456	2,577.00	0.1536	53.50
2626	2,575.59	0.1163	56.00	5459	2,556.58	0.1200	75.70
2627	2,575.67	0.0508	55.90	5462	2,573.94	0.0817	56.80
2629	2,609.37	0.1424	20.90	5469	2,575.32	0.1119	55.10
2630	2,608.15	0.0824	22.10	5471	2,593.76	0.1377	36.80
2632	2,568.74	0.1139	62.10	5475	2,576.11	0.3477	52.70
2633	2,568.41	0.1873	62.40	5477	2,585.67	0.2653	44.70
2635	2,590.00	0.0142	38.60	5484	2,563.19	0.2416	69.60
2638	2,562.73	0.2135	71.30	5488	2,572.80	0.4723	61.80
2639	2,564.09	0.0128	69.90	5490	2,566.88	0.1680	66.20
2641	2,551.74	0.2288	77.40	5501	2,585.50	0.1861	44.30
2643	2,575.69	0.1424	56.40	5503	2,570.05	0.0243	57.30
2644	2,574.92	0.1643	57.10	5506	2,547.29	0.0282	62.80
2646	2,581.04	0.0752	49.60	5508	2,573.70	0.5930	61.10
2647	2,580.66	0.2275	50.10	5512	2,575.54	0.1746	55.30
2649	2,564.37	0.4064	68.60	5515	2,559.08	0.2742	70.90
2650	2,566.12	0.0025	66.90	5517	2,568.98	0.4485	61.80
2652	2,558.62	0.1308	72.60	5522	2,594.04	0.0980	34.50
2654	2,567.97	0.1283	62.50	5524	2,560.53	0.1939	69.80
2655	2,568.41	0.0249	62.00	5526	2,579.20	0.3345	55.70
2657	2,559.10	0.3894	70.50	5531	2,583.28	0.1529	47.30
2658	2,558.81	0.0085	70.80	5534	2,598.51	0.2059	34.40
2661	2,588.08	0.0432	41.40	5536	2,561.22	0.2941	71.30
2662	2,588.36	0.0258	41.10	5539	2,580.38	0.2873	49.30
2664	2,567.77	0.0415	62.00	5541	2,559.00	0.0904	69.40
2665	2,568.18	0.0458	61.60	5545	2,556.19	0.1931	74.00
2667	2,576.44	0.1424	56.10	5548	2,584.03	0.2167	44.90
2669	2,573.94	0.1016	55.90	5555	2,580.00	0.3464	48.50
2670	2,574.07	0.0165	55.80	5558	2,555.10	0.0890	77.70
2673	2,609.78	0.1424	5.70	5559	2,557.00	0.3397	75.80
2674	2,610.88	0.1424	4.60	5561	2,565.00	0.1818	69.40
2676	2,561.98	0.1441	69.10	5564	2,591.03	0.1424	38.70
2677	2,562.61	0.0356	68.50	5565	2,591.43	0.1423	38.30
2679	2,561.92	0.1758	70.50	5572	2,576.56	0.3271	58.20
2680	2,561.00	0.0831	71.40	5573	2,572.81	0.1343	62.00
2682	2,588.27	0.0452	43.60	5575	2,566.32	0.1424	67.40
2687	2,581.40	0.0587	48.10	5578	2,573.16	0.0772	58.40
2688	2,581.00	1.1303	48.40	5584	2,590.72	0.1679	37.70
2693	2,578.00	0.0582	52.80	5586	2,579.00	0.1462	49.80
2699	2,580.04	0.2525	51.20	5588	2,569.70	0.1412	61.10
2700	2,580.04	0.2256	51.20	5590	2,572.48	0.1636	62.10

2702	2,574.51	0.0721	57.00	5594	2,584.00	0.3533	47.90
2705	2,562.44	0.0137	67.50	5599	2,606.44	0.1424	14.30
2706	2,562.43	0.0551	67.50	5604	2,573.69	0.0629	55.30
2708	2,579.80	0.1033	50.70	5606	2,586.66	0.0915	43.40
2710	2,611.21	0.1424	4.60	5608	2,565.16	0.2397	69.70
2714	2,557.26	0.1592	75.50	5610	2,555.00	0.5106	74.80
2715	2,556.92	0.1493	75.80	5615	2,571.72	0.0839	60.80
2717	2,562.94	0.0430	67.80	5620	2,571.82	0.3567	56.00
2718	2,562.33	0.0985	68.40	5621	2,570.05	0.6850	58.40
2720	2,574.78	0.0139	54.80	5624	2,575.44	0.1664	55.00
2721	2,574.75	0.0319	54.90	5629	2,574.23	0.3892	56.10
2723	2,635.00	0.1424	0.90	5634	2,565.00	0.2350	64.70
2724	2,635.00	0.0008	0.90	5636	2,571.54	0.3968	59.40
2726	2,582.50	0.0536	48.90	5643	2,586.57	0.2705	43.20
2727	2,582.25	0.0438	49.20	5645	2,569.95	0.0131	60.90
2732	2,578.32	0.1132	52.10	5649	2,557.00	0.2082	72.60
2733	2,577.43	0.0602	53.10	5650	2,556.71	0.0971	72.90
2736	2,566.86	0.0648	66.00	5655	2,577.21	0.4817	58.50
2738	2,571.99	0.1763	56.40	5656	2,575.97	0.1266	59.80
2739	2,571.84	0.0649	56.60	5659	2,572.36	0.6765	55.20
2743	2,580.00	0.1016	50.40	5663	2,563.21	0.2885	66.90
2744	2,580.28	0.0813	50.20	5667	2,577.02	0.1677	53.90
2746	2,569.46	0.0188	61.30	5675	2,577.67	0.2813	52.90
2748	2,582.75	0.0575	47.80	5679	2,578.69	0.1101	51.80
2750	2,581.60	0.1911	50.30	5684	2,578.00	0.1149	53.70
2751	2,581.26	0.0308	50.70	5687	2,555.65	0.3948	74.20
2753	2,581.89	0.2360	48.80	5688	2,559.01	0.3587	70.80
2754	2,582.47	0.0338	48.20	5691	2,563.53	0.1147	65.90
2756	2,563.88	0.1243	66.40	5693	2,564.35	0.2210	66.00
2757	2,563.38	0.1941	66.90	5697	2,585.25	0.4467	45.70
2759	2,554.84	0.4639	78.10	5703	2,588.87	0.1558	39.60
2760	2,557.78	0.0579	75.20	5706	2,585.01	0.2440	44.00
2762	2,556.88	0.0262	75.80	5709	2,594.54	0.2409	35.60
2764	2,574.15	0.1075	56.70	5712	2,555.84	0.0578	69.60
2765	2,574.00	0.0783	56.90	5714	2,578.14	0.1726	53.90
2767	2,578.47	0.1662	50.00	5720	2,587.53	0.1307	43.90
2769	2,574.00	0.0325	56.80	5722	2,579.92	0.2140	51.40
2771	2,591.00	0.1933	37.30	5729	2,576.59	0.0961	54.50
2772	2,590.31	0.1424	38.00	5731	2,582.51	0.1152	48.20
2774	2,590.24	0.0023	39.90	5737	2,587.74	0.1532	41.50
2778	2,577.74	0.1547	50.80	5739	2,583.44	0.0950	48.60
2779	2,577.48	0.0467	51.00	5745	2,562.62	0.1681	67.60
2781	2,561.57	0.0770	71.00	5748	2,601.31	0.0747	31.20
2782	2,563.72	0.0990	68.90	5752	2,580.77	0.1657	48.20
2784	2,568.21	0.1125	62.20	5755	2,607.52	0.1424	13.40
2785	2,567.51	0.1099	62.90	5760	2,555.93	0.1439	76.40
2787	2,565.73	0.1542	59.80	5772	2,579.43	0.2584	50.20

2788	2,567.01	0.0056	58.30	5775	2,563.57	0.0229	71.20
2790	2,574.00	0.0715	56.80	5779	2,572.47	0.2279	56.00
2792	2,570.87	0.1209	59.40	5782	2,570.66	0.1424	62.20
2794	2,566.00	0.1682	64.80	5784	2,563.01	0.1637	70.60
2795	2,566.82	0.2994	63.90	5786	2,554.81	0.2178	75.40
2797	2,550.79	0.0067	78.30	5788	2,563.40	0.1506	69.00
2799	2,575.70	0.0064	55.50	5790	2,574.95	0.0486	57.60
2802	2,569.71	0.0747	62.40	5794	2,560.95	0.0823	71.90
2803	2,569.58	0.1016	62.50	5796	2,581.45	0.0453	49.20
2805	2,574.19	0.0380	54.10	5798	2,587.14	0.1425	47.20
2806	2,574.82	0.0065	53.50	5801	2,580.35	0.0356	52.20
2808	2,569.57	0.1325	63.30	5808	2,579.92	0.1911	51.70
2809	2,567.29	0.1322	65.60	5814	2,564.42	0.0735	68.10
2811	2,590.82	0.0994	37.50	5816	2,584.91	0.4324	47.50
2813	2,592.87	0.1631	38.60	5817	2,580.48	0.0990	51.90
2818	2,590.56	0.1708	39.60	5822	2,558.43	1.2462	73.30
2820	2,566.34	0.1424	68.90	5824	2,574.57	0.2408	57.00
2822	2,603.64	0.0243	31.90	5826	2,575.93	0.1424	53.60
2823	2,601.11	0.0116	34.40	5830	2,571.24	0.6224	63.80
2827	2,580.00	0.1344	51.20	5835	2,577.06	0.4337	53.90
2829	2,559.08	0.1586	73.30	5838	2,593.34	0.0309	39.50
2830	2,558.62	0.1507	73.70	5842	2,571.12	0.1611	58.60
2832	2,571.54	0.0210	58.10	5844	2,557.60	0.0020	70.50
2838	2,555.01	0.1570	75.10	5847	2,572.13	0.4891	63.10
2840	2,609.01	0.0040	26.80	5855	2,567.34	0.5663	67.20
2842	2,574.80	0.1207	60.00	5857	2,580.78	0.1285	49.90
2844	2,581.32	0.0760	50.60	5864	2,568.33	0.1424	64.80
2848	2,579.00	0.0477	51.60	5866	2,580.39	0.2614	48.00
2849	2,579.11	0.0516	51.40	5872	2,569.71	0.1424	62.20
2851	2,580.10	0.1424	49.10	5873	2,567.37	0.7013	64.60
2852	2,580.22	0.1130	48.90	5878	2,583.69	0.1047	50.50
2854	2,563.84	0.2045	65.90	5881	2,572.49	0.0701	58.40
2856	2,575.37	0.0476	55.10	5887	2,578.46	0.2800	51.80
2858	2,556.93	0.1944	72.90	5892	2,568.71	0.2251	61.50
2859	2,557.34	0.0951	72.50	5899	2,611.72	0.1945	19.20
2861	2,574.95	0.0667	56.80	5908	2,565.45	0.0832	67.50
2862	2,575.05	0.2093	56.70	5910	2,575.29	0.2129	54.60
2864	2,557.87	0.0015	72.00	5918	2,575.31	0.2879	54.70
2866	2,571.80	0.1386	58.50	5927	2,574.59	0.1867	53.80
2868	2,591.95	0.1424	36.70	5938	2,562.29	0.5099	71.30
2872	2,554.71	0.1346	75.40	5943	2,561.60	0.2843	71.90
2873	2,554.30	0.0968	75.80	5948	2,574.63	0.2355	55.60
2875	2,581.20	0.0520	49.90	5954	2,605.69	0.7775	25.80
2877	2,560.18	0.0635	70.50	5962	2,597.08	0.1341	38.70
2878	2,559.77	0.0767	70.50	5964	2,575.79	0.0952	53.70
2880	2,574.31	0.1003	57.30	5967	2,569.06	0.0587	61.70
2881	2,574.54	0.0686	57.10	5974	2,604.69	0.2872	28.90

2883	2,581.62	0.3574	49.00	5977	2,569.19	0.1031	65.40
2885	2,583.35	0.0107	47.60	5981	2,568.21	0.6250	61.90
2886	2,584.00	0.1424	47.00	5986	2,587.43	0.1424	42.40
2888	2,572.24	0.1424	37.90	5994	2,573.92	0.5163	56.20
2889	2,577.18	0.1424	32.90	5997	2,564.64	0.0818	66.10
2891	2,562.60	0.0398	67.20	6000	2,578.00	0.3430	50.30
2892	2,562.42	0.3290	67.30	6006	2,569.22	0.5553	66.00
2898	2,575.69	0.0269	56.10	6009	2,610.72	0.1424	11.90
2900	2,580.26	0.1293	51.70	6012	2,555.07	0.1931	74.30
2905	2,586.83	0.0222	42.50	6017	2,547.54	0.0752	81.60
2906	2,586.26	0.1142	43.10	6020	2,586.46	0.1505	44.30
2908	2,554.25	0.1471	75.20	6022	2,570.91	3.2076	48.70
2910	2,550.13	0.2275	79.30	6024	2,586.63	0.0872	43.80
2911	2,551.57	0.2059	77.80	6026	2,580.62	0.9062	48.20
2913	2,578.85	0.2349	52.30	6030	2,585.81	0.4855	42.60
2917	2,573.34	0.0815	57.50	6034	2,595.48	0.0445	35.90
2921	2,581.07	0.0544	49.40	6036	2,561.89	0.3078	68.00
2923	2,590.72	0.0629	37.70	6040	2,546.71	0.0763	82.40
2925	2,561.49	0.1246	68.70	6044	2,554.68	0.0597	74.80
2926	2,561.00	0.0967	69.10	6047	2,574.73	0.2055	56.10
2928	2,574.79	0.0811	54.80	6052	2,585.27	0.2482	45.50
2930	2,573.31	0.0701	58.40	6061	2,564.37	0.0033	66.40
2931	2,573.49	0.0200	58.20	6064	2,575.70	0.1424	53.10
2933	2,577.84	0.1006	53.20	6073	2,561.46	0.2607	68.70
2935	2,568.28	0.1424	63.60	6080	2,570.75	0.5891	57.80
2937	2,570.11	0.1492	62.10	6082	2,595.12	0.2426	34.30
2939	2,572.38	0.1039	57.90	6087	2,589.27	0.2233	42.70
2941	2,553.89	0.1360	75.60	6093	2,559.26	0.1994	73.40
2942	2,553.53	0.1223	75.90	6095	2,566.22	0.1664	68.90
2944	2,566.17	0.1570	66.70	6097	2,585.12	0.0517	45.10
2946	2,562.38	0.0409	68.80	6099	2,577.77	0.2326	53.10
2949	2,574.09	0.1147	54.20	6101	2,576.08	0.1178	54.80
2951	2,583.97	0.1510	45.60	6106	2,553.56	0.0407	71.90
2953	2,559.16	0.0237	70.50	6108	2,572.90	0.4106	60.10
2954	2,558.83	0.1424	70.80	6114	2,598.93	0.1910	34.40
2956	2,592.43	0.1309	41.00	6125	2,578.56	0.1424	53.10
2958	2,574.26	0.1424	44.20	6127	2,568.55	0.2360	61.50
2960	2,583.99	0.0704	44.50	6129	2,575.69	0.3442	54.90
2962	2,578.24	0.0956	50.20	6133	2,581.54	0.3959	47.30
2964	2,566.30	0.1095	68.90	6139	2,592.95	0.0846	38.40
2967	2,635.00	0.1424	1.00	6158	2,562.20	0.0958	70.90
2969	2,560.87	0.1277	70.00	6161	2,577.00	0.1954	53.90
2970	2,560.24	0.0200	70.60	6169	2,564.23	0.1431	68.80
2972	2,590.16	0.0886	40.80	6173	2,605.37	0.1433	23.70
2973	2,590.88	0.0357	40.10	6178	2,567.84	0.0849	65.20
2975	2,563.16	0.1046	66.10	6187	2,563.67	0.1418	64.90
2977	2,591.34	0.0756	40.10	6190	2,578.76	0.4819	51.10

2978	2,591.11	0.1091	40.30	6202	2,584.16	0.1296	48.80
2980	2,591.25	0.0793	40.90	6206	2,574.57	0.1853	54.90
2983	2,611.43	0.0601	22.60	6209	2,580.52	0.2673	49.70
2984	2,610.75	0.0322	23.20	6211	2,601.93	0.0450	31.20
2988	2,558.46	0.0748	74.00	6235	2,572.14	0.3899	57.60
2989	2,558.10	0.0969	74.40	6237	2,576.30	0.2404	54.10
2991	2,593.09	0.0371	35.70	6239	2,600.05	0.7998	35.80
2992	2,592.67	0.0008	36.10	6245	2,554.81	0.2804	73.90
2994	2,576.46	0.1424	55.00	6251	2,569.81	0.1555	54.70
2995	2,576.23	0.1424	55.30	6252	2,608.50	0.1424	16.10
2997	2,564.13	0.0990	68.40	6254	2,588.39	0.2369	40.10
2998	2,565.36	0.0721	67.10	6256	2,566.57	0.0101	65.30
3002	2,574.07	0.0592	58.30	6264	2,575.85	0.0236	44.40
3003	2,573.53	0.3043	58.90	6269	2,572.81	0.1424	62.30
3005	2,559.53	0.0604	70.80	6274	2,602.71	0.0396	33.10
3006	2,559.23	0.2203	71.10	6278	2,583.25	0.1070	47.20
3008	2,556.34	0.0304	73.80	6281	2,579.13	0.0885	51.60
3010	2,572.44	0.3039	60.40	6286	2,580.61	0.0672	55.10
3011	2,572.04	0.1424	60.90	6290	2,556.04	0.1399	73.70
3013	2,574.31	0.0796	56.60	6297	2,570.17	0.0264	61.20
3014	2,573.88	0.0916	57.00	6300	2,586.85	0.0683	42.80
3017	2,593.82	0.0639	41.00	6304	2,555.92	0.1367	76.50
3019	2,575.97	0.1805	59.20	6309	2,574.00	0.1132	53.60
3020	2,577.55	0.1488	57.60	6312	2,582.14	0.0955	46.70
3022	2,566.94	0.2568	65.50	6315	2,587.64	0.0773	47.90
3024	2,575.00	0.2191	55.90	6322	2,592.92	0.0072	30.30
3025	2,574.91	0.0971	56.00	6325	2,560.47	0.1234	69.40
3028	2,563.66	0.0464	69.20	6334	2,556.70	0.0678	73.60
3030	2,561.27	0.0307	66.20	6337	2,583.88	0.6429	44.50
3031	2,561.46	0.1424	66.10	6345	2,575.52	0.0009	52.00
3034	2,572.72	0.1054	58.90	6356	2,559.83	0.0173	68.10
3037	2,582.00	0.1294	47.70	6366	2,579.05	0.0439	52.60
3039	2,574.41	0.0904	55.20	6370	2,554.36	0.1104	75.70
3044	2,585.24	0.0720	50.00	6374	2,572.50	0.0405	58.30
3045	2,583.58	0.4410	51.70	6377	2,581.94	0.2596	46.50
3047	2,591.58	0.0874	39.90	6382	2,580.07	0.2427	50.60
3048	2,591.14	0.2901	40.40	6389	2,571.00	0.4304	61.60
3050	2,569.48	0.0696	63.60	6437	2,578.86	0.6027	56.50
3051	2,566.51	0.1645	66.60	6441	2,561.07	0.0286	68.90
3053	2,559.60	0.1107	70.60	6463	2,540.33	0.1424	69.80
3054	2,559.37	0.0849	70.80	6470	2,581.21	0.2125	47.60
3056	2,576.17	0.1424	55.30	6478	2,585.73	0.1424	43.80
3058	2,563.98	0.1992	68.80	6491	2,564.05	0.1931	71.20
3059	2,563.55	0.1537	69.20	6508	2,566.85	0.0514	68.30
3061	2,558.18	0.0965	73.00	6512	2,566.67	0.2466	67.90
3062	2,558.00	0.1085	73.10	6515	2,550.89	0.2808	80.20
3066	2,561.08	0.0605	71.70	6519	2,635.00	0.4058	1.00

3068	2,565.05	0.3369	64.20	6529	2,591.35	0.1762	40.70
3070	2,577.81	0.2917	53.60	6531	2,572.30	0.0881	60.60
3073	2,578.36	0.0605	50.10	6537	2,601.64	0.2345	28.80
3075	2,583.70	0.0250	44.80	6542	2,548.23	0.1424	75.20
3080	2,571.39	0.0541	58.90	6551	2,587.79	0.0901	42.00
3082	2,560.00	0.0137	69.70				

Anexo 8. Datos de los nodos año 2034

Nudos	Cotas	Caudal	Presion	Nudos	Cotas	Caudal	Presion
943	2,575.75	0.32	54.70	3083	2559.61	0.05	68.70
944	2,575.79	0.19	54.60	3085	2557.07	0.12	69.70
946	2,552.37	0.47	68.40	3086	2557.75	0.16	69.00
947	2,552.50	0.35	68.20	3090	2560.40	0.16	68.20
949	2,559.81	0.28	72.30	3092	2568.38	0.17	63.90
950	2,559.81	0.41	72.30	3094	2592.53	0.16	33.50
952	2,566.82	0.07	65.30	3095	2589.55	0.16	36.50
953	2,566.82	0.06	65.30	3098	2558.02	0.09	74.00
955	2,581.58	0.02	46.90	3100	2562.51	0.07	65.20
956	2,581.58	0.08	46.90	3101	2562.86	0.06	64.80
958	2,558.19	0.08	71.80	3103	2582.23	0.19	47.20
959	2,558.18	0.08	71.80	3105	2563.24	0.22	65.60
961	2,594.53	0.24	39.60	3107	2563.11	0.09	66.20
962	2,594.49	0.12	39.60	3109	2573.19	0.13	56.40
964	2,580.59	0.01	46.10	3110	2574.21	0.05	55.40
965	2,580.60	0.08	46.00	3112	2571.48	0.16	60.10
967	2,579.86	0.08	49.60	3114	2558.11	0.02	70.80
968	2,579.85	0.12	49.60	3116	2562.29	0.05	69.80
970	2,589.41	0.21	39.50	3117	2561.78	0.14	70.30
971	2,589.42	0.16	39.50	3119	2587.83	0.16	46.20
973	2,572.07	0.16	57.20	3120	2586.16	0.19	47.80
974	2,572.08	0.24	57.10	3122	2581.17	0.10	49.20
976	2,592.36	0.16	34.90	3125	2594.99	0.29	37.30
977	2,592.37	0.06	34.90	3127	2568.83	0.14	58.70
979	2,635.00	0.16	0.90	3128	2570.03	0.13	57.40
980	2,635.00	0.16	0.90	3130	2579.90	0.04	46.70
982	2,635.00	0.23	0.90	3132	2583.40	0.23	44.90
987	2,601.91	0.18	33.90	3134	2569.31	0.22	60.40
988	2,602.10	0.16	33.70	3135	2569.21	0.21	60.50
990	2,565.50	0.04	64.30	3137	2562.09	0.10	67.50
991	2,565.50	0.16	64.30	3138	2558.96	0.02	70.60
993	2,572.99	0.16	61.70	3140	2562.23	0.15	70.20
994	2,572.99	0.16	61.80	3141	2562.16	0.27	70.30
999	2,569.42	0.10	57.80	3145	2582.91	0.04	45.90
1000	2,569.44	0.06	57.80	3146	2583.36	0.02	45.50
1002	2,599.91	0.10	29.00	3148	2567.74	0.03	60.80
1003	2,599.98	0.01	28.90	3151	2559.41	0.26	69.60
1005	2,589.20	0.06	40.70	3153	2558.10	0.10	70.10
1006	2,589.24	0.09	40.70	3154	2561.23	0.22	67.00
1008	2,605.74	0.01	23.30	3157	2580.24	0.06	47.50
1009	2,605.79	0.04	23.30	3158	2580.41	0.26	47.30
1011	2,583.50	0.03	44.80	3160	2574.66	0.16	59.90
1012	2,583.49	0.10	44.80	3163	2558.90	0.02	70.60

1014	2,576.25	0.24	52.70	3165	2562.29	0.09	69.80
1015	2,576.25	0.20	52.70	3166	2562.65	0.22	69.50
1017	2,575.11	0.16	54.40	3168	2553.93	0.09	74.60
1018	2,575.10	0.01	54.40	3169	2550.83	0.16	77.70
1020	2,564.89	0.10	65.50	3172	2579.80	0.01	51.10
1021	2,564.89	0.07	65.50	3173	2579.90	0.02	50.80
1023	2,581.25	0.12	48.30	3176	2569.75	0.20	60.00
1024	2,581.24	0.14	48.30	3179	2558.25	0.09	69.40
1026	2,556.99	0.12	71.40	3180	2556.11	0.13	71.50
1027	2,556.94	0.04	71.50	3182	2571.23	0.21	58.40
1029	2,552.80	0.06	75.50	3183	2567.59	0.13	62.00
1030	2,552.80	0.16	75.50	3185	2590.51	0.16	37.50
1032	2,582.00	0.18	47.30	3187	2562.23	0.06	66.20
1033	2,582.00	0.07	47.30	3189	2574.00	0.07	55.70
1035	2,561.61	0.07	68.80	3191	2573.78	0.20	60.20
1036	2,561.59	0.07	68.80	3193	2562.08	0.11	65.70
1038	2,594.41	0.20	35.10	3196	2572.53	0.02	58.50
1039	2,594.41	0.42	35.10	3197	2573.44	0.06	57.50
1041	2,581.10	0.28	47.00	3199	2567.74	0.26	64.00
1042	2,581.11	0.06	47.00	3202	2572.36	0.13	54.40
1044	2,560.94	0.12	71.00	3206	2594.33	0.07	33.60
1045	2,560.94	0.15	71.00	3208	2580.48	0.02	48.50
1047	2,567.42	0.02	63.80	3209	2579.71	0.00	49.30
1048	2,567.42	0.03	63.80	3211	2575.68	0.05	54.10
1050	2,562.51	0.16	69.90	3212	2575.00	0.16	54.80
1051	2,562.49	0.16	69.90	3214	2548.98	0.34	79.00
1053	2,576.19	0.12	53.60	3215	2548.67	0.10	79.30
1054	2,576.16	0.15	53.50	3217	2581.05	0.10	47.50
1056	2,557.00	0.10	74.60	3219	2583.66	0.15	43.10
1057	2,557.00	0.28	74.60	3220	2583.21	0.55	43.60
1059	2,635.00	0.01	0.90	3222	2585.14	0.16	43.40
1061	2,554.58	0.05	73.40	3224	2595.66	0.06	37.20
1062	2,554.56	0.06	73.50	3225	2596.23	0.11	36.60
1064	2,581.72	0.14	46.80	3227	2559.62	0.15	70.10
1065	2,581.70	0.00	46.80	3229	2577.89	0.13	52.40
1067	2,586.74	0.37	43.60	3230	2577.71	0.10	52.60
1068	2,586.76	0.20	43.60	3234	2578.72	0.00	50.30
1070	2,587.67	0.30	39.30	3238	2573.86	0.02	52.80
1071	2,587.63	0.04	39.40	3240	2564.99	0.03	62.00
1073	2,581.41	0.12	49.10	3242	2593.54	0.07	39.30
1074	2,581.37	0.03	49.10	3243	2593.66	0.12	39.20
1076	2,572.97	0.26	61.80	3245	2602.79	0.08	27.10
1077	2,572.95	0.16	61.80	3246	2606.35	0.01	23.60
1079	2,584.46	0.16	42.50	3248	2574.87	0.12	55.90
1080	2,584.45	0.08	42.50	3250	2568.08	0.07	61.60
1082	2,600.56	0.02	29.40	3251	2568.51	0.12	61.20
1083	2,600.63	0.16	29.30	3253	2582.93	0.07	46.40

1088	2,567.16	0.00	62.60	3255	2558.96	0.18	73.10
1089	2,567.15	0.04	62.60	3257	2560.58	0.45	69.20
1091	2,561.21	0.16	67.30	3258	2560.00	0.33	69.50
1092	2,561.05	0.11	67.50	3260	2569.19	0.09	59.30
1094	2,574.58	0.08	52.00	3261	2569.20	0.25	59.30
1095	2,574.55	0.43	52.10	3263	2567.01	0.04	64.20
1097	2,570.42	0.26	63.90	3265	2581.25	0.06	46.80
1098	2,570.37	0.61	64.00	3266	2581.41	0.04	46.60
1100	2,599.23	0.16	27.80	3268	2564.68	0.11	63.50
1101	2,599.20	0.16	27.80	3269	2566.33	0.02	61.90
1103	2,581.13	0.06	47.20	3272	2609.03	0.07	20.60
1104	2,581.12	0.14	47.20	3273	2608.92	0.41	20.60
1106	2,572.61	0.06	55.70	3276	2560.65	0.02	68.20
1107	2,572.51	0.12	55.80	3277	2559.88	0.11	69.00
1109	2,567.28	0.03	62.50	3279	2563.25	0.02	65.50
1110	2,567.26	0.29	62.50	3282	2556.79	0.01	66.40
1112	2,563.27	0.12	68.90	3284	2606.67	0.19	22.20
1113	2,563.25	0.03	68.90	3285	2607.42	0.14	21.40
1115	2,548.86	0.62	79.40	3287	2554.32	0.12	74.20
1116	2,548.79	0.12	79.40	3289	2594.58	0.13	40.00
1118	2,562.31	0.16	66.10	3290	2592.81	0.30	41.80
1119	2,562.37	0.11	66.10	3292	2560.65	0.10	67.60
1121	2,576.08	0.16	52.90	3293	2561.67	0.03	66.60
1122	2,576.04	0.09	53.00	3295	2559.19	0.04	72.60
1124	2,543.61	0.16	61.00	3296	2559.13	0.22	72.70
1125	2,543.99	0.16	60.60	3299	2610.59	0.16	7.50
1127	2,578.26	0.10	48.70	3300	2611.09	0.16	6.60
1128	2,578.27	0.05	48.70	3305	2552.74	0.18	75.40
1130	2,580.20	0.25	54.60	3306	2552.85	0.01	75.30
1131	2,580.17	0.07	54.60	3309	2611.89	0.07	21.70
1133	2,572.97	0.14	56.90	3311	2583.04	0.09	45.80
1134	2,572.95	0.02	56.90	3313	2567.83	0.01	64.30
1136	2,588.86	0.10	40.00	3314	2567.35	0.18	64.80
1137	2,588.89	0.04	39.90	3316	2567.74	0.19	64.70
1139	2,561.94	0.26	70.50	3318	2608.27	0.08	26.10
1140	2,561.90	0.10	70.50	3319	2602.12	0.04	32.30
1142	2,564.14	0.01	64.50	3321	2575.48	0.16	50.30
1143	2,564.19	0.16	64.40	3326	2583.95	0.19	45.30
1145	2,572.95	0.40	56.00	3328	2562.86	0.19	69.20
1146	2,572.96	0.33	56.00	3330	2577.00	0.50	51.50
1151	2,578.48	0.04	48.40	3331	2577.00	0.01	51.50
1152	2,578.52	0.38	48.30	3336	2574.71	0.11	53.50
1154	2,557.12	0.09	73.10	3338	2562.07	0.30	70.00
1155	2,557.11	0.16	73.10	3340	2577.66	0.13	54.10
1157	2,582.74	0.01	45.30	3341	2578.16	0.12	53.60
1158	2,582.52	0.14	45.50	3343	2556.01	0.21	76.00
1160	2,580.00	0.00	50.30	3344	2555.37	0.14	76.70

1161	2,580.00	0.02	50.30	3346	2579.00	0.20	52.30
1163	2,564.72	0.60	68.50	3347	2579.00	0.11	52.50
1164	2,564.76	0.18	68.50	3349	2579.12	0.06	49.40
1166	2,563.13	0.18	65.50	3350	2584.21	0.31	44.40
1167	2,563.18	0.06	65.40	3353	2560.26	0.29	68.10
1169	2,561.21	0.03	71.20	3354	2559.97	0.13	68.40
1170	2,561.17	0.03	71.30	3357	2569.29	0.13	62.00
1172	2,590.99	0.16	37.50	3360	2552.04	0.11	68.70
1173	2,591.16	0.16	37.40	3362	2587.93	0.15	41.10
1175	2,570.81	0.26	60.70	3363	2587.18	0.05	41.80
1176	2,570.81	0.36	60.70	3365	2579.31	0.14	55.40
1181	2,564.13	0.16	68.00	3366	2578.58	0.16	56.20
1182	2,564.09	0.03	68.10	3368	2587.08	0.22	39.70
1184	2,574.45	0.05	53.80	3369	2587.04	0.18	39.70
1185	2,574.41	0.01	53.90	3371	2583.09	0.35	44.20
1187	2,560.00	0.01	66.40	3373	2574.53	0.05	52.10
1188	2,560.00	0.07	66.40	3375	2559.37	0.02	70.20
1190	2,587.18	0.16	41.30	3377	2574.23	0.09	55.00
1191	2,587.20	0.27	41.30	3379	2581.46	0.14	48.70
1193	2,591.17	0.16	37.40	3380	2582.12	0.11	48.00
1195	2,585.66	0.02	42.60	3382	2550.00	0.16	77.70
1196	2,585.69	0.16	42.60	3385	2609.06	0.16	1.90
1198	2,563.05	0.01	69.30	3387	2566.48	0.06	61.80
1199	2,563.01	0.03	69.40	3388	2566.18	0.12	62.10
1201	2,580.30	0.09	48.20	3390	2579.75	0.11	49.60
1202	2,580.28	0.09	48.30	3393	2589.23	0.14	46.50
1204	2,559.00	0.16	73.40	3395	2582.62	0.03	47.30
1205	2,559.00	0.16	73.40	3397	2560.49	0.08	67.20
1207	2,571.06	0.01	54.70	3399	2574.66	0.04	54.30
1208	2,571.44	0.08	54.30	3400	2574.78	0.31	54.20
1210	2,573.05	0.16	61.70	3402	2583.69	0.15	43.10
1212	2,601.52	0.01	30.60	3404	2568.17	0.14	62.10
1213	2,601.65	0.09	30.50	3407	2562.34	0.55	69.70
1215	2,590.84	0.90	37.70	3408	2561.93	0.09	70.10
1216	2,590.86	0.16	37.70	3410	2572.92	0.02	58.10
1218	2,574.09	0.23	52.70	3413	2563.31	0.05	62.80
1219	2,574.09	0.02	52.70	3414	2561.35	0.04	64.80
1221	2,573.06	0.01	61.70	3416	2572.26	0.15	54.50
1222	2,572.98	0.16	61.70	3418	2572.76	0.57	56.30
1224	2,562.28	0.01	67.60	3420	2610.02	0.16	7.60
1225	2,562.27	0.01	67.80	3422	2568.17	0.16	64.30
1230	2,580.84	0.08	49.20	3424	2586.00	0.15	46.10
1232	2,599.06	0.03	28.00	3425	2585.08	0.16	47.10
1234	2,577.00	0.16	53.20	3428	2596.58	0.04	31.20
1235	2,577.00	0.16	53.20	3429	2595.81	0.04	32.00
1237	2,580.17	0.03	54.60	3431	2576.39	0.55	52.90
1239	2,594.87	0.26	33.60	3433	2584.24	0.11	42.80

1240	2,594.88	0.16	33.60	3434	2582.45	0.29	44.60
1242	2,599.11	0.16	28.50	3436	2591.55	0.39	36.40
1243	2,599.04	0.02	28.60	3438	2573.37	0.07	53.60
1245	2,580.00	0.07	48.00	3439	2572.98	0.08	54.00
1246	2,580.25	0.16	47.70	3441	2585.65	0.26	42.80
1248	2,560.03	0.16	68.70	3442	2584.84	0.17	43.70
1249	2,559.98	0.17	68.70	3444	2575.93	0.13	53.90
1251	2,558.47	0.06	71.80	3445	2576.28	0.14	53.60
1252	2,558.46	0.02	71.90	3447	2576.16	0.23	50.50
1254	2,603.94	0.11	30.40	3448	2575.20	0.15	51.50
1255	2,603.18	0.14	31.10	3450	2582.82	0.29	47.30
1257	2,561.89	0.16	70.30	3451	2583.32	0.40	47.00
1258	2,561.96	0.16	70.20	3453	2577.79	0.13	57.00
1260	2,549.48	0.34	78.90	3455	2589.08	0.05	37.80
1261	2,549.31	0.16	79.10	3457	2589.00	0.22	38.80
1264	2,599.13	0.27	27.80	3459	2568.04	0.13	64.10
1266	2,592.83	0.01	34.20	3461	2583.50	0.04	43.50
1267	2,592.82	0.16	34.20	3463	2575.01	0.18	55.50
1269	2,554.73	0.41	49.90	3467	2573.40	0.02	58.80
1271	2,571.18	0.16	60.30	3469	2608.17	0.22	21.60
1272	2,571.08	0.16	60.40	3471	2574.29	0.08	55.60
1274	2,576.41	0.08	55.90	3473	2582.24	0.22	45.70
1275	2,576.37	0.25	55.90	3474	2581.73	0.05	46.20
1277	2,566.52	0.09	61.80	3476	2565.62	0.16	64.00
1278	2,566.45	0.15	61.90	3477	2565.51	0.14	64.20
1280	2,565.46	0.02	64.30	3479	2584.71	0.09	43.90
1282	2,560.00	0.06	68.50	3481	2576.24	0.03	54.40
1283	2,560.00	0.14	68.50	3484	2581.33	0.03	46.80
1285	2,578.03	0.10	49.00	3486	2546.72	0.16	57.80
1286	2,578.03	0.16	49.00	3491	2566.93	0.09	61.40
1288	2,581.93	0.12	52.80	3493	2569.66	0.19	60.30
1289	2,581.93	0.09	52.80	3494	2568.42	0.07	61.50
1291	2,578.04	0.16	48.90	3498	2609.07	0.01	21.00
1293	2,594.56	0.00	37.80	3502	2587.78	0.09	46.90
1294	2,594.68	0.16	37.70	3503	2587.85	0.27	46.80
1296	2,593.01	0.16	37.50	3505	2561.02	0.07	70.60
1297	2,592.98	0.03	37.50	3507	2564.46	0.08	65.10
1299	2,586.95	0.16	43.50	3509	2561.23	0.28	70.90
1300	2,586.00	0.02	44.40	3511	2571.79	0.00	58.20
1302	2,580.78	0.16	54.00	3513	2578.10	0.18	52.70
1303	2,580.78	0.01	54.00	3514	2580.35	0.11	50.40
1305	2,554.48	0.16	50.20	3516	2547.02	0.04	81.20
1307	2,585.57	0.16	42.70	3518	2566.50	0.27	65.20
1308	2,585.56	0.16	42.70	3520	2565.93	0.10	63.60
1310	2,583.44	0.16	45.90	3525	2579.72	0.11	50.30
1311	2,583.50	0.16	45.80	3527	2582.95	0.07	45.70
1313	2,589.30	0.05	41.90	3530	2587.86	0.14	43.00

1314	2,589.55	0.08	41.70	3531	2587.74	0.32	43.10
1316	2,559.72	0.12	72.40	3533	2582.63	0.06	47.50
1317	2,559.84	0.24	72.30	3534	2583.19	0.02	47.00
1319	2,556.05	0.16	76.00	3536	2558.70	0.05	71.40
1320	2,556.09	0.33	76.00	3538	2573.63	0.21	53.40
1322	2,585.68	0.34	43.40	3539	2574.61	0.10	52.40
1323	2,585.77	0.07	43.30	3541	2578.92	0.23	47.90
1325	2,583.46	0.16	51.50	3542	2578.94	0.25	47.90
1326	2,583.45	0.08	51.50	3544	2602.54	0.26	29.90
1328	2,598.02	0.16	28.80	3545	2605.96	0.46	26.50
1329	2,598.04	0.35	28.80	3547	2578.88	0.15	53.30
1331	2,574.57	0.09	55.20	3550	2577.23	0.13	49.50
1332	2,574.58	0.05	55.20	3551	2576.96	0.12	49.80
1334	2,582.96	0.15	46.40	3554	2590.09	0.29	43.90
1335	2,582.94	0.16	46.40	3556	2583.57	0.03	45.80
1337	2,565.93	0.40	63.60	3558	2573.24	0.11	55.00
1338	2,565.98	0.06	63.50	3560	2579.46	0.19	52.70
1340	2,589.80	0.23	37.20	3561	2582.84	0.19	49.30
1341	2,589.27	0.05	37.70	3563	2555.75	0.11	73.20
1343	2,591.74	0.07	38.20	3565	2579.27	0.16	51.50
1344	2,592.01	0.16	37.90	3567	2588.70	0.16	42.30
1346	2,583.46	0.16	44.80	3568	2588.69	0.17	42.30
1348	2,576.38	0.10	52.90	3570	2581.14	0.09	49.30
1349	2,576.32	0.17	53.00	3571	2581.02	0.40	49.40
1354	2,581.93	0.03	46.40	3573	2580.31	0.09	49.80
1355	2,581.96	0.03	46.40	3575	2577.36	0.20	53.20
1357	2,570.86	0.35	58.10	3576	2577.19	0.32	53.30
1358	2,570.77	0.23	58.20	3578	2584.67	0.32	45.10
1360	2,564.59	0.04	65.80	3580	2570.10	0.14	61.30
1361	2,564.59	0.01	65.80	3582	2581.71	0.54	45.30
1366	2,594.44	0.39	37.90	3585	2591.00	0.10	36.00
1368	2,559.97	0.16	69.50	3586	2586.72	0.24	40.20
1369	2,559.79	0.03	69.70	3588	2563.66	0.12	68.80
1372	2,577.57	0.06	49.30	3589	2563.72	0.09	68.70
1373	2,577.48	0.33	49.40	3591	2568.56	0.16	63.60
1375	2,574.23	0.16	60.40	3592	2569.66	0.16	62.50
1377	2,557.10	0.04	74.70	3594	2570.04	0.12	59.80
1378	2,557.05	0.16	74.70	3596	2560.85	0.10	67.70
1380	2,579.00	0.06	50.00	3597	2560.02	0.17	68.50
1381	2,579.00	0.10	50.00	3599	2558.62	0.21	70.60
1383	2,589.08	0.04	37.90	3600	2557.32	0.05	71.90
1385	2,594.38	0.01	34.70	3602	2587.12	0.21	43.80
1386	2,594.27	0.04	34.80	3604	2567.92	0.39	63.40
1388	2,572.40	0.10	54.40	3606	2577.14	0.17	52.10
1389	2,572.46	0.03	54.30	3607	2578.97	0.27	50.30
1391	2,583.69	0.11	46.80	3609	2564.19	0.01	40.50
1392	2,583.77	0.06	46.70	3611	2602.02	0.01	27.90

1394	2,575.84	0.27	54.00	3613	2572.79	0.11	61.60
1395	2,575.20	0.05	54.60	3614	2572.66	0.18	61.70
1397	2,595.57	0.05	34.30	3617	2582.04	0.13	48.10
1398	2,595.71	0.16	34.20	3620	2560.92	0.09	70.80
1400	2,594.18	0.07	37.60	3622	2568.93	0.12	60.90
1401	2,594.09	0.12	37.80	3623	2572.02	0.18	57.80
1403	2,583.99	0.07	44.60	3625	2579.71	0.18	50.20
1404	2,583.97	0.14	44.60	3629	2574.27	0.16	52.40
1406	2,591.31	0.17	37.50	3631	2572.00	0.50	57.10
1407	2,591.21	0.00	37.60	3632	2571.85	0.40	57.20
1409	2,580.00	0.16	51.20	3635	2568.23	0.12	61.30
1410	2,580.00	0.16	51.30	3636	2567.06	0.12	62.50
1412	2,580.60	0.16	46.00	3639	2572.97	0.35	41.20
1415	2,582.84	0.14	48.20	3641	2576.34	0.31	50.70
1416	2,582.95	0.16	48.10	3643	2565.37	0.19	68.30
1418	2,571.26	0.09	57.30	3645	2603.61	0.06	31.80
1419	2,571.38	0.27	57.10	3648	2595.61	0.14	38.90
1421	2,580.00	0.41	48.00	3650	2558.67	0.06	71.50
1423	2,554.41	0.09	50.20	3651	2560.03	0.16	70.10
1425	2,585.00	0.09	50.00	3653	2594.80	0.17	36.40
1426	2,585.00	0.03	49.90	3654	2597.21	0.18	34.00
1431	2,566.02	0.07	63.50	3657	2598.01	0.01	32.40
1433	2,575.62	0.05	53.60	3660	2568.71	0.21	61.00
1434	2,575.59	0.04	53.60	3661	2567.36	0.08	62.30
1436	2,580.91	0.16	47.60	3663	2629.74	0.16	6.10
1437	2,580.89	0.04	47.60	3664	2635.00	0.16	1.00
1439	2,581.31	0.10	49.20	3666	2558.12	0.20	73.40
1441	2,562.52	0.04	67.60	3668	2550.52	0.13	77.20
1442	2,562.38	0.03	67.70	3669	2551.39	0.17	76.30
1444	2,595.57	0.08	34.80	3671	2583.18	0.31	43.70
1445	2,595.76	0.03	34.60	3672	2584.00	0.07	42.80
1447	2,565.09	0.11	62.70	3678	2570.25	0.19	59.30
1448	2,565.10	0.15	62.70	3680	2571.28	0.15	57.80
1450	2,574.72	0.02	54.80	3682	2553.88	0.06	69.30
1451	2,574.70	0.03	54.90	3686	2582.78	0.04	47.40
1453	2,580.07	0.06	50.50	3688	2551.85	0.01	77.10
1454	2,580.18	0.05	50.40	3689	2551.58	0.16	77.40
1456	2,577.17	0.05	49.60	3691	2580.84	0.10	49.20
1458	2,583.82	0.05	44.50	3693	2581.08	0.07	53.70
1459	2,583.84	0.09	44.50	3694	2579.09	0.25	55.70
1461	2,570.80	0.10	58.90	3697	2598.20	0.21	36.00
1462	2,570.69	0.29	59.00	3700	2587.49	0.06	42.40
1464	2,583.04	0.10	48.00	3701	2589.01	0.05	40.90
1466	2,576.94	0.16	50.00	3703	2572.62	0.11	55.90
1468	2,580.32	0.12	49.50	3704	2569.12	0.25	59.30
1469	2,580.22	0.11	49.70	3707	2568.39	0.18	64.20
1471	2,566.20	0.30	68.40	3710	2557.88	0.09	74.30

1472	2,566.16	0.32	67.90	3711	2558.52	0.21	73.60
1474	2,595.00	0.23	33.50	3713	2577.85	0.00	53.60
1477	2,567.51	0.25	63.60	3715	2558.11	0.51	74.00
1478	2,567.49	0.01	63.70	3716	2558.79	0.23	73.30
1482	2,569.50	0.02	60.70	3719	2567.00	0.19	62.20
1483	2,569.30	0.01	60.90	3720	2565.23	0.19	64.00
1485	2,581.56	0.07	48.00	3723	2575.64	0.29	51.40
1486	2,581.57	0.15	48.00	3724	2576.08	0.26	51.00
1488	2,580.07	0.14	48.80	3727	2579.63	0.18	50.30
1489	2,580.01	0.16	48.90	3728	2579.71	0.04	50.20
1491	2,585.40	0.08	43.70	3731	2561.41	0.19	67.20
1493	2,565.51	0.02	63.20	3732	2561.97	0.00	66.70
1495	2,600.92	0.10	34.40	3734	2585.00	0.12	41.10
1499	2,565.23	0.04	66.80	3735	2580.77	0.03	45.30
1501	2,573.34	0.44	61.20	3737	2581.76	0.16	35.20
1503	2,567.18	0.13	62.50	3739	2588.17	0.23	41.80
1504	2,567.08	0.10	62.60	3740	2587.22	0.26	42.70
1506	2,547.78	0.16	56.80	3743	2562.66	0.07	66.40
1507	2,547.51	0.01	57.10	3744	2564.51	0.15	64.60
1509	2,575.00	0.07	54.60	3747	2586.31	0.04	44.10
1510	2,575.02	0.32	54.50	3751	2564.37	0.10	67.50
1512	2,556.66	0.05	71.80	3752	2564.40	0.12	67.40
1514	2,561.49	0.26	68.90	3754	2571.18	0.50	60.90
1516	2,588.92	1.47	39.20	3755	2570.41	0.16	61.60
1517	2,588.61	0.16	39.60	3757	2562.18	0.37	65.50
1519	2,591.06	0.06	43.60	3758	2562.44	0.14	65.20
1521	2,600.57	0.05	33.90	3761	2574.00	0.14	55.70
1523	2,574.71	0.20	54.90	3762	2574.20	0.14	55.50
1524	2,574.81	0.09	54.80	3765	2554.34	0.16	74.60
1526	2,580.00	0.08	50.20	3767	2567.00	0.18	61.00
1527	2,580.00	0.16	50.20	3769	2574.47	0.10	60.10
1529	2,583.06	0.10	45.60	3771	2575.09	0.23	54.20
1530	2,583.01	0.15	45.60	3777	2580.00	0.10	47.80
1532	2,575.91	0.13	50.90	3778	2580.00	0.02	47.80
1534	2,566.15	0.23	66.00	3781	2580.02	0.00	48.50
1536	2,551.16	0.07	81.20	3783	2570.82	0.05	58.20
1538	2,583.71	0.26	46.60	3785	2555.99	0.29	76.00
1540	2,575.94	0.16	55.90	3787	2580.07	0.17	50.00
1541	2,575.89	0.10	55.90	3788	2580.00	0.13	50.10
1543	2,570.15	0.12	63.80	3790	2579.92	0.02	50.40
1546	2,565.23	0.08	67.20	3794	2576.40	0.14	52.60
1548	2,575.60	0.16	56.50	3795	2577.39	0.04	51.60
1551	2,588.00	0.07	39.00	3797	2559.69	0.21	68.70
1553	2,581.73	0.13	45.20	3799	2582.11	0.17	48.30
1555	2,585.76	0.19	46.40	3801	2560.72	0.07	68.20
1557	2,586.62	0.09	44.20	3805	2590.09	0.05	38.70
1559	2,543.09	0.04	61.50	3807	2566.36	0.53	66.10

1561	2,573.56	1.68	51.90	3809	2561.37	0.24	70.30
1563	2,573.72	0.03	53.50	3811	2597.68	0.13	32.20
1565	2,569.18	0.02	60.60	3812	2594.17	0.13	35.70
1567	2,554.69	0.09	74.20	3814	2561.35	0.32	70.80
1568	2,554.50	0.03	74.40	3815	2560.17	0.15	71.90
1570	2,580.22	0.12	50.00	3817	2567.67	0.06	60.60
1573	2,574.17	0.16	56.40	3821	2564.67	0.27	65.10
1575	2,591.37	0.26	37.10	3823	2583.40	0.09	46.40
1577	2,575.84	0.25	58.90	3824	2582.76	0.07	47.10
1579	2,608.75	0.16	25.70	3827	2600.77	0.21	26.80
1580	2,608.19	0.12	26.30	3829	2575.25	0.32	51.50
1582	2,584.18	0.08	44.10	3830	2576.86	0.20	49.90
1583	2,584.09	0.02	44.20	3832	2557.12	0.15	71.30
1585	2,581.96	0.16	46.40	3833	2559.94	0.05	68.50
1587	2,582.72	0.14	44.20	3835	2552.92	0.08	76.10
1588	2,582.62	0.47	44.40	3837	2586.11	0.08	43.80
1590	2,576.73	0.27	52.90	3839	2574.00	0.08	55.70
1591	2,576.66	0.21	52.90	3842	2570.10	0.37	58.30
1593	2,557.58	0.05	74.40	3845	2571.79	0.11	56.50
1594	2,557.42	0.00	74.60	3848	2566.94	0.18	62.10
1596	2,558.26	0.07	73.80	3849	2566.03	0.25	62.90
1597	2,558.13	0.07	73.90	3853	2581.96	0.13	48.40
1599	2,586.00	0.02	40.80	3855	2567.30	0.25	61.90
1601	2,578.13	0.03	48.70	3857	2555.54	0.35	74.80
1602	2,578.14	0.04	48.70	3858	2554.96	0.14	75.30
1604	2,584.52	0.24	42.40	3861	2580.12	0.04	49.50
1605	2,584.42	0.08	42.50	3863	2591.00	0.08	35.90
1607	2,552.95	0.34	76.00	3864	2590.08	0.13	36.70
1608	2,552.75	0.14	76.10	3868	2574.92	0.02	59.80
1610	2,572.93	0.17	55.40	3870	2577.56	0.26	52.20
1611	2,572.77	0.04	55.50	3872	2569.95	0.06	61.40
1613	2,567.85	0.12	64.60	3874	2544.27	0.19	60.30
1614	2,567.63	0.08	64.80	3878	2569.49	0.40	57.50
1616	2,562.40	0.03	67.40	3880	2564.00	0.12	65.10
1618	2,566.91	0.09	65.30	3882	2554.98	0.15	73.20
1619	2,567.08	0.08	65.10	3883	2554.92	0.22	73.20
1621	2,554.76	0.01	74.20	3885	2565.33	0.22	63.70
1623	2,583.54	0.14	46.40	3887	2591.15	0.16	36.30
1624	2,583.44	0.06	46.50	3888	2591.84	0.16	35.70
1626	2,564.55	0.16	63.20	3890	2600.95	0.17	30.60
1628	2,572.40	0.19	62.30	3892	2576.20	0.19	50.60
1629	2,573.22	0.07	61.50	3894	2571.46	0.32	60.10
1631	2,607.38	0.05	22.60	3895	2572.41	0.19	59.20
1632	2,607.71	0.04	22.30	3897	2565.80	0.06	67.90
1634	2,578.02	0.08	49.00	3899	2568.77	0.23	62.90
1639	2,580.00	0.07	51.20	3901	2574.93	0.25	54.90
1641	2,579.95	0.14	51.30	3904	2556.51	0.02	66.70

1643	2,573.50	0.02	57.20	3906	2552.68	0.04	51.80
1644	2,573.42	0.16	57.30	3908	2568.59	0.06	63.60
1646	2,595.00	0.16	33.40	3913	2563.40	0.05	68.80
1648	2,562.12	0.17	66.30	3915	2602.43	0.08	29.80
1650	2,565.76	0.03	63.80	3917	2581.64	0.15	46.70
1652	2,587.90	0.03	39.10	3918	2581.69	0.09	46.70
1654	2,576.76	0.02	53.30	3920	2567.85	0.05	59.50
1655	2,576.79	0.22	53.20	3921	2568.41	0.10	58.90
1657	2,554.59	0.06	50.10	3923	2564.16	0.11	63.50
1659	2,576.41	0.20	53.40	3926	2562.90	0.10	65.80
1660	2,576.43	0.25	53.40	3928	2558.40	0.06	70.80
1662	2,577.45	0.05	56.50	3932	2575.00	0.04	54.40
1663	2,578.36	0.16	55.60	3934	2559.46	0.12	69.20
1665	2,580.35	0.04	48.20	3935	2560.03	0.11	68.60
1666	2,580.33	0.01	48.20	3937	2566.53	0.13	62.80
1668	2,580.00	0.16	50.50	3940	2583.05	0.28	52.60
1669	2,579.91	0.16	50.60	3941	2587.11	0.16	48.50
1671	2,558.88	0.16	68.70	3943	2555.86	0.30	72.40
1672	2,558.83	0.13	68.80	3946	2572.15	0.07	57.40
1674	2,566.13	0.07	63.20	3947	2570.14	0.16	59.40
1675	2,566.11	0.10	63.30	3953	2580.00	0.18	47.00
1677	2,582.73	0.19	46.70	3955	2560.08	0.30	69.10
1678	2,582.79	0.01	46.60	3957	2563.99	0.17	64.90
1680	2,565.40	0.35	66.70	3959	2568.48	0.16	63.70
1682	2,565.55	0.15	64.20	3961	2579.38	1.62	49.60
1684	2,570.02	0.19	58.40	3965	2564.08	0.10	67.70
1685	2,569.97	0.08	58.50	3967	2563.71	0.13	68.50
1687	2,572.86	0.02	56.20	3969	2558.27	0.15	73.80
1688	2,572.97	0.16	56.10	3971	2579.88	0.04	50.00
1690	2,583.99	0.00	44.30	3974	2585.44	0.35	45.30
1692	2,581.93	0.27	46.50	3979	2563.42	0.21	68.70
1694	2,569.66	0.03	64.90	3981	2555.23	0.06	76.70
1696	2,588.80	0.04	41.60	3984	2583.52	0.01	45.80
1697	2,587.86	0.03	42.60	3985	2582.42	0.15	46.90
1699	2,566.42	0.23	63.40	3988	2556.14	0.08	72.00
1700	2,566.25	0.04	63.60	3990	2583.99	0.04	44.30
1702	2,567.45	0.16	63.70	3992	2580.50	0.52	47.10
1704	2,562.96	0.01	67.10	3994	2568.30	0.11	61.50
1706	2,603.20	0.16	25.60	3995	2568.94	0.07	60.80
1707	2,603.40	0.01	25.40	4000	2562.08	0.18	70.00
1709	2,561.07	0.09	71.40	4001	2563.18	0.06	68.90
1711	2,575.17	0.02	54.30	4003	2579.07	0.52	48.30
1713	2,589.62	0.04	46.10	4005	2573.95	0.12	55.70
1714	2,588.34	0.14	47.40	4008	2572.90	0.13	53.90
1716	2,554.97	0.16	73.90	4010	2573.94	0.01	58.30
1718	2,553.38	0.05	74.30	4012	2582.75	0.16	47.70
1719	2,553.33	0.10	74.30	4014	2558.12	0.11	73.40

1721	2,559.26	0.11	69.20	4016	2573.67	0.21	54.60
1722	2,559.18	0.03	69.20	4018	2575.60	0.08	55.10
1724	2,586.14	0.16	42.00	4019	2574.49	0.06	56.20
1725	2,586.07	0.25	42.10	4021	2575.71	0.12	53.30
1727	2,579.51	0.16	50.90	4023	2575.12	0.12	59.50
1728	2,579.41	0.16	51.00	4028	2570.48	0.07	56.90
1730	2,599.93	0.00	29.00	4031	2578.06	0.07	51.70
1732	2,585.96	0.13	41.00	4032	2578.19	0.13	51.50
1733	2,585.96	0.02	41.00	4037	2574.58	0.11	56.20
1735	2,586.47	0.09	40.50	4039	2609.76	0.16	8.10
1736	2,586.37	0.09	40.60	4042	2565.39	0.18	67.00
1738	2,572.76	0.16	55.50	4044	2589.22	0.02	39.70
1740	2,575.30	0.12	51.50	4046	2590.31	0.08	38.50
1741	2,575.39	0.18	51.40	4048	2587.55	0.21	43.10
1743	2,582.59	0.05	46.00	4049	2588.22	0.16	42.40
1744	2,582.56	0.02	46.00	4053	2583.31	0.36	46.00
1746	2,582.41	0.17	46.00	4056	2561.58	0.13	67.40
1747	2,582.46	0.16	45.90	4058	2579.44	0.18	49.80
1749	2,570.50	0.05	58.00	4059	2579.77	0.07	49.50
1750	2,570.48	0.02	58.00	4063	2592.51	0.10	36.30
1752	2,584.85	0.46	50.30	4064	2592.33	0.16	36.50
1753	2,584.63	0.29	50.50	4068	2579.31	0.19	50.50
1755	2,575.94	0.20	53.10	4069	2579.61	0.26	50.20
1756	2,575.87	0.01	53.20	4075	2559.18	0.27	72.80
1758	2,605.47	0.02	23.60	4077	2555.48	0.23	73.50
1760	2,583.54	0.09	45.80	4078	2554.03	0.05	74.90
1762	2,562.00	0.15	67.30	4083	2556.21	0.14	71.90
1763	2,562.32	0.03	67.00	4084	2555.83	0.10	72.40
1765	2,583.87	0.16	45.50	4086	2586.77	0.19	42.50
1766	2,583.73	0.08	45.60	4088	2556.52	0.42	71.40
1768	2,573.86	0.37	52.90	4090	2578.78	0.15	48.10
1769	2,573.88	0.16	52.90	4092	2579.07	0.14	51.60
1771	2,579.80	0.01	50.80	4094	2571.66	0.03	55.10
1773	2,568.33	0.08	63.40	4096	2561.74	0.04	70.40
1774	2,568.48	0.06	63.30	4098	2563.62	0.11	68.60
1776	2,563.27	0.41	65.40	4100	2592.65	0.00	34.60
1777	2,563.22	0.25	65.50	4102	2565.00	0.06	67.30
1780	2,585.45	0.01	42.80	4104	2560.85	0.18	68.40
1781	2,585.52	0.07	42.80	4106	2576.07	0.12	56.00
1783	2,568.14	0.01	58.90	4109	2576.40	0.15	53.60
1784	2,568.15	0.14	58.90	4115	2559.13	0.13	70.10
1786	2,580.06	0.16	51.20	4116	2557.87	0.21	71.30
1787	2,579.85	0.16	51.40	4121	2558.61	0.16	73.80
1789	2,560.50	0.24	67.20	4123	2552.82	0.12	76.20
1790	2,560.88	0.18	66.80	4124	2552.41	0.16	76.60
1792	2,580.01	0.16	51.20	4126	2600.67	0.16	29.70
1794	2,580.20	0.16	49.10	4128	2591.43	0.02	38.50

1795	2,579.96	0.02	49.40	4130	2589.97	0.25	37.90
1797	2,594.61	0.16	34.20	4131	2589.46	0.15	38.50
1799	2,562.00	0.04	69.90	4133	2565.36	0.12	67.00
1800	2,563.09	0.01	68.80	4137	2570.61	0.12	58.60
1802	2,595.12	0.12	35.20	4142	2577.00	0.10	53.40
1804	2,556.30	0.01	72.70	4143	2579.27	0.04	51.20
1805	2,556.20	0.25	72.80	4147	2577.70	0.08	49.10
1807	2,566.03	0.17	69.00	4150	2570.92	0.02	55.90
1808	2,566.12	0.28	69.00	4152	2574.90	0.34	55.20
1810	2,589.21	0.04	37.70	4155	2555.86	0.12	72.20
1811	2,588.75	0.00	38.20	4157	2584.73	0.07	45.00
1813	2,564.82	0.03	62.20	4159	2554.29	0.16	59.70
1814	2,564.58	0.03	62.40	4160	2562.25	0.13	51.70
1816	2,575.57	0.04	54.60	4162	2570.44	0.03	56.80
1817	2,575.36	0.02	54.80	4165	2564.04	0.04	68.10
1819	2,576.85	0.16	54.60	4167	2565.00	0.30	64.80
1820	2,576.88	0.12	54.50	4172	2565.00	0.13	64.80
1822	2,566.85	0.10	62.70	4175	2603.19	0.27	29.50
1823	2,566.84	0.02	62.70	4176	2604.28	0.31	28.50
1825	2,569.98	0.03	59.10	4178	2574.16	0.17	56.60
1826	2,569.87	0.13	59.20	4180	2581.06	0.04	48.30
1828	2,600.29	0.15	34.20	4187	2569.90	0.16	61.60
1830	2,554.19	0.07	69.00	4189	2566.73	0.28	63.00
1831	2,554.33	0.00	68.90	4191	2593.18	0.25	39.50
1835	2,560.46	0.01	68.70	4193	2554.00	0.06	74.90
1836	2,560.51	0.06	68.70	4195	2553.23	0.23	75.20
1838	2,577.78	0.16	53.00	4196	2557.37	0.32	71.10
1839	2,577.84	0.16	53.00	4201	2583.57	0.43	43.40
1841	2,575.83	0.03	53.30	4204	2592.06	0.01	43.60
1843	2,550.00	0.16	77.70	4208	2555.22	0.06	74.50
1844	2,550.00	0.18	77.70	4213	2564.78	0.28	65.10
1846	2,579.64	0.05	50.80	4215	2569.83	0.20	60.00
1847	2,579.57	0.17	50.90	4218	2558.19	0.26	70.90
1849	2,568.00	0.04	59.00	4224	2570.44	0.18	44.30
1851	2,571.35	0.17	57.20	4227	2581.57	0.05	47.70
1853	2,575.00	0.33	54.30	4230	2599.33	0.07	35.20
1854	2,575.00	0.16	54.30	4232	2559.61	0.22	68.50
1856	2,556.07	0.16	71.90	4234	2562.70	0.13	69.50
1857	2,555.87	0.02	72.20	4238	2573.16	0.07	56.90
1859	2,569.17	0.16	63.40	4239	2575.62	0.04	54.40
1860	2,569.06	0.16	63.50	4242	2569.64	0.03	50.10
1862	2,587.40	0.16	41.20	4247	2573.00	0.03	53.70
1863	2,587.18	0.16	41.40	4249	2582.80	0.44	46.70
1865	2,576.04	0.16	53.20	4251	2554.10	0.45	74.90
1866	2,575.71	0.25	53.50	4255	2608.66	0.09	20.50
1868	2,560.85	0.06	69.20	4257	2572.63	0.06	56.90
1870	2,599.76	0.18	29.10	4259	2605.13	0.13	23.80

1871	2,599.34	0.29	29.60	4261	2595.45	0.23	31.80
1873	2,547.95	0.16	56.70	4262	2596.55	0.06	30.70
1875	2,555.08	0.02	68.10	4264	2603.27	0.11	31.20
1876	2,555.13	0.00	68.10	4266	2593.93	0.16	38.60
1878	2,574.95	0.22	52.50	4268	2568.79	0.10	60.20
1879	2,575.64	0.16	51.80	4271	2575.33	0.39	59.00
1881	2,580.95	0.16	49.10	4273	2580.06	0.12	46.60
1883	2,583.01	0.16	48.00	4275	2579.33	0.14	51.10
1885	2,580.24	0.01	50.30	4278	2568.66	0.28	60.90
1886	2,580.36	0.05	50.20	4280	2579.00	0.15	51.10
1888	2,586.02	0.16	43.90	4281	2580.17	0.08	50.20
1889	2,585.73	0.05	44.20	4283	2591.44	0.10	35.40
1891	2,564.26	0.09	68.00	4285	2566.48	0.15	65.80
1892	2,564.39	0.22	67.90	4290	2580.98	0.06	54.00
1894	2,566.13	0.11	63.20	4291	2582.26	0.13	52.60
1896	2,591.59	0.08	43.00	4293	2556.83	0.28	75.10
1898	2,586.17	0.04	40.70	4294	2558.84	0.20	73.10
1899	2,586.43	0.06	40.40	4296	2589.61	0.27	40.80
1901	2,592.48	0.05	34.80	4302	2573.41	0.16	55.40
1902	2,592.62	0.02	34.60	4303	2575.25	0.33	53.60
1905	2,572.18	0.08	56.30	4305	2576.90	0.15	52.10
1906	2,571.96	0.16	56.50	4306	2576.41	0.15	52.40
1908	2,564.17	0.24	68.00	4308	2584.04	0.24	44.60
1909	2,563.92	0.04	68.20	4310	2561.22	0.12	70.90
1911	2,583.10	0.07	47.30	4312	2578.93	0.11	51.60
1912	2,583.70	0.16	46.70	4314	2583.56	0.00	33.30
1914	2,545.71	0.02	58.90	4320	2580.68	0.27	46.20
1916	2,580.59	0.16	48.70	4321	2581.39	0.15	45.40
1917	2,580.00	0.05	49.30	4323	2585.28	0.52	44.10
1919	2,572.89	0.29	61.80	4325	2559.82	0.40	72.60
1921	2,581.07	0.05	47.10	4327	2565.16	0.29	63.10
1922	2,581.06	0.04	47.10	4329	2575.16	0.11	54.40
1924	2,579.36	0.05	51.00	4332	2575.00	0.12	51.90
1926	2,557.20	0.10	74.60	4334	2564.00	0.15	68.20
1928	2,557.63	0.12	74.40	4336	2564.90	0.22	64.10
1929	2,557.50	0.17	74.50	4338	2587.47	0.05	42.30
1931	2,583.88	0.16	44.40	4340	2555.90	0.08	73.80
1933	2,583.71	0.02	44.60	4342	2573.47	0.32	57.20
1934	2,583.69	0.03	44.60	4343	2574.44	0.11	56.20
1940	2,584.02	0.16	45.30	4345	2576.89	0.01	53.00
1941	2,583.88	0.10	45.50	4346	2577.65	0.11	52.30
1943	2,560.69	0.09	71.40	4348	2566.31	0.17	65.90
1944	2,560.56	0.22	71.50	4351	2580.23	0.01	46.70
1946	2,577.20	0.16	53.20	4355	2576.57	0.16	28.00
1947	2,577.29	0.19	53.10	4357	2570.34	0.05	60.70
1949	2,579.25	0.04	49.30	4358	2567.84	0.03	63.20
1950	2,579.28	0.21	49.20	4360	2588.07	0.08	38.90

1952	2,578.69	0.05	51.40	4362	2583.37	0.04	45.60
1953	2,578.57	0.16	51.50	4364	2597.97	0.05	32.90
1955	2,575.07	0.02	54.40	4366	2574.14	0.12	55.60
1957	2,574.00	0.02	55.70	4368	2577.13	0.19	49.60
1958	2,574.00	0.12	55.70	4369	2575.82	0.30	50.90
1960	2,579.37	0.09	55.40	4371	2551.06	0.04	77.40
1961	2,579.54	0.04	55.20	4373	2572.46	0.02	59.60
1963	2,571.33	0.08	56.00	4375	2587.00	0.55	42.70
1964	2,571.49	0.04	55.80	4378	2578.33	0.13	53.80
1966	2,567.29	0.02	63.80	4380	2574.34	0.26	55.40
1968	2,557.45	0.19	74.50	4382	2584.01	0.19	45.90
1971	2,581.25	0.40	49.10	4385	2561.81	0.14	70.30
1972	2,581.40	0.26	49.10	4389	2577.13	0.16	46.00
1974	2,578.33	0.01	48.50	4392	2557.01	0.24	71.90
1975	2,578.31	0.03	48.50	4393	2558.58	0.21	70.30
1977	2,592.81	0.02	40.00	4395	2592.54	0.46	34.50
1978	2,592.71	0.12	40.10	4397	2583.99	0.08	46.50
1980	2,580.00	0.16	50.80	4401	2563.99	0.16	64.80
1981	2,580.00	0.22	50.90	4403	2580.91	0.19	49.60
1984	2,598.16	0.16	28.70	4407	2601.23	0.02	31.70
1986	2,557.62	0.26	71.50	4409	2589.48	0.18	37.30
1987	2,557.37	0.15	71.70	4411	2555.01	0.26	73.80
1989	2,560.94	0.30	70.90	4412	2554.02	0.13	74.80
1991	2,602.09	0.14	25.50	4415	2563.68	0.06	68.40
1992	2,602.01	0.16	25.60	4418	2568.44	0.12	63.10
1994	2,574.90	0.03	54.70	4420	2561.27	0.06	67.20
1996	2,576.72	0.09	50.20	4421	2562.05	0.21	66.40
1998	2,578.41	0.16	38.40	4423	2575.77	0.11	55.00
1999	2,578.79	0.16	37.20	4427	2575.91	0.15	54.00
2001	2,575.10	0.30	52.50	4430	2582.25	0.04	47.10
2003	2,585.06	0.16	50.10	4432	2595.25	0.14	32.00
2005	2,574.89	0.07	54.90	4438	2581.41	0.20	45.50
2006	2,574.96	0.08	54.90	4440	2563.39	0.03	63.60
2008	2,591.77	0.13	36.00	4443	2562.90	0.05	66.40
2009	2,591.53	0.04	36.30	4445	2559.95	0.13	72.20
2011	2,581.81	0.19	49.30	4447	2578.90	0.16	51.70
2012	2,581.56	0.03	49.50	4451	2546.29	0.35	58.30
2014	2,570.18	0.11	61.40	4452	2541.99	0.29	62.60
2015	2,570.47	0.35	61.10	4455	2571.16	0.12	59.70
2017	2,587.44	0.02	42.50	4460	2574.55	0.07	52.50
2018	2,587.23	0.17	42.70	4462	2582.02	0.46	47.70
2020	2,593.00	0.16	34.20	4464	2574.18	0.12	55.40
2026	2,542.75	0.16	61.80	4467	2592.25	0.19	35.30
2028	2,580.00	0.16	50.80	4470	2575.50	0.21	55.20
2030	2,576.89	0.15	55.30	4472	2580.95	0.07	48.60
2031	2,576.65	0.16	55.60	4479	2597.91	0.03	29.90
2033	2,609.76	0.09	19.20	4484	2574.32	0.09	57.90

2034	2,609.91	0.16	19.00	4486	2572.42	0.17	57.70
2037	2,573.72	0.01	56.50	4487	2570.70	0.22	59.40
2038	2,573.01	0.16	57.20	4489	2585.82	0.22	41.10
2040	2,574.43	0.16	55.80	4490	2586.00	0.41	40.90
2042	2,555.96	0.08	76.00	4492	2579.56	0.37	52.20
2043	2,555.83	0.07	76.10	4496	2583.37	0.16	47.10
2046	2,567.62	0.20	65.00	4498	2576.19	0.16	54.00
2047	2,567.66	0.43	64.90	4500	2575.14	0.16	54.70
2049	2,570.69	0.23	60.80	4503	2578.10	0.11	48.70
2050	2,570.69	0.09	60.80	4505	2559.31	0.32	72.30
2052	2,580.11	0.08	50.50	4507	2580.34	0.08	54.40
2054	2,602.59	0.08	29.80	4509	2570.51	0.16	55.90
2055	2,603.17	0.08	29.20	4512	2557.42	0.05	75.00
2057	2,560.94	0.16	71.00	4514	2567.46	0.32	64.70
2059	2,563.39	0.16	68.50	4515	2568.04	0.10	64.10
2061	2,568.00	0.11	59.00	4518	2582.36	0.23	44.50
2063	2,563.93	0.04	68.20	4520	2580.32	0.32	46.40
2064	2,563.90	0.16	68.30	4522	2577.41	0.31	52.70
2066	2,567.92	0.25	64.60	4526	2587.49	0.13	47.30
2068	2,560.00	0.10	68.50	4528	2586.88	0.01	43.00
2070	2,573.99	0.36	53.30	4530	2561.92	0.09	67.70
2072	2,572.92	0.05	57.90	4534	2568.85	0.24	59.70
2074	2,563.16	0.21	66.90	4538	2581.71	0.09	48.70
2075	2,563.26	0.09	66.80	4539	2579.18	0.37	51.20
2077	2,573.63	0.06	55.50	4541	2572.29	0.22	57.70
2078	2,573.31	0.11	55.90	4546	2589.89	0.16	38.60
2080	2,572.73	0.07	58.10	4551	2572.15	0.12	55.20
2082	2,562.71	0.14	67.30	4554	2575.44	0.23	54.70
2084	2,594.79	0.09	35.10	4557	2557.00	0.15	74.80
2086	2,558.02	0.07	71.90	4560	2570.70	0.04	61.80
2089	2,563.16	0.16	65.60	4566	2555.29	0.02	73.10
2090	2,563.16	0.07	65.60	4569	2565.00	0.07	66.00
2092	2,564.38	0.22	67.80	4572	2573.04	0.16	55.50
2093	2,564.23	0.16	67.90	4574	2557.31	0.07	72.90
2095	2,564.44	0.05	64.20	4584	2563.27	0.45	66.40
2099	2,567.61	0.06	64.00	4589	2550.21	0.27	77.80
2100	2,567.70	0.14	64.00	4594	2575.58	0.03	54.20
2102	2,561.68	0.03	67.80	4596	2576.40	0.17	50.40
2103	2,561.89	0.12	67.60	4597	2575.55	0.12	51.30
2105	2,575.43	0.12	56.60	4602	2577.30	0.17	49.70
2107	2,563.00	0.01	65.80	4605	2552.04	0.17	75.80
2108	2,563.00	0.07	65.80	4606	2552.65	0.15	75.10
2110	2,573.32	0.10	52.40	4609	2578.30	0.16	52.10
2111	2,572.21	0.03	53.50	4613	2566.01	0.08	62.30
2113	2,586.46	0.35	44.30	4614	2571.73	0.02	56.60
2115	2,568.85	0.07	57.60	4616	2576.04	0.14	50.80
2117	2,570.97	0.31	58.80	4618	2565.70	0.30	62.90

2118	2,570.83	0.15	58.90	4619	2566.21	0.20	62.50
2120	2,582.00	0.12	46.00	4621	2579.00	1.05	48.20
2122	2,577.00	0.01	52.30	4623	2565.14	0.12	66.70
2123	2,577.00	0.42	52.30	4624	2566.78	0.16	65.00
2125	2,581.63	0.08	46.40	4626	2564.09	0.16	62.30
2127	2,573.43	0.10	56.40	4630	2602.62	0.19	30.90
2128	2,573.29	0.18	56.50	4631	2603.67	0.20	30.00
2131	2,566.11	0.16	62.20	4634	2577.44	0.17	52.10
2132	2,566.08	0.16	62.20	4639	2551.72	0.37	76.00
2134	2,559.62	0.05	69.90	4645	2589.04	0.12	39.90
2135	2,559.46	0.16	70.00	4647	2558.09	0.12	70.80
2137	2,586.66	0.14	44.20	4649	2568.65	0.06	63.60
2138	2,586.92	0.22	44.00	4651	2566.09	0.17	63.70
2140	2,563.38	0.16	66.70	4653	2557.40	0.10	70.80
2142	2,560.03	0.16	69.40	4656	2586.68	0.15	43.20
2144	2,558.35	0.16	72.00	4659	2561.37	0.02	70.70
2149	2,557.29	0.17	74.30	4662	2567.86	0.26	61.90
2151	2,561.71	0.09	67.20	4665	2541.00	0.08	63.60
2152	2,560.85	0.16	68.10	4667	2575.00	0.24	51.80
2154	2,579.86	0.08	50.80	4670	2594.04	0.22	33.20
2155	2,580.03	0.04	50.70	4672	2577.00	0.11	57.60
2157	2,574.73	0.11	53.50	4675	2577.60	0.30	52.80
2158	2,574.71	0.01	53.50	4677	2583.12	0.03	46.20
2160	2,572.19	0.00	56.90	4679	2587.59	0.49	41.40
2161	2,572.45	0.03	56.60	4681	2588.84	0.09	40.20
2163	2,588.99	0.16	38.00	4685	2568.16	0.11	61.60
2165	2,563.15	0.17	69.00	4687	2571.51	0.33	55.00
2166	2,563.18	0.19	69.00	4688	2571.74	0.15	54.70
2170	2,570.10	0.09	58.90	4690	2575.50	0.06	53.90
2172	2,572.82	0.06	57.10	4693	2574.87	0.51	52.10
2174	2,566.94	0.16	62.80	4695	2590.75	0.53	38.50
2175	2,567.20	0.05	62.50	4699	2559.27	0.18	61.60
2177	2,560.05	0.41	68.60	4700	2565.54	0.00	54.90
2178	2,559.85	0.22	68.80	4702	2598.56	0.13	28.60
2180	2,570.78	0.16	58.50	4704	2580.85	0.13	53.90
2181	2,570.61	0.00	58.70	4706	2587.75	0.13	41.30
2183	2,610.31	0.16	1.80	4709	2558.59	1.19	73.40
2184	2,610.39	0.16	1.70	4710	2557.76	0.23	74.20
2186	2,577.00	0.26	52.30	4712	2583.26	0.29	46.70
2188	2,555.56	0.65	49.10	4720	2552.97	0.28	79.40
2190	2,557.54	0.07	65.70	4727	2554.93	0.24	73.50
2191	2,557.34	0.01	65.90	4729	2557.46	0.26	71.10
2193	2,577.31	0.10	49.50	4733	2555.62	0.16	58.30
2195	2,550.80	0.00	81.50	4735	2585.63	0.14	43.00
2196	2,550.07	0.16	82.30	4740	2602.91	0.30	26.40
2198	2,579.96	0.22	50.30	4742	2579.57	0.29	52.20
2200	2,568.38	0.10	60.20	4745	2583.64	0.25	45.70

2201	2,568.40	0.03	60.10	4747	2566.15	0.12	63.50
2203	2,588.77	0.07	38.00	4749	2561.22	0.09	68.50
2204	2,589.27	0.08	37.50	4751	2576.13	0.33	53.80
2206	2,567.44	0.01	63.60	4752	2576.86	0.21	53.10
2207	2,566.95	0.16	64.10	4755	2591.03	0.11	35.90
2210	2,582.44	0.11	46.80	4758	2591.58	0.50	41.70
2211	2,582.80	0.08	46.50	4765	2556.36	0.38	75.60
2213	2,567.28	0.01	53.20	4767	2595.83	0.11	32.70
2214	2,568.54	0.16	51.90	4770	2567.60	0.23	62.20
2216	2,571.34	0.03	57.90	4771	2567.27	0.23	62.50
2217	2,571.14	0.02	58.10	4775	2583.29	0.10	45.30
2219	2,564.76	0.16	62.20	4779	2598.57	0.04	29.20
2221	2,580.07	0.16	50.00	4788	2581.83	0.15	44.80
2222	2,580.11	0.09	49.90	4790	2606.62	0.16	11.00
2224	2,566.95	0.01	65.30	4791	2606.02	0.16	11.50
2225	2,566.49	0.16	65.70	4795	2562.43	0.01	66.00
2227	2,594.73	0.11	34.00	4797	2570.20	0.21	59.60
2229	2,556.76	0.12	72.10	4801	2555.64	0.09	72.80
2230	2,556.37	0.12	72.50	4804	2583.04	0.26	45.80
2232	2,592.45	0.16	35.70	4809	2576.56	0.45	58.00
2233	2,592.24	0.16	36.00	4811	2550.68	0.16	77.50
2236	2,579.19	0.29	49.40	4815	2574.19	0.17	56.60
2237	2,579.07	0.16	49.50	4817	2576.18	0.03	56.00
2239	2,593.28	0.09	36.60	4818	2577.35	0.20	54.90
2240	2,594.39	0.02	35.50	4820	2559.56	0.12	72.40
2242	2,556.48	0.11	72.50	4821	2560.58	0.36	71.40
2244	2,581.52	0.13	47.00	4825	2557.84	0.21	74.30
2245	2,581.44	0.03	47.10	4826	2556.53	0.10	75.60
2247	2,574.82	0.01	52.60	4828	2561.17	0.05	67.40
2248	2,574.97	0.12	52.40	4832	2576.33	0.19	53.40
2252	2,598.57	0.02	31.30	4834	2558.88	0.22	73.00
2253	2,598.76	0.03	31.10	4837	2587.50	0.35	39.30
2255	2,565.00	0.46	66.00	4839	2575.67	0.24	55.00
2256	2,565.00	0.16	66.00	4841	2581.83	0.06	46.20
2258	2,579.31	0.15	52.40	4843	2575.70	0.07	54.10
2259	2,579.63	0.18	52.10	4845	2575.39	0.11	58.40
2261	2,568.15	0.14	61.40	4846	2575.67	0.21	58.10
2262	2,568.22	0.05	61.30	4849	2585.00	0.00	32.50
2264	2,566.57	0.04	65.50	4850	2592.35	0.16	25.10
2265	2,566.37	0.25	65.70	4856	2583.00	0.33	46.30
2267	2,563.80	0.15	65.10	4859	2574.65	0.32	57.50
2268	2,563.60	0.02	65.30	4861	2600.44	0.53	35.00
2270	2,577.00	0.16	55.20	4865	2555.98	0.55	76.10
2272	2,567.02	0.09	65.10	4867	2584.65	0.16	43.60
2273	2,566.69	0.23	65.40	4869	2583.81	0.31	45.60
2275	2,596.41	0.05	34.00	4871	2579.53	0.16	50.50
2277	2,561.27	0.02	66.60	4873	2567.88	0.16	62.90

2278	2,560.93	0.03	66.90	4875	2558.24	0.12	73.70
2280	2,578.22	0.16	51.50	4878	2575.00	0.32	56.80
2281	2,578.25	0.16	51.50	4879	2575.09	0.22	57.30
2283	2,581.88	0.02	47.40	4882	2588.97	0.28	46.80
2284	2,581.60	0.04	47.70	4884	2579.00	0.29	51.00
2286	2,563.59	0.13	65.30	4886	2582.10	0.09	52.80
2288	2,568.79	0.16	58.20	4888	2554.25	0.45	78.10
2289	2,568.56	0.00	58.40	4890	2585.09	0.16	43.50
2291	2,610.22	0.19	22.50	4891	2584.18	0.14	44.40
2292	2,609.20	0.05	23.50	4893	2583.69	0.04	51.10
2294	2,580.43	0.03	48.00	4899	2588.82	0.20	40.40
2295	2,580.32	0.08	48.10	4902	2588.69	0.01	38.20
2297	2,583.89	0.38	46.50	4905	2596.59	0.12	38.10
2299	2,606.11	0.16	22.90	4907	2593.55	0.15	35.20
2301	2,577.73	0.25	53.70	4909	2544.43	0.08	60.20
2302	2,576.30	0.16	55.10	4916	2573.54	0.76	52.30
2305	2,592.34	0.07	42.30	4920	2566.51	0.40	63.30
2307	2,571.83	0.16	60.00	4922	2559.20	0.31	69.10
2308	2,571.85	0.16	60.00	4923	2557.80	0.39	70.50
2310	2,575.24	0.07	54.40	4926	2595.09	0.03	33.80
2311	2,574.94	0.16	54.60	4928	2585.74	0.23	44.70
2313	2,609.10	0.03	23.60	4931	2551.82	0.22	80.50
2315	2,578.26	0.17	52.20	4932	2556.53	0.28	75.80
2316	2,578.21	0.06	52.20	4935	2577.00	0.17	49.80
2319	2,587.37	0.11	41.30	4937	2561.69	0.20	70.40
2321	2,596.97	0.14	30.50	4939	2565.00	0.23	67.20
2322	2,597.20	0.12	30.20	4946	2583.93	0.30	46.60
2324	2,568.17	0.02	61.60	4947	2585.16	0.17	45.40
2325	2,569.79	0.16	60.00	4951	2563.27	0.10	66.80
2327	2,570.00	0.12	61.30	4954	2575.82	0.44	52.70
2328	2,569.13	0.10	62.20	4955	2576.03	0.26	52.50
2331	2,574.20	0.15	55.40	4958	2575.44	0.16	54.30
2332	2,574.84	0.00	54.80	4961	2585.89	0.87	41.20
2334	2,590.06	0.15	36.80	4963	2593.67	0.26	33.70
2335	2,590.08	0.04	36.80	4967	2589.08	0.19	39.90
2337	2,547.00	0.16	57.60	4969	2587.25	0.34	42.60
2339	2,592.27	0.06	35.90	4970	2586.70	0.16	43.20
2341	2,564.95	0.11	67.50	4972	2555.00	0.16	77.10
2343	2,568.70	0.11	61.10	4975	2574.44	0.26	51.50
2345	2,578.36	0.26	48.50	4976	2576.01	0.26	49.90
2347	2,563.90	0.30	63.10	4979	2577.69	0.02	49.10
2348	2,563.63	0.02	63.30	4983	2580.68	0.06	54.50
2351	2,590.32	0.16	38.60	4984	2576.86	0.11	58.30
2352	2,590.63	0.03	38.30	4988	2573.28	0.08	57.60
2355	2,566.18	0.22	62.10	4993	2583.79	0.39	45.90
2356	2,567.64	0.06	60.60	4996	2562.95	0.17	66.30
2360	2,581.89	0.16	47.40	4998	2593.21	0.04	35.60

2361	2,581.58	0.16	47.70	5002	2553.27	0.11	79.10
2363	2,568.70	0.27	63.90	5003	2552.02	0.11	80.30
2368	2,566.55	0.07	61.90	5006	2571.69	0.10	63.00
2369	2,566.27	0.05	62.20	5008	2581.36	0.11	45.30
2371	2,573.37	0.06	53.50	5013	2581.91	0.80	48.50
2372	2,573.23	0.43	53.60	5017	2576.07	0.18	57.90
2374	2,583.24	0.27	46.70	5020	2563.70	0.40	68.40
2375	2,583.65	0.09	46.20	5023	2572.29	0.18	60.00
2377	2,570.04	0.16	61.60	5025	2582.88	0.03	45.50
2378	2,570.39	0.16	61.20	5030	2582.75	0.18	46.70
2380	2,542.28	0.16	62.20	5032	2560.84	0.25	67.70
2381	2,543.23	0.16	61.30	5036	2568.88	0.15	60.20
2383	2,565.73	0.21	63.00	5038	2584.40	0.16	43.90
2385	2,580.34	0.16	38.80	5042	2590.12	1.35	37.30
2386	2,579.96	0.16	39.20	5043	2591.95	0.02	35.50
2388	2,576.80	0.16	55.50	5048	2583.78	0.24	43.10
2391	2,562.31	0.36	70.30	5055	2569.60	0.30	60.20
2392	2,560.76	0.17	71.80	5060	2580.01	0.35	47.00
2394	2,579.83	0.30	51.50	5068	2567.42	0.15	59.70
2396	2,575.77	0.27	51.00	5069	2567.66	0.03	59.50
2398	2,608.31	0.16	21.80	5071	2584.00	0.51	46.80
2399	2,607.58	0.07	22.50	5073	2578.67	0.12	53.00
2402	2,576.45	0.16	55.00	5075	2566.89	0.11	60.20
2405	2,568.47	0.13	60.60	5078	2560.48	0.45	68.20
2406	2,568.33	0.16	60.80	5080	2575.76	0.06	53.60
2408	2,571.58	0.05	57.60	5083	2559.19	0.11	72.80
2410	2,573.48	0.23	55.70	5085	2566.38	0.08	65.90
2412	2,580.63	0.07	47.80	5090	2600.90	0.27	32.50
2413	2,580.72	0.04	47.70	5093	2573.35	0.14	55.80
2415	2,565.96	0.16	64.90	5096	2558.43	0.16	73.60
2416	2,565.88	0.05	64.90	5098	2578.52	0.17	51.10
2418	2,571.43	0.21	60.40	5100	2579.62	0.01	54.20
2419	2,571.83	0.16	60.10	5105	2564.00	0.15	68.10
2421	2,584.06	0.04	44.20	5109	2573.58	0.34	53.20
2423	2,582.98	0.16	48.10	5111	2558.39	0.07	71.60
2425	2,563.90	0.20	66.50	5113	2566.87	0.37	62.80
2427	2,567.90	0.00	64.90	5115	2560.71	0.27	68.20
2429	2,580.00	0.16	50.90	5117	2595.55	0.15	32.30
2431	2,580.25	0.06	50.00	5121	2551.68	0.10	76.40
2432	2,580.15	0.02	50.10	5123	2593.91	0.14	33.70
2434	2,572.18	0.17	56.90	5127	2585.04	0.26	44.90
2436	2,590.65	0.05	36.20	5132	2580.14	0.10	55.00
2437	2,589.98	0.16	36.80	5137	2570.02	0.10	59.00
2439	2,585.01	0.48	45.00	5139	2572.37	0.42	57.30
2440	2,585.29	0.10	44.70	5142	2571.48	0.11	63.60
2442	2,561.04	0.03	71.40	5143	2570.51	0.44	64.40
2445	2,573.67	0.03	58.80	5146	2589.44	0.22	37.30

2446	2,573.80	0.44	58.60	5149	2584.93	0.01	43.40
2449	2,570.64	0.07	58.40	5151	2564.33	0.17	64.60
2450	2,570.55	0.05	58.50	5155	2609.29	0.31	20.00
2453	2,577.53	0.02	52.90	5157	2560.96	0.08	64.80
2455	2,608.69	0.16	21.20	5158	2560.99	0.07	64.70
2456	2,608.08	0.16	21.80	5162	2560.28	0.09	68.60
2459	2,583.00	0.02	46.30	5165	2564.21	0.07	64.10
2460	2,582.91	0.02	46.40	5167	2618.00	0.13	11.30
2462	2,570.00	0.38	64.00	5170	2576.75	0.43	50.70
2464	2,608.66	0.12	21.30	5172	2557.81	0.16	70.40
2465	2,608.07	0.16	21.90	5176	2574.02	0.24	55.40
2467	2,575.32	0.16	55.10	5177	2571.95	0.09	57.40
2468	2,575.64	0.03	54.80	5180	2574.33	0.49	52.50
2470	2,560.93	0.09	67.70	5182	2583.68	0.22	46.30
2471	2,560.81	0.19	67.80	5184	2568.88	0.39	60.50
2476	2,586.94	0.08	42.80	5187	2569.25	0.06	62.10
2477	2,586.28	0.09	43.50	5189	2570.03	0.96	55.50
2479	2,572.55	0.16	59.40	5191	2582.47	0.05	52.30
2481	2,592.88	0.16	34.20	5195	2563.33	0.18	69.10
2483	2,562.67	0.46	69.70	5199	2578.63	0.36	51.00
2485	2,577.41	0.03	54.70	5200	2577.58	0.58	52.00
2486	2,577.55	0.16	54.60	5203	2580.17	0.14	50.60
2489	2,569.56	0.16	62.90	5205	2562.23	0.02	64.50
2491	2,581.60	0.01	47.50	5208	2570.00	0.18	59.80
2492	2,581.67	0.12	47.80	5210	2582.24	0.37	47.90
2494	2,564.40	0.02	67.80	5213	2557.00	0.05	69.80
2496	2,564.14	0.04	65.40	5214	2556.68	0.01	70.10
2497	2,564.38	0.26	65.20	5216	2578.50	0.19	51.90
2499	2,579.00	0.05	50.70	5217	2579.15	0.33	51.30
2500	2,579.00	0.14	50.70	5221	2558.77	0.62	73.10
2502	2,566.96	0.12	61.30	5224	2569.47	0.11	59.90
2503	2,566.98	0.04	61.20	5228	2576.89	0.24	52.50
2505	2,562.75	0.32	69.10	5229	2576.32	0.14	53.10
2506	2,562.84	0.21	69.00	5233	2571.48	0.19	59.40
2508	2,590.92	0.03	39.10	5236	2576.79	0.07	57.10
2509	2,590.77	0.18	39.30	5240	2576.83	0.11	52.80
2511	2,554.89	0.08	49.80	5243	2579.45	0.23	50.70
2513	2,572.82	0.17	56.20	5245	2575.67	0.04	54.10
2515	2,554.35	0.17	74.20	5247	2579.43	0.18	50.70
2516	2,554.60	0.34	74.00	5249	2562.60	0.13	69.80
2518	2,569.93	0.04	44.50	5251	2582.98	0.23	46.50
2519	2,570.81	0.08	43.60	5253	2586.78	0.08	40.00
2521	2,576.14	0.12	57.70	5256	2565.68	1.79	47.90
2522	2,576.78	0.29	57.10	5259	2553.82	0.01	74.30
2524	2,571.50	0.17	56.80	5263	2583.62	0.00	43.30
2526	2,562.58	0.02	66.70	5266	2577.33	0.14	57.40
2527	2,562.54	0.04	66.70	5272	2583.16	0.14	50.80

2529	2,601.84	0.43	33.90	5275	2569.61	0.27	62.90
2531	2,580.92	0.04	47.30	5277	2572.19	0.44	57.50
2533	2,573.89	0.25	57.00	5279	2571.80	0.06	55.50
2534	2,575.46	0.16	55.50	5283	2571.07	0.08	58.10
2536	2,592.98	0.16	35.20	5289	2584.52	0.29	44.80
2538	2,563.86	0.20	65.60	5292	2610.10	0.16	19.90
2539	2,564.77	0.05	64.70	5294	2570.40	0.10	58.10
2541	2,574.81	0.02	55.00	5298	2575.11	0.16	57.00
2544	2,563.81	0.07	66.00	5300	2580.00	0.48	48.00
2545	2,563.71	0.08	66.10	5301	2580.00	0.31	47.90
2548	2,553.07	0.40	77.20	5303	2576.02	0.05	53.40
2549	2,552.90	0.05	77.40	5305	2564.10	0.06	65.50
2551	2,573.00	0.01	41.70	5310	2561.23	0.16	70.90
2553	2,565.74	0.16	66.50	5312	2563.76	0.84	69.30
2554	2,564.90	0.16	67.30	5314	2582.08	0.19	48.10
2557	2,565.40	0.06	66.90	5317	2596.86	0.20	30.30
2558	2,565.00	0.25	67.30	5319	2579.53	0.12	49.90
2560	2,594.53	0.16	33.80	5321	2575.75	0.16	52.50
2562	2,610.77	0.16	0.80	5323	2559.07	0.09	69.80
2564	2,577.49	0.16	53.30	5328	2591.72	0.25	40.60
2565	2,577.14	0.16	53.70	5332	2575.99	0.13	53.40
2567	2,560.58	0.02	68.10	5334	2587.46	0.29	43.30
2569	2,576.61	0.11	51.80	5336	2560.93	0.36	71.20
2570	2,576.46	0.24	52.00	5340	2574.59	0.09	52.20
2572	2,570.71	0.13	60.90	5342	2559.03	0.21	69.10
2574	2,578.30	0.19	48.50	5344	2573.14	0.10	57.50
2575	2,578.57	0.01	48.20	5346	2564.96	0.16	39.60
2577	2,574.35	0.10	55.50	5348	2548.11	0.16	65.80
2578	2,574.16	0.10	55.70	5353	2576.17	0.13	52.80
2580	2,568.75	0.09	63.50	5359	2558.65	0.57	70.50
2581	2,567.93	0.06	64.30	5363	2571.56	0.44	59.80
2583	2,593.88	0.16	34.10	5365	2551.07	0.07	76.60
2584	2,594.03	0.06	33.90	5370	2596.40	0.16	37.70
2587	2,581.09	0.10	49.10	5372	2556.05	0.13	76.00
2588	2,581.09	0.06	49.10	5377	2585.23	0.20	41.60
2590	2,594.59	0.16	33.80	5382	2550.75	0.16	53.90
2592	2,583.26	0.01	46.00	5384	2595.81	0.03	37.90
2593	2,583.39	0.03	45.90	5387	2562.24	0.35	67.20
2595	2,583.28	0.13	44.10	5391	2595.40	0.22	35.00
2596	2,584.11	0.24	43.30	5393	2588.50	0.12	41.40
2598	2,582.82	0.16	48.00	5401	2568.08	0.08	60.60
2603	2,565.00	0.24	67.10	5405	2566.78	0.04	65.30
2605	2,568.46	0.02	58.50	5409	2579.52	0.00	49.80
2607	2,575.78	0.16	53.60	5413	2589.27	0.15	44.70
2608	2,575.57	0.04	53.80	5415	2592.93	0.21	41.10
2610	2,585.11	0.16	43.40	5417	2575.00	0.22	53.10
2611	2,585.10	0.05	43.40	5423	2556.36	0.16	75.60

2614	2,578.40	0.12	51.70	5425	2564.77	0.16	66.20
2615	2,577.99	0.04	52.10	5433	2576.38	0.11	54.40
2617	2,579.00	0.02	50.40	5440	2582.48	0.16	47.60
2618	2,578.99	0.26	50.50	5442	2565.16	0.05	60.60
2620	2,573.47	0.21	56.30	5447	2556.47	0.09	72.50
2621	2,573.34	0.05	56.50	5453	2575.63	0.16	52.60
2623	2,584.44	0.30	45.10	5455	2575.86	0.69	53.50
2624	2,584.04	0.21	45.40	5456	2577.00	0.17	52.30
2626	2,575.59	0.13	55.10	5459	2556.58	0.13	75.00
2627	2,575.67	0.06	55.00	5462	2573.94	0.09	55.70
2629	2,609.37	0.16	19.70	5469	2575.32	0.12	53.90
2630	2,608.15	0.09	20.90	5471	2593.76	0.15	35.70
2632	2,568.74	0.13	61.00	5475	2576.11	0.39	51.20
2633	2,568.41	0.21	61.40	5477	2585.67	0.29	43.50
2635	2,590.00	0.02	37.00	5484	2563.19	0.27	68.90
2638	2,562.73	0.24	70.90	5488	2572.80	0.52	61.50
2639	2,564.09	0.01	69.60	5490	2566.88	0.19	65.60
2641	2,551.74	0.25	75.90	5501	2585.50	0.21	43.00
2643	2,575.69	0.16	55.50	5503	2570.05	0.03	55.50
2644	2,574.92	0.18	56.20	5506	2547.29	0.03	57.30
2646	2,581.04	0.08	48.50	5508	2573.70	0.66	60.90
2647	2,580.66	0.25	49.00	5512	2575.54	0.19	54.20
2649	2,564.37	0.45	68.00	5515	2559.08	0.30	69.70
2650	2,566.12	0.00	66.30	5517	2568.98	0.50	60.70
2652	2,558.62	0.15	71.60	5522	2594.04	0.11	33.00
2654	2,567.97	0.14	61.30	5524	2560.53	0.22	68.70
2655	2,568.41	0.03	60.80	5526	2579.20	0.37	55.50
2657	2,559.10	0.43	69.20	5531	2583.28	0.17	46.10
2658	2,558.81	0.01	69.50	5534	2598.51	0.23	33.80
2661	2,588.08	0.05	40.00	5536	2561.22	0.33	70.60
2662	2,588.36	0.03	39.70	5539	2580.38	0.32	47.90
2664	2,567.77	0.05	60.70	5541	2559.00	0.10	67.80
2665	2,568.18	0.05	60.30	5545	2556.19	0.21	72.80
2667	2,576.44	0.16	55.40	5548	2584.03	0.24	43.40
2669	2,573.94	0.11	54.60	5555	2580.00	0.38	47.00
2670	2,574.07	0.02	54.50	5558	2555.10	0.10	77.00
2673	2,609.78	0.16	1.30	5559	2557.00	0.38	75.10
2674	2,610.88	0.16	0.20	5561	2565.00	0.20	69.10
2676	2,561.98	0.16	68.10	5564	2591.03	0.16	37.40
2677	2,562.61	0.04	67.50	5565	2591.43	0.16	37.00
2679	2,561.92	0.20	69.70	5572	2576.56	0.36	58.00
2680	2,561.00	0.09	70.70	5573	2572.81	0.15	61.70
2682	2,588.27	0.05	42.80	5575	2566.32	0.16	66.90
2687	2,581.40	0.07	46.70	5578	2573.16	0.09	57.50
2688	2,581.00	1.26	47.00	5584	2590.72	0.19	36.10
2693	2,578.00	0.06	51.70	5586	2579.00	0.16	48.30
2699	2,580.04	0.28	50.20	5588	2569.70	0.16	60.10

2700	2,580.04	0.25	50.20	5590	2572.48	0.18	61.80
2702	2,574.51	0.08	56.10	5594	2584.00	0.39	47.10
2705	2,562.44	0.02	66.30	5599	2606.44	0.16	11.00
2706	2,562.43	0.06	66.30	5604	2573.69	0.07	53.80
2708	2,579.80	0.11	49.50	5606	2586.66	0.10	42.20
2710	2,611.21	0.16	0.30	5608	2565.16	0.27	69.50
2714	2,557.26	0.18	74.80	5610	2555.00	0.57	73.40
2715	2,556.92	0.17	75.10	5615	2571.72	0.09	60.10
2717	2,562.94	0.05	66.70	5620	2571.82	0.40	54.30
2718	2,562.33	0.11	67.30	5621	2570.05	0.76	56.80
2720	2,574.78	0.02	53.50	5624	2575.44	0.18	53.80
2721	2,574.75	0.04	53.50	5629	2574.23	0.43	54.90
2723	2,635.00	0.16	0.90	5634	2565.00	0.26	63.40
2724	2,635.00	0.00	0.90	5636	2571.54	0.44	58.40
2726	2,582.50	0.06	48.00	5643	2586.57	0.30	41.90
2727	2,582.25	0.05	48.20	5645	2569.95	0.01	59.80
2732	2,578.32	0.13	51.00	5649	2557.00	0.23	71.20
2733	2,577.43	0.07	51.90	5650	2556.71	0.11	71.50
2736	2,566.86	0.07	65.30	5655	2577.21	0.54	58.50
2738	2,571.99	0.20	54.80	5656	2575.97	0.14	59.70
2739	2,571.84	0.07	55.00	5659	2572.36	0.75	53.40
2743	2,580.00	0.11	49.30	5663	2563.21	0.32	65.70
2744	2,580.28	0.09	49.00	5667	2577.02	0.19	52.80
2746	2,569.46	0.02	60.20	5675	2577.67	0.31	51.80
2748	2,582.75	0.06	46.60	5679	2578.69	0.12	50.60
2750	2,581.60	0.21	49.50	5684	2578.00	0.13	52.70
2751	2,581.26	0.03	49.80	5687	2555.65	0.44	72.90
2753	2,581.89	0.26	47.70	5688	2559.01	0.40	69.50
2754	2,582.47	0.04	47.10	5691	2563.53	0.13	64.50
2756	2,563.88	0.14	65.20	5693	2564.35	0.25	64.90
2757	2,563.38	0.22	65.70	5697	2585.25	0.50	44.60
2759	2,554.84	0.52	77.50	5703	2588.87	0.17	38.00
2760	2,557.78	0.06	74.60	5706	2585.01	0.27	42.60
2762	2,556.88	0.03	75.10	5709	2594.54	0.27	34.30
2764	2,574.15	0.12	55.60	5712	2555.84	0.06	67.40
2765	2,574.00	0.09	55.80	5714	2578.14	0.19	53.10
2767	2,578.47	0.18	48.40	5720	2587.53	0.15	43.00
2769	2,574.00	0.04	55.80	5722	2579.92	0.24	50.50
2771	2,591.00	0.21	35.70	5729	2576.59	0.11	53.50
2772	2,590.31	0.16	36.40	5731	2582.51	0.13	47.10
2774	2,590.24	0.00	38.60	5737	2587.74	0.17	40.10
2778	2,577.74	0.17	49.20	5739	2583.44	0.11	47.70
2779	2,577.48	0.05	49.40	5745	2562.62	0.19	66.30
2781	2,561.57	0.09	70.30	5748	2601.31	0.08	30.50
2782	2,563.72	0.11	68.20	5752	2580.77	0.18	46.70
2784	2,568.21	0.12	61.00	5755	2607.52	0.16	10.10
2785	2,567.51	0.12	61.70	5760	2555.93	0.16	75.60

2787	2,565.73	0.17	57.60	5772	2579.43	0.29	48.90
2788	2,567.01	0.01	56.10	5775	2563.57	0.03	71.00
2790	2,574.00	0.08	55.70	5779	2572.47	0.25	54.40
2792	2,570.87	0.13	58.20	5782	2570.66	0.16	61.60
2794	2,566.00	0.19	63.80	5784	2563.01	0.18	70.10
2795	2,566.82	0.33	62.80	5786	2554.81	0.24	74.20
2797	2,550.79	0.01	76.80	5788	2563.40	0.17	68.30
2799	2,575.70	0.01	54.50	5790	2574.95	0.05	56.80
2802	2,569.71	0.08	61.60	5794	2560.95	0.09	71.20
2803	2,569.58	0.11	61.70	5796	2581.45	0.05	48.10
2805	2,574.19	0.04	52.50	5798	2587.14	0.16	46.80
2806	2,574.82	0.01	51.90	5801	2580.35	0.04	51.50
2808	2,569.57	0.15	62.70	5808	2579.92	0.21	50.80
2809	2,567.29	0.15	64.90	5814	2564.42	0.08	67.40
2811	2,590.82	0.11	35.90	5816	2584.91	0.48	46.80
2813	2,592.87	0.18	37.60	5817	2580.48	0.11	51.20
2818	2,590.56	0.19	38.40	5822	2558.43	1.38	72.50
2820	2,566.34	0.16	68.70	5824	2574.57	0.27	56.10
2822	2,603.64	0.03	31.80	5826	2575.93	0.16	52.30
2823	2,601.11	0.01	34.30	5830	2571.24	0.69	63.60
2827	2,580.00	0.15	50.20	5835	2577.06	0.48	52.80
2829	2,559.08	0.18	72.50	5838	2593.34	0.03	38.90
2830	2,558.62	0.17	73.00	5842	2571.12	0.18	57.20
2832	2,571.54	0.02	56.80	5844	2557.60	0.00	68.80
2838	2,555.01	0.17	73.90	5847	2572.13	0.54	63.00
2840	2,609.01	0.00	26.70	5855	2567.34	0.63	67.00
2842	2,574.80	0.13	59.80	5857	2580.78	0.14	48.80
2844	2,581.32	0.08	49.80	5864	2568.33	0.16	64.20
2848	2,579.00	0.05	50.40	5866	2580.39	0.29	46.40
2849	2,579.11	0.06	50.30	5872	2569.71	0.16	61.40
2851	2,580.10	0.16	47.60	5873	2567.37	0.78	63.70
2852	2,580.22	0.13	47.50	5878	2583.69	0.12	50.10
2854	2,563.84	0.23	64.60	5881	2572.49	0.08	57.30
2856	2,575.37	0.05	54.00	5887	2578.46	0.31	50.60
2858	2,556.93	0.22	71.60	5892	2568.71	0.25	60.30
2859	2,557.34	0.11	71.20	5899	2611.72	0.22	18.10
2861	2,574.95	0.07	55.90	5908	2565.45	0.09	66.90
2862	2,575.05	0.23	55.80	5910	2575.29	0.24	53.30
2864	2,557.87	0.00	70.70	5918	2575.31	0.32	53.50
2866	2,571.80	0.15	57.30	5927	2574.59	0.21	52.20
2868	2,591.95	0.16	35.10	5938	2562.29	0.57	70.80
2872	2,554.71	0.15	74.20	5943	2561.60	0.32	71.40
2873	2,554.30	0.11	74.60	5948	2574.63	0.26	54.40
2875	2,581.20	0.06	48.80	5954	2605.69	0.86	24.80
2877	2,560.18	0.07	69.40	5962	2597.08	0.15	38.60
2878	2,559.77	0.09	69.40	5964	2575.79	0.11	52.40
2880	2,574.31	0.11	56.40	5967	2569.06	0.07	60.60

2881	2,574.54	0.08	56.20	5974	2604.69	0.32	28.40
2883	2,581.62	0.40	47.90	5977	2569.19	0.11	65.10
2885	2,583.35	0.01	46.60	5981	2568.21	0.69	60.70
2886	2,584.00	0.16	45.90	5986	2587.43	0.16	41.00
2888	2,572.24	0.16	32.30	5994	2573.92	0.57	55.00
2889	2,577.18	0.16	27.40	5997	2564.64	0.09	65.00
2891	2,562.60	0.04	65.80	6000	2578.00	0.38	48.70
2892	2,562.42	0.37	66.00	6006	2569.22	0.62	65.90
2898	2,575.69	0.03	55.20	6009	2610.72	0.16	9.00
2900	2,580.26	0.14	50.90	6012	2555.07	0.21	72.90
2905	2,586.83	0.02	41.10	6017	2547.54	0.08	80.10
2906	2,586.26	0.13	41.70	6020	2586.46	0.17	43.20
2908	2,554.25	0.16	73.80	6022	2570.91	3.56	45.20
2910	2,550.13	0.25	77.90	6024	2586.63	0.10	42.60
2911	2,551.57	0.23	76.50	6026	2580.62	1.01	46.70
2913	2,578.85	0.26	51.30	6030	2585.81	0.54	40.90
2917	2,573.34	0.09	56.50	6034	2595.48	0.05	34.90
2921	2,581.07	0.06	48.20	6036	2561.89	0.34	66.80
2923	2,590.72	0.07	36.10	6040	2546.71	0.08	80.90
2925	2,561.49	0.14	67.50	6044	2554.68	0.07	73.40
2926	2,561.00	0.11	67.90	6047	2574.73	0.23	55.00
2928	2,574.79	0.09	53.40	6052	2585.27	0.28	44.40
2930	2,573.31	0.08	57.50	6061	2564.37	0.00	65.30
2931	2,573.49	0.02	57.30	6064	2575.70	0.16	51.60
2933	2,577.84	0.11	52.20	6073	2561.46	0.29	67.40
2935	2,568.28	0.16	62.70	6080	2570.75	0.65	56.20
2937	2,570.11	0.17	61.30	6082	2595.12	0.27	32.80
2939	2,572.38	0.12	56.80	6087	2589.27	0.25	41.90
2941	2,553.89	0.15	74.20	6093	2559.26	0.22	72.70
2942	2,553.53	0.14	74.60	6095	2566.22	0.18	68.70
2944	2,566.17	0.17	66.10	6097	2585.12	0.06	43.90
2946	2,562.38	0.05	67.70	6099	2577.77	0.26	52.10
2949	2,574.09	0.13	52.60	6101	2576.08	0.13	53.70
2951	2,583.97	0.17	44.30	6106	2553.56	0.05	69.70
2953	2,559.16	0.03	69.20	6108	2572.90	0.46	59.40
2954	2,558.83	0.16	69.50	6114	2598.93	0.21	33.90
2956	2,592.43	0.15	40.50	6125	2578.56	0.16	52.20
2958	2,574.26	0.16	40.40	6127	2568.55	0.26	60.30
2960	2,583.99	0.08	42.90	6129	2575.69	0.38	53.80
2962	2,578.24	0.11	48.60	6133	2581.54	0.44	45.80
2964	2,566.30	0.12	68.80	6139	2592.95	0.09	37.40
2967	2,635.00	0.16	1.00	6158	2562.20	0.11	70.30
2969	2,560.87	0.14	68.90	6161	2577.00	0.22	52.80
2970	2,560.24	0.02	69.50	6169	2564.23	0.16	68.20
2972	2,590.16	0.10	39.70	6173	2605.37	0.16	22.20
2973	2,590.88	0.04	39.00	6178	2567.84	0.09	64.60
2975	2,563.16	0.12	64.70	6187	2563.67	0.16	63.30

2977	2,591.34	0.08	39.10	6190	2578.76	0.54	49.80
2978	2,591.11	0.12	39.40	6202	2584.16	0.14	48.20
2980	2,591.25	0.09	40.10	6206	2574.57	0.21	53.60
2983	2,611.43	0.07	22.10	6209	2580.52	0.30	48.40
2984	2,610.75	0.04	22.80	6211	2601.93	0.05	30.60
2988	2,558.46	0.08	73.30	6235	2572.14	0.43	56.30
2989	2,558.10	0.11	73.70	6237	2576.30	0.27	53.00
2991	2,593.09	0.04	34.10	6239	2600.05	0.89	35.70
2992	2,592.67	0.00	34.60	6245	2554.81	0.31	72.40
2994	2,576.46	0.16	54.10	6251	2569.81	0.17	52.20
2995	2,576.23	0.16	54.30	6252	2608.50	0.16	13.60
2997	2,564.13	0.11	67.70	6254	2588.39	0.26	38.50
2998	2,565.36	0.08	66.40	6256	2566.57	0.01	64.40
3002	2,574.07	0.07	57.60	6264	2575.85	0.03	41.00
3003	2,573.53	0.34	58.10	6269	2572.81	0.16	62.10
3005	2,559.53	0.07	69.60	6274	2602.71	0.04	33.10
3006	2,559.23	0.24	69.90	6278	2583.25	0.12	46.10
3008	2,556.34	0.03	72.60	6281	2579.13	0.10	50.50
3010	2,572.44	0.34	59.80	6286	2580.61	0.07	55.00
3011	2,572.04	0.16	60.30	6290	2556.04	0.16	72.40
3013	2,574.31	0.09	55.50	6297	2570.17	0.03	60.20
3014	2,573.88	0.10	56.00	6300	2586.85	0.08	41.50
3017	2,593.82	0.07	40.70	6304	2555.92	0.15	75.70
3019	2,575.97	0.20	59.00	6309	2574.00	0.13	51.80
3020	2,577.55	0.17	57.40	6312	2582.14	0.11	45.20
3022	2,566.94	0.29	64.80	6315	2587.64	0.09	47.80
3024	2,575.00	0.24	54.80	6322	2592.92	0.01	27.60
3025	2,574.91	0.11	54.90	6325	2560.47	0.14	68.10
3028	2,563.66	0.05	68.50	6334	2556.70	0.08	72.40
3030	2,561.27	0.03	64.50	6337	2583.88	0.71	42.80
3031	2,561.46	0.16	64.30	6345	2575.52	0.00	50.20
3034	2,572.72	0.12	58.00	6356	2559.83	0.02	66.40
3037	2,582.00	0.14	46.30	6366	2579.05	0.05	51.70
3039	2,574.41	0.10	53.90	6370	2554.36	0.12	74.50
3044	2,585.24	0.08	49.90	6374	2572.50	0.05	57.30
3045	2,583.58	0.49	51.50	6377	2581.94	0.29	44.90
3047	2,591.58	0.10	39.00	6382	2580.07	0.27	49.40
3048	2,591.14	0.32	39.40	6389	2571.00	0.48	60.90
3050	2,569.48	0.08	63.00	6437	2578.86	0.67	56.40
3051	2,566.51	0.18	66.00	6441	2561.07	0.03	67.60
3053	2,559.60	0.12	69.30	6463	2540.33	0.16	64.20
3054	2,559.37	0.09	69.60	6470	2581.21	0.24	46.00
3056	2,576.17	0.16	54.40	6478	2585.73	0.16	42.40
3058	2,563.98	0.22	68.10	6491	2564.05	0.21	71.10
3059	2,563.55	0.17	68.50	6508	2566.85	0.06	68.10
3061	2,558.18	0.11	72.00	6512	2566.67	0.27	67.60
3062	2,558.00	0.12	72.10	6515	2550.89	0.31	79.20

3066	2,561.08	0.07	71.00	6519	2635.00	0.45	1.00
3068	2,565.05	0.37	62.70	6529	2591.35	0.20	39.90
3070	2,577.81	0.32	52.60	6531	2572.30	0.10	60.00
3073	2,578.36	0.07	48.50	6537	2601.64	0.26	27.60
3075	2,583.70	0.03	43.20	6542	2548.23	0.16	72.50
3080	2,571.39	0.06	57.70	6551	2587.79	0.10	40.70
3082	2,560.00	0.02	68.40				

Anexo 9. Datos de las tuberías año 2024

Etiqueta	Long (m)	Diam (mm)	Mat	Coef C	Grad. perdida carga (m/km)	Etiqueta	Long (m)	Diam (mm)	Mat	Coef C	Grad. perdida carga (m/km)
3.2_T_1001	143.0	63	PVC	150	0.0000	3.2_T_2549	49.54	63	PVC	150	0.0481
3.2_T_1002	106.3	63	PVC	150	0.0056	3.2_T_2550	49.65	110	PVC	150	0.2758
3.2_T_1003	0.130	200	PVC	150	0.0000	3.2_T_2551	49.68	63	PVC	150	0.1678
3.2_T_1004	0.200	250	AC	140	0.0000	3.2_T_2552	49.70	110	PVC	150	0.0958
3.2_T_1005	0.290	110	PVC	150	1.0315	3.2_T_2553	55.33	63	PVC	150	1.5277
3.2_T_1006	0.360	160	PVC	150	1.6494	3.2_T_2554	49.73	63	PVC	150	0.0180
3.2_T_1007	0.370	63	PVC	150	3.2512	3.2_T_2555	49.73	63	PVC	150	0.0479
3.2_T_1008	0.400	63	PVC	150	0.0000	3.2_T_2556	49.77	63	PVC	150	0.6399
3.2_T_1009	0.410	63	PVC	150	3.6270	3.2_T_2557	52.12	110	PVC	150	0.4683
3.2_T_1010	0.560	63	PVC	150	5.3123	3.2_T_2558	50.00	300	AC	140	0.0357
3.2_T_1011	0.560	63	PVC	150	28.046	3.2_T_2560	50.56	110	PVC	150	0.4945
3.2_T_1012	0.570	63	PVC	150	14.199	3.2_T_2561	51.14	63	PVC	150	1.5367
3.2_T_1013	0.890	700	HD	130	0.6712	3.2_T_2562	49.95	110	PVC	150	2.6578
3.2_T_1014	0.460	700	HD	130	0.6469	3.2_T_2563	49.99	63	PVC	150	1.9651
3.2_T_1016	0.760	150	PVC	150	0.3909	3.2_T_2564	50.04	63	PVC	150	0.1130
3.2_T_1017	0.770	63	PVC	150	0.0000	3.2_T_2565	50.12	200	AC	140	2.3102
3.2_T_1018	0.810	110	PVC	150	0.0000	3.2_T_2566	50.12	63	PVC	150	0.0000
3.2_T_1020	0.830	110	PVC	150	0.0000	3.2_T_2567	50.16	63	PVC	150	0.0119
3.2_T_1021	0.850	63	PVC	150	1.0561	3.2_T_2569	50.18	63	PVC	150	0.7415
3.2_T_1022	0.850	63	PVC	150	0.0000	3.2_T_2570	50.22	160	PVC	150	0.0059
3.2_T_1023	0.860	63	PVC	150	1.7334	3.2_T_2571	50.33	63	PVC	150	0.5795
3.2_T_1024	0.880	63	PVC	150	0.3395	3.2_T_2573	50.29	63	PVC	150	0.1006
3.2_T_1025	0.890	63	PVC	150	0.3326	3.2_T_2574	50.37	63	PVC	150	0.0709
3.2_T_1026	0.900	63	PVC	150	7.6334	3.2_T_2575	226.2	63	PVC	150	0.0158
3.2_T_1027	0.940	200	PVC	150	1.2652	3.2_T_2576	51.69	63	PVC	150	1.3647
3.2_T_1028	0.960	50	PVC	150	10.802	3.2_T_2577	50.43	63	PVC	150	0.0177
3.2_T_1029	0.970	110	PVC	150	0.0000	3.2_T_2578	50.44	63	PVC	150	0.0531
3.2_T_1030	1.000	63	PVC	150	0.0000	3.2_T_2579	50.44	63	PVC	150	0.1416
3.2_T_1031	1.010	63	PVC	150	0.0000	3.2_T_2580	51.61	63	PVC	150	0.8997
3.2_T_1032	1.020	160	PVC	150	1.1691	3.2_T_2581	50.47	63	PVC	150	0.6841
3.2_T_1033	1.030	110	PVC	150	1.1603	3.2_T_2582	50.50	63	PVC	150	0.1592
3.2_T_1034	3.350	63	PVC	150	1.0655	3.2_T_2583	50.60	63	PVC	150	7.3293
3.2_T_1035	1.120	63	PVC	150	0.5312	3.2_T_2584	50.55	63	PVC	150	4.2690
3.2_T_1036	1.210	63	PVC	150	6.9005	3.2_T_2585	50.86	110	PVC	150	0.2224
3.2_T_1037	1.220	63	PVC	150	0.0000	3.2_T_2586	50.90	63	PVC	150	0.0468
3.2_T_1038	1.230	63	PVC	150	40.598	3.2_T_2587	50.61	63	PVC	150	2.3348
3.2_T_1039	1.260	63	PVC	150	0.4720	3.2_T_2588	50.63	250	AC	140	1.0877
3.2_T_1040	1.170	700	HD	130	0.5097	3.2_T_2589	50.64	63	PVC	150	0.2351
3.2_T_1041	1.320	63	PVC	150	7.2096	3.2_T_2590	53.18	110	PVC	150	0.0000
3.2_T_1042	1.340	110	PVC	150	1.3281	3.2_T_2591	50.67	200	AC	140	0.1351
3.2_T_1043	1.360	110	PVC	150	0.0000	3.2_T_2593	50.81	63	PVC	150	0.2695

3.2_T_1044	1.370	63	PVC	150	1.5252	3.2_T_2594	50.89	63	PVC	150	0.0117
3.2_T_1045	1.370	110	PVC	150	0.8666	3.2_T_2595	50.97	63	PVC	150	0.7416
3.2_T_1046	1.390	110	PVC	150	0.0000	3.2_T_2596	51.92	160	PVC	150	0.3096
3.2_T_1047	1.410	110	PVC	150	0.0000	3.2_T_2597	52.52	63	PVC	150	0.0113
3.2_T_1048	1.420	63	PVC	150	0.0000	3.2_T_2598	51.18	160	PVC	150	0.3431
3.2_T_1050	1.450	63	PVC	150	0.8234	3.2_T_2599	51.19	110	PVC	150	0.3082
3.2_T_1051	1.450	160	PVC	150	0.2047	3.2_T_2601	51.30	63	PVC	150	2.6401
3.2_T_1052	1.500	63	PVC	150	0.5968	3.2_T_2602	51.29	110	PVC	150	0.4759
3.2_T_1053	1.500	50	AC	140	18.499	3.2_T_2603	51.38	110	PVC	150	0.1390
3.2_T_1054	1.510	160	PVC	150	0.0000	3.2_T_2604	51.39	160	PVC	150	0.7530
3.2_T_1055	1.550	63	PVC	150	0.9610	3.2_T_2605	51.54	63	PVC	150	0.2599
3.2_T_1056	1.580	63	PVC	150	0.7544	3.2_T_2606	51.48	50	PVC	150	0.5435
3.2_T_1057	1.580	63	PVC	150	0.0000	3.2_T_2607	51.62	63	PVC	150	0.1096
3.2_T_1058	1.590	110	PVC	150	0.7480	3.2_T_2608	51.67	63	PVC	150	0.1383
3.2_T_1059	1.590	63	PVC	150	0.1868	3.2_T_2609	55.94	63	PVC	150	18.420
3.2_T_1060	1.620	63	PVC	150	0.9202	3.2_T_2610	51.74	50	PVC	150	0.3279
3.2_T_1061	1.640	200	AC	140	0.0000	3.2_T_2611	51.76	100	PVC	150	2.6512
3.2_T_1062	1.670	63	PVC	150	0.1783	3.2_T_2612	51.76	63	PVC	150	0.0000
3.2_T_1063	1.690	100	PVC	150	1.2335	3.2_T_2613	113.2	50	PVC	150	0.2996
3.2_T_1064	1.730	110	PVC	150	0.1724	3.2_T_2614	51.88	50	PVC	150	0.1377
3.2_T_1065	1.750	63	PVC	150	2.5491	3.2_T_2615	51.94	100	PVC	150	1.6334
3.2_T_1066	1.780	63	PVC	150	1.1725	3.2_T_2617	54.50	250	PVC	150	0.0000
3.2_T_1067	1.830	63	PVC	150	0.0000	3.2_T_2618	52.14	63	PVC	150	0.0742
3.2_T_1068	1.890	63	PVC	150	0.1577	3.2_T_2619	52.21	63	PVC	150	0.0513
3.2_T_1069	1.920	200	AC	140	0.0000	3.2_T_2620	52.23	63	PVC	150	1.5559
3.2_T_1071	1.980	200	PVC	150	0.1506	3.2_T_2621	52.25	63	PVC	150	0.0513
3.2_T_1072	2.000	63	PVC	150	0.0000	3.2_T_2622	54.80	63	PVC	150	0.5269
3.2_T_1073	2.020	160	PVC	150	1.7674	3.2_T_2623	59.55	110	PVC	150	1.2247
3.2_T_1074	2.030	63	PVC	150	12.897	3.2_T_2624	52.38	63	PVC	150	0.0057
3.2_T_1075	2.070	50	AC	140	11.943	3.2_T_2625	52.62	63	PVC	150	0.0396
3.2_T_1076	2.070	63	PVC	150	0.0000	3.2_T_2626	52.51	63	PVC	150	2.2730
3.2_T_1077	2.130	63	PVC	150	0.2789	3.2_T_2627	52.56	110	PVC	150	3.7602
3.2_T_1078	2.250	63	PVC	150	0.0000	3.2_T_2628	52.84	50	PVC	150	0.1634
3.2_T_1079	2.260	63	PVC	150	1.8443	3.2_T_2629	52.93	63	PVC	150	0.0506
3.2_T_1081	2.430	63	PVC	150	0.0000	3.2_T_2630	53.30	63	PVC	150	0.0168
3.2_T_1082	2.450	63	PVC	150	1.8213	3.2_T_2631	52.62	50	PVC	150	3.6369
3.2_T_1083	2.480	63	PVC	150	3.4843	3.2_T_2632	52.64	250	PVC	150	2.1542
3.2_T_1084	2.520	160	PVC	150	2.0069	3.2_T_2634	52.64	63	PVC	150	10.885
3.2_T_1085	2.570	63	PVC	150	0.4633	3.2_T_2635	52.68	63	PVC	150	0.0961
3.2_T_1086	2.640	63	PVC	150	0.0000	3.2_T_2636	52.69	63	PVC	150	0.2542
3.2_T_1087	2.640	63	PVC	150	0.0000	3.2_T_2637	52.81	50	PVC	150	3.3479
3.2_T_1088	2.670	110	PVC	150	0.0000	3.2_T_2638	52.14	63	PVC	150	0.0000
3.2_T_1089	2.690	110	PVC	150	0.6649	3.2_T_2639	52.90	63	PVC	150	0.6133
3.2_T_1090	2.690	63	PVC	150	0.1108	3.2_T_2641	53.07	63	PVC	150	0.2580
3.2_T_1091	2.690	110	PVC	150	0.0000	3.2_T_2642	71.89	63	PVC	150	0.0331
3.2_T_1092	2.730	160	PVC	150	11.978	3.2_T_2643	53.10	63	PVC	150	0.2130

3.2_T_1093	2.750	160	PVC	150	2.7097	3.2_T_2644	53.11	63	PVC	150	0.0112
3.2_T_1094	2.850	200	PVC	150	0.0000	3.2_T_2645	53.18	63	PVC	150	0.0000
3.2_T_1095	2.800	63	PVC	150	0.0000	3.2_T_2646	53.20	63	PVC	150	1.9694
3.2_T_1096	2.860	63	PVC	150	32.882	3.2_T_2647	53.21	63	PVC	150	2.2097
3.2_T_1098	7.400	160	PVC	150	0.0000	3.2_T_2648	53.24	63	PVC	150	0.0447
3.2_T_1099	2.890	110	PVC	150	0.0000	3.2_T_2649	53.32	63	PVC	150	0.0279
3.2_T_1100	2.900	160	PVC	150	0.0000	3.2_T_2650	53.37	63	PVC	150	0.0000
3.2_T_1101	2.960	110	PVC	150	0.0000	3.2_T_2651	53.42	63	PVC	150	0.8302
3.2_T_1102	2.980	160	PVC	150	0.0000	3.2_T_2652	53.46	50	AC	140	35.289
3.2_T_1103	3.000	63	PVC	150	0.0992	3.2_T_2653	53.47	200	PVC	150	0.7737
3.2_T_1104	3.000	110	PVC	150	0.0000	3.2_T_2654	53.51	63	PVC	150	0.0167
3.2_T_1105	3.060	63	PVC	150	0.0972	3.2_T_2655	53.95	100	PVC	150	0.0055
3.2_T_1106	3.130	110	PVC	150	0.4749	3.2_T_2656	53.60	63	PVC	150	1.6827
3.2_T_1107	3.140	200	PVC	150	6.5474	3.2_T_2657	53.62	63	PVC	150	0.0944
3.2_T_1108	3.140	200	AC	140	0.2840	3.2_T_2658	53.62	110	PVC	150	0.0444
3.2_T_1109	3.150	63	PVC	150	0.0000	3.2_T_2659	53.65	63	PVC	150	1.8476
3.2_T_1110	3.160	63	PVC	150	2.2630	3.2_T_2660	53.73	63	PVC	150	0.2327
3.2_T_1111	3.170	200	PVC	150	0.0939	3.2_T_2661	53.67	63	PVC	150	0.0000
3.2_T_1112	3.180	110	PVC	150	0.3750	3.2_T_2662	53.70	63	PVC	150	3.9352
3.2_T_1113	3.200	110	PVC	150	0.0000	3.2_T_2663	53.85	63	PVC	150	0.0166
3.2_T_1114	3.200	110	PVC	150	0.0000	3.2_T_2664	54.91	63	PVC	150	0.3469
3.2_T_1115	3.240	250	AC	140	0.0000	3.2_T_2665	53.87	63	PVC	150	2.5250
3.2_T_1116	3.240	63	PVC	150	0.1836	3.2_T_2666	58.32	63	PVC	150	0.0357
3.2_T_1117	3.250	63	PVC	150	0.0000	3.2_T_2667	54.00	63	PVC	150	0.0496
3.2_T_1118	3.250	160	PVC	150	0.2744	3.2_T_2668	54.00	63	PVC	150	0.0055
3.2_T_1119	3.280	250	PVC	150	0.0907	3.2_T_2669	54.02	63	PVC	150	0.0772
3.2_T_1120	3.300	63	PVC	150	0.5414	3.2_T_2670	54.33	250	PVC	150	0.0000
3.2_T_1121	3.330	250	PVC	150	0.0000	3.2_T_2671	54.07	63	PVC	150	3.7382
3.2_T_1122	3.330	100	PVC	150	0.0000	3.2_T_2672	57.02	63	PVC	150	0.6107
3.2_T_1123	3.350	63	PVC	150	0.0000	3.2_T_2673	54.09	160	PVC	150	0.9630
3.2_T_1124	3.420	63	PVC	150	0.0000	3.2_T_2674	54.24	110	PVC	150	6.2450
3.2_T_1125	3.380	63	PVC	150	1.7605	3.2_T_2675	54.12	110	PVC	150	2.0515
3.2_T_1126	3.390	110	PVC	150	0.0000	3.2_T_2676	54.12	63	PVC	150	0.2860
3.2_T_1127	3.400	63	PVC	150	0.0000	3.2_T_2677	54.13	63	PVC	150	0.0385
3.2_T_1128	3.400	63	PVC	150	0.0000	3.2_T_2679	54.21	100	AC	140	0.1208
3.2_T_1129	3.440	100	PVC	150	6.2278	3.2_T_2680	54.22	63	PVC	150	0.1702
3.2_T_1130	3.500	200	AC	140	0.1702	3.2_T_2682	55.96	63	PVC	150	0.2447
3.2_T_1131	3.510	100	PVC	150	0.0847	3.2_T_2683	54.27	50	PVC	150	0.1591
3.2_T_1132	3.530	160	PVC	150	2.6133	3.2_T_2684	54.36	160	PVC	150	0.1533
3.2_T_1133	3.550	300	AC	140	0.0000	3.2_T_2686	54.42	50	PVC	150	0.0000
3.2_T_1134	3.580	63	PVC	150	0.0000	3.2_T_2687	54.45	110	PVC	150	0.1093
3.2_T_1135	3.640	63	PVC	150	6.6157	3.2_T_2688	54.47	63	PVC	150	0.0328
3.2_T_1136	3.650	63	PVC	150	0.8153	3.2_T_2689	54.65	110	PVC	150	1.3890
3.2_T_1137	3.720	160	PVC	150	0.2400	3.2_T_2691	54.61	63	PVC	150	0.0927
3.2_T_1138	3.730	63	PVC	150	0.9580	3.2_T_2692	54.76	63	PVC	150	0.1957
3.2_T_1139	3.750	110	PVC	150	0.0000	3.2_T_2693	54.77	160	PVC	150	0.8859

3.2_T_1140	3.760	63	PVC	150	0.0792	3.2_T_2694	54.21	63	PVC	150	0.0000
3.2_T_1141	3.760	200	AC	140	2.1379	3.2_T_2695	57.39	63	PVC	150	0.0519
3.2_T_1143	3.770	63	PVC	150	0.0790	3.2_T_2696	54.88	63	PVC	150	0.0380
3.2_T_1144	3.770	200	AC	140	0.0789	3.2_T_2697	54.86	63	PVC	150	2.7836
3.2_T_1145	3.770	63	PVC	150	0.7103	3.2_T_2698	54.91	50	PVC	150	2.0762
3.2_T_1147	3.850	100	PVC	150	3.3257	3.2_T_2699	56.07	100	PVC	150	0.5946
3.2_T_1148	3.860	63	PVC	150	0.2312	3.2_T_2700	54.95	160	PVC	150	3.6674
3.2_T_1149	3.880	110	PVC	150	0.0000	3.2_T_2701	54.96	63	PVC	150	1.1969
3.2_T_1150	3.890	110	PVC	150	0.0765	3.2_T_2702	54.99	63	PVC	150	6.4418
3.2_T_1151	3.920	63	PVC	150	0.0000	3.2_T_2703	55.06	63	PVC	150	0.1243
3.2_T_1152	3.950	63	PVC	150	0.0000	3.2_T_2704	65.31	63	PVC	150	0.1595
3.2_T_1153	4.000	63	PVC	150	0.0000	3.2_T_2705	55.09	63	PVC	150	0.0216
3.2_T_1154	4.010	63	PVC	150	1.0393	3.2_T_2706	55.10	63	PVC	150	0.0864
3.2_T_1155	4.010	63	PVC	150	0.0742	3.2_T_2707	55.11	63	PVC	150	5.8336
3.2_T_1156	4.020	50	PVC	150	0.0000	3.2_T_2708	55.21	63	PVC	150	0.0270
3.2_T_1157	4.030	63	PVC	150	0.0739	3.2_T_2709	55.29	200	AC	140	2.0082
3.2_T_1158	4.030	200	PVC	150	1.4022	3.2_T_2710	55.46	100	PVC	150	5.1467
3.2_T_1159	4.070	63	PVC	150	0.0732	3.2_T_2711	55.32	110	PVC	150	1.1191
3.2_T_1160	4.080	100	PVC	150	8.6117	3.2_T_2712	55.34	110	PVC	150	0.0269
3.2_T_1161	4.100	63	PVC	150	0.9432	3.2_T_2713	55.35	63	PVC	150	1.3605
3.2_T_1162	4.110	110	PVC	150	0.7240	3.2_T_2714	55.42	63	PVC	150	0.0000
3.2_T_1163	4.140	110	PVC	150	2.6582	3.2_T_2715	56.25	110	PVC	150	1.9420
3.2_T_1164	4.160	63	PVC	150	0.0715	3.2_T_2716	55.54	100	PVC	150	0.3591
3.2_T_1165	4.200	160	PVC	150	3.2573	3.2_T_2717	55.54	63	PVC	150	1.6508
3.2_T_1166	4.230	200	AC	140	1.4085	3.2_T_2719	55.65	63	PVC	150	0.0963
3.2_T_1167	4.260	110	PVC	150	0.8384	3.2_T_2720	56.09	110	PVC	150	0.3449
3.2_T_1168	4.290	110	PVC	150	0.2079	3.2_T_2721	55.88	200	PVC	150	1.2252
3.2_T_1169	4.300	160	PVC	150	0.0692	3.2_T_2722	55.69	63	PVC	150	0.6253
3.2_T_1170	4.360	200	AC	140	2.2533	3.2_T_2723	55.75	50	PVC	150	6.6735
3.2_T_1172	4.430	160	PVC	150	3.9612	3.2_T_2724	55.77	63	PVC	150	6.1591
3.2_T_1173	4.440	63	PVC	150	0.0000	3.2_T_2725	55.78	63	PVC	150	0.0053
3.2_T_1174	4.460	63	PVC	150	0.0667	3.2_T_2727	55.99	250	PVC	150	1.6907
3.2_T_1175	4.480	63	PVC	150	1.4615	3.2_T_2728	55.92	50	PVC	150	0.5216
3.2_T_1176	4.490	160	PVC	150	0.0000	3.2_T_2730	56.05	63	PVC	150	0.4355
3.2_T_1177	4.540	110	PVC	150	0.2622	3.2_T_2731	56.03	63	PVC	150	0.0159
3.2_T_1178	5.700	63	PVC	150	1.4628	3.2_T_2732	56.07	50	PVC	150	1.0670
3.2_T_1179	4.560	63	PVC	150	0.0000	3.2_T_2733	56.14	63	PVC	150	0.0477
3.2_T_1180	4.570	63	PVC	150	0.0000	3.2_T_2734	56.16	32	PVC	150	1.4310
3.2_T_1181	4.650	100	PVC	150	0.0000	3.2_T_2736	56.30	63	PVC	150	0.0529
3.2_T_1182	4.670	63	PVC	150	0.0000	3.2_T_2737	56.66	63	PVC	150	0.1891
3.2_T_1183	4.670	63	PVC	150	1.8467	3.2_T_2738	56.94	50	PVC	150	0.7946
3.2_T_1184	4.700	200	AC	140	0.0000	3.2_T_2739	57.41	63	PVC	150	0.0156
3.2_T_1185	4.720	110	PVC	150	0.0000	3.2_T_2740	56.40	63	PVC	150	0.0158
3.2_T_1186	4.720	50	PVC	150	18.221	3.2_T_2741	56.52	63	PVC	150	3.4023
3.2_T_1187	5.440	50	HF	130	73.440	3.2_T_2742	56.62	110	PVC	150	0.0105
3.2_T_1188	4.780	50	PVC	150	8.2217	3.2_T_2743	56.68	110	PVC	150	0.1523

3.2_T_1189	4.780	110	PVC	150	0.0000	3.2_T_2744	56.71	63	PVC	150	25.425
3.2_T_1190	4.800	63	PVC	150	0.0000	3.2_T_2745	56.76	110	PVC	150	0.0262
3.2_T_1192	4.840	200	AC	140	0.4919	3.2_T_2746	56.87	50	AC	140	0.0157
3.2_T_1193	4.860	110	PVC	150	1.4089	3.2_T_2747	57.20	63	PVC	150	0.4684
3.2_T_1194	4.880	63	PVC	150	0.0610	3.2_T_2748	56.93	63	PVC	150	0.0628
3.2_T_1195	4.880	110	PVC	150	0.0000	3.2_T_2749	56.94	63	PVC	150	0.0000
3.2_T_1196	4.890	110	PVC	150	0.0000	3.2_T_2750	56.97	50	PVC	150	0.1097
3.2_T_1197	4.910	110	PVC	150	0.0000	3.2_T_2751	56.97	63	PVC	150	2.8473
3.2_T_1199	4.910	63	PVC	150	0.0000	3.2_T_2752	57.10	300	AC	140	0.0365
3.2_T_1200	4.910	63	PVC	150	0.3635	3.2_T_2753	57.05	250	AC	140	0.0000
3.2_T_1201	4.920	63	PVC	150	0.6052	3.2_T_2754	58.99	63	PVC	150	0.0051
3.2_T_1202	4.920	63	PVC	150	0.4233	3.2_T_2756	57.16	63	PVC	150	2.0256
3.2_T_1203	4.930	200	PVC	150	1.9944	3.2_T_2757	57.85	63	PVC	150	0.0720
3.2_T_1204	4.940	110	PVC	150	0.0000	3.2_T_2758	57.36	63	PVC	150	2.7139
3.2_T_1205	4.950	110	PVC	150	0.0000	3.2_T_2759	57.37	300	AC	140	0.0156
3.2_T_1206	4.950	63	PVC	150	0.0601	3.2_T_2760	57.38	63	PVC	150	0.0052
3.2_T_1207	4.950	110	PVC	150	0.0000	3.2_T_2761	58.00	63	PVC	150	0.0000
3.2_T_1208	4.950	110	PVC	150	0.0000	3.2_T_2762	57.54	63	PVC	150	0.0104
3.2_T_1209	7.300	160	PVC	150	0.7750	3.2_T_2763	57.55	63	PVC	150	0.0103
3.2_T_1210	4.960	63	PVC	150	0.0601	3.2_T_2764	57.57	63	PVC	150	0.0310
3.2_T_1211	5.970	63	PVC	150	1.5460	3.2_T_2765	57.59	63	PVC	150	1.0183
3.2_T_1212	4.960	100	AC	140	0.0000	3.2_T_2766	78.62	63	PVC	150	0.0530
3.2_T_1213	4.970	110	PVC	150	0.0000	3.2_T_2767	57.61	63	PVC	150	1.3641
3.2_T_1214	4.970	110	PVC	150	0.0000	3.2_T_2768	58.02	63	PVC	150	0.6618
3.2_T_1215	5.000	110	PVC	150	0.0000	3.2_T_2769	57.62	63	PVC	150	1.1003
3.2_T_1216	4.970	63	PVC	150	0.1197	3.2_T_2770	57.55	63	PVC	150	0.0000
3.2_T_1217	4.970	100	HF	130	0.0000	3.2_T_2771	57.75	110	PVC	150	0.0361
3.2_T_1218	4.980	110	PVC	150	0.0000	3.2_T_2772	57.80	50	PVC	150	3.1364
3.2_T_1219	4.980	110	PVC	150	0.0000	3.2_T_2773	58.72	110	PVC	150	0.5830
3.2_T_1220	4.990	110	PVC	150	0.0000	3.2_T_2774	65.02	63	PVC	150	0.0229
3.2_T_1221	4.990	100	PVC	150	0.0000	3.2_T_2775	57.85	63	PVC	150	0.0875
3.2_T_1222	4.990	110	PVC	150	0.0000	3.2_T_2776	57.82	63	PVC	150	0.2420
3.2_T_1223	4.990	110	PVC	150	0.0000	3.2_T_2777	57.94	50	PVC	150	1.6285
3.2_T_1224	5.000	63	PVC	150	0.0000	3.2_T_2778	57.85	63	PVC	150	0.0515
3.2_T_1225	5.000	100	PVC	150	0.0000	3.2_T_2779	57.91	63	PVC	150	0.1799
3.2_T_1226	5.000	110	PVC	150	0.0000	3.2_T_2780	58.37	63	PVC	150	0.0510
3.2_T_1227	5.000	50	PVC	150	0.0000	3.2_T_2781	58.00	63	PVC	150	0.0513
3.2_T_1228	5.000	110	PVC	150	0.0000	3.2_T_2782	58.01	63	PVC	150	0.2053
3.2_T_1229	5.000	110	PVC	150	0.0000	3.2_T_2783	58.06	110	PVC	150	0.8715
3.2_T_1230	5.000	63	PVC	150	0.0000	3.2_T_2784	69.05	63	PVC	150	6.8193
3.2_T_1231	5.000	200	PVC	150	0.0000	3.2_T_2785	58.07	63	PVC	150	3.1367
3.2_T_1232	5.000	63	PVC	150	0.0000	3.2_T_2786	58.09	63	PVC	150	0.4202
3.2_T_1233	5.000	63	PVC	150	0.0000	3.2_T_2787	58.10	63	PVC	150	1.4652
3.2_T_1234	5.000	110	PVC	150	0.0000	3.2_T_2788	58.12	110	PVC	150	0.7888
3.2_T_1235	5.010	110	PVC	150	0.0000	3.2_T_2789	58.16	50	AC	140	0.0358
3.2_T_1236	5.010	110	PVC	150	0.0000	3.2_T_2790	58.17	63	PVC	150	0.0563

ID						ID					
3.2_T_1237	5.040	110	PVC	150	0.0591	3.2_T_2791	58.17	63	PVC	150	0.0051
3.2_T_1238	5.040	63	PVC	150	0.0591	3.2_T_2792	58.20	160	PVC	150	1.7542
3.2_T_1239	5.050	110	PVC	150	0.2950	3.2_T_2793	58.31	250	AC	140	0.0102
3.2_T_1240	5.050	110	PVC	150	0.0000	3.2_T_2794	58.63	63	PVC	150	2.1172
3.2_T_1241	5.080	63	PVC	150	0.0000	3.2_T_2795	58.84	63	PVC	150	0.0911
3.2_T_1242	5.080	100	PVC	150	0.2343	3.2_T_2796	58.42	63	PVC	150	0.8661
3.2_T_1243	5.100	110	PVC	150	0.0000	3.2_T_2797	68.69	63	PVC	150	0.1993
3.2_T_1244	7.370	110	PVC	150	0.3230	3.2_T_2798	58.44	63	PVC	150	0.0000
3.2_T_1245	5.140	110	PVC	150	0.6956	3.2_T_2799	67.87	63	PVC	150	0.0000
3.2_T_1246	5.140	50	PVC	150	18.301	3.2_T_2800	123.7	63	PVC	150	0.0337
3.2_T_1247	5.140	63	PVC	150	0.1736	3.2_T_2801	58.54	110	PVC	150	0.0153
3.2_T_1248	5.180	110	PVC	150	10.467	3.2_T_2802	58.68	63	PVC	150	0.0152
3.2_T_1249	5.260	63	PVC	150	17.273	3.2_T_2803	58.77	50	PVC	150	1.2763
3.2_T_1250	5.270	63	PVC	150	0.1696	3.2_T_2804	58.78	100	AC	140	0.5672
3.2_T_1251	5.300	63	PVC	150	0.0000	3.2_T_2805	58.80	63	PVC	150	0.2987
3.2_T_1252	5.330	63	PVC	150	1.6769	3.2_T_2806	58.82	110	PVC	150	1.5131
3.2_T_1253	5.330	63	PVC	150	0.0558	3.2_T_2807	58.83	63	PVC	150	0.1012
3.2_T_1254	5.340	63	PVC	150	0.3900	3.2_T_2808	58.87	50	PVC	150	12.316
3.2_T_1255	5.340	200	PVC	150	3.0636	3.2_T_2809	59.05	100	PVC	150	0.0857
3.2_T_1256	5.360	110	PVC	150	2.6079	3.2_T_2810	59.04	63	PVC	150	0.0252
3.2_T_1258	5.400	110	PVC	150	3.1434	3.2_T_2811	59.04	63	PVC	150	0.1109
3.2_T_1259	5.430	110	PVC	150	0.0548	3.2_T_2812	59.08	63	PVC	150	0.5542
3.2_T_1260	5.470	63	PVC	150	0.0544	3.2_T_2813	59.16	200	AC	140	2.5812
3.2_T_1261	6.360	50	PVC	150	2.9954	3.2_T_2814	59.17	63	PVC	150	0.0050
3.2_T_1262	5.540	63	PVC	150	0.5376	3.2_T_2815	59.59	63	PVC	150	1.7932
3.2_T_1263	5.560	63	PVC	150	0.0000	3.2_T_2816	59.29	63	PVC	150	0.2310
3.2_T_1264	5.560	160	PVC	150	0.1071	3.2_T_2817	59.24	110	PVC	150	0.0251
3.2_T_1265	5.590	160	PVC	150	3.0331	3.2_T_2818	59.27	63	PVC	150	0.0251
3.2_T_1266	5.650	160	PVC	150	0.0527	3.2_T_2819	59.31	110	PVC	150	0.2309
3.2_T_1267	5.680	63	PVC	150	0.0000	3.2_T_2820	59.36	63	PVC	150	0.0201
3.2_T_1268	5.680	50	PVC	150	0.1572	3.2_T_2821	62.52	63	PVC	150	0.0000
3.2_T_1269	5.690	63	PVC	150	2.2511	3.2_T_2822	59.92	63	PVC	150	4.5003
3.2_T_1270	5.710	200	PVC	150	0.0000	3.2_T_2823	59.43	63	PVC	150	0.1002
3.2_T_1271	5.720	63	PVC	150	0.0521	3.2_T_2825	59.53	160	PVC	150	0.3800
3.2_T_1272	5.720	160	PVC	150	1.8204	3.2_T_2826	59.63	63	PVC	150	0.0599
3.2_T_1273	6.590	110	PVC	150	1.9869	3.2_T_2827	60.04	110	PVC	150	0.7139
3.2_T_1274	5.730	63	PVC	150	0.0519	3.2_T_2828	59.72	63	PVC	150	0.0050
3.2_T_1275	5.760	63	PVC	150	0.2069	3.2_T_2829	72.84	63	PVC	150	0.0204
3.2_T_1276	5.810	63	PVC	150	0.0000	3.2_T_2830	59.92	110	PVC	150	0.3328
3.2_T_1277	5.800	63	PVC	150	0.0513	3.2_T_2831	59.84	63	PVC	150	0.2736
3.2_T_1278	5.810	110	PVC	150	0.1025	3.2_T_2832	60.15	110	PVC	150	2.0389
3.2_T_1279	5.830	63	PVC	150	4.6450	3.2_T_2833	59.89	63	PVC	150	0.1342
3.2_T_1280	5.850	110	PVC	150	0.0000	3.2_T_2834	60.37	63	PVC	150	1.2968
3.2_T_1281	5.880	110	PVC	150	0.0506	3.2_T_2835	59.98	63	PVC	150	2.2482
3.2_T_1282	5.880	63	PVC	150	0.0000	3.2_T_2836	59.99	110	PVC	150	0.1439
3.2_T_1283	8.300	110	PVC	150	0.9325	3.2_T_2837	67.29	110	PVC	150	0.8669

3.2_T_1284	5.920	110	PVC	150	0.0000	3.2_T_2838	60.00	63	PVC	150	0.0744
3.2_T_1285	5.930	160	PVC	150	0.0000	3.2_T_2839	60.01	63	PVC	150	0.0546
3.2_T_1286	5.960	63	PVC	150	0.0000	3.2_T_2840	60.09	250	AC	140	0.0000
3.2_T_1287	5.990	63	PVC	150	0.0000	3.2_T_2841	60.09	50	PVC	150	3.6903
3.2_T_1288	6.000	63	PVC	150	0.0496	3.2_T_2842	61.14	63	PVC	150	0.1363
3.2_T_1289	6.000	63	PVC	150	0.0496	3.2_T_2843	60.31	63	PVC	150	6.4956
3.2_T_1290	6.000	63	PVC	150	0.0000	3.2_T_2844	60.32	63	PVC	150	0.7600
3.2_T_1291	6.000	63	PVC	150	0.0000	3.2_T_2845	60.52	50	PVC	150	0.0738
3.2_T_1292	6.000	63	PVC	150	0.0992	3.2_T_2846	60.54	400	HF	130	0.0787
3.2_T_1293	6.000	63	PVC	150	0.0496	3.2_T_2847	61.04	63	PVC	150	1.4094
3.2_T_1294	6.000	63	PVC	150	0.0000	3.2_T_2848	60.61	63	PVC	150	0.5942
3.2_T_1295	6.000	63	PVC	150	0.0000	3.2_T_2849	60.57	63	PVC	150	0.0147
3.2_T_1296	6.000	63	PVC	150	0.0000	3.2_T_2850	60.60	100	AC	140	0.5943
3.2_T_1297	6.000	63	PVC	150	0.0496	3.2_T_2851	60.91	63	PVC	150	0.0489
3.2_T_1298	6.000	63	PVC	150	0.0992	3.2_T_2852	60.67	50	PVC	150	2.2324
3.2_T_1299	6.000	63	PVC	150	0.0000	3.2_T_2853	60.74	63	PVC	150	1.0389
3.2_T_1300	6.000	63	PVC	150	0.0496	3.2_T_2854	60.86	63	PVC	150	3.5409
3.2_T_1301	6.000	63	PVC	150	0.0000	3.2_T_2855	61.09	63	PVC	150	4.6334
3.2_T_1302	8.790	63	PVC	150	7.0113	3.2_T_2856	60.96	63	PVC	150	0.0049
3.2_T_1303	6.090	63	PVC	150	4.3510	3.2_T_2857	63.00	160	PVC	150	0.5291
3.2_T_1304	6.090	63	PVC	150	0.0000	3.2_T_2858	60.98	63	PVC	150	0.1464
3.2_T_1305	6.110	110	PVC	150	0.1948	3.2_T_2859	61.98	110	PVC	150	0.0144
3.2_T_1306	6.130	63	PVC	150	0.0000	3.2_T_2860	61.04	63	PVC	150	0.6047
3.2_T_1307	6.140	63	PVC	150	0.0485	3.2_T_2861	61.02	50	AC	140	0.0732
3.2_T_1308	6.150	300	AC	140	0.0000	3.2_T_2862	61.06	63	PVC	150	0.0293
3.2_T_1309	7.050	110	PVC	150	0.0000	3.2_T_2863	61.08	63	PVC	150	1.9835
3.2_T_1310	6.300	63	PVC	150	0.0472	3.2_T_2864	61.12	63	PVC	150	0.7646
3.2_T_1311	6.310	200	AC	140	0.5660	3.2_T_2865	61.12	63	PVC	150	1.3051
3.2_T_1312	6.350	160	PVC	150	0.0469	3.2_T_2866	61.16	110	PVC	150	1.3969
3.2_T_1313	6.360	110	PVC	150	0.0000	3.2_T_2867	61.24	63	PVC	150	0.0146
3.2_T_1314	6.370	63	PVC	150	0.0000	3.2_T_2868	61.25	63	PVC	150	4.8888
3.2_T_1315	6.390	450	HD	130	0.7917	3.2_T_2869	61.21	50	PVC	150	0.2043
3.2_T_1316	9.550	63	PVC	150	0.0312	3.2_T_2870	61.24	200	AC	140	2.1678
3.2_T_1317	6.420	110	PVC	150	0.0000	3.2_T_2871	63.45	63	PVC	150	1.3932
3.2_T_1318	6.430	63	PVC	150	0.0000	3.2_T_2872	61.29	110	PVC	150	0.0874
3.2_T_1319	6.560	110	PVC	150	0.0000	3.2_T_2873	62.70	63	PVC	150	0.5554
3.2_T_1320	6.470	63	PVC	150	0.0000	3.2_T_2874	61.34	63	PVC	150	0.0000
3.2_T_1321	6.480	63	PVC	150	3.6294	3.2_T_2875	61.35	63	PVC	150	1.5478
3.2_T_1322	6.480	63	PVC	150	0.5513	3.2_T_2876	61.39	110	PVC	150	0.6788
3.2_T_1323	6.480	110	PVC	150	5.1872	3.2_T_2877	61.66	200	PVC	150	0.0241
3.2_T_1324	6.490	63	PVC	150	0.0000	3.2_T_2878	61.42	63	PVC	150	0.0679
3.2_T_1325	6.530	63	PVC	150	0.0000	3.2_T_2879	61.42	63	PVC	150	2.0644
3.2_T_1326	8.860	63	PVC	150	0.2352	3.2_T_2880	61.52	63	PVC	150	0.6338
3.2_T_1327	6.550	200	AC	140	0.1818	3.2_T_2881	61.58	110	PVC	150	0.2659
3.2_T_1328	6.560	63	PVC	150	0.0000	3.2_T_2882	61.60	63	PVC	150	0.0483
3.2_T_1329	6.560	160	PVC	150	0.5894	3.2_T_2883	61.63	63	PVC	150	0.0531

3.2_T_1330	6.600	200	PVC	150	0.0451	3.2_T_2884	61.63	110	PVC	150	3.7962
3.2_T_1331	6.670	63	PVC	150	0.0000	3.2_T_2885	62.17	63	PVC	150	2.3795
3.2_T_1333	6.770	63	PVC	150	0.0000	3.2_T_2886	61.72	63	PVC	150	0.0000
3.2_T_1334	6.790	63	PVC	150	0.0439	3.2_T_2887	61.76	63	PVC	150	0.0530
3.2_T_1335	6.820	63	PVC	150	0.0000	3.2_T_2888	61.78	150	PVC	150	0.1205
3.2_T_1336	6.890	63	PVC	150	0.1295	3.2_T_2889	61.76	100	PVC	150	0.1012
3.2_T_1337	6.840	200	PVC	150	0.2177	3.2_T_2890	61.79	50	PVC	150	0.3517
3.2_T_1338	6.850	63	PVC	150	0.0000	3.2_T_2891	61.81	50	PVC	150	0.1059
3.2_T_1339	6.860	160	PVC	150	0.0434	3.2_T_2892	62.76	63	PVC	150	1.4609
3.2_T_1340	6.890	63	PVC	150	0.0864	3.2_T_2893	61.90	200	AC	140	0.4953
3.2_T_1341	6.890	63	PVC	150	0.0432	3.2_T_2894	61.99	63	PVC	150	1.5606
3.2_T_1342	6.950	600	HD	130	0.8569	3.2_T_2895	61.97	63	PVC	150	0.1249
3.2_T_1343	6.980	63	PVC	150	0.0426	3.2_T_2896	62.03	63	PVC	150	0.0048
3.2_T_1344	7.040	200	AC	140	1.7343	3.2_T_2897	62.18	63	PVC	150	0.0910
3.2_T_1345	7.040	110	PVC	150	0.0000	3.2_T_2898	62.56	50	PVC	150	10.724
3.2_T_1346	7.060	63	PVC	150	0.0000	3.2_T_2899	62.30	110	PVC	150	0.0334
3.2_T_1347	7.600	63	PVC	150	0.0392	3.2_T_2900	95.30	63	PVC	150	0.2249
3.2_T_1348	7.080	63	PVC	150	0.0000	3.2_T_2901	62.39	63	PVC	150	3.2871
3.2_T_1349	7.930	63	PVC	150	0.0375	3.2_T_2902	62.52	200	AC	140	0.0333
3.2_T_1350	7.100	160	PVC	150	1.0475	3.2_T_2903	63.56	100	PVC	150	0.8429
3.2_T_1351	7.160	63	PVC	150	9.7690	3.2_T_2904	62.58	200	PVC	150	2.7968
3.2_T_1352	7.170	63	PVC	150	0.0000	3.2_T_2905	62.63	50	PVC	150	0.0000
3.2_T_1353	7.180	110	PVC	150	0.0000	3.2_T_2906	62.69	63	PVC	150	0.5888
3.2_T_1354	7.190	200	AC	140	0.6206	3.2_T_2907	62.75	63	PVC	150	0.0047
3.2_T_1355	7.200	160	PVC	150	1.3646	3.2_T_2908	62.80	63	PVC	150	0.4503
3.2_T_1356	7.340	200	AC	140	2.1487	3.2_T_2909	74.18	50	PVC	150	0.0923
3.2_T_1357	7.370	110	PVC	150	0.0808	3.2_T_2910	62.88	63	PVC	150	0.6201
3.2_T_1358	7.390	63	PVC	150	0.0403	3.2_T_2911	62.90	250	AC	140	0.1704
3.2_T_1359	7.450	110	PVC	150	1.5989	3.2_T_2912	62.96	63	PVC	150	0.0851
3.2_T_1360	7.530	63	PVC	150	7.0002	3.2_T_2913	62.97	63	PVC	150	0.0095
3.2_T_1361	7.550	63	PVC	150	2.1693	3.2_T_2914	63.09	63	PVC	150	0.0613
3.2_T_1362	7.560	63	PVC	150	0.0394	3.2_T_2915	63.98	50	PVC	150	0.0791
3.2_T_1363	7.590	63	PVC	150	0.3924	3.2_T_2916	80.74	63	PVC	150	0.0148
3.2_T_1364	9.800	63	PVC	150	0.0304	3.2_T_2919	63.50	250	PVC	150	2.1233
3.2_T_1365	7.630	110	PVC	150	0.3509	3.2_T_2920	63.32	63	PVC	150	3.1919
3.2_T_1366	7.640	63	PVC	150	1.9084	3.2_T_2921	63.32	63	PVC	150	0.0423
3.2_T_1367	7.660	63	PVC	150	5.9869	3.2_T_2922	63.51	63	PVC	150	0.0750
3.2_T_1368	7.740	63	PVC	150	0.2307	3.2_T_2923	63.52	110	PVC	150	0.1968
3.2_T_1369	7.740	100	PVC	150	0.2307	3.2_T_2924	63.52	63	PVC	150	0.7591
3.2_T_1370	7.770	110	PVC	150	0.0000	3.2_T_2925	63.58	63	PVC	150	0.0000
3.2_T_1371	7.810	110	PVC	150	0.0000	3.2_T_2926	63.59	63	PVC	150	0.1077
3.2_T_1373	7.920	160	PVC	150	1.0146	3.2_T_2927	63.74	63	PVC	150	0.6958
3.2_T_1374	7.930	63	PVC	150	0.0375	3.2_T_2928	64.60	160	PVC	150	0.0461
3.2_T_1375	8.030	100	PVC	150	0.3706	3.2_T_2929	83.95	63	PVC	150	0.0461
3.2_T_1376	7.990	200	PVC	150	1.3785	3.2_T_2930	63.80	110	PVC	150	0.5179
3.2_T_1377	7.990	63	PVC	150	1.8992	3.2_T_2931	62.97	63	PVC	150	0.0000

ID	Length	Diameter	Material	C	Flow	ID	Length	Diameter	Material	C	Flow
3.2_T_1378	8.020	63	PVC	150	0.0371	3.2_T_2932	64.14	100	PVC	150	0.0464
3.2_T_1379	8.030	63	PVC	150	0.0000	3.2_T_2933	64.23	63	PVC	150	0.0093
3.2_T_1380	8.080	160	PVC	150	0.9574	3.2_T_2934	64.67	63	PVC	150	0.9574
3.2_T_1381	8.090	63	PVC	150	0.0000	3.2_T_2935	64.05	63	PVC	150	0.5112
3.2_T_1382	8.110	63	PVC	150	0.0000	3.2_T_2936	64.20	63	PVC	150	0.0510
3.2_T_1383	8.130	200	PVC	150	2.5257	3.2_T_2937	65.23	110	PVC	150	1.1955
3.2_T_1384	8.170	63	PVC	150	0.0365	3.2_T_2938	64.34	160	PVC	150	0.0694
3.2_T_1385	8.170	200	PVC	150	0.2913	3.2_T_2939	64.29	63	PVC	150	0.0278
3.2_T_1386	8.200	110	PVC	150	17.8286	3.2_T_2940	64.30	63	PVC	150	0.0417
3.2_T_1387	8.210	110	PVC	150	0.1812	3.2_T_2941	64.40	63	PVC	150	2.0614
3.2_T_1388	8.290	100	PVC	150	3.9484	3.2_T_2942	64.32	63	PVC	150	6.4416
3.2_T_1389	8.310	200	PVC	150	0.2150	3.2_T_2943	64.42	63	PVC	150	0.6238
3.2_T_1391	8.410	63	PVC	150	0.0354	3.2_T_2945	70.87	63	PVC	150	0.4494
3.2_T_1392	8.450	63	PVC	150	2.7824	3.2_T_2946	69.53	63	PVC	150	0.0171
3.2_T_1393	8.480	63	PVC	150	0.0000	3.2_T_2947	64.88	50	AC	140	0.0872
3.2_T_1394	8.520	110	PVC	150	0.6640	3.2_T_2948	64.90	50	PVC	150	9.9060
3.2_T_1395	8.530	63	PVC	150	81.498	3.2_T_2949	65.00	160	PVC	150	0.0183
3.2_T_1396	8.630	63	PVC	150	10.207	3.2_T_2950	67.00	63	PVC	150	1.3195
3.2_T_1397	8.630	300	AC	140	0.2759	3.2_T_2951	65.05	63	PVC	150	0.0229
3.2_T_1398	8.630	110	PVC	150	0.3792	3.2_T_2952	65.20	110	PVC	150	0.6072
3.2_T_1399	8.660	63	PVC	150	0.0000	3.2_T_2953	65.26	63	PVC	150	0.1186
3.2_T_1400	8.690	200	AC	140	2.5685	3.2_T_2954	65.14	110	PVC	150	2.2758
3.2_T_1401	8.710	200	AC	140	0.2393	3.2_T_2955	65.15	63	PVC	150	0.1097
3.2_T_1402	8.750	63	PVC	150	0.1020	3.2_T_2956	65.23	63	PVC	150	0.0958
3.2_T_1403	8.760	63	PVC	150	9.0726	3.2_T_2957	65.25	110	PVC	150	0.3513
3.2_T_1405	11.55	63	PVC	150	6.7797	3.2_T_2958	65.38	63	PVC	150	0.0000
3.2_T_1406	8.820	90	PVC	150	0.0675	3.2_T_2959	65.48	63	PVC	150	0.0591
3.2_T_1407	8.820	200	PVC	150	4.8935	3.2_T_2960	65.53	63	PVC	150	0.1136
3.2_T_1408	8.830	110	PVC	150	8.2268	3.2_T_2961	79.36	100	AC	140	0.0600
3.2_T_1409	8.840	160	PVC	150	0.0000	3.2_T_2962	65.98	160	PVC	150	1.2361
3.2_T_1410	11.81	63	PVC	150	0.2772	3.2_T_2963	65.67	63	PVC	150	0.2855
3.2_T_1411	8.870	63	PVC	150	0.0336	3.2_T_2964	65.71	63	PVC	150	3.1482
3.2_T_1412	8.870	63	PVC	150	0.0336	3.2_T_2965	65.80	160	PVC	150	0.9681
3.2_T_1413	8.920	100	AC	140	0.2002	3.2_T_2966	65.83	63	PVC	150	0.0181
3.2_T_1414	12.92	110	PVC	150	0.2073	3.2_T_2967	68.21	63	PVC	150	0.1266
3.2_T_1415	9.040	250	AC	140	2.3717	3.2_T_2968	66.07	63	PVC	150	0.0090
3.2_T_1416	9.040	63	PVC	150	0.8886	3.2_T_2969	96.28	63	PVC	150	0.0371
3.2_T_1417	9.050	200	PVC	150	1.2497	3.2_T_2970	67.18	63	PVC	150	0.0620
3.2_T_1418	9.060	63	PVC	150	0.0328	3.2_T_2971	66.12	63	PVC	150	0.6977
3.2_T_1419	9.070	63	PVC	150	0.0656	3.2_T_2972	66.22	110	PVC	150	0.0000
3.2_T_1420	9.070	63	PVC	150	0.1312	3.2_T_2973	66.22	63	PVC	150	0.3147
3.2_T_1421	9.080	250	PVC	150	0.0000	3.2_T_2974	66.33	63	PVC	150	0.0180
3.2_T_1422	9.090	300	AC	140	0.2291	3.2_T_2975	78.25	63	PVC	150	0.1826
3.2_T_1423	9.140	63	PVC	150	1.1404	3.2_T_2976	66.59	63	PVC	150	0.4381
3.2_T_1424	9.170	160	PVC	150	0.0000	3.2_T_2977	68.28	63	PVC	150	0.1003
3.2_T_1425	9.170	110	PVC	150	0.0000	3.2_T_2978	92.96	50	PVC	150	1.3673

3.2_T_1426	9.240	63	PVC	150	0.0322	3.2_T_2979	67.05	63	PVC	150	0.0622
3.2_T_1427	9.280	200	AC	140	0.4811	3.2_T_2980	69.80	63	PVC	150	0.0085
3.2_T_1428	9.380	110	PVC	150	0.4759	3.2_T_2981	66.76	50	PVC	150	81.962
3.2_T_1429	9.460	63	PVC	150	0.0315	3.2_T_2982	66.82	50	PVC	150	0.0178
3.2_T_1430	9.600	63	PVC	150	0.0310	3.2_T_2983	67.34	63	PVC	150	0.4155
3.2_T_1431	9.570	63	PVC	150	5.4713	3.2_T_2984	66.92	50	PVC	150	0.4136
3.2_T_1432	9.600	63	PVC	150	2.2022	3.2_T_2985	66.98	63	PVC	150	0.1111
3.2_T_1433	9.610	63	PVC	150	0.0310	3.2_T_2986	67.04	63	PVC	150	0.0577
3.2_T_1434	9.620	63	PVC	150	0.0619	3.2_T_2987	67.11	160	PVC	150	0.5412
3.2_T_1435	9.640	63	PVC	150	0.0000	3.2_T_2988	74.64	110	PVC	150	0.0040
3.2_T_1437	9.740	63	PVC	150	8.3138	3.2_T_2989	67.14	63	PVC	150	0.0310
3.2_T_1438	9.760	63	PVC	150	0.0000	3.2_T_2990	68.25	63	PVC	150	0.0436
3.2_T_1439	10.38	110	PVC	150	0.1433	3.2_T_2991	67.28	63	PVC	150	1.6325
3.2_T_1440	9.850	63	PVC	150	0.0000	3.2_T_2992	93.83	63	PVC	150	0.0666
3.2_T_1441	9.860	63	PVC	150	0.0302	3.2_T_2993	67.38	63	PVC	150	2.5447
3.2_T_1442	9.890	100	PVC	150	0.3010	3.2_T_2994	73.81	63	PVC	150	1.5808
3.2_T_1443	9.910	63	PVC	150	0.0000	3.2_T_2995	67.65	63	PVC	150	0.0000
3.2_T_1444	11.45	63	PVC	150	1.0916	3.2_T_2996	67.89	63	PVC	150	0.0745
3.2_T_1445	9.920	160	PVC	150	1.6805	3.2_T_2997	67.72	63	PVC	150	0.9627
3.2_T_1446	9.960	200	AC	140	1.0162	3.2_T_2998	67.53	400	HF	130	0.0838
3.2_T_1447	10.05	110	PVC	150	0.0000	3.2_T_2999	92.07	50	PVC	150	1.9431
3.2_T_1448	10.06	63	PVC	150	0.0000	3.2_T_3000	67.69	200	PVC	150	0.0176
3.2_T_1449	10.06	63	PVC	150	0.1183	3.2_T_3001	67.68	63	PVC	150	0.0264
3.2_T_1450	10.08	63	PVC	150	0.0591	3.2_T_3002	67.89	110	PVC	150	0.6883
3.2_T_1451	10.09	63	PVC	150	0.0295	3.2_T_3003	72.87	50	PVC	150	0.8210
3.2_T_1452	10.10	100	PVC	150	3.8606	3.2_T_3004	67.79	63	PVC	150	0.0439
3.2_T_1453	10.11	150	AC	140	0.3828	3.2_T_3005	67.84	63	PVC	150	5.6076
3.2_T_1454	10.11	63	PVC	150	0.0294	3.2_T_3006	68.00	63	PVC	150	1.5451
3.2_T_1455	10.12	110	PVC	150	0.4704	3.2_T_3007	68.05	110	PVC	150	1.1242
3.2_T_1457	10.21	63	PVC	150	0.0583	3.2_T_3008	68.09	50	PVC	150	8.0043
3.2_T_1458	10.24	63	PVC	150	0.0581	3.2_T_3009	68.14	50	PVC	150	0.0350
3.2_T_1459	10.26	63	PVC	150	0.0000	3.2_T_3010	68.16	200	PVC	150	0.3625
3.2_T_1460	10.32	63	PVC	150	0.3172	3.2_T_3011	75.01	63	PVC	150	1.9723
3.2_T_1461	10.33	63	PVC	150	0.0000	3.2_T_3012	71.75	63	PVC	150	0.0249
3.2_T_1462	10.37	63	PVC	150	0.0574	3.2_T_3014	68.45	63	PVC	150	0.1000
3.2_T_1463	10.41	200	AC	140	0.4574	3.2_T_3015	68.72	63	PVC	150	0.0043
3.2_T_1465	10.44	63	PVC	150	0.2565	3.2_T_3016	68.54	63	PVC	150	0.0695
3.2_T_1466	10.48	63	PVC	150	0.6820	3.2_T_3017	68.40	63	PVC	150	0.0392
3.2_T_1467	10.48	63	PVC	150	0.0568	3.2_T_3018	68.58	63	PVC	150	0.0998
3.2_T_1468	10.50	200	AC	140	0.1985	3.2_T_3019	68.64	63	PVC	150	0.0130
3.2_T_1469	10.50	63	PVC	150	0.0567	3.2_T_3020	68.66	110	PVC	150	1.4002
3.2_T_1470	10.58	32	PVC	150	1.4342	3.2_T_3021	68.68	63	PVC	150	4.7197
3.2_T_1471	10.59	200	AC	140	1.2644	3.2_T_3022	68.71	200	PVC	150	0.0650
3.2_T_1472	10.72	160	PVC	150	0.0833	3.2_T_3023	68.77	63	PVC	150	0.0000
3.2_T_1473	10.61	63	PVC	150	0.1402	3.2_T_3024	70.00	63	PVC	150	5.4638
3.2_T_1474	10.67	100	PVC	150	0.0837	3.2_T_3025	91.03	63	PVC	150	0.0098

ID						ID					
3.2_T_1475	10.70	110	PVC	150	0.0000	3.2_T_3026	68.99	63	PVC	150	0.0000
3.2_T_1476	10.71	200	PVC	150	3.5010	3.2_T_3027	70.94	63	PVC	150	0.5287
3.2_T_1477	10.74	63	PVC	150	0.0000	3.2_T_3028	68.96	63	PVC	150	0.1597
3.2_T_1478	10.89	63	PVC	150	0.0000	3.2_T_3029	69.14	50	PVC	150	0.1248
3.2_T_1479	10.95	63	PVC	150	0.0544	3.2_T_3030	69.41	200	PVC	150	0.3431
3.2_T_1480	10.98	110	PVC	150	2.9271	3.2_T_3031	69.26	63	PVC	150	0.0000
3.2_T_1481	11.00	63	PVC	150	0.0271	3.2_T_3033	78.26	63	PVC	150	0.0418
3.2_T_1482	11.02	63	PVC	150	0.0540	3.2_T_3035	69.67	300	AC	140	0.0171
3.2_T_1483	11.03	63	PVC	150	0.0270	3.2_T_3036	69.68	63	PVC	150	0.0299
3.2_T_1484	11.10	63	PVC	150	0.0536	3.2_T_3037	69.78	63	PVC	150	1.8683
3.2_T_1485	11.13	63	PVC	150	0.0535	3.2_T_3038	69.87	63	PVC	150	0.0682
3.2_T_1486	11.18	63	PVC	150	0.0533	3.2_T_3039	69.88	63	PVC	150	0.1491
3.2_T_1487	11.22	110	PVC	150	3.6609	3.2_T_3040	69.89	63	PVC	150	0.0170
3.2_T_1488	11.56	50	PVC	150	0.6693	3.2_T_3041	69.93	63	PVC	150	1.9707
3.2_T_1489	11.35	63	PVC	150	0.0525	3.2_T_3042	70.04	110	PVC	150	2.3415
3.2_T_1491	11.37	110	PVC	150	0.0000	3.2_T_3043	70.54	50	PVC	150	2.3758
3.2_T_1492	11.38	63	PVC	150	0.0523	3.2_T_3044	71.64	160	PVC	150	0.3698
3.2_T_1493	11.78	63	PVC	150	0.6064	3.2_T_3045	93.01	63	PVC	150	0.1632
3.2_T_1494	11.42	63	PVC	150	0.0261	3.2_T_3046	70.16	63	PVC	150	0.0509
3.2_T_1495	11.49	63	PVC	150	0.0259	3.2_T_3047	70.21	160	PVC	150	0.0000
3.2_T_1496	11.53	200	PVC	150	1.4458	3.2_T_3048	70.28	63	PVC	150	0.2033
3.2_T_1497	11.63	63	PVC	150	0.9211	3.2_T_3050	70.48	500	HD	130	1.0473
3.2_T_1498	11.67	63	PVC	150	0.2041	3.2_T_3051	70.48	63	PVC	150	1.7103
3.2_T_1499	11.71	63	PVC	150	0.0508	3.2_T_3052	70.52	63	PVC	150	0.0042
3.2_T_1500	11.69	110	PVC	150	1.0690	3.2_T_3053	70.59	110	PVC	150	0.0042
3.2_T_1501	11.87	63	PVC	150	0.0000	3.2_T_3054	70.68	160	PVC	150	0.9855
3.2_T_1502	11.90	63	PVC	150	0.0000	3.2_T_3055	70.66	50	PVC	150	0.4339
3.2_T_1503	11.90	63	PVC	150	1.4757	3.2_T_3056	95.73	63	PVC	150	0.0560
3.2_T_1504	11.91	110	PVC	150	2.5239	3.2_T_3057	71.05	50	HF	130	6.5145
3.2_T_1505	11.92	63	PVC	150	0.6241	3.2_T_3058	79.07	63	PVC	150	0.0753
3.2_T_1506	11.99	110	PVC	150	0.0000	3.2_T_3059	71.19	63	PVC	150	1.8774
3.2_T_1507	12.00	63	PVC	150	0.0000	3.2_T_3060	71.83	63	PVC	150	0.0829
3.2_T_1508	12.00	63	PVC	150	0.0496	3.2_T_3061	71.21	63	PVC	150	1.2581
3.2_T_1509	12.00	63	PVC	150	0.0000	3.2_T_3062	71.31	63	PVC	150	0.0543
3.2_T_1510	12.00	63	PVC	150	0.0248	3.2_T_3063	72.02	63	PVC	150	0.0207
3.2_T_1511	12.00	63	PVC	150	0.0000	3.2_T_3064	71.48	160	PVC	150	0.0375
3.2_T_1512	12.04	63	PVC	150	0.0742	3.2_T_3065	71.44	110	PVC	150	0.0292
3.2_T_1513	12.04	63	PVC	150	0.0247	3.2_T_3066	71.71	63	PVC	150	0.2615
3.2_T_1514	12.05	110	PVC	150	0.1729	3.2_T_3067	71.73	63	PVC	150	4.8590
3.2_T_1515	12.09	63	PVC	150	0.0739	3.2_T_3068	71.93	63	PVC	150	2.8015
3.2_T_1516	12.14	200	AC	140	1.1770	3.2_T_3069	72.01	63	PVC	150	0.4836
3.2_T_1517	12.20	63	PVC	150	4.2444	3.2_T_3070	72.09	63	PVC	150	0.0372
3.2_T_1518	12.26	200	AC	140	2.1357	3.2_T_3071	72.56	63	PVC	150	1.9322
3.2_T_1519	12.27	200	AC	140	0.0728	3.2_T_3072	72.17	110	PVC	150	0.2392
3.2_T_1520	12.30	110	PVC	150	2.2267	3.2_T_3073	72.17	63	PVC	150	0.1650
3.2_T_1521	12.31	63	PVC	150	0.0000	3.2_T_3074	72.36	63	PVC	150	7.7093

3.2_T_1522	12.34	63	PVC	150	0.0000	3.2_T_3075	72.27	50	PVC	150	0.0618
3.2_T_1524	12.36	160	PVC	150	2.7215	3.2_T_3076	72.27	63	PVC	150	0.0865
3.2_T_1525	12.41	110	PVC	150	3.1650	3.2_T_3077	72.33	63	PVC	150	0.0247
3.2_T_1526	12.45	63	PVC	150	0.0717	3.2_T_3078	72.58	63	PVC	150	0.0533
3.2_T_1527	12.45	63	PVC	150	0.0239	3.2_T_3079	72.63	63	PVC	150	0.0492
3.2_T_1528	12.54	63	PVC	150	0.0000	3.2_T_3080	72.49	50	PVC	150	1.1498
3.2_T_1529	12.57	63	PVC	150	1.1371	3.2_T_3081	72.53	63	PVC	150	0.8536
3.2_T_1530	12.61	63	PVC	150	0.0472	3.2_T_3082	97.38	63	PVC	150	1.4152
3.2_T_1531	12.63	63	PVC	150	0.6362	3.2_T_3083	72.62	63	PVC	150	0.0410
3.2_T_1532	12.64	110	PVC	150	0.0236	3.2_T_3084	72.84	50	PVC	150	0.3065
3.2_T_1533	12.72	160	PVC	150	0.0936	3.2_T_3086	80.09	63	PVC	150	0.8808
3.2_T_1534	12.77	110	PVC	150	0.0000	3.2_T_3087	73.00	63	PVC	150	0.0816
3.2_T_1535	12.78	63	PVC	150	0.0000	3.2_T_3088	73.06	63	PVC	150	0.0407
3.2_T_1536	13.04	110	PVC	150	0.1370	3.2_T_3089	73.06	63	PVC	150	5.5938
3.2_T_1537	12.88	63	PVC	150	0.0000	3.2_T_3090	73.09	110	PVC	150	0.0937
3.2_T_1538	12.89	110	PVC	150	0.0462	3.2_T_3091	73.17	50	AC	140	1.2204
3.2_T_1540	13.01	63	PVC	150	0.0458	3.2_T_3092	73.48	63	PVC	150	0.0081
3.2_T_1541	13.03	250	AC	140	0.5026	3.2_T_3093	73.37	110	PVC	150	1.7282
3.2_T_1543	13.09	63	PVC	150	0.0000	3.2_T_3094	73.99	50	PVC	150	0.2414
3.2_T_1544	13.13	200	PVC	150	0.0680	3.2_T_3095	73.59	100	PVC	150	0.0728
3.2_T_1545	13.17	200	PVC	150	3.1190	3.2_T_3096	73.60	63	PVC	150	0.0526
3.2_T_1546	13.19	500	HD	130	0.7671	3.2_T_3097	73.60	63	PVC	150	0.0364
3.2_T_1547	13.25	63	PVC	150	0.0450	3.2_T_3098	74.06	63	PVC	150	0.1889
3.2_T_1548	13.25	200	AC	140	0.6513	3.2_T_3099	73.72	160	PVC	150	0.0040
3.2_T_1549	13.27	63	PVC	150	0.0449	3.2_T_3100	73.79	63	PVC	150	1.3513
3.2_T_1550	13.36	600	HD	130	0.6906	3.2_T_3101	73.81	63	PVC	150	0.0202
3.2_T_1551	13.51	200	PVC	150	1.5866	3.2_T_3102	73.81	160	PVC	150	0.6493
3.2_T_1552	13.58	110	PVC	150	2.7845	3.2_T_3103	74.00	200	PVC	150	0.0483
3.2_T_1553	13.58	450	HD	130	0.0219	3.2_T_3104	74.13	100	PVC	150	0.5702
3.2_T_1554	13.62	100	AC	140	0.5026	3.2_T_3105	74.95	63	PVC	150	0.0516
3.2_T_1555	13.68	63	PVC	150	0.0435	3.2_T_3106	74.26	63	PVC	150	0.0040
3.2_T_1556	13.70	200	AC	140	2.0855	3.2_T_3107	77.70	600	HD	130	0.4291
3.2_T_1557	13.71	200	AC	140	0.0434	3.2_T_3108	74.39	63	PVC	150	1.5724
3.2_T_1558	13.74	63	PVC	150	0.8666	3.2_T_3109	74.86	90	PVC	150	0.1948
3.2_T_1559	13.80	160	PVC	150	0.8196	3.2_T_3110	74.48	110	PVC	150	2.0421
3.2_T_1560	13.90	63	PVC	150	0.0000	3.2_T_3111	75.53	110	PVC	150	0.0985
3.2_T_1561	13.90	150	AC	140	0.0000	3.2_T_3112	74.68	63	PVC	150	0.0359
3.2_T_1562	13.95	63	PVC	150	0.0000	3.2_T_3113	74.73	63	PVC	150	0.0199
3.2_T_1563	13.99	160	PVC	150	1.6596	3.2_T_3116	74.86	63	PVC	150	0.6203
3.2_T_1564	14.01	110	PVC	150	6.4572	3.2_T_3117	74.91	63	PVC	150	0.6675
3.2_T_1565	14.04	63	PVC	150	0.0000	3.2_T_3118	74.99	63	PVC	150	0.0159
3.2_T_1566	14.05	200	AC	140	1.1020	3.2_T_3119	75.22	200	AC	140	0.6450
3.2_T_1567	14.09	200	PVC	150	0.2325	3.2_T_3120	75.76	63	PVC	150	2.1964
3.2_T_1568	14.12	200	AC	140	10.475	3.2_T_3121	91.64	63	PVC	150	0.0033
3.2_T_1569	14.13	200	PVC	150	3.4540	3.2_T_3122	75.48	110	PVC	150	0.0513
3.2_T_1570	14.15	200	PVC	150	1.2411	3.2_T_3123	75.61	110	PVC	150	2.3108

3.2_T_1571	14.15	63	PVC	150	1.6617	3.2_T_3124	75.69	63	PVC	150	0.0000
3.2_T_1572	14.15	63	PVC	150	0.0000	3.2_T_3125	75.72	110	PVC	150	2.9720
3.2_T_1573	14.15	63	PVC	150	0.0210	3.2_T_3126	75.75	110	PVC	150	0.3929
3.2_T_1574	14.18	63	PVC	150	0.5667	3.2_T_3127	75.93	50	AC	140	0.1607
3.2_T_1575	14.23	250	PVC	150	0.7531	3.2_T_3128	75.96	63	PVC	150	0.0901
3.2_T_1576	14.29	110	PVC	150	1.6453	3.2_T_3129	76.00	63	PVC	150	0.5013
3.2_T_1577	14.30	200	AC	140	1.8314	3.2_T_3130	76.03	63	PVC	150	1.1079
3.2_T_1578	14.31	63	PVC	150	0.0000	3.2_T_3131	76.11	63	PVC	150	0.2229
3.2_T_1579	14.31	200	PVC	150	3.0163	3.2_T_3132	76.11	63	PVC	150	0.3363
3.2_T_1580	14.42	63	PVC	150	22.834	3.2_T_3133	76.15	63	PVC	150	0.0821
3.2_T_1581	14.42	63	PVC	150	0.0619	3.2_T_3134	76.21	50	PVC	150	0.1601
3.2_T_1582	14.44	110	PVC	150	32.118	3.2_T_3135	76.68	63	PVC	150	0.0544
3.2_T_1583	14.46	63	PVC	150	0.0206	3.2_T_3136	77.38	63	PVC	150	1.2732
3.2_T_1584	14.50	100	HF	130	0.1643	3.2_T_3137	78.81	110	PVC	150	1.0689
3.2_T_1585	14.50	63	PVC	150	0.0411	3.2_T_3139	76.78	200	PVC	150	0.1279
3.2_T_1586	14.54	63	PVC	150	0.0614	3.2_T_3140	76.91	110	PVC	150	5.8208
3.2_T_1587	14.54	63	PVC	150	0.1023	3.2_T_3141	77.11	63	PVC	150	1.1272
3.2_T_1589	14.64	63	PVC	150	1.4027	3.2_T_3143	77.58	63	PVC	150	0.4796
3.2_T_1590	14.68	110	PVC	150	8.3142	3.2_T_3144	76.98	160	PVC	150	1.3147
3.2_T_1591	14.72	110	PVC	150	0.0202	3.2_T_3145	78.73	150	PVC	150	0.2987
3.2_T_1592	14.73	63	PVC	150	0.3838	3.2_T_3146	77.37	63	PVC	150	3.1123
3.2_T_1593	14.74	200	AC	140	2.0998	3.2_T_3147	78.26	63	PVC	150	0.0533
3.2_T_1594	15.01	200	PVC	150	2.9749	3.2_T_3148	77.33	63	PVC	150	0.0000
3.2_T_1595	15.02	110	PVC	150	6.1632	3.2_T_3149	77.47	63	PVC	150	4.9987
3.2_T_1596	15.08	63	PVC	150	21.943	3.2_T_3150	77.44	63	PVC	150	0.0423
3.2_T_1597	15.16	63	PVC	150	0.0000	3.2_T_3151	77.45	63	PVC	150	0.0269
3.2_T_1598	15.18	160	PVC	150	0.5884	3.2_T_3152	78.34	63	PVC	150	0.0152
3.2_T_1599	15.21	63	PVC	150	0.0000	3.2_T_3153	81.30	63	PVC	150	1.9807
3.2_T_1600	15.30	63	PVC	150	3.5027	3.2_T_3154	77.57	63	PVC	150	0.0307
3.2_T_1601	15.30	63	PVC	150	0.0195	3.2_T_3155	77.75	110	PVC	150	0.0881
3.2_T_1602	15.31	63	PVC	150	0.0000	3.2_T_3156	77.78	63	PVC	150	2.0014
3.2_T_1603	15.56	160	PVC	150	0.0383	3.2_T_3157	77.67	63	PVC	150	0.0498
3.2_T_1604	15.38	63	PVC	150	1.2970	3.2_T_3158	77.74	63	PVC	150	0.0613
3.2_T_1605	15.45	200	AC	140	0.0000	3.2_T_3159	78.41	200	PVC	150	0.0380
3.2_T_1606	15.45	63	PVC	150	0.0000	3.2_T_3160	77.91	63	PVC	150	0.0382
3.2_T_1607	15.52	50	PVC	150	2.8581	3.2_T_3161	120.0	63	PVC	150	0.5010
3.2_T_1608	15.70	63	PVC	150	5.5175	3.2_T_3162	78.00	63	PVC	150	0.0191
3.2_T_1609	15.57	63	PVC	150	0.0000	3.2_T_3163	78.13	160	PVC	150	0.6439
3.2_T_1610	15.71	63	PVC	150	2.0649	3.2_T_3164	78.18	250	AC	140	0.9823
3.2_T_1611	15.77	63	PVC	150	0.0000	3.2_T_3165	78.19	110	PVC	150	0.0267
3.2_T_1612	15.89	50	PVC	150	0.1686	3.2_T_3166	122.8	50	PVC	150	0.1066
3.2_T_1613	15.89	63	PVC	150	0.1499	3.2_T_3167	80.28	250	AC	140	0.0185
3.2_T_1614	15.90	63	PVC	150	0.0000	3.2_T_3168	78.44	63	PVC	150	0.0342
3.2_T_1615	18.37	110	PVC	150	0.6480	3.2_T_3169	78.58	110	PVC	150	0.6704
3.2_T_1616	16.04	110	PVC	150	0.1856	3.2_T_3170	78.64	63	PVC	150	0.0379
3.2_T_1617	16.18	63	PVC	150	0.0184	3.2_T_3171	78.69	63	PVC	150	0.3404

ID						ID					
3.2_T_1618	16.24	200	PVC	150	2.9326	3.2_T_3172	78.70	160	PVC	150	0.0227
3.2_T_1619	16.27	200	PVC	150	0.0000	3.2_T_3173	105.0	63	PVC	150	0.1673
3.2_T_1620	16.27	63	PVC	150	15.423	3.2_T_3174	79.15	63	PVC	150	0.1579
3.2_T_1621	17.27	63	PVC	150	0.7411	3.2_T_3175	79.00	63	PVC	150	0.3467
3.2_T_1622	16.32	110	PVC	150	1.3683	3.2_T_3176	79.58	63	PVC	150	0.5723
3.2_T_1623	16.33	110	PVC	150	1.3303	3.2_T_3177	89.86	250	AC	140	0.0464
3.2_T_1624	16.36	63	PVC	150	3.9487	3.2_T_3178	106.9	63	PVC	150	0.2560
3.2_T_1625	16.41	32	PVC	150	28.177	3.2_T_3179	80.04	63	PVC	150	0.1376
3.2_T_1626	16.46	63	PVC	150	0.0543	3.2_T_3181	80.25	50	PVC	150	0.8791
3.2_T_1627	16.49	63	PVC	150	0.0000	3.2_T_3182	79.51	50	PVC	150	4.3690
3.2_T_1628	16.50	63	PVC	150	3.1934	3.2_T_3183	79.78	110	PVC	150	0.0149
3.2_T_1629	19.18	63	PVC	150	1.5830	3.2_T_3184	79.79	63	PVC	150	0.8915
3.2_T_1630	16.63	100	PVC	150	0.1432	3.2_T_3185	80.22	63	PVC	150	2.3600
3.2_T_1631	16.63	63	PVC	150	0.5371	3.2_T_3186	79.99	63	PVC	150	0.0595
3.2_T_1632	18.10	63	PVC	150	0.7236	3.2_T_3187	80.15	110	PVC	150	0.0074
3.2_T_1633	16.71	63	PVC	150	0.0000	3.2_T_3188	111.9	110	PVC	150	0.0186
3.2_T_1634	16.76	110	PVC	150	0.0000	3.2_T_3189	80.23	160	PVC	150	0.0408
3.2_T_1635	16.80	63	PVC	150	1.5418	3.2_T_3191	80.43	63	PVC	150	0.3331
3.2_T_1636	16.82	63	PVC	150	0.0531	3.2_T_3192	80.41	63	PVC	150	0.1703
3.2_T_1637	16.92	63	PVC	150	0.0000	3.2_T_3193	114.6	50	PVC	150	0.2648
3.2_T_1638	16.92	110	PVC	150	1.1963	3.2_T_3194	80.44	50	PVC	150	0.0074
3.2_T_1639	18.38	63	PVC	150	8.7441	3.2_T_3195	110.2	63	PVC	150	0.0000
3.2_T_1641	16.96	63	PVC	150	0.0000	3.2_T_3196	81.22	90	PVC	150	0.0000
3.2_T_1642	22.89	63	PVC	150	1.0143	3.2_T_3197	80.74	50	AC	140	3.1484
3.2_T_1643	17.04	63	PVC	150	0.8209	3.2_T_3198	80.77	110	PVC	150	3.8365
3.2_T_1644	17.05	63	PVC	150	0.0524	3.2_T_3199	80.87	110	PVC	150	0.0221
3.2_T_1645	17.10	110	PVC	150	1.4451	3.2_T_3200	80.99	63	PVC	150	0.0772
3.2_T_1646	17.13	110	PVC	150	3.1097	3.2_T_3201	81.03	63	PVC	150	2.5495
3.2_T_1647	17.15	63	PVC	150	6.0227	3.2_T_3202	81.07	63	PVC	150	1.2925
3.2_T_1648	17.19	63	PVC	150	0.9868	3.2_T_3203	81.09	63	PVC	150	0.4405
3.2_T_1649	17.22	63	PVC	150	2.2646	3.2_T_3204	82.26	63	PVC	150	4.3424
3.2_T_1650	17.29	63	PVC	150	0.0861	3.2_T_3205	81.33	160	PVC	150	0.0329
3.2_T_1651	17.42	63	PVC	150	0.0513	3.2_T_3207	81.29	63	PVC	150	0.0256
3.2_T_1652	17.42	160	PVC	150	0.0000	3.2_T_3208	81.29	63	PVC	150	0.0915
3.2_T_1653	17.43	63	PVC	150	0.0000	3.2_T_3209	153.4	63	PVC	150	0.2560
3.2_T_1654	17.64	160	PVC	150	8.0505	3.2_T_3210	81.39	160	PVC	150	0.7424
3.2_T_1655	17.52	110	PVC	150	0.0000	3.2_T_3211	81.39	110	PVC	150	0.0000
3.2_T_1656	17.87	63	PVC	150	0.0000	3.2_T_3213	81.46	63	PVC	150	0.0585
3.2_T_1657	17.52	110	PVC	150	2.5141	3.2_T_3214	81.51	63	PVC	150	0.8873
3.2_T_1658	17.56	63	PVC	150	2.8811	3.2_T_3215	81.66	63	PVC	150	0.1057
3.2_T_1659	17.60	110	PVC	150	0.0000	3.2_T_3216	81.88	63	PVC	150	0.0945
3.2_T_1660	17.63	63	PVC	150	6.6703	3.2_T_3217	81.88	50	AC	140	3.2282
3.2_T_1661	17.66	63	PVC	150	0.0000	3.2_T_3218	81.76	63	PVC	150	0.0983
3.2_T_1662	17.69	63	PVC	150	0.0000	3.2_T_3219	88.29	63	PVC	150	3.7862
3.2_T_1663	17.74	110	PVC	150	0.1175	3.2_T_3220	81.92	200	AC	140	0.1090
3.2_T_1664	17.75	63	PVC	150	0.0000	3.2_T_3221	81.92	110	PVC	150	1.6060

3.2_T_1665	17.75	63	PVC	150	0.0000	3.2_T_3222	98.56	63	PVC	150	0.0906
3.2_T_1666	17.76	200	AC	140	0.2012	3.2_T_3223	83.08	63	PVC	150	0.1254
3.2_T_1667	17.79	160	PVC	150	0.0000	3.2_T_3224	82.27	160	PVC	150	0.6874
3.2_T_1669	25.05	32	PVC	150	1.4375	3.2_T_3225	82.76	100	AC	140	0.9280
3.2_T_1670	17.98	63	PVC	150	0.0000	3.2_T_3227	82.55	100	PVC	150	0.2163
3.2_T_1671	18.25	63	PVC	150	1.3374	3.2_T_3228	82.73	63	PVC	150	0.7412
3.2_T_1672	18.03	100	PVC	150	6.0932	3.2_T_3229	82.69	100	PVC	150	0.1296
3.2_T_1674	18.07	63	PVC	150	2.4540	3.2_T_3230	82.83	63	PVC	150	5.9113
3.2_T_1676	18.10	63	PVC	150	0.2631	3.2_T_3231	82.88	250	PVC	150	0.0000
3.2_T_1677	18.10	63	PVC	150	1.0359	3.2_T_3232	82.87	50	HF	130	0.3341
3.2_T_1679	18.15	160	PVC	150	1.5414	3.2_T_3233	83.03	200	PVC	150	1.0360
3.2_T_1680	18.21	63	PVC	150	2.5997	3.2_T_3234	83.16	50	PVC	150	0.1611
3.2_T_1681	18.23	110	PVC	150	0.0000	3.2_T_3236	83.12	63	PVC	150	0.0501
3.2_T_1682	18.25	63	PVC	150	0.0163	3.2_T_3237	83.20	63	PVC	150	1.2879
3.2_T_1683	18.30	63	PVC	150	0.8782	3.2_T_3238	92.24	63	PVC	150	0.1097
3.2_T_1684	18.58	32	PVC	150	1.4257	3.2_T_3239	83.29	63	PVC	150	0.4896
3.2_T_1686	18.37	110	PVC	150	0.0972	3.2_T_3240	83.28	63	PVC	150	0.0465
3.2_T_1687	18.40	63	PVC	150	0.4205	3.2_T_3241	83.35	50	AC	140	0.1857
3.2_T_1688	18.44	63	PVC	150	0.5813	3.2_T_3242	83.76	63	PVC	150	0.0746
3.2_T_1689	18.44	300	PVC	150	2.8406	3.2_T_3243	111.4	110	PVC	150	0.0027
3.2_T_1690	19.29	63	PVC	150	0.0000	3.2_T_3244	88.19	63	PVC	150	0.1080
3.2_T_1692	18.60	63	PVC	150	1.3444	3.2_T_3245	83.62	200	PVC	150	3.4598
3.2_T_1693	18.87	160	PVC	150	7.8851	3.2_T_3246	83.71	110	PVC	150	0.2311
3.2_T_1694	23.97	63	PVC	150	1.8005	3.2_T_3247	84.22	200	PVC	150	0.0707
3.2_T_1695	18.70	200	PVC	150	0.0318	3.2_T_3248	83.80	63	PVC	150	0.0710
3.2_T_1697	18.77	63	PVC	150	0.0317	3.2_T_3249	83.82	50	AC	140	1.8182
3.2_T_1698	18.81	63	PVC	150	0.0158	3.2_T_3250	83.96	63	PVC	150	0.0496
3.2_T_1699	18.83	63	PVC	150	0.8061	3.2_T_3251	84.08	50	AC	140	0.2407
3.2_T_1700	21.26	63	PVC	150	0.0000	3.2_T_3252	84.94	50	PVC	150	0.2383
3.2_T_1701	18.88	63	PVC	150	0.0000	3.2_T_3253	84.10	50	PVC	150	18.086
3.2_T_1702	18.93	63	PVC	150	0.0315	3.2_T_3254	84.12	200	AC	140	0.0354
3.2_T_1703	18.98	50	PVC	150	0.0314	3.2_T_3255	84.76	50	PVC	150	4.3267
3.2_T_1704	18.99	63	PVC	150	0.0000	3.2_T_3256	84.28	63	PVC	150	0.3179
3.2_T_1705	19.02	200	PVC	150	0.9701	3.2_T_3257	89.46	63	PVC	150	0.4459
3.2_T_1706	20.96	200	PVC	150	0.1562	3.2_T_3258	104.5	32	PVC	150	1.4288
3.2_T_1707	19.21	200	PVC	150	0.9452	3.2_T_3259	84.81	63	PVC	150	3.0957
3.2_T_1708	19.17	63	PVC	150	0.0466	3.2_T_3261	84.71	63	PVC	150	0.0105
3.2_T_1709	19.18	63	PVC	150	1.6293	3.2_T_3262	84.82	63	PVC	150	0.0246
3.2_T_1710	19.24	200	PVC	150	0.2940	3.2_T_3263	93.32	50	AC	140	0.4848
3.2_T_1711	19.34	200	PVC	150	0.0308	3.2_T_3264	85.06	110	PVC	150	0.4164
3.2_T_1712	19.35	100	PVC	150	0.8305	3.2_T_3265	85.27	63	PVC	150	0.8727
3.2_T_1713	19.40	63	PVC	150	0.0307	3.2_T_3266	85.32	63	PVC	150	0.0174
3.2_T_1714	19.47	63	PVC	150	0.0459	3.2_T_3267	89.10	160	PVC	150	0.6180
3.2_T_1715	19.49	110	PVC	150	8.2180	3.2_T_3268	85.46	63	PVC	150	0.0174
3.2_T_1716	19.52	160	PVC	150	0.6862	3.2_T_3269	85.52	63	PVC	150	1.4478
3.2_T_1717	19.57	63	PVC	150	0.0000	3.2_T_3270	85.68	63	PVC	150	0.2119

3.2_T_1718	19.57	63	PVC	150	4.0920	3.2_T_3271	85.70	63	PVC	150	0.2466
3.2_T_1719	28.94	63	PVC	150	0.0000	3.2_T_3272	85.78	50	PVC	150	6.4266
3.2_T_1720	19.64	63	PVC	150	0.0000	3.2_T_3273	85.79	63	PVC	150	0.0659
3.2_T_1721	19.65	63	PVC	150	4.5286	3.2_T_3274	85.83	63	PVC	150	0.0694
3.2_T_1722	20.23	63	PVC	150	0.4709	3.2_T_3275	85.91	50	PVC	150	0.2668
3.2_T_1723	20.27	63	PVC	150	0.0000	3.2_T_3276	86.25	110	PVC	150	0.0000
3.2_T_1724	19.84	110	PVC	150	0.0000	3.2_T_3277	86.04	63	PVC	150	0.0588
3.2_T_1725	20.00	63	PVC	150	0.0149	3.2_T_3278	86.21	63	PVC	150	0.3384
3.2_T_1726	20.04	63	PVC	150	0.7576	3.2_T_3279	87.35	200	PVC	150	0.8246
3.2_T_1728	20.05	63	PVC	150	2.2562	3.2_T_3280	86.26	63	PVC	150	0.2174
3.2_T_1729	20.06	110	PVC	150	0.0000	3.2_T_3281	87.05	63	PVC	150	6.6985
3.2_T_1730	20.08	63	PVC	150	0.0000	3.2_T_3282	88.14	63	PVC	150	0.8409
3.2_T_1732	20.15	63	PVC	150	2.9403	3.2_T_3283	86.58	63	PVC	150	1.1861
3.2_T_1733	20.18	63	PVC	150	1.0473	3.2_T_3284	87.80	63	PVC	150	0.5153
3.2_T_1734	20.20	63	PVC	150	0.0000	3.2_T_3285	89.43	32	PVC	150	52.549
3.2_T_1735	20.27	63	PVC	150	4.2435	3.2_T_3286	87.03	160	PVC	150	1.0945
3.2_T_1737	20.30	63	PVC	150	0.1173	3.2_T_3287	87.14	200	PVC	150	0.1879
3.2_T_1738	20.32	63	PVC	150	0.0000	3.2_T_3288	92.52	100	PVC	150	0.7303
3.2_T_1739	20.33	63	PVC	150	0.6150	3.2_T_3289	88.69	63	PVC	150	0.1745
3.2_T_1740	20.37	63	PVC	150	0.0146	3.2_T_3290	87.35	63	PVC	150	0.0000
3.2_T_1742	20.41	63	PVC	150	0.0146	3.2_T_3291	87.48	200	PVC	150	0.3267
3.2_T_1743	20.50	63	PVC	150	0.0436	3.2_T_3292	87.54	63	PVC	150	0.6630
3.2_T_1744	20.50	110	PVC	150	0.4210	3.2_T_3293	87.71	63	PVC	150	0.0238
3.2_T_1745	20.52	63	PVC	150	4.9603	3.2_T_3294	87.73	63	PVC	150	0.6175
3.2_T_1746	20.53	63	PVC	150	0.1015	3.2_T_3295	87.77	200	PVC	150	1.0344
3.2_T_1747	20.74	63	PVC	150	0.4592	3.2_T_3296	93.80	63	PVC	150	3.5384
3.2_T_1748	20.68	63	PVC	150	0.0000	3.2_T_3297	88.41	150	AC	140	0.0000
3.2_T_1749	20.78	63	PVC	150	1.7472	3.2_T_3298	87.87	63	PVC	150	0.2845
3.2_T_1750	20.90	63	PVC	150	0.0570	3.2_T_3299	99.62	63	PVC	150	0.9442
3.2_T_1751	20.92	63	PVC	150	1.1524	3.2_T_3300	88.01	200	PVC	150	0.0338
3.2_T_1752	20.95	63	PVC	150	0.1989	3.2_T_3301	88.19	63	PVC	150	0.0236
3.2_T_1753	21.07	63	PVC	150	0.0989	3.2_T_3302	90.64	63	PVC	150	0.0164
3.2_T_1754	21.08	160	PVC	150	0.9745	3.2_T_3303	88.22	110	PVC	150	1.1134
3.2_T_1755	21.11	50	PVC	150	16.613	3.2_T_3304	89.55	110	PVC	150	3.0080
3.2_T_1756	21.19	63	PVC	150	0.0281	3.2_T_3305	88.43	63	PVC	150	0.2491
3.2_T_1757	21.26	63	PVC	150	2.0446	3.2_T_3306	88.52	63	PVC	150	0.1950
3.2_T_1758	21.28	160	PVC	150	0.0000	3.2_T_3307	88.48	63	PVC	150	0.0034
3.2_T_1759	21.29	63	PVC	150	0.0419	3.2_T_3308	88.52	50	PVC	150	0.2018
3.2_T_1760	21.31	63	PVC	150	0.5448	3.2_T_3310	121.6	63	PVC	150	0.0636
3.2_T_1761	21.40	63	PVC	150	6.4393	3.2_T_3311	88.76	200	AC	140	0.2314
3.2_T_1763	21.43	50	PVC	150	0.0139	3.2_T_3312	88.77	63	PVC	150	1.0629
3.2_T_1764	21.46	63	PVC	150	2.5522	3.2_T_3313	88.91	110	PVC	150	2.6952
3.2_T_1766	21.58	63	PVC	150	0.0000	3.2_T_3314	88.98	110	PVC	150	0.3512
3.2_T_1767	21.78	63	PVC	150	3.3484	3.2_T_3315	88.98	63	PVC	150	0.0335
3.2_T_1768	21.75	50	PVC	150	1.7104	3.2_T_3316	89.08	63	PVC	150	0.1938
3.2_T_1769	21.76	63	PVC	150	2.1198	3.2_T_3317	89.27	63	PVC	150	0.2901

3.2_T_1771	21.83	63	PVC	150	0.1500	3.2_T_3318	120.5	50	PVC	150	0.4790
3.2_T_1772	21.88	63	PVC	150	0.0408	3.2_T_3319	89.40	110	PVC	150	0.1332
3.2_T_1773	21.88	250	PVC	150	0.0000	3.2_T_3320	89.59	50	PVC	150	19.940
3.2_T_1774	21.96	63	PVC	150	0.2575	3.2_T_3321	117.9	63	PVC	150	0.2929
3.2_T_1775	21.98	63	PVC	150	0.0000	3.2_T_3323	90.24	63	PVC	150	0.0330
3.2_T_1776	21.98	63	PVC	150	1.6931	3.2_T_3324	90.73	63	PVC	150	0.1181
3.2_T_1777	22.05	63	PVC	150	1.0260	3.2_T_3325	107.5	63	PVC	150	0.2436
3.2_T_1778	22.10	63	PVC	150	0.0135	3.2_T_3326	89.80	63	PVC	150	0.2121
3.2_T_1779	22.28	63	PVC	150	0.0267	3.2_T_3327	89.89	63	PVC	150	0.4371
3.2_T_1780	22.30	63	PVC	150	0.0534	3.2_T_3328	90.27	63	PVC	150	0.9892
3.2_T_1781	22.34	63	PVC	150	2.1714	3.2_T_3329	89.97	63	PVC	150	1.3829
3.2_T_1782	22.36	63	PVC	150	2.7152	3.2_T_3330	90.06	110	PVC	150	0.5090
3.2_T_1783	22.46	63	PVC	150	0.3579	3.2_T_3331	90.30	63	PVC	150	0.0099
3.2_T_1784	22.48	110	PVC	150	0.0265	3.2_T_3332	124.4	110	PVC	150	0.0024
3.2_T_1785	22.49	63	PVC	150	3.3345	3.2_T_3333	90.48	63	PVC	150	3.9114
3.2_T_1786	29.73	300	PVC	150	0.1702	3.2_T_3334	90.59	160	PVC	150	0.8313
3.2_T_1787	22.58	63	PVC	150	0.0264	3.2_T_3335	92.90	110	PVC	150	2.6689
3.2_T_1788	22.59	63	PVC	150	30.1801	3.2_T_3336	90.85	63	PVC	150	0.3014
3.2_T_1789	22.63	63	PVC	150	0.0526	3.2_T_3337	90.85	63	PVC	150	1.5629
3.2_T_1790	22.62	100	PVC	150	4.3692	3.2_T_3338	118.8	63	PVC	150	0.0100
3.2_T_1791	22.64	63	PVC	150	0.0526	3.2_T_3339	90.98	110	PVC	150	0.1178
3.2_T_1792	22.72	200	PVC	150	0.1965	3.2_T_3340	119.3	63	PVC	150	0.4564
3.2_T_1793	22.73	110	PVC	150	0.1310	3.2_T_3341	91.04	250	AC	140	0.1373
3.2_T_1794	22.72	400	HF	130	0.0000	3.2_T_3342	91.06	110	PVC	150	0.0033
3.2_T_1795	22.72	63	PVC	150	0.1704	3.2_T_3343	91.64	63	PVC	150	0.8380
3.2_T_1796	22.91	500	HD	130	3.3136	3.2_T_3344	91.24	63	PVC	150	0.0457
3.2_T_1797	23.00	63	PVC	150	0.0000	3.2_T_3345	91.37	200	PVC	150	0.7656
3.2_T_1798	22.97	63	PVC	150	0.0000	3.2_T_3346	91.53	63	PVC	150	0.3187
3.2_T_1799	23.01	63	PVC	150	1.8758	3.2_T_3347	91.54	63	PVC	150	4.9458
3.2_T_1800	23.04	63	PVC	150	0.0258	3.2_T_3348	91.67	63	PVC	150	0.7176
3.2_T_1801	23.13	100	PVC	150	6.7188	3.2_T_3349	92.44	63	PVC	150	8.8777
3.2_T_1802	23.15	63	PVC	150	0.8099	3.2_T_3350	121.1	63	PVC	150	0.0074
3.2_T_1803	23.16	63	PVC	150	0.0000	3.2_T_3351	91.77	63	PVC	150	0.0260
3.2_T_1804	23.90	110	PVC	150	0.2491	3.2_T_3352	91.78	63	PVC	150	0.0357
3.2_T_1805	23.88	200	PVC	150	1.9693	3.2_T_3353	91.91	63	PVC	150	1.1789
3.2_T_1806	23.37	63	PVC	150	0.0127	3.2_T_3354	92.19	63	PVC	150	1.4691
3.2_T_1807	23.39	63	PVC	150	0.0000	3.2_T_3355	92.10	160	PVC	150	2.6566
3.2_T_1808	23.42	63	PVC	150	0.0508	3.2_T_3356	92.10	63	PVC	150	3.1219
3.2_T_1809	23.43	110	PVC	150	0.7497	3.2_T_3357	118.8	63	PVC	150	0.0601
3.2_T_1811	23.57	63	PVC	150	0.0126	3.2_T_3358	92.22	63	PVC	150	0.0258
3.2_T_1812	23.59	160	PVC	150	0.2902	3.2_T_3359	92.36	160	PVC	150	1.1699
3.2_T_1813	23.61	63	PVC	150	0.0126	3.2_T_3360	92.52	63	PVC	150	0.1769
3.2_T_1814	23.62	63	PVC	150	1.6888	3.2_T_3361	92.42	50	HF	130	1.2174
3.2_T_1815	23.67	63	PVC	150	0.2641	3.2_T_3362	92.50	63	PVC	150	0.0740
3.2_T_1816	23.70	63	PVC	150	0.0000	3.2_T_3363	126.4	63	PVC	150	0.0730
3.2_T_1817	23.83	200	AC	140	2.0739	3.2_T_3364	103.0	63	PVC	150	2.3518

3.2_T_1818	23.76	63	PVC	150	0.0501	3.2_T_3365	92.69	63	PVC	150	0.0161
3.2_T_1819	23.78	63	PVC	150	0.9887	3.2_T_3366	93.12	50	PVC	150	0.4987
3.2_T_1820	23.88	110	PVC	150	0.1621	3.2_T_3367	93.23	63	PVC	150	0.2490
3.2_T_1821	23.96	63	PVC	150	0.8570	3.2_T_3368	93.27	63	PVC	150	0.0670
3.2_T_1822	25.95	63	PVC	150	0.1147	3.2_T_3369	93.36	63	PVC	150	0.0064
3.2_T_1823	24.07	63	PVC	150	0.0495	3.2_T_3370	93.99	63	PVC	150	0.0538
3.2_T_1824	24.09	110	PVC	150	0.0989	3.2_T_3371	139.1	63	PVC	150	0.0535
3.2_T_1825	24.12	63	PVC	150	0.7404	3.2_T_3372	94.04	63	PVC	150	2.5258
3.2_T_1827	24.15	63	PVC	150	0.0247	3.2_T_3373	93.55	63	PVC	150	1.6227
3.2_T_1829	24.38	300	AC	140	0.0122	3.2_T_3374	93.58	63	PVC	150	0.0509
3.2_T_1830	24.42	100	AC	140	0.9385	3.2_T_3375	93.65	200	AC	140	0.4895
3.2_T_1831	24.45	300	AC	140	0.0122	3.2_T_3376	93.70	200	AC	140	0.0032
3.2_T_1832	24.48	63	PVC	150	0.0243	3.2_T_3377	93.86	63	PVC	150	1.7411
3.2_T_1833	24.48	63	PVC	150	0.0608	3.2_T_3378	96.27	200	PVC	150	0.9152
3.2_T_1834	24.50	50	PVC	150	0.1579	3.2_T_3379	99.76	63	PVC	150	0.1641
3.2_T_1835	24.59	160	PVC	150	0.9322	3.2_T_3380	93.93	63	PVC	150	3.6157
3.2_T_1836	24.61	63	PVC	150	0.5322	3.2_T_3381	94.00	63	PVC	150	0.0570
3.2_T_1837	24.70	200	AC	140	0.0603	3.2_T_3382	94.78	63	PVC	150	0.1570
3.2_T_1838	24.83	200	PVC	150	0.0120	3.2_T_3383	94.10	110	PVC	150	1.6543
3.2_T_1839	24.83	63	PVC	150	1.2106	3.2_T_3384	94.16	63	PVC	150	0.0696
3.2_T_1840	24.89	200	PVC	150	0.0957	3.2_T_3385	94.19	63	PVC	150	0.1801
3.2_T_1841	24.91	110	PVC	150	0.1434	3.2_T_3386	94.20	63	PVC	150	0.0632
3.2_T_1842	25.00	110	PVC	150	0.2262	3.2_T_3387	98.49	110	PVC	150	0.0000
3.2_T_1843	24.98	63	PVC	150	0.0000	3.2_T_3388	94.79	63	PVC	150	0.5872
3.2_T_1845	25.15	110	PVC	150	0.1538	3.2_T_3389	94.40	63	PVC	150	1.4819
3.2_T_1846	25.23	63	PVC	150	0.0944	3.2_T_3390	94.35	50	PVC	150	0.2619
3.2_T_1847	25.36	63	PVC	150	2.4057	3.2_T_3391	94.39	63	PVC	150	0.1104
3.2_T_1848	26.17	63	PVC	150	0.0455	3.2_T_3392	94.41	63	PVC	150	0.0536
3.2_T_1850	25.40	63	PVC	150	0.0469	3.2_T_3393	94.64	50	HF	130	0.2768
3.2_T_1851	25.41	63	PVC	150	0.0234	3.2_T_3394	172.2	63	PVC	150	0.1158
3.2_T_1852	27.00	32	PVC	150	1.4331	3.2_T_3395	95.92	63	PVC	150	0.0590
3.2_T_1854	25.47	63	PVC	150	0.0234	3.2_T_3396	94.74	63	PVC	150	0.0063
3.2_T_1855	35.93	63	PVC	150	0.0083	3.2_T_3397	109.9	110	PVC	150	0.0135
3.2_T_1856	25.58	63	PVC	150	1.3845	3.2_T_3398	94.99	100	PVC	150	2.4098
3.2_T_1857	31.40	63	PVC	150	1.8677	3.2_T_3399	110.7	63	PVC	150	0.0188
3.2_T_1858	25.62	160	PVC	150	0.5112	3.2_T_3400	102.6	63	PVC	150	0.0087
3.2_T_1859	25.69	63	PVC	150	0.0000	3.2_T_3401	95.05	50	AC	140	0.1848
3.2_T_1860	25.72	110	PVC	150	2.3722	3.2_T_3402	95.46	63	PVC	150	2.5786
3.2_T_1861	25.72	50	PVC	150	0.0000	3.2_T_3403	95.13	63	PVC	150	0.0031
3.2_T_1862	25.83	200	PVC	150	0.0000	3.2_T_3404	95.24	110	PVC	150	0.3188
3.2_T_1863	25.95	63	PVC	150	0.0115	3.2_T_3405	95.17	110	PVC	150	1.8140
3.2_T_1864	25.98	63	PVC	150	0.0229	3.2_T_3406	94.62	63	PVC	150	0.0000
3.2_T_1865	25.98	63	PVC	150	3.9989	3.2_T_3407	95.57	63	PVC	150	1.1617
3.2_T_1866	26.00	100	PVC	150	3.0793	3.2_T_3408	95.62	63	PVC	150	0.0529
3.2_T_1867	26.03	63	PVC	150	2.5498	3.2_T_3409	96.15	63	PVC	150	0.0929
3.2_T_1868	26.06	63	PVC	150	0.0000	3.2_T_3410	112.6	160	PVC	150	0.0291

3.2_T_1869	26.10	110	PVC	150	0.1140	3.2_T_3411	96.95	100	AC	140	0.7184
3.2_T_1870	26.26	63	PVC	150	0.0907	3.2_T_3412	96.05	63	PVC	150	0.4122
3.2_T_1871	26.36	63	PVC	150	0.0113	3.2_T_3413	96.54	200	PVC	150	0.0185
3.2_T_1872	26.43	63	PVC	150	0.1351	3.2_T_3414	96.36	63	PVC	150	0.0154
3.2_T_1874	26.55	63	PVC	150	0.0000	3.2_T_3415	96.14	50	PVC	150	0.0805
3.2_T_1875	26.56	63	PVC	150	0.0112	3.2_T_3416	99.52	63	PVC	150	0.5444
3.2_T_1876	26.87	100	PVC	150	3.0688	3.2_T_3417	96.41	63	PVC	150	0.0525
3.2_T_1877	26.60	50	PVC	150	2.6743	3.2_T_3418	96.53	63	PVC	150	0.6846
3.2_T_1878	26.68	63	PVC	150	1.1270	3.2_T_3419	96.50	50	PVC	150	9.0408
3.2_T_1879	26.70	110	PVC	150	0.4125	3.2_T_3420	97.43	63	PVC	150	0.1405
3.2_T_1880	26.83	63	PVC	150	0.1331	3.2_T_3421	96.95	63	PVC	150	0.0522
3.2_T_1881	26.87	63	PVC	150	0.0443	3.2_T_3422	97.01	110	PVC	150	0.0460
3.2_T_1882	26.92	63	PVC	150	0.8293	3.2_T_3423	97.04	160	PVC	150	0.6441
3.2_T_1883	27.07	63	PVC	150	0.0000	3.2_T_3424	97.08	50	AC	140	4.7249
3.2_T_1884	27.08	110	PVC	150	0.2419	3.2_T_3426	97.27	250	AC	140	0.5294
3.2_T_1885	27.10	63	PVC	150	0.0549	3.2_T_3427	97.35	63	PVC	150	3.9872
3.2_T_1886	27.40	63	PVC	150	2.5960	3.2_T_3428	97.91	63	PVC	150	0.4499
3.2_T_1887	37.45	63	PVC	150	3.6246	3.2_T_3429	97.58	63	PVC	150	0.2562
3.2_T_1888	27.12	110	PVC	150	2.0304	3.2_T_3430	98.45	63	PVC	150	0.0030
3.2_T_1889	27.15	160	PVC	150	0.0877	3.2_T_3431	97.82	63	PVC	150	0.4625
3.2_T_1890	27.37	110	PVC	150	0.4459	3.2_T_3433	98.39	63	PVC	150	0.0666
3.2_T_1891	27.41	63	PVC	150	0.2606	3.2_T_3434	99.61	63	PVC	150	0.0000
3.2_T_1892	27.42	63	PVC	150	0.3582	3.2_T_3435	99.55	50	PVC	150	0.4695
3.2_T_1893	28.01	63	PVC	150	0.0531	3.2_T_3436	98.08	63	PVC	150	6.4457
3.2_T_1894	27.55	63	PVC	150	0.0108	3.2_T_3437	98.74	100	AC	140	0.1085
3.2_T_1895	27.59	200	PVC	150	0.9495	3.2_T_3438	98.94	63	PVC	150	0.9658
3.2_T_1896	27.57	50	PVC	150	0.7017	3.2_T_3439	118.6	110	PVC	150	0.0126
3.2_T_1897	27.61	63	PVC	150	0.0324	3.2_T_3440	98.53	160	PVC	150	0.5015
3.2_T_1898	27.64	160	PVC	150	3.9630	3.2_T_3441	99.15	160	PVC	150	0.3002
3.2_T_1899	27.73	63	PVC	150	0.9340	3.2_T_3442	110.9	63	PVC	150	0.9467
3.2_T_1900	27.80	63	PVC	150	0.6959	3.2_T_3443	98.63	50	HF	130	2.4445
3.2_T_1901	27.92	63	PVC	150	0.1919	3.2_T_3444	98.65	63	PVC	150	0.0422
3.2_T_1902	80.41	50	PVC	150	0.0185	3.2_T_3445	98.82	63	PVC	150	0.9247
3.2_T_1903	27.96	50	PVC	150	0.0532	3.2_T_3446	99.03	63	PVC	150	0.0240
3.2_T_1904	28.12	100	PVC	150	0.2011	3.2_T_3447	99.16	63	PVC	150	1.7201
3.2_T_1905	28.02	63	PVC	150	2.3159	3.2_T_3448	112.0	63	PVC	150	4.4377
3.2_T_1906	28.07	63	PVC	150	0.0000	3.2_T_3449	99.79	63	PVC	150	0.4623
3.2_T_1907	28.12	63	PVC	150	0.0529	3.2_T_3450	99.88	63	PVC	150	0.0507
3.2_T_1908	28.12	63	PVC	150	0.0212	3.2_T_3451	124.6	50	PVC	150	0.5014
3.2_T_1909	28.21	63	PVC	150	14.510	3.2_T_3452	99.82	63	PVC	150	0.3966
3.2_T_1910	28.24	63	PVC	150	0.2846	3.2_T_3453	100.8	110	PVC	150	0.0236
3.2_T_1911	28.25	63	PVC	150	0.0527	3.2_T_3455	101.7	63	PVC	150	1.1794
3.2_T_1912	28.30	50	PVC	150	0.0842	3.2_T_3456	99.97	63	PVC	150	0.0030
3.2_T_1913	28.32	63	PVC	150	4.2671	3.2_T_3457	100.1	63	PVC	150	0.0951
3.2_T_1914	28.39	63	PVC	150	0.0210	3.2_T_3458	100.2	50	AC	140	0.1040
3.2_T_1915	28.48	63	PVC	150	0.3972	3.2_T_3459	100.2	63	PVC	150	2.6403

ID	Length	Diameter	Material	C	Value	ID	Length	Diameter	Material	C	Value
3.2_T_1916	28.48	160	PVC	150	0.2822	3.2_T_3460	100.2	63	PVC	150	0.0148
3.2_T_1917	28.48	63	PVC	150	0.0000	3.2_T_3461	100.4	63	PVC	150	0.0326
3.2_T_1918	28.64	63	PVC	150	30.273	3.2_T_3462	100.4	63	PVC	150	18.465
3.2_T_1919	28.60	63	PVC	150	0.2082	3.2_T_3463	100.5	63	PVC	150	0.1984
3.2_T_1920	29.41	63	PVC	150	0.0708	3.2_T_3464	100.6	63	PVC	150	1.6355
3.2_T_1921	28.90	63	PVC	150	0.1957	3.2_T_3465	102.4	63	PVC	150	0.1859
3.2_T_1922	28.92	50	PVC	150	0.1029	3.2_T_3467	101.0	63	PVC	150	0.1502
3.2_T_1923	28.93	63	PVC	150	0.0000	3.2_T_3468	101.0	63	PVC	150	0.1238
3.2_T_1924	28.93	63	PVC	150	0.2469	3.2_T_3469	102.4	63	PVC	150	0.7438
3.2_T_1925	28.98	63	PVC	150	0.0103	3.2_T_3470	101.9	63	PVC	150	0.6192
3.2_T_1926	28.99	63	PVC	150	0.0103	3.2_T_3471	101.2	63	PVC	150	0.0000
3.2_T_1927	29.04	100	PVC	150	0.3485	3.2_T_3472	101.4	63	PVC	150	1.6990
3.2_T_1928	29.12	63	PVC	150	7.4221	3.2_T_3473	101.4	63	PVC	150	2.0623
3.2_T_1929	29.22	160	PVC	150	0.0102	3.2_T_3474	101.5	63	PVC	150	0.0938
3.2_T_1930	30.21	63	PVC	150	0.0099	3.2_T_3475	102.6	63	PVC	150	3.3891
3.2_T_1931	29.30	63	PVC	150	0.0102	3.2_T_3476	102.3	400	HF	130	0.0494
3.2_T_1932	29.32	63	PVC	150	0.0000	3.2_T_3477	101.7	63	PVC	150	1.9023
3.2_T_1933	29.35	63	PVC	150	0.6288	3.2_T_3478	101.7	110	PVC	150	0.9044
3.2_T_1934	29.43	160	PVC	150	1.2037	3.2_T_3479	102.4	110	PVC	150	0.2759
3.2_T_1935	29.43	200	PVC	150	1.4970	3.2_T_3480	101.8	63	PVC	150	0.5932
3.2_T_1936	29.60	63	PVC	150	0.5129	3.2_T_3481	103.2	63	PVC	150	0.0202
3.2_T_1937	29.61	63	PVC	150	0.2915	3.2_T_3482	102.0	63	PVC	150	0.0175
3.2_T_1938	30.21	63	PVC	150	0.1577	3.2_T_3483	102.1	63	PVC	150	1.4927
3.2_T_1939	29.69	63	PVC	150	0.0401	3.2_T_3484	102.8	63	PVC	150	1.8354
3.2_T_1940	29.70	160	PVC	150	0.7116	3.2_T_3485	102.2	63	PVC	150	0.0786
3.2_T_1941	29.71	63	PVC	150	0.0301	3.2_T_3486	102.7	63	PVC	150	0.2288
3.2_T_1942	29.71	50	PVC	150	0.1202	3.2_T_3487	102.3	63	PVC	150	1.8316
3.2_T_1943	29.72	63	PVC	150	0.0000	3.2_T_3488	102.5	63	PVC	150	0.4556
3.2_T_1944	29.77	63	PVC	150	0.9798	3.2_T_3489	135.2	63	PVC	150	0.4864
3.2_T_1946	29.77	32	PVC	150	10.947	3.2_T_3490	102.9	63	PVC	150	1.9374
3.2_T_1948	29.87	63	PVC	150	0.0100	3.2_T_3491	102.8	100	AC	140	1.9342
3.2_T_1949	32.34	400	HD	130	0.3038	3.2_T_3492	102.8	110	PVC	150	0.7294
3.2_T_1950	29.92	63	PVC	150	0.0100	3.2_T_3494	102.9	63	PVC	150	8.2867
3.2_T_1951	29.97	63	PVC	150	4.6782	3.2_T_3496	104.5	50	PVC	150	0.2676
3.2_T_1952	29.97	250	AC	140	0.0000	3.2_T_3497	103.0	160	PVC	150	2.6017
3.2_T_1953	29.99	250	PVC	150	0.0199	3.2_T_3498	104.3	63	PVC	150	2.3756
3.2_T_1954	30.00	63	PVC	150	0.0199	3.2_T_3499	103.2	200	AC	140	0.0519
3.2_T_1955	30.00	63	PVC	150	0.0496	3.2_T_3500	103.3	110	PVC	150	0.3429
3.2_T_1957	30.10	63	PVC	150	7.6345	3.2_T_3501	103.3	63	PVC	150	0.0778
3.2_T_1958	30.13	110	PVC	150	1.8471	3.2_T_3502	103.3	63	PVC	150	3.7241
3.2_T_1959	30.22	50	PVC	150	0.0000	3.2_T_3503	104.8	63	PVC	150	1.0586
3.2_T_1960	30.31	63	PVC	150	0.0000	3.2_T_3504	142.2	63	PVC	150	1.2056
3.2_T_1961	30.32	200	AC	140	0.2258	3.2_T_3505	103.5	63	PVC	150	0.1523
3.2_T_1962	30.35	63	PVC	150	0.2943	3.2_T_3506	103.6	63	PVC	150	0.5601
3.2_T_1963	30.41	63	PVC	150	0.1077	3.2_T_3507	103.6	110	PVC	150	0.2699
3.2_T_1964	30.41	63	PVC	150	0.2936	3.2_T_3508	103.7	200	AC	140	0.5769

ID	V1	V2	Mat	V3	V4	ID	V1	V2	Mat	V3	V4
3.2_T_1965	30.43	50	PVC	150	0.0294	3.2_T_3509	103.7	63	PVC	150	0.0258
3.2_T_1966	30.43	110	PVC	150	0.0978	3.2_T_3510	103.7	50	HF	130	0.7630
3.2_T_1967	30.49	110	PVC	150	0.0098	3.2_T_3511	104.1	110	PVC	150	0.0486
3.2_T_1968	30.50	63	PVC	150	4.5093	3.2_T_3512	103.9	63	PVC	150	0.4037
3.2_T_1969	30.62	63	PVC	150	0.0000	3.2_T_3513	139.5	63	PVC	150	0.2624
3.2_T_1970	30.56	63	PVC	150	0.1753	3.2_T_3514	121.7	63	PVC	150	0.1345
3.2_T_1971	30.58	63	PVC	150	1.2069	3.2_T_3515	104.4	250	AC	140	0.7070
3.2_T_1972	30.66	110	PVC	150	0.3883	3.2_T_3516	104.4	50	AC	140	0.0627
3.2_T_1973	30.65	63	PVC	150	0.0291	3.2_T_3517	167.7	63	PVC	150	0.0692
3.2_T_1974	30.65	63	PVC	150	0.1554	3.2_T_3519	104.5	200	PVC	150	3.0823
3.2_T_1975	30.77	63	PVC	150	1.1126	3.2_T_3520	105.5	110	PVC	150	0.1635
3.2_T_1976	30.68	110	PVC	150	1.0188	3.2_T_3521	105.0	63	PVC	150	1.8931
3.2_T_1977	30.70	63	PVC	150	0.0097	3.2_T_3522	104.9	63	PVC	150	0.3121
3.2_T_1978	30.73	63	PVC	150	0.0484	3.2_T_3523	105.1	63	PVC	150	0.8379
3.2_T_1979	30.78	160	PVC	150	1.4311	3.2_T_3524	102.2	50	PVC	150	0.2591
3.2_T_1980	30.83	50	PVC	150	0.0869	3.2_T_3525	105.1	110	PVC	150	0.1926
3.2_T_1981	30.80	63	PVC	150	0.0000	3.2_T_3526	111.9	63	PVC	150	0.0479
3.2_T_1982	30.92	200	AC	140	0.5102	3.2_T_3527	105.5	63	PVC	150	0.0254
3.2_T_1983	30.94	63	PVC	150	0.2309	3.2_T_3528	106.8	63	PVC	150	1.1143
3.2_T_1984	31.04	63	PVC	150	0.0479	3.2_T_3529	106.1	63	PVC	150	0.0084
3.2_T_1985	31.05	160	PVC	150	1.8694	3.2_T_3530	158.5	63	PVC	150	0.7058
3.2_T_1986	56.81	32	PVC	150	1.4303	3.2_T_3532	106.1	110	PVC	150	2.5881
3.2_T_1987	31.09	63	PVC	150	0.0287	3.2_T_3533	107.3	63	PVC	150	0.5295
3.2_T_1988	31.14	63	PVC	150	0.1529	3.2_T_3534	168.7	63	PVC	150	0.1958
3.2_T_1989	31.14	300	AC	140	0.4014	3.2_T_3535	107.9	250	PVC	150	1.9337
3.2_T_1990	31.18	63	PVC	150	0.1814	3.2_T_3536	108.2	63	PVC	150	0.8388
3.2_T_1991	31.26	160	PVC	150	0.3619	3.2_T_3537	106.6	50	HF	130	0.1172
3.2_T_1992	43.06	63	PVC	150	0.0138	3.2_T_3538	115.4	63	PVC	150	0.2294
3.2_T_1993	31.51	63	PVC	150	0.0094	3.2_T_3539	106.9	63	PVC	150	0.7266
3.2_T_1994	31.31	63	PVC	150	0.0475	3.2_T_3540	107.3	200	AC	140	0.9400
3.2_T_1995	31.35	200	PVC	150	0.9019	3.2_T_3541	151.4	63	PVC	150	0.8353
3.2_T_1996	31.35	63	PVC	150	1.0063	3.2_T_3542	107.1	110	PVC	150	3.3194
3.2_T_1997	42.72	63	PVC	150	0.0209	3.2_T_3543	140.6	63	PVC	150	0.0339
3.2_T_1998	31.65	63	PVC	150	0.0000	3.2_T_3544	107.2	50	PVC	150	0.1637
3.2_T_1999	31.52	63	PVC	150	1.0673	3.2_T_3545	110.5	63	PVC	150	0.0997
3.2_T_2000	31.62	63	PVC	150	2.5696	3.2_T_3546	107.8	63	PVC	150	0.4746
3.2_T_2001	31.63	50	PVC	150	0.4235	3.2_T_3547	107.6	100	AC	140	0.0498
3.2_T_2002	31.67	63	PVC	150	0.3666	3.2_T_3548	107.6	63	PVC	150	0.3317
3.2_T_2003	31.84	32	PVC	150	1.4302	3.2_T_3549	108.0	50	PVC	150	0.2286
3.2_T_2004	34.65	200	PVC	150	0.0000	3.2_T_3550	231.8	50	PVC	150	0.1066
3.2_T_2005	85.17	63	PVC	150	0.0315	3.2_T_3551	108.1	63	PVC	150	0.5725
3.2_T_2006	31.74	63	PVC	150	0.0844	3.2_T_3552	108.1	200	AC	140	0.8529
3.2_T_2007	31.79	63	PVC	150	0.0281	3.2_T_3553	109.5	63	PVC	150	0.0190
3.2_T_2008	31.81	200	AC	140	0.0094	3.2_T_3554	145.0	63	PVC	150	0.0390
3.2_T_2009	31.81	63	PVC	150	0.0281	3.2_T_3555	117.3	50	PVC	150	0.8298
3.2_T_2010	31.91	63	PVC	150	4.3376	3.2_T_3556	109.4	63	PVC	150	0.2800

166

3.2_T_2011	31.94	63	PVC	150	0.0093	3.2_T_3557	109.2	63	PVC	150	0.0082
3.2_T_2012	32.36	63	PVC	150	1.3612	3.2_T_3558	109.4	110	PVC	150	0.0190
3.2_T_2013	32.02	63	PVC	150	0.7716	3.2_T_3559	111.4	63	PVC	150	6.0025
3.2_T_2014	32.09	63	PVC	150	0.0464	3.2_T_3560	109.7	400	HF	130	0.0325
3.2_T_2015	32.15	50	PVC	150	3.7590	3.2_T_3562	109.4	63	PVC	150	0.0544
3.2_T_2016	32.74	63	PVC	150	0.0273	3.2_T_3563	109.4	200	AC	140	0.0408
3.2_T_2017	32.22	63	PVC	150	0.0092	3.2_T_3564	120.5	50	PVC	150	0.2864
3.2_T_2018	32.22	63	PVC	150	5.7459	3.2_T_3566	110.0	110	PVC	150	4.6064
3.2_T_2019	43.79	110	PVC	150	4.8055	3.2_T_3567	110.1	300	AC	140	0.0027
3.2_T_2020	32.28	63	PVC	150	2.0378	3.2_T_3568	112.3	63	PVC	150	0.0159
3.2_T_2021	32.69	200	PVC	150	0.0091	3.2_T_3569	110.7	200	AC	140	0.0161
3.2_T_2022	32.52	110	PVC	150	1.4738	3.2_T_3570	111.0	63	PVC	150	0.0590
3.2_T_2023	32.39	200	PVC	150	2.8763	3.2_T_3571	149.4	50	PVC	150	52.082
3.2_T_2024	32.44	63	PVC	150	1.4864	3.2_T_3572	111.1	63	PVC	150	0.0214
3.2_T_2025	32.62	63	PVC	150	0.0091	3.2_T_3573	111.3	160	PVC	150	0.2727
3.2_T_2026	33.05	63	PVC	150	0.1621	3.2_T_3575	128.4	63	PVC	150	1.0611
3.2_T_2027	32.68	63	PVC	150	0.0091	3.2_T_3576	111.6	63	PVC	150	0.0613
3.2_T_2028	32.70	63	PVC	150	0.0091	3.2_T_3577	111.8	63	PVC	150	0.0080
3.2_T_2029	39.26	200	AC	140	8.1265	3.2_T_3578	112.3	63	PVC	150	0.3233
3.2_T_2030	32.81	63	PVC	150	0.0000	3.2_T_3579	112.3	63	PVC	150	0.0080
3.2_T_2031	33.78	63	PVC	150	0.7667	3.2_T_3580	112.3	110	PVC	150	1.6398
3.2_T_2033	32.99	63	PVC	150	0.0181	3.2_T_3581	114.6	110	PVC	150	0.3868
3.2_T_2034	33.04	63	PVC	150	0.0090	3.2_T_3582	112.6	63	PVC	150	0.7347
3.2_T_2035	33.07	63	PVC	150	0.0900	3.2_T_3583	112.6	63	PVC	150	0.0159
3.2_T_2036	33.09	63	PVC	150	2.2666	3.2_T_3584	112.7	63	PVC	150	0.1743
3.2_T_2037	33.11	63	PVC	150	0.0000	3.2_T_3585	112.7	110	PVC	150	0.4884
3.2_T_2038	34.66	110	PVC	150	4.3714	3.2_T_3586	131.5	63	PVC	150	0.0113
3.2_T_2039	33.20	63	PVC	150	0.0986	3.2_T_3587	121.5	160	PVC	150	0.0196
3.2_T_2040	33.23	50	PVC	150	0.0538	3.2_T_3588	112.8	63	PVC	150	0.1055
3.2_T_2041	33.64	63	PVC	150	0.0708	3.2_T_3589	113.0	63	PVC	150	6.0165
3.2_T_2042	46.23	63	PVC	150	0.0193	3.2_T_3590	113.0	50	PVC	150	2.1824
3.2_T_2043	33.42	200	AC	140	0.2850	3.2_T_3591	113.7	100	HF	130	0.7484
3.2_T_2044	39.97	63	PVC	150	2.4130	3.2_T_3592	113.3	63	PVC	150	0.1471
3.2_T_2045	33.45	63	PVC	150	1.2102	3.2_T_3594	113.8	200	AC	140	0.8291
3.2_T_2046	33.46	63	PVC	150	0.0089	3.2_T_3595	113.8	63	PVC	150	0.8759
3.2_T_2047	33.46	100	PVC	150	1.0676	3.2_T_3596	113.8	450	HD	130	0.8941
3.2_T_2048	33.46	63	PVC	150	0.0267	3.2_T_3597	113.9	50	AC	140	0.1699
3.2_T_2049	34.61	32	PVC	150	10.940	3.2_T_3598	113.9	63	PVC	150	0.4727
3.2_T_2051	33.68	63	PVC	150	0.0265	3.2_T_3599	115.2	63	PVC	150	0.0000
3.2_T_2052	33.71	63	PVC	150	0.0177	3.2_T_3600	114.4	50	PVC	150	1.0794
3.2_T_2053	33.71	63	PVC	150	0.2031	3.2_T_3601	114.6	63	PVC	150	1.0101
3.2_T_2054	33.76	100	PVC	150	2.1780	3.2_T_3602	114.8	63	PVC	150	2.6030
3.2_T_2055	33.83	50	PVC	150	0.0088	3.2_T_3603	114.8	110	PVC	150	1.9265
3.2_T_2056	33.84	63	PVC	150	0.0088	3.2_T_3604	115.4	110	PVC	150	0.7837
3.2_T_2057	33.85	63	PVC	150	0.0176	3.2_T_3605	114.8	160	PVC	150	2.3892
3.2_T_2058	33.89	50	PVC	150	0.0264	3.2_T_3607	115.3	63	PVC	150	0.1601

3.2_T_2059	34.03	63	PVC	150	0.3849	3.2_T_3608	118.6	200	PVC	150	0.0853
3.2_T_2060	34.06	200	AC	140	1.3635	3.2_T_3609	116.1	110	PVC	150	0.5076
3.2_T_2061	34.41	63	PVC	150	0.0000	3.2_T_3610	115.7	110	PVC	150	0.8615
3.2_T_2062	34.09	63	PVC	150	0.0262	3.2_T_3611	115.9	50	PVC	150	0.2541
3.2_T_2063	34.10	63	PVC	150	0.6024	3.2_T_3612	115.7	63	PVC	150	3.9949
3.2_T_2064	34.20	63	PVC	150	0.2786	3.2_T_3613	116.3	250	PVC	150	0.0026
3.2_T_2065	34.38	110	PVC	150	0.3204	3.2_T_3614	124.4	110	PVC	150	3.4921
3.2_T_2066	34.38	63	PVC	150	0.9264	3.2_T_3615	116.6	63	PVC	150	0.3164
3.2_T_2067	35.70	63	PVC	150	0.2084	3.2_T_3616	116.8	63	PVC	150	0.1044
3.2_T_2068	34.42	63	PVC	150	0.0259	3.2_T_3617	116.8	63	PVC	150	4.2375
3.2_T_2069	34.47	63	PVC	150	7.8246	3.2_T_3618	116.9	50	PVC	150	0.3766
3.2_T_2070	34.48	100	PVC	150	1.0962	3.2_T_3619	117.9	200	PVC	150	1.8223
3.2_T_2071	34.63	63	PVC	150	0.0000	3.2_T_3620	117.8	110	PVC	150	0.1238
3.2_T_2072	34.67	160	PVC	150	1.0474	3.2_T_3621	117.5	100	PVC	150	5.0707
3.2_T_2073	34.81	63	PVC	150	2.7448	3.2_T_3622	141.4	90	PVC	150	0.0126
3.2_T_2074	34.86	200	PVC	150	3.0479	3.2_T_3623	117.5	50	PVC	150	0.3038
3.2_T_2075	35.63	110	PVC	150	2.1304	3.2_T_3624	121.1	63	PVC	150	0.0713
3.2_T_2076	35.49	63	PVC	150	0.3355	3.2_T_3625	117.7	63	PVC	150	0.0076
3.2_T_2077	35.00	110	PVC	150	0.1106	3.2_T_3626	165.7	63	PVC	150	0.1311
3.2_T_2078	35.82	110	PVC	150	0.4155	3.2_T_3627	149.6	63	PVC	150	0.0378
3.2_T_2079	34.96	110	PVC	150	0.0851	3.2_T_3628	124.1	63	PVC	150	0.4051
3.2_T_2080	35.09	63	PVC	150	0.0594	3.2_T_3629	149.2	63	PVC	150	0.0439
3.2_T_2081	35.22	110	PVC	150	0.0761	3.2_T_3630	122.5	110	PVC	150	1.8921
3.2_T_2082	35.23	63	PVC	150	0.0591	3.2_T_3631	142.4	63	PVC	150	0.0063
3.2_T_2083	44.50	63	PVC	150	0.0067	3.2_T_3632	150.6	63	PVC	150	0.3754
3.2_T_2084	35.24	50	PVC	150	1.8245	3.2_T_3633	118.5	63	PVC	150	1.3286
3.2_T_2085	35.29	63	PVC	150	1.7966	3.2_T_3634	126.1	200	PVC	150	2.6090
3.2_T_2086	47.66	63	PVC	150	0.1436	3.2_T_3636	118.4	63	PVC	150	0.0905
3.2_T_2087	66.45	63	PVC	150	0.0000	3.2_T_3637	118.4	100	AC	140	0.4019
3.2_T_2088	35.40	63	PVC	150	0.0000	3.2_T_3638	123.7	63	PVC	150	0.9238
3.2_T_2089	35.42	50	AC	140	0.0841	3.2_T_3639	121.7	63	PVC	150	7.9518
3.2_T_2090	35.43	110	PVC	150	0.9325	3.2_T_3640	155.8	250	PVC	150	0.0993
3.2_T_2091	35.47	63	PVC	150	0.0084	3.2_T_3641	119.3	250	PVC	150	1.7632
3.2_T_2092	35.56	110	PVC	150	0.2511	3.2_T_3642	119.4	200	AC	140	0.8871
3.2_T_2093	44.95	63	PVC	150	0.0199	3.2_T_3643	123.3	250	PVC	150	0.0000
3.2_T_2094	35.65	63	PVC	150	0.0668	3.2_T_3644	119.7	63	PVC	150	1.4193
3.2_T_2095	35.87	63	PVC	150	0.0332	3.2_T_3645	119.9	63	PVC	150	2.2289
3.2_T_2097	35.71	63	PVC	150	0.0500	3.2_T_3646	122.7	400	HD	130	0.2329
3.2_T_2098	36.19	110	PVC	150	0.4112	3.2_T_3647	120.7	63	PVC	150	0.1356
3.2_T_2099	35.78	200	AC	140	6.2151	3.2_T_3648	120.8	200	AC	140	0.5738
3.2_T_2100	35.79	63	PVC	150	0.0333	3.2_T_3649	120.8	63	PVC	150	0.3939
3.2_T_2101	35.83	63	PVC	150	0.0083	3.2_T_3650	122.0	63	PVC	150	3.8457
3.2_T_2102	35.87	63	PVC	150	4.4724	3.2_T_3651	121.2	63	PVC	150	0.3511
3.2_T_2103	35.89	50	PVC	150	9.1967	3.2_T_3652	121.1	63	PVC	150	0.1425
3.2_T_2104	35.93	50	HF	130	9.8924	3.2_T_3653	121.9	50	PVC	150	1.5016
3.2_T_2105	35.95	63	PVC	150	0.0083	3.2_T_3654	122.2	250	PVC	150	0.0024

ID						ID					
3.2_T_2106	35.97	110	PVC	150	1.8699	3.2_T_3655	123.3	160	PVC	150	0.0893
3.2_T_2107	36.41	200	AC	140	2.0683	3.2_T_3656	122.5	50	PVC	150	0.0632
3.2_T_2108	36.10	63	PVC	150	0.0577	3.2_T_3657	122.2	110	PVC	150	0.1315
3.2_T_2109	36.12	50	PVC	150	0.1978	3.2_T_3658	122.2	200	AC	140	0.0828
3.2_T_2110	36.12	50	PVC	150	1.9778	3.2_T_3659	122.3	110	PVC	150	0.2505
3.2_T_2111	36.12	63	PVC	150	0.0000	3.2_T_3660	166.1	200	PVC	150	2.2271
3.2_T_2112	37.60	63	PVC	150	0.1742	3.2_T_3661	140.7	110	PVC	150	1.6175
3.2_T_2113	36.25	63	PVC	150	0.0082	3.2_T_3662	123.9	110	PVC	150	2.6659
3.2_T_2114	38.56	150	PVC	150	2.0145	3.2_T_3663	124.2	63	PVC	150	0.1844
3.2_T_2115	36.33	63	PVC	150	0.3523	3.2_T_3664	124.0	63	PVC	150	4.9847
3.2_T_2116	36.35	63	PVC	150	0.0573	3.2_T_3665	124.3	63	PVC	150	1.9153
3.2_T_2117	36.82	110	PVC	150	0.2991	3.2_T_3666	124.2	200	PVC	150	5.4129
3.2_T_2119	61.28	250	PVC	150	0.0729	3.2_T_3667	124.9	63	PVC	150	3.9412
3.2_T_2120	36.51	63	PVC	150	0.5299	3.2_T_3668	125.0	110	PVC	150	0.1262
3.2_T_2121	36.54	63	PVC	150	0.0000	3.2_T_3669	127.2	63	PVC	150	0.9055
3.2_T_2122	36.64	63	PVC	150	2.6808	3.2_T_3670	125.2	50	AC	140	0.7177
3.2_T_2123	36.65	63	PVC	150	0.1868	3.2_T_3671	127.7	63	PVC	150	2.0545
3.2_T_2124	36.65	63	PVC	150	0.0081	3.2_T_3672	125.4	63	PVC	150	0.1614
3.2_T_2125	36.65	63	PVC	150	0.0569	3.2_T_3673	181.5	63	PVC	150	0.5573
3.2_T_2126	36.69	63	PVC	150	0.0243	3.2_T_3674	125.7	50	AC	140	0.0260
3.2_T_2127	42.53	63	PVC	150	0.1190	3.2_T_3675	129.5	63	PVC	150	4.0892
3.2_T_2128	36.78	63	PVC	150	0.0243	3.2_T_3676	167.3	63	PVC	150	0.0960
3.2_T_2129	168.4	63	PVC	150	0.4031	3.2_T_3677	126.1	250	AC	140	0.5736
3.2_T_2130	36.83	63	PVC	150	1.8428	3.2_T_3678	127.4	63	PVC	150	1.1280
3.2_T_2131	36.83	110	PVC	150	0.2425	3.2_T_3679	163.2	63	PVC	150	0.0547
3.2_T_2132	37.67	110	PVC	150	0.7270	3.2_T_3680	130.1	63	PVC	150	7.6429
3.2_T_2133	41.86	63	PVC	150	9.5789	3.2_T_3681	176.5	63	PVC	150	0.0320
3.2_T_2134	36.97	500	HD	130	0.9178	3.2_T_3682	126.3	63	PVC	150	0.0801
3.2_T_2135	36.97	50	PVC	150	0.2657	3.2_T_3683	132.9	160	PVC	150	0.0493
3.2_T_2136	36.97	110	PVC	150	0.1449	3.2_T_3684	127.7	200	PVC	150	1.9853
3.2_T_2137	36.98	63	PVC	150	0.1047	3.2_T_3685	132.6	63	PVC	150	0.0538
3.2_T_2138	36.99	63	PVC	150	0.1127	3.2_T_3687	127.5	300	AC	140	0.0000
3.2_T_2139	37.03	63	PVC	150	0.0723	3.2_T_3688	127.3	110	PVC	150	0.0070
3.2_T_2140	39.81	63	PVC	150	0.4785	3.2_T_3689	128.3	63	PVC	150	0.3711
3.2_T_2141	37.10	63	PVC	150	0.1364	3.2_T_3690	128.8	110	PVC	150	2.0472
3.2_T_2142	37.17	110	PVC	150	0.2803	3.2_T_3691	127.6	110	PVC	150	0.0420
3.2_T_2143	37.21	63	PVC	150	0.0080	3.2_T_3692	134.0	63	PVC	150	0.3909
3.2_T_2144	37.23	63	PVC	150	0.1279	3.2_T_3693	127.8	50	PVC	150	0.0349
3.2_T_2145	37.48	63	PVC	150	1.3182	3.2_T_3694	127.9	63	PVC	150	0.0419
3.2_T_2146	37.31	63	PVC	150	0.0319	3.2_T_3695	128.0	50	PVC	150	0.1627
3.2_T_2147	37.46	110	PVC	150	2.4157	3.2_T_3696	128.2	63	PVC	150	4.0984
3.2_T_2148	37.48	63	PVC	150	1.3501	3.2_T_3697	132.6	63	PVC	150	0.2827
3.2_T_2149	37.51	63	PVC	150	0.4047	3.2_T_3698	146.4	50	PVC	150	1.1771
3.2_T_2150	37.61	63	PVC	150	0.0475	3.2_T_3699	138.6	63	PVC	150	2.4839
3.2_T_2151	37.66	110	PVC	150	0.0869	3.2_T_3700	128.3	63	PVC	150	1.9688
3.2_T_2152	37.75	63	PVC	150	0.2760	3.2_T_3701	128.6	63	PVC	150	3.3927

3.2_T_2154	38.05	63	PVC	150	0.0313	3.2_T_3702	128.8	63	PVC	150	4.7290
3.2_T_2155	37.71	63	PVC	150	0.0553	3.2_T_3703	128.9	160	PVC	150	0.0000
3.2_T_2156	37.71	63	PVC	150	0.0395	3.2_T_3705	129.1	63	PVC	150	0.5485
3.2_T_2157	37.77	63	PVC	150	1.1034	3.2_T_3706	161.5	63	PVC	150	0.4903
3.2_T_2158	37.82	63	PVC	150	1.0388	3.2_T_3707	129.3	63	PVC	150	0.8352
3.2_T_2159	37.83	160	PVC	150	2.6204	3.2_T_3708	129.3	63	PVC	150	0.0460
3.2_T_2160	37.85	63	PVC	150	0.0551	3.2_T_3709	130.1	110	PVC	150	0.0823
3.2_T_2161	37.86	63	PVC	150	3.5770	3.2_T_3710	129.4	250	AC	140	0.5173
3.2_T_2162	37.90	110	PVC	150	0.0864	3.2_T_3711	171.8	63	PVC	150	0.0849
3.2_T_2163	38.00	63	PVC	150	0.1018	3.2_T_3712	129.6	160	PVC	150	0.8470
3.2_T_2165	38.07	63	PVC	150	0.0469	3.2_T_3713	129.7	63	PVC	150	0.1698
3.2_T_2166	38.06	63	PVC	150	0.0000	3.2_T_3714	129.7	63	PVC	150	0.0069
3.2_T_2167	38.08	63	PVC	150	0.0156	3.2_T_3715	129.7	63	PVC	150	0.5275
3.2_T_2168	47.62	110	PVC	150	0.0000	3.2_T_3716	130.1	63	PVC	150	1.5851
3.2_T_2169	38.14	63	PVC	150	0.0078	3.2_T_3717	130.4	63	PVC	150	1.6086
3.2_T_2170	38.14	100	PVC	150	0.2029	3.2_T_3718	133.9	160	PVC	150	0.5333
3.2_T_2171	38.15	63	PVC	150	0.8036	3.2_T_3719	143.1	63	PVC	150	0.1767
3.2_T_2172	38.17	63	PVC	150	0.0000	3.2_T_3720	133.4	100	PVC	150	2.4987
3.2_T_2173	38.18	110	PVC	150	0.6315	3.2_T_3721	131.7	110	PVC	150	0.0023
3.2_T_2174	38.42	110	PVC	150	2.3785	3.2_T_3722	132.2	300	AC	140	0.0450
3.2_T_2175	38.22	63	PVC	150	0.0000	3.2_T_3723	133.4	63	PVC	150	0.2097
3.2_T_2176	38.22	63	PVC	150	0.0857	3.2_T_3724	132.4	160	PVC	150	10.213
3.2_T_2177	38.24	63	PVC	150	0.1090	3.2_T_3725	132.4	200	AC	140	0.0337
3.2_T_2178	51.02	63	PVC	150	0.0117	3.2_T_3726	194.7	63	PVC	150	0.7809
3.2_T_2179	38.26	63	PVC	150	0.0000	3.2_T_3727	132.5	63	PVC	150	0.5997
3.2_T_2180	76.49	63	PVC	150	0.0000	3.2_T_3730	133.6	63	PVC	150	7.7400
3.2_T_2181	38.35	110	PVC	150	0.2872	3.2_T_3731	134.2	200	PVC	150	0.5856
3.2_T_2182	37.66	63	PVC	150	0.0000	3.2_T_3732	134.2	250	AC	140	0.0111
3.2_T_2183	38.40	63	PVC	150	0.2248	3.2_T_3733	182.3	50	PVC	150	0.2122
3.2_T_2184	38.40	110	PVC	150	0.0620	3.2_T_3734	134.6	110	PVC	150	0.6765
3.2_T_2185	38.41	250	AC	140	0.0155	3.2_T_3735	134.5	100	AC	140	0.2722
3.2_T_2186	38.57	63	PVC	150	0.0077	3.2_T_3736	134.6	63	PVC	150	0.0243
3.2_T_2188	38.73	63	PVC	150	0.0231	3.2_T_3737	134.8	160	PVC	150	1.7156
3.2_T_2189	38.69	63	PVC	150	0.0154	3.2_T_3738	135.6	63	PVC	150	0.1404
3.2_T_2190	38.74	63	PVC	150	1.6214	3.2_T_3739	193.5	63	PVC	150	0.4582
3.2_T_2191	38.78	63	PVC	150	0.1688	3.2_T_3741	136.0	63	PVC	150	3.4580
3.2_T_2192	112.9	63	PVC	150	0.0844	3.2_T_3742	139.0	63	PVC	150	5.3137
3.2_T_2193	38.85	63	PVC	150	0.0077	3.2_T_3743	135.8	63	PVC	150	0.3527
3.2_T_2194	38.85	63	PVC	150	0.0153	3.2_T_3744	138.8	63	PVC	150	4.6083
3.2_T_2195	38.86	110	PVC	150	0.0000	3.2_T_3745	158.8	63	PVC	150	0.1124
3.2_T_2196	39.02	160	PVC	150	0.8391	3.2_T_3746	136.1	250	PVC	150	2.0507
3.2_T_2197	38.95	160	PVC	150	0.0229	3.2_T_3747	137.0	63	PVC	150	1.1749
3.2_T_2198	39.36	63	PVC	150	0.0756	3.2_T_3748	142.6	63	PVC	150	0.4632
3.2_T_2199	39.02	63	PVC	150	0.0229	3.2_T_3749	167.8	63	PVC	150	0.0532
3.2_T_2200	39.04	63	PVC	150	0.3278	3.2_T_3750	137.2	50	AC	140	0.4750
3.2_T_2201	39.11	63	PVC	150	0.0837	3.2_T_3751	141.4	50	AC	140	0.0021

3.2_T_2202	39.16	63	PVC	150	1.3075	3.2_T_3752	158.1	110	PVC	150	0.2654
3.2_T_2203	39.16	63	PVC	150	0.1140	3.2_T_3753	137.9	160	PVC	150	1.9723
3.2_T_2204	39.17	63	PVC	150	0.0836	3.2_T_3754	139.8	160	PVC	150	2.8052
3.2_T_2205	39.23	63	PVC	150	0.0379	3.2_T_3755	138.8	100	PVC	150	5.2574
3.2_T_2206	39.28	160	PVC	150	1.2201	3.2_T_3756	138.0	63	PVC	150	4.0076
3.2_T_2207	40.07	63	PVC	150	0.2229	3.2_T_3757	138.4	63	PVC	150	0.0366
3.2_T_2208	39.29	63	PVC	150	0.1970	3.2_T_3758	138.2	110	PVC	150	0.0000
3.2_T_2209	39.30	63	PVC	150	0.0076	3.2_T_3759	181.6	63	PVC	150	0.1573
3.2_T_2210	39.33	63	PVC	150	1.0368	3.2_T_3760	138.4	63	PVC	150	0.0022
3.2_T_2212	39.41	63	PVC	150	0.0000	3.2_T_3761	141.4	160	PVC	150	0.2924
3.2_T_2213	40.35	63	PVC	150	0.5755	3.2_T_3762	143.2	300	AC	140	0.0000
3.2_T_2214	39.45	63	PVC	150	0.0151	3.2_T_3763	160.9	63	PVC	150	0.7174
3.2_T_2215	39.62	90	PVC	150	0.0826	3.2_T_3764	139.5	63	PVC	150	3.0811
3.2_T_2216	39.50	100	PVC	150	1.1456	3.2_T_3765	144.9	160	PVC	150	0.0595
3.2_T_2217	39.65	63	PVC	150	0.4505	3.2_T_3766	142.6	63	PVC	150	0.0042
3.2_T_2218	39.69	250	PVC	150	0.0000	3.2_T_3767	139.7	160	PVC	150	0.3088
3.2_T_2219	39.74	63	PVC	150	0.0300	3.2_T_3768	139.9	300	AC	140	0.2552
3.2_T_2220	39.73	63	PVC	150	0.0974	3.2_T_3769	153.6	63	PVC	150	0.0310
3.2_T_2221	39.76	63	PVC	150	1.4900	3.2_T_3770	140.0	110	PVC	150	2.0876
3.2_T_2222	39.78	63	PVC	150	0.0599	3.2_T_3771	140.7	63	PVC	150	0.0212
3.2_T_2223	39.79	50	PVC	150	6.9878	3.2_T_3772	141.5	63	PVC	150	0.6182
3.2_T_2224	39.81	100	PVC	150	0.0673	3.2_T_3773	142.0	63	PVC	150	0.3353
3.2_T_2225	40.03	63	PVC	150	0.0818	3.2_T_3774	142.2	63	PVC	150	0.4791
3.2_T_2226	39.87	63	PVC	150	0.0075	3.2_T_3775	143.0	63	PVC	150	0.0146
3.2_T_2227	40.00	50	PVC	150	0.3200	3.2_T_3776	142.8	160	PVC	150	0.4814
3.2_T_2228	39.94	63	PVC	150	0.0447	3.2_T_3777	142.9	63	PVC	150	1.3601
3.2_T_2229	41.55	250	PVC	150	1.7051	3.2_T_3778	147.0	63	PVC	150	0.0526
3.2_T_2230	40.56	63	PVC	150	0.0000	3.2_T_3779	171.7	63	PVC	150	3.1097
3.2_T_2231	40.00	63	PVC	150	0.0074	3.2_T_3780	145.2	63	PVC	150	4.5456
3.2_T_2232	40.02	300	AC	140	0.0074	3.2_T_3781	145.3	63	PVC	150	0.2806
3.2_T_2233	40.04	63	PVC	150	0.2007	3.2_T_3782	154.9	100	PVC	150	0.3842
3.2_T_2235	42.21	63	PVC	150	0.0000	3.2_T_3783	145.8	50	PVC	150	0.3796
3.2_T_2236	40.25	250	PVC	150	1.6862	3.2_T_3784	145.8	63	PVC	150	0.0020
3.2_T_2237	40.14	63	PVC	150	0.0223	3.2_T_3785	145.8	63	PVC	150	1.1225
3.2_T_2238	40.12	63	PVC	150	0.0223	3.2_T_3786	159.3	63	PVC	150	0.0131
3.2_T_2239	40.15	63	PVC	150	0.0297	3.2_T_3787	147.6	150	AC	140	0.0685
3.2_T_2240	40.21	63	PVC	150	7.2477	3.2_T_3788	146.3	200	AC	140	0.0997
3.2_T_2241	40.16	63	PVC	150	0.0222	3.2_T_3789	157.3	63	PVC	150	0.0492
3.2_T_2242	40.23	63	PVC	150	0.0074	3.2_T_3790	146.3	63	PVC	150	0.0935
3.2_T_2243	40.24	200	PVC	150	1.4721	3.2_T_3791	148.9	63	PVC	150	1.6330
3.2_T_2244	40.28	63	PVC	150	1.8180	3.2_T_3792	158.3	63	PVC	150	0.3948
3.2_T_2245	40.73	63	PVC	150	0.6138	3.2_T_3793	147.8	50	PVC	150	0.1047
3.2_T_2246	40.31	63	PVC	150	0.0295	3.2_T_3794	165.8	110	PVC	150	1.9614
3.2_T_2247	40.31	63	PVC	150	0.0369	3.2_T_3795	207.1	63	PVC	150	0.0259
3.2_T_2248	40.31	100	PVC	150	8.3213	3.2_T_3796	147.4	63	PVC	150	0.4401
3.2_T_2249	55.25	63	PVC	150	0.0539	3.2_T_3797	156.6	63	PVC	150	0.0171

171

3.2_T_2250	40.53	63	PVC	150	1.6964	3.2_T_3798	147.9	160	PVC	150	0.0825
3.2_T_2251	40.34	63	PVC	150	0.1328	3.2_T_3799	148.5	63	PVC	150	1.5527
3.2_T_2252	40.99	63	PVC	150	0.0581	3.2_T_3800	149.0	110	PVC	150	0.6592
3.2_T_2253	40.35	100	PVC	150	0.0443	3.2_T_3801	152.6	63	PVC	150	0.8600
3.2_T_2254	41.30	160	PVC	150	0.3892	3.2_T_3802	148.9	63	PVC	150	1.4626
3.2_T_2255	40.39	63	PVC	150	0.7074	3.2_T_3803	151.8	63	PVC	150	0.0000
3.2_T_2256	48.96	63	PVC	150	0.0608	3.2_T_3804	156.4	400	HF	130	0.0133
3.2_T_2257	40.43	110	PVC	150	0.1252	3.2_T_3805	150.2	63	PVC	150	0.0396
3.2_T_2258	40.56	160	PVC	150	0.4403	3.2_T_3806	152.5	110	PVC	150	0.1796
3.2_T_2259	40.58	63	PVC	150	2.9119	3.2_T_3807	151.0	100	AC	140	0.3055
3.2_T_2260	40.98	110	PVC	150	0.8934	3.2_T_3808	151.0	63	PVC	150	1.2019
3.2_T_2261	40.62	63	PVC	150	0.0000	3.2_T_3809	151.2	110	PVC	150	1.0726
3.2_T_2263	40.70	63	PVC	150	0.0219	3.2_T_3810	152.6	63	PVC	150	0.7509
3.2_T_2264	40.73	63	PVC	150	0.0365	3.2_T_3811	152.2	63	PVC	150	0.5161
3.2_T_2265	51.92	63	PVC	150	0.0459	3.2_T_3812	185.7	63	PVC	150	0.0144
3.2_T_2266	40.79	63	PVC	150	0.0000	3.2_T_3813	150.7	110	PVC	150	0.0296
3.2_T_2268	42.02	63	PVC	150	48.468	3.2_T_3814	153.0	50	PVC	150	0.1594
3.2_T_2269	41.30	63	PVC	150	1.6073	3.2_T_3815	153.9	110	PVC	150	0.4081
3.2_T_2270	41.41	63	PVC	150	0.0288	3.2_T_3816	157.0	63	PVC	150	0.4833
3.2_T_2271	40.87	160	PVC	150	0.8231	3.2_T_3817	154.6	200	PVC	150	0.1367
3.2_T_2272	40.87	50	PVC	150	1.7261	3.2_T_3818	155.8	63	PVC	150	0.0860
3.2_T_2273	40.88	100	AC	140	0.0000	3.2_T_3819	158.5	160	PVC	150	1.4418
3.2_T_2274	40.99	63	PVC	150	1.4523	3.2_T_3820	174.3	63	PVC	150	0.4167
3.2_T_2275	40.88	63	PVC	150	0.0000	3.2_T_3821	160.2	63	PVC	150	0.0000
3.2_T_2276	40.99	63	PVC	150	4.7273	3.2_T_3822	156.2	63	PVC	150	0.0267
3.2_T_2277	40.97	63	PVC	150	0.0145	3.2_T_3823	159.5	63	PVC	150	6.7168
3.2_T_2278	41.03	63	PVC	150	0.0073	3.2_T_3824	158.1	63	PVC	150	1.0069
3.2_T_2279	41.03	110	PVC	150	7.5011	3.2_T_3825	162.8	63	PVC	150	1.2707
3.2_T_2280	41.04	63	PVC	150	0.0145	3.2_T_3826	157.0	63	PVC	150	0.5856
3.2_T_2281	41.06	63	PVC	150	0.0000	3.2_T_3827	158.6	63	PVC	150	2.0559
3.2_T_2282	41.06	63	PVC	150	0.2610	3.2_T_3828	158.2	63	PVC	150	1.0325
3.2_T_2283	41.11	200	AC	140	0.3113	3.2_T_3829	157.8	160	PVC	150	0.0075
3.2_T_2284	41.12	63	PVC	150	0.0145	3.2_T_3830	157.5	63	PVC	150	0.2910
3.2_T_2285	41.14	110	PVC	150	4.7898	3.2_T_3831	157.9	63	PVC	150	0.0019
3.2_T_2286	41.17	63	PVC	150	0.0868	3.2_T_3832	158.0	63	PVC	150	0.0094
3.2_T_2287	41.20	100	PVC	150	3.4385	3.2_T_3833	184.6	160	PVC	150	3.4567
3.2_T_2288	41.21	63	PVC	150	0.0361	3.2_T_3834	158.8	63	PVC	150	4.4262
3.2_T_2289	44.14	63	PVC	150	0.0000	3.2_T_3835	159.1	100	PVC	150	0.0468
3.2_T_2290	41.22	63	PVC	150	0.0722	3.2_T_3836	159.8	200	AC	140	0.4469
3.2_T_2291	45.53	63	PVC	150	0.0262	3.2_T_3837	160.2	110	PVC	150	1.8042
3.2_T_2292	41.48	63	PVC	150	0.0502	3.2_T_3838	161.0	63	PVC	150	0.1700
3.2_T_2293	41.49	63	PVC	150	0.0072	3.2_T_3839	161.5	100	PVC	150	0.3796
3.2_T_2294	41.52	63	PVC	150	0.0287	3.2_T_3840	232.4	110	PVC	150	0.0000
3.2_T_2295	46.31	110	PVC	150	0.0064	3.2_T_3841	162.7	150	AC	140	0.3713
3.2_T_2296	41.77	200	PVC	150	1.2828	3.2_T_3842	163.0	63	PVC	150	1.9699
3.2_T_2297	44.05	63	PVC	150	1.3650	3.2_T_3843	162.7	63	PVC	150	0.0329

3.2_T_2298	41.59	63	PVC	150	0.0859	3.2_T_3844	164.2	110	PVC	150	2.0113
3.2_T_2299	41.64	63	PVC	150	0.0072	3.2_T_3845	190.5	110	PVC	150	0.0000
3.2_T_2300	42.57	63	PVC	150	9.9007	3.2_T_3846	176.2	63	PVC	150	0.3226
3.2_T_2301	41.79	200	PVC	150	0.8762	3.2_T_3847	199.8	50	PVC	150	0.4946
3.2_T_2303	41.84	63	PVC	150	0.0285	3.2_T_3848	164.1	50	AC	140	5.4579
3.2_T_2304	42.09	63	PVC	150	4.4831	3.2_T_3849	164.5	110	PVC	150	0.0072
3.2_T_2305	42.21	63	PVC	150	0.1904	3.2_T_3850	169.3	63	PVC	150	0.4184
3.2_T_2306	41.97	200	AC	140	1.9077	3.2_T_3851	168.7	63	PVC	150	0.1428
3.2_T_2307	42.00	63	PVC	150	0.0000	3.2_T_3852	168.5	63	PVC	150	0.0071
3.2_T_2308	42.00	63	PVC	150	0.0142	3.2_T_3853	168.0	160	PVC	150	1.3424
3.2_T_2309	42.00	63	PVC	150	0.0567	3.2_T_3854	168.0	100	HF	130	0.1222
3.2_T_2310	42.01	50	PVC	150	3.3299	3.2_T_3855	168.1	63	PVC	150	1.7105
3.2_T_2311	42.09	63	PVC	150	0.4667	3.2_T_3856	221.6	63	PVC	150	0.3263
3.2_T_2312	42.11	63	PVC	150	0.7422	3.2_T_3857	168.7	50	PVC	150	1.2632
3.2_T_2313	42.17	63	PVC	150	0.2259	3.2_T_3858	169.1	63	PVC	150	0.6161
3.2_T_2314	42.62	63	PVC	150	0.9568	3.2_T_3859	169.1	63	PVC	150	0.3238
3.2_T_2315	42.32	63	PVC	150	0.2532	3.2_T_3860	169.6	63	PVC	150	11.385
3.2_T_2317	42.25	63	PVC	150	0.0564	3.2_T_3861	174.2	63	PVC	150	1.7189
3.2_T_2319	42.31	110	PVC	150	0.1055	3.2_T_3862	175.5	160	PVC	150	0.2492
3.2_T_2321	42.40	63	PVC	150	0.7722	3.2_T_3863	170.1	110	PVC	150	0.7332
3.2_T_2322	42.42	50	PVC	150	0.4350	3.2_T_3864	170.4	110	PVC	150	1.2315
3.2_T_2323	42.42	63	PVC	150	0.0070	3.2_T_3865	171.4	63	PVC	150	0.2327
3.2_T_2324	42.46	50	PVC	150	0.2313	3.2_T_3866	171.5	50	PVC	150	3.5683
3.2_T_2325	42.46	63	PVC	150	0.8903	3.2_T_3867	172.1	200	AC	140	1.0151
3.2_T_2326	51.78	63	PVC	150	0.4426	3.2_T_3868	173.4	200	PVC	150	0.0927
3.2_T_2327	42.50	63	PVC	150	2.7456	3.2_T_3869	176.7	110	PVC	150	3.8225
3.2_T_2328	42.55	63	PVC	150	0.0070	3.2_T_3870	204.2	63	PVC	150	2.4012
3.2_T_2329	42.72	63	PVC	150	1.0939	3.2_T_3871	178.0	300	AC	140	0.2524
3.2_T_2330	43.74	100	PVC	150	0.5785	3.2_T_3872	177.8	600	HD	130	0.9559
3.2_T_2331	42.67	63	PVC	150	0.6976	3.2_T_3873	178.3	250	AC	140	0.1603
3.2_T_2332	42.60	110	PVC	150	0.1118	3.2_T_3875	184.2	50	PVC	150	0.0856
3.2_T_2333	42.60	63	PVC	150	0.0000	3.2_T_3876	182.7	300	AC	140	0.6418
3.2_T_2334	42.65	200	AC	140	0.5513	3.2_T_3877	182.5	110	PVC	150	1.9976
3.2_T_2335	42.63	63	PVC	150	0.0000	3.2_T_3878	250.6	63	PVC	150	31.311
3.2_T_2336	42.93	63	PVC	150	0.0139	3.2_T_3879	184.4	63	PVC	150	1.7837
3.2_T_2337	42.68	160	PVC	150	0.4394	3.2_T_3880	184.4	400	HD	130	0.8084
3.2_T_2338	43.77	110	PVC	150	0.0952	3.2_T_3881	185.3	63	PVC	150	12.0309
3.2_T_2339	42.82	63	PVC	150	1.5780	3.2_T_3882	185.3	63	PVC	150	0.3261
3.2_T_2340	42.81	160	PVC	150	1.4741	3.2_T_3883	236.3	63	PVC	150	0.2141
3.2_T_2343	42.81	63	PVC	150	1.8633	3.2_T_3886	195.4	50	PVC	150	2.9413
3.2_T_2344	42.82	100	AC	140	0.9176	3.2_T_3887	189.6	110	PVC	150	0.0502
3.2_T_2345	55.79	63	PVC	150	0.0373	3.2_T_3888	201.7	63	PVC	150	4.5526
3.2_T_2346	42.89	63	PVC	150	0.0486	3.2_T_3889	213.2	63	PVC	150	1.0105
3.2_T_2347	42.89	110	PVC	150	0.0000	3.2_T_3890	193.1	200	PVC	150	0.9895
3.2_T_2348	42.96	63	PVC	150	0.7413	3.2_T_3891	196.9	63	PVC	150	1.7203
3.2_T_2349	43.05	110	PVC	150	0.0069	3.2_T_3892	191.3	450	HD	130	0.9445

3.2_T_2350	43.07	63	PVC	150	0.0000	3.2_T_3893	192.0	200	AC	140	0.8074
3.2_T_2351	43.13	63	PVC	150	0.0483	3.2_T_3894	192.7	110	PVC	150	4.5118
3.2_T_2352	43.13	50	PVC	150	0.0966	3.2_T_3895	193.1	160	PVC	150	0.9586
3.2_T_2353	43.17	63	PVC	150	0.3034	3.2_T_3896	203.3	200	AC	140	0.4405
3.2_T_2355	43.68	63	PVC	150	0.0273	3.2_T_3897	198.6	200	PVC	150	0.0809
3.2_T_2357	43.37	63	PVC	150	0.0069	3.2_T_3898	201.7	63	PVC	150	0.9664
3.2_T_2358	43.38	63	PVC	150	0.0000	3.2_T_3899	196.6	160	PVC	150	0.6932
3.2_T_2359	43.38	63	PVC	150	0.8920	3.2_T_3900	211.0	160	PVC	150	0.0339
3.2_T_2360	43.38	63	PVC	150	0.0137	3.2_T_3901	198.9	300	AC	140	0.7722
3.2_T_2361	44.30	100	PVC	150	0.3158	3.2_T_3902	199.0	63	PVC	150	0.5549
3.2_T_2362	43.46	110	PVC	150	0.0000	3.2_T_3903	199.7	110	PVC	150	1.4755
3.2_T_2363	43.53	63	PVC	150	4.3007	3.2_T_3904	201.9	63	PVC	150	0.0030
3.2_T_2364	43.47	110	PVC	150	0.0069	3.2_T_3905	201.3	110	PVC	150	1.0702
3.2_T_2365	43.61	63	PVC	150	0.0341	3.2_T_3906	277.1	63	PVC	150	0.1031
3.2_T_2366	57.74	63	PVC	150	0.0103	3.2_T_3907	201.9	300	PVC	150	0.0015
3.2_T_2367	43.71	63	PVC	150	0.4086	3.2_T_3908	203.7	63	PVC	150	0.5390
3.2_T_2368	43.72	110	PVC	150	0.1975	3.2_T_3909	203.9	63	PVC	150	0.3956
3.2_T_2369	45.10	200	PVC	150	0.0726	3.2_T_3910	217.8	300	PVC	150	1.7761
3.2_T_2370	43.83	63	PVC	150	0.0000	3.2_T_3911	207.1	160	PVC	150	2.1113
3.2_T_2371	43.85	63	PVC	150	0.1833	3.2_T_3912	208.4	110	PVC	150	0.7498
3.2_T_2372	43.88	63	PVC	150	0.6716	3.2_T_3913	210.2	63	PVC	150	0.2350
3.2_T_2373	43.94	63	PVC	150	0.2168	3.2_T_3914	230.4	250	PVC	150	2.1768
3.2_T_2374	43.95	63	PVC	150	0.2506	3.2_T_3915	212.5	160	PVC	150	1.6117
3.2_T_2375	43.95	63	PVC	150	0.0880	3.2_T_3916	217.7	63	PVC	150	0.1312
3.2_T_2376	47.57	200	PVC	150	1.4516	3.2_T_3917	224.5	63	PVC	150	0.0013
3.2_T_2377	44.07	250	PVC	150	1.8102	3.2_T_3918	226.9	63	PVC	150	0.7868
3.2_T_2378	44.01	63	PVC	150	0.0541	3.2_T_3919	213.4	100	AC	140	2.7177
3.2_T_2379	44.05	50	PVC	150	0.0068	3.2_T_3920	214.2	63	PVC	150	0.2931
3.2_T_2382	44.35	160	PVC	150	0.1208	3.2_T_3921	215.8	100	AC	140	1.1447
3.2_T_2383	44.21	200	PVC	150	2.0803	3.2_T_3922	214.8	200	PVC	150	1.4189
3.2_T_2384	62.57	63	PVC	150	0.2474	3.2_T_3923	215.2	160	PVC	150	0.7135
3.2_T_2385	44.20	100	PVC	150	1.8383	3.2_T_3924	215.3	63	PVC	150	1.4609
3.2_T_2386	44.29	63	PVC	150	0.0067	3.2_T_3925	221.2	63	PVC	150	0.0538
3.2_T_2387	44.29	63	PVC	150	0.3226	3.2_T_3926	225.4	200	PVC	150	0.0753
3.2_T_2389	44.34	63	PVC	150	0.1544	3.2_T_3927	221.0	63	PVC	150	1.0868
3.2_T_2390	44.35	110	PVC	150	0.4899	3.2_T_3928	221.3	110	PVC	150	0.3255
3.2_T_2391	44.42	63	PVC	150	0.1005	3.2_T_3930	221.9	400	HD	130	0.2843
3.2_T_2392	44.49	63	PVC	150	0.0000	3.2_T_3931	236.8	63	PVC	150	0.1106
3.2_T_2393	44.54	100	AC	140	0.2139	3.2_T_3932	227.8	200	AC	140	2.7370
3.2_T_2394	44.59	63	PVC	150	0.1936	3.2_T_3933	225.9	300	HF	130	0.0263
3.2_T_2395	44.61	63	PVC	150	4.7573	3.2_T_3934	228.3	200	AC	140	0.4954
3.2_T_2396	44.62	63	PVC	150	0.4603	3.2_T_3935	230.6	63	PVC	150	2.5537
3.2_T_2398	44.68	63	PVC	150	1.0326	3.2_T_3936	244.2	63	PVC	150	0.0695
3.2_T_2399	44.69	160	PVC	150	0.0067	3.2_T_3937	231.4	110	PVC	150	7.9701
3.2_T_2400	44.70	63	PVC	150	4.8942	3.2_T_3938	245.4	63	PVC	150	0.5883
3.2_T_2401	44.81	63	PVC	150	0.1262	3.2_T_3939	237.6	63	PVC	150	1.0833

3.2_T_2402	44.81	200	AC	140	0.1926	3.2_T_3940	371.2	110	PVC	150	0.1066
3.2_T_2404	44.91	63	PVC	150	0.0663	3.2_T_3941	246.3	63	PVC	150	3.7051
3.2_T_2406	45.00	63	PVC	150	0.0066	3.2_T_3942	243.5	110	PVC	150	4.7935
3.2_T_2407	45.03	63	PVC	150	0.5090	3.2_T_3943	248.2	200	PVC	150	2.2661
3.2_T_2408	45.05	63	PVC	150	0.0132	3.2_T_3944	289.4	63	PVC	150	0.9853
3.2_T_2409	45.06	63	PVC	150	2.8671	3.2_T_3945	359.3	63	PVC	150	0.4034
3.2_T_2410	45.14	250	PVC	150	0.0066	3.2_T_3946	246.2	160	PVC	150	0.7494
3.2_T_2411	45.19	63	PVC	150	1.4953	3.2_T_3947	246.6	250	PVC	150	0.0024
3.2_T_2412	45.23	200	AC	140	0.5331	3.2_T_3948	249.7	63	PVC	150	0.7486
3.2_T_2413	45.27	63	PVC	150	0.0000	3.2_T_3949	250.2	300	HF	130	0.0000
3.2_T_2414	45.33	63	PVC	150	10.032	3.2_T_3950	301.4	200	PVC	150	0.7860
3.2_T_2416	45.70	63	PVC	150	5.6081	3.2_T_3951	252.7	300	HD	130	0.9399
3.2_T_2417	45.35	63	PVC	150	0.0066	3.2_T_3952	256.6	110	PVC	150	0.0441
3.2_T_2418	45.36	63	PVC	150	1.2731	3.2_T_3953	254.1	200	AC	140	0.0105
3.2_T_2419	45.45	63	PVC	150	0.7598	3.2_T_3954	295.7	63	PVC	150	0.6462
3.2_T_2420	45.37	100	PVC	150	0.6626	3.2_T_3955	258.0	160	PVC	150	1.9105
3.2_T_2421	45.43	63	PVC	150	2.1361	3.2_T_3956	258.9	63	PVC	150	1.0793
3.2_T_2422	45.48	63	PVC	150	0.0131	3.2_T_3957	260.7	200	PVC	150	0.1073
3.2_T_2423	45.60	63	PVC	150	2.2714	3.2_T_3959	260.7	450	HD	130	0.6450
3.2_T_2424	45.46	63	PVC	150	0.0131	3.2_T_3961	261.8	600	HD	130	0.5525
3.2_T_2425	45.52	63	PVC	150	4.5709	3.2_T_3962	302.2	110	PVC	150	0.1241
3.2_T_2426	45.53	100	PVC	150	2.4187	3.2_T_3963	263.4	63	PVC	150	2.4385
3.2_T_2427	45.56	63	PVC	150	0.0261	3.2_T_3964	269.2	63	PVC	150	0.0077
3.2_T_2429	45.62	63	PVC	150	0.2023	3.2_T_3965	266.5	160	PVC	150	0.6824
3.2_T_2430	45.62	63	PVC	150	0.3523	3.2_T_3966	274.8	63	PVC	150	0.8567
3.2_T_2431	57.09	63	PVC	150	0.0417	3.2_T_3967	276.1	63	PVC	150	0.1455
3.2_T_2432	45.64	63	PVC	150	2.1587	3.2_T_3968	334.6	250	PVC	150	0.0036
3.2_T_2433	45.65	63	PVC	150	5.0402	3.2_T_3969	279.9	63	PVC	150	0.1861
3.2_T_2434	45.66	63	PVC	150	3.7741	3.2_T_3970	495.6	63	PVC	150	1.5693
3.2_T_2435	45.67	63	PVC	150	0.0196	3.2_T_3971	282.9	160	PVC	150	2.1901
3.2_T_2436	52.74	63	PVC	150	0.0452	3.2_T_3972	289.0	300	AC	140	0.3615
3.2_T_2438	45.76	100	AC	140	0.7741	3.2_T_3973	291.8	500	HD	130	0.8160
3.2_T_2439	45.76	100	PVC	150	1.8928	3.2_T_3975	307.1	63	PVC	150	13.927
3.2_T_2440	45.83	100	PVC	150	1.5977	3.2_T_3976	341.2	63	PVC	150	0.2390
3.2_T_2441	45.96	63	PVC	150	0.1360	3.2_T_3977	395.3	600	HD	130	1.3528
3.2_T_2442	47.40	200	PVC	150	1.4381	3.2_T_3978	301.3	50	AC	140	0.7913
3.2_T_2443	46.07	63	PVC	150	0.0065	3.2_T_3979	302.0	63	PVC	150	0.0778
3.2_T_2444	46.10	63	PVC	150	1.6722	3.2_T_3980	305.8	250	PVC	150	0.0000
3.2_T_2446	46.22	63	PVC	150	0.0515	3.2_T_3981	315.3	110	PVC	150	0.2237
3.2_T_2447	46.17	63	PVC	150	3.2687	3.2_T_3982	416.4	63	PVC	150	6.7956
3.2_T_2448	46.18	63	PVC	150	1.8500	3.2_T_3983	335.5	200	PVC	150	0.5082
3.2_T_2449	46.22	63	PVC	150	0.0322	3.2_T_3984	337.8	600	HD	130	0.7657
3.2_T_2450	46.24	63	PVC	150	4.1133	3.2_T_3985	352.8	63	PVC	150	0.1324
3.2_T_2451	46.26	110	PVC	150	0.8623	3.2_T_3986	388.0	200	PVC	150	2.2115
3.2_T_2452	46.26	50	PVC	150	0.8429	3.2_T_3987	363.9	200	PVC	150	0.9241
3.2_T_2454	46.48	50	PVC	150	0.1537	3.2_T_3988	356.5	250	HD	130	0.5485

3.2_T_2455	46.51	63	PVC	150	0.7936	3.2_T_3989	373.0	110	PVC	150	0.0040
3.2_T_2456	46.51	110	PVC	150	1.2735	3.2_T_3990	464.5	200	PVC	150	0.1922
3.2_T_2457	46.78	63	PVC	150	3.6838	3.2_T_3991	459.2	160	PVC	150	1.1544
3.2_T_2458	46.54	63	PVC	150	0.0256	3.2_T_3992	391.4	110	PVC	150	0.1939
3.2_T_2459	46.60	63	PVC	150	0.4919	3.2_T_3994	413.1	110	PVC	150	6.0162
3.2_T_2460	46.87	110	PVC	150	0.4191	3.2_T_3995	432.1	63	PVC	150	2.9041
3.2_T_2461	56.60	63	PVC	150	0.0473	3.2_T_3996	471.4	110	PVC	150	9.0415
3.2_T_2462	46.69	63	PVC	150	1.0390	3.2_T_3997	465.2	63	PVC	150	0.0224
3.2_T_2463	46.87	63	PVC	150	0.0064	3.2_T_3998	478.6	110	PVC	150	1.4322
3.2_T_2464	46.89	63	PVC	150	0.0127	3.2_T_3999	486.9	200	PVC	150	0.0110
3.2_T_2465	47.22	110	PVC	150	0.0504	3.2_T_4000	1361.1	600	HD	130	1.3785
3.2_T_2466	47.04	63	PVC	150	0.0253	3.2_T_4001	3.200	63	PVC	150	0.1863
3.2_T_2467	47.04	63	PVC	150	0.0570	3.2_T_4002	2.590	63	PVC	150	0.0000
3.2_T_2468	47.05	100	PVC	150	0.1771	3.2_T_4003	135.5	63	PVC	150	0.0527
3.2_T_2469	43.90	63	PVC	150	0.0068	3.2_T_4004	17.17	200	PVC	150	0.0000
3.2_T_2470	49.44	200	PVC	150	0.0783	3.2_T_4005	147.6	200	PVC	150	0.0000
3.2_T_2471	47.08	63	PVC	150	2.8638	3.2_T_4006	321.8	400	HF	130	0.0000
3.2_T_2472	47.12	63	PVC	150	0.0505	3.2_T_4007	13.15	400	HF	130	0.0000
3.2_T_2473	48.41	63	PVC	150	0.2644	3.2_T_4008	79.91	63	PVC	150	0.0000
3.2_T_2474	47.19	200	PVC	150	0.0757	3.2_T_4009	68.84	63	PVC	150	0.0043
3.2_T_2475	47.22	63	PVC	150	3.0698	3.2_T_4010	29.05	110	PVC	150	0.0000
3.2_T_2476	47.23	50	PVC	150	0.0189	3.2_T_4011	215.4	250	PVC	150	0.0000
3.2_T_2477	47.63	160	PVC	150	0.8937	3.2_T_4012	7.940	250	PVC	150	0.0000
3.2_T_2478	47.26	63	PVC	150	0.8503	3.2_T_4013	130.1	200	AC	140	0.0000
3.2_T_2479	47.29	63	PVC	150	0.0063	3.2_T_4014	20.46	200	AC	140	0.0000
3.2_T_2480	47.30	63	PVC	150	0.0063	3.2_T_4015	1.870	63	PVC	150	0.0000
3.2_T_2481	49.73	63	PVC	150	6.8714	3.2_T_4016	60.24	63	PVC	150	0.0000
3.2_T_2482	47.33	63	PVC	150	2.7294	3.2_T_4017	121.1	63	PVC	150	0.5700
3.2_T_2483	47.35	63	PVC	150	0.0377	3.2_T_4018	250.6	63	PVC	150	0.5701
3.2_T_2484	47.37	63	PVC	150	0.8923	3.2_T_4019	7.140	63	PVC	150	0.0417
3.2_T_2485	47.38	63	PVC	150	0.0754	3.2_T_4020	1.250	63	PVC	150	0.0000
3.2_T_2486	48.25	100	PVC	150	2.1035	3.2_T_4021	5.930	63	PVC	150	0.0502
3.2_T_2487	47.44	50	PVC	150	0.1255	3.2_T_4022	235.7	63	PVC	150	0.0530
3.2_T_2489	47.51	110	PVC	150	0.0000	3.2_T_4023	15.28	63	PVC	150	0.0195
3.2_T_2490	47.72	63	PVC	150	0.9730	3.2_T_4024	16.99	63	PVC	150	0.0000
3.2_T_2491	47.60	63	PVC	150	0.0876	3.2_T_4025	18.24	200	PVC	150	0.3427
3.2_T_2492	47.72	110	PVC	150	0.9605	3.2_T_4026	108.9	200	PVC	150	0.3387
3.2_T_2493	47.66	63	PVC	150	0.0187	3.2_T_4027	20.71	200	AC	140	0.6897
3.2_T_2495	47.72	63	PVC	150	0.0499	3.2_T_4028	239.9	200	AC	140	0.6871
3.2_T_2496	47.73	160	PVC	150	2.2199	3.2_T_4029	59.52	63	PVC	150	0.0550
3.2_T_2498	47.86	50	PVC	150	0.0000	3.2_T_4030	1.640	63	PVC	150	0.0000
3.2_T_2499	47.86	63	PVC	150	0.3918	3.2_T_4031	7.270	160	PVC	150	0.0000
3.2_T_2500	47.88	50	PVC	150	0.1119	3.2_T_4032	38.01	160	PVC	150	0.0000
3.2_T_2501	47.90	63	PVC	150	3.0011	3.2_T_4033	22.79	300	PVC	150	0.0000
3.2_T_2502	47.90	63	PVC	150	0.0062	3.2_T_4034	14.09	300	PVC	150	0.0000
3.2_T_2503	47.98	200	AC	140	1.8673	3.2_T_4035	5.860	200	PVC	150	0.0000

3.2_T_2504	47.98	63	PVC	150	0.0310	3.2_T_4036	6.600	200	PVC	150	0.0000
3.2_T_2505	47.99	63	PVC	150	0.0868	3.2_T_4037	27.63	200	PVC	150	0.0000
3.2_T_2506	47.99	63	PVC	150	0.0248	3.2_T_4038	5.630	200	PVC	150	0.0000
3.2_T_2507	48.07	160	PVC	150	0.1424	3.2_T_4039	5.190	250	PVC	150	0.0000
3.2_T_2508	48.13	110	PVC	150	0.2721	3.2_T_4040	66.93	250	PVC	150	0.0000
3.2_T_2509	48.38	63	PVC	150	1.6611	3.2_T_4041	8.620	63	PVC	150	0.0691
3.2_T_2510	48.28	63	PVC	150	0.5302	3.2_T_4042	93.21	63	PVC	150	0.0511
3.2_T_2511	48.27	63	PVC	150	0.0000	3.2_T_4043	1.020	63	PVC	150	0.0000
3.2_T_2512	48.29	63	PVC	150	0.4562	3.2_T_4044	35.50	63	PVC	150	0.0503
3.2_T_2516	48.66	63	PVC	150	0.0061	3.2_T_4045	66.14	63	PVC	150	0.0000
3.2_T_2517	48.77	63	PVC	150	0.0061	3.2_T_4046	1.360	63	PVC	150	0.0000
3.2_T_2518	48.84	63	PVC	150	0.0305	3.2_T_4047	1.090	63	PVC	150	0.0000
3.2_T_2519	49.33	63	PVC	150	0.4043	3.2_T_4048	55.73	63	PVC	150	0.0534
3.2_T_2520	48.91	63	PVC	150	0.8459	3.2_T_4049	10.72	63	PVC	150	0.0278
3.2_T_2521	48.92	63	PVC	150	0.1765	3.2_T_4050	2.220	63	PVC	150	0.0000
3.2_T_2522	48.92	63	PVC	150	0.0669	3.2_T_4051	4.410	63	PVC	150	0.0675
3.2_T_2523	49.40	63	PVC	150	1.7474	3.2_T_4052	4.050	63	PVC	150	0.0000
3.2_T_2524	48.97	63	PVC	150	1.4346	3.2_T_4053	47.49	63	PVC	150	0.0063
3.2_T_2527	49.01	63	PVC	150	0.0122	3.2_T_4054	1.010	63	PVC	150	0.0000
3.2_T_2528	49.03	63	PVC	150	3.2603	3.2_T_4055	69.70	63	PVC	150	0.0085
3.2_T_2529	49.04	63	PVC	150	0.0304	3.2_T_4056	1.330	63	PVC	150	0.0000
3.2_T_2530	49.05	63	PVC	150	9.8128	3.2_T_4057	7.140	63	PVC	150	0.0834
3.2_T_2531	49.08	63	PVC	150	3.5299	3.2_T_4058	1.940	63	PVC	150	0.0000
3.2_T_2532	49.18	110	PVC	150	5.2172	3.2_T_4059	54.11	63	PVC	150	0.0000
3.2_T_2533	49.21	63	PVC	150	0.4113	3.2_T_4060	2.130	63	PVC	150	0.0000
3.2_T_2534	49.21	63	PVC	150	1.1433	3.2_T_4061	65.14	63	PVC	150	0.0548
3.2_T_2537	49.36	200	PVC	150	5.2583	3.2_T_4062	1.000	63	PVC	150	0.0000
3.2_T_2539	49.38	63	PVC	150	0.0000	3.2_T_4063	46.01	63	PVC	150	0.0518
3.2_T_2540	49.42	63	PVC	150	0.8131	3.2_T_4064	3.630	63	PVC	150	0.0000
3.2_T_2541	49.43	63	PVC	150	4.1373	3.2_T_4065	2.170	63	PVC	150	0.1374
3.2_T_2542	49.51	63	PVC	150	0.6793	3.2_T_4066	1.480	63	PVC	150	0.0000
3.2_T_2543	49.46	63	PVC	150	0.0120	3.2_T_4067	97.93	110	PVC	150	0.0000
3.2_T_2544	49.46	63	PVC	150	0.1926	3.2_T_4068	18.89	300	PVC	150	2.8525
3.2_T_2545	49.50	50	AC	140	0.3428	3.2_T_4069	14.34	150	PVC	150	2.0753
3.2_T_2546	49.60	110	PVC	150	0.3721	3.2_T_4070	10.46	500	HD	130	3.3306
3.2_T_2547	65.58	63	PVC	150	0.2360	3.2_T_4071	14.30	400	HF	130	0.0000
3.2_T_2548	49.64	63	PVC	150	1.1273					

Anexo 10. Datos de las tuberías año 2034

Etiqueta	Long (m)	Diam (mm)	Mat	Coef C	Grad. perdida carga (m/km)	Etiqueta	Long (m)	Diam (mm)	Mat	Coef C	Grad. perdida carga (m/km)
3.2_T_1001	143.0	63	PVC	150	0.0021	3.2_T_2549	49.54	63	PVC	150	0.0601
3.2_T_1002	106.3	63	PVC	150	0.0084	3.2_T_2550	49.65	110	PVC	150	0.3417
3.2_T_1003	0.130	200	PVC	150	0.0000	3.2_T_2551	49.68	63	PVC	150	0.2097
3.2_T_1004	0.200	250	AC	140	0.0000	3.2_T_2552	49.70	110	PVC	150	0.1198
3.2_T_1005	0.290	110	PVC	150	1.0315	3.2_T_2553	55.33	63	PVC	150	1.8559
3.2_T_1006	0.360	160	PVC	150	2.4742	3.2_T_2554	49.73	63	PVC	150	0.0180
3.2_T_1007	0.370	63	PVC	150	3.2512	3.2_T_2555	49.73	63	PVC	150	0.0658
3.2_T_1008	0.400	63	PVC	150	0.0000	3.2_T_2556	49.77	63	PVC	150	0.7715
3.2_T_1009	0.410	63	PVC	150	3.6270	3.2_T_2557	52.12	110	PVC	150	0.5711
3.2_T_1010	0.560	63	PVC	150	6.3747	3.2_T_2558	50.00	300	AC	140	0.0357
3.2_T_1011	0.560	63	PVC	150	33.867	3.2_T_2560	50.56	110	PVC	150	0.6063
3.2_T_1012	0.570	63	PVC	150	17.355	3.2_T_2561	51.14	63	PVC	150	1.8627
3.2_T_1013	0.890	700	HD	130	0.6712	3.2_T_2562	49.95	110	PVC	150	3.2239
3.2_T_1014	0.460	700	HD	130	0.6469	3.2_T_2563	49.99	63	PVC	150	2.3879
3.2_T_1016	0.760	150	PVC	150	0.3909	3.2_T_2564	50.04	63	PVC	150	0.1428
3.2_T_1017	0.770	63	PVC	150	0.0000	3.2_T_2565	50.12	200	AC	140	2.8031
3.2_T_1018	0.810	110	PVC	150	0.3678	3.2_T_2566	50.12	63	PVC	150	0.0000
3.2_T_1020	0.830	110	PVC	150	0.3583	3.2_T_2567	50.16	63	PVC	150	0.0178
3.2_T_1021	0.850	63	PVC	150	1.7602	3.2_T_2569	50.18	63	PVC	150	0.9076
3.2_T_1022	0.850	63	PVC	150	0.0000	3.2_T_2570	50.22	160	PVC	150	0.0059
3.2_T_1023	0.860	63	PVC	150	2.0801	3.2_T_2571	50.33	63	PVC	150	0.7037
3.2_T_1024	0.880	63	PVC	150	0.3395	3.2_T_2573	50.29	63	PVC	150	0.1243
3.2_T_1025	0.890	63	PVC	150	0.3326	3.2_T_2574	50.37	63	PVC	150	0.0768
3.2_T_1026	0.900	63	PVC	150	8.9610	3.2_T_2575	226.2	63	PVC	150	0.0171
3.2_T_1027	0.940	200	PVC	150	1.5815	3.2_T_2576	51.69	63	PVC	150	1.6526
3.2_T_1028	0.960	50	PVC	150	12.963	3.2_T_2577	50.43	63	PVC	150	0.0236
3.2_T_1029	0.970	110	PVC	150	0.3075	3.2_T_2578	50.44	63	PVC	150	0.0649
3.2_T_1030	1.000	63	PVC	150	0.0000	3.2_T_2579	50.44	63	PVC	150	0.1770
3.2_T_1031	1.010	63	PVC	150	0.0000	3.2_T_2580	51.61	63	PVC	150	1.0958
3.2_T_1032	1.020	160	PVC	150	1.4614	3.2_T_2581	50.47	63	PVC	150	0.8315
3.2_T_1033	1.030	110	PVC	150	1.4504	3.2_T_2582	50.50	63	PVC	150	0.1945
3.2_T_1034	3.350	63	PVC	150	1.2431	3.2_T_2583	50.60	63	PVC	150	8.9057
3.2_T_1035	1.120	63	PVC	150	0.2656	3.2_T_2584	50.55	63	PVC	150	5.1816
3.2_T_1036	1.210	63	PVC	150	8.3792	3.2_T_2585	50.86	110	PVC	150	0.2692
3.2_T_1037	1.220	63	PVC	150	0.2445	3.2_T_2586	50.90	63	PVC	150	0.0526
3.2_T_1038	1.230	63	PVC	150	49.540	3.2_T_2587	50.61	63	PVC	150	2.8347
3.2_T_1039	1.260	63	PVC	150	0.2360	3.2_T_2588	50.63	250	AC	140	1.3229
3.2_T_1040	1.170	700	HD	130	0.7645	3.2_T_2589	50.64	63	PVC	150	0.2880
3.2_T_1041	1.320	63	PVC	150	8.7866	3.2_T_2590	53.18	110	PVC	150	0.0000
3.2_T_1042	1.340	110	PVC	150	1.5494	3.2_T_2591	50.67	200	AC	140	0.1645
3.2_T_1043	1.360	110	PVC	150	0.2196	3.2_T_2593	50.81	63	PVC	150	0.3339

ID						ID					
3.2_T_1044	1.370	63	PVC	150	1.9609	3.2_T_2594	50.89	63	PVC	150	0.0176
3.2_T_1045	1.370	110	PVC	150	0.8666	3.2_T_2595	50.97	63	PVC	150	0.9051
3.2_T_1046	1.390	110	PVC	150	0.0000	3.2_T_2596	51.92	160	PVC	150	0.3784
3.2_T_1047	1.410	110	PVC	150	0.0000	3.2_T_2597	52.52	63	PVC	150	0.0170
3.2_T_1048	1.420	63	PVC	150	0.0000	3.2_T_2598	51.18	160	PVC	150	0.4187
3.2_T_1050	1.450	63	PVC	150	0.8234	3.2_T_2599	51.19	110	PVC	150	0.3721
3.2_T_1051	1.450	160	PVC	150	0.2047	3.2_T_2601	51.30	63	PVC	150	3.2030
3.2_T_1052	1.500	63	PVC	150	0.7958	3.2_T_2602	51.29	110	PVC	150	0.5803
3.2_T_1053	1.500	50	AC	140	22.677	3.2_T_2603	51.38	110	PVC	150	0.1680
3.2_T_1054	1.510	160	PVC	150	0.0000	3.2_T_2604	51.39	160	PVC	150	0.9151
3.2_T_1055	1.550	63	PVC	150	1.3454	3.2_T_2605	51.54	63	PVC	150	0.3119
3.2_T_1056	1.580	63	PVC	150	0.7544	3.2_T_2606	51.48	50	PVC	150	0.6591
3.2_T_1057	1.580	63	PVC	150	0.0000	3.2_T_2607	51.62	63	PVC	150	0.1384
3.2_T_1058	1.590	110	PVC	150	0.9350	3.2_T_2608	51.67	63	PVC	150	0.1671
3.2_T_1059	1.590	63	PVC	150	0.3736	3.2_T_2609	55.94	63	PVC	150	22.379
3.2_T_1060	1.620	63	PVC	150	0.9202	3.2_T_2610	51.74	50	PVC	150	0.3970
3.2_T_1061	1.640	200	AC	140	0.0000	3.2_T_2611	51.76	100	PVC	150	3.2206
3.2_T_1062	1.670	63	PVC	150	0.0000	3.2_T_2612	51.76	63	PVC	150	0.0058
3.2_T_1063	1.690	100	PVC	150	1.5859	3.2_T_2613	113.27	50	PVC	150	0.3653
3.2_T_1064	1.730	110	PVC	150	0.1724	3.2_T_2614	51.88	50	PVC	150	0.1721
3.2_T_1065	1.750	63	PVC	150	3.0589	3.2_T_2615	51.94	100	PVC	150	1.9830
3.2_T_1066	1.780	63	PVC	150	1.5075	3.2_T_2617	54.50	250	PVC	150	0.0055
3.2_T_1067	1.830	63	PVC	150	0.0000	3.2_T_2618	52.14	63	PVC	150	0.0913
3.2_T_1068	1.890	63	PVC	150	0.0000	3.2_T_2619	52.21	63	PVC	150	0.0570
3.2_T_1069	1.920	200	AC	140	0.0000	3.2_T_2620	52.23	63	PVC	150	1.8921
3.2_T_1071	1.980	200	PVC	150	0.0000	3.2_T_2621	52.25	63	PVC	150	0.0627
3.2_T_1072	2.000	63	PVC	150	0.0000	3.2_T_2622	54.80	63	PVC	150	0.6409
3.2_T_1073	2.020	160	PVC	150	2.3565	3.2_T_2623	59.55	110	PVC	150	1.4897
3.2_T_1074	2.030	63	PVC	150	15.682	3.2_T_2624	52.38	63	PVC	150	0.0057
3.2_T_1075	2.070	50	AC	140	14.533	3.2_T_2625	52.62	63	PVC	150	0.0509
3.2_T_1076	2.070	63	PVC	150	0.0000	3.2_T_2626	52.51	63	PVC	150	2.7605
3.2_T_1077	2.130	63	PVC	150	0.2789	3.2_T_2627	52.56	110	PVC	150	4.5700
3.2_T_1078	2.250	63	PVC	150	0.1323	3.2_T_2628	52.84	50	PVC	150	0.1972
3.2_T_1079	2.260	63	PVC	150	2.2395	3.2_T_2629	52.93	63	PVC	150	0.0619
3.2_T_1081	2.430	63	PVC	150	0.1226	3.2_T_2630	53.30	63	PVC	150	0.0168
3.2_T_1082	2.450	63	PVC	150	2.1855	3.2_T_2631	52.62	50	PVC	150	4.4175
3.2_T_1083	2.480	63	PVC	150	4.2052	3.2_T_2632	52.64	250	PVC	150	2.6179
3.2_T_1084	2.520	160	PVC	150	2.3611	3.2_T_2634	52.64	63	PVC	150	13.221
3.2_T_1085	2.570	63	PVC	150	0.4633	3.2_T_2635	52.68	63	PVC	150	0.1187
3.2_T_1086	2.640	63	PVC	150	0.1128	3.2_T_2636	52.69	63	PVC	150	0.3051
3.2_T_1087	2.640	63	PVC	150	0.0000	3.2_T_2637	52.81	50	PVC	150	4.0693
3.2_T_1088	2.670	110	PVC	150	0.0000	3.2_T_2638	52.14	63	PVC	150	0.0000
3.2_T_1089	2.690	110	PVC	150	0.7758	3.2_T_2639	52.90	63	PVC	150	0.7483
3.2_T_1090	2.690	63	PVC	150	0.1108	3.2_T_2641	53.07	63	PVC	150	0.3141
3.2_T_1091	2.690	110	PVC	150	0.0000	3.2_T_2642	71.89	63	PVC	150	0.0414
3.2_T_1092	2.730	160	PVC	150	14.483	3.2_T_2643	53.10	63	PVC	150	0.2635

3.2_T_1093	2.750	160	PVC	150	3.2516	3.2_T_2644	53.11	63	PVC	150	0.0112
3.2_T_1094	2.850	200	PVC	150	0.1045	3.2_T_2645	53.18	63	PVC	150	0.0056
3.2_T_1095	2.800	63	PVC	150	0.1063	3.2_T_2646	53.20	63	PVC	150	2.3946
3.2_T_1096	2.860	63	PVC	150	39.958	3.2_T_2647	53.21	63	PVC	150	2.6796
3.2_T_1098	7.400	160	PVC	150	0.0000	3.2_T_2648	53.24	63	PVC	150	0.0615
3.2_T_1099	2.890	110	PVC	150	0.0000	3.2_T_2649	53.32	63	PVC	150	0.0279
3.2_T_1100	2.900	160	PVC	150	0.0000	3.2_T_2650	53.37	63	PVC	150	0.0000
3.2_T_1101	2.960	110	PVC	150	0.0000	3.2_T_2651	53.42	63	PVC	150	1.0086
3.2_T_1102	2.980	160	PVC	150	0.0000	3.2_T_2652	53.46	50	AC	140	42.879
3.2_T_1103	3.000	63	PVC	150	0.0000	3.2_T_2653	53.47	200	PVC	150	0.9463
3.2_T_1104	3.000	110	PVC	150	0.0000	3.2_T_2654	53.51	63	PVC	150	0.0223
3.2_T_1105	3.060	63	PVC	150	0.0972	3.2_T_2655	53.95	100	PVC	150	0.0055
3.2_T_1106	3.130	110	PVC	150	0.5699	3.2_T_2656	53.60	63	PVC	150	2.0492
3.2_T_1107	3.140	200	PVC	150	7.8759	3.2_T_2657	53.62	63	PVC	150	0.1166
3.2_T_1108	3.140	200	AC	140	0.3786	3.2_T_2658	53.62	110	PVC	150	0.0555
3.2_T_1109	3.150	63	PVC	150	0.0944	3.2_T_2659	53.65	63	PVC	150	2.2415
3.2_T_1110	3.160	63	PVC	150	2.6401	3.2_T_2660	53.73	63	PVC	150	0.2825
3.2_T_1111	3.170	200	PVC	150	0.0939	3.2_T_2661	53.67	63	PVC	150	0.0056
3.2_T_1112	3.180	110	PVC	150	0.3750	3.2_T_2662	53.70	63	PVC	150	4.7776
3.2_T_1113	3.200	110	PVC	150	0.0000	3.2_T_2663	53.85	63	PVC	150	0.0221
3.2_T_1114	3.200	110	PVC	150	0.0000	3.2_T_2664	54.91	63	PVC	150	0.4120
3.2_T_1115	3.240	250	AC	140	0.0920	3.2_T_2665	53.87	63	PVC	150	3.0609
3.2_T_1116	3.240	63	PVC	150	0.3672	3.2_T_2666	58.32	63	PVC	150	0.0459
3.2_T_1117	3.250	63	PVC	150	0.0000	3.2_T_2667	54.00	63	PVC	150	0.0606
3.2_T_1118	3.250	160	PVC	150	0.3659	3.2_T_2668	54.00	63	PVC	150	0.0110
3.2_T_1119	3.280	250	PVC	150	0.0907	3.2_T_2669	54.02	63	PVC	150	0.0992
3.2_T_1120	3.300	63	PVC	150	0.6316	3.2_T_2670	54.33	250	PVC	150	0.0000
3.2_T_1121	3.330	250	PVC	150	0.0894	3.2_T_2671	54.07	63	PVC	150	4.5365
3.2_T_1122	3.330	100	PVC	150	0.0000	3.2_T_2672	57.02	63	PVC	150	0.7465
3.2_T_1123	3.350	63	PVC	150	0.0889	3.2_T_2673	54.09	160	PVC	150	1.1721
3.2_T_1124	3.420	63	PVC	150	0.0000	3.2_T_2674	54.24	110	PVC	150	7.5895
3.2_T_1125	3.380	63	PVC	150	2.1126	3.2_T_2675	54.12	110	PVC	150	2.4915
3.2_T_1126	3.390	110	PVC	150	0.0000	3.2_T_2676	54.12	63	PVC	150	0.3575
3.2_T_1127	3.400	63	PVC	150	0.0876	3.2_T_2677	54.13	63	PVC	150	0.0440
3.2_T_1128	3.400	63	PVC	150	0.0875	3.2_T_2679	54.21	100	AC	140	0.1483
3.2_T_1129	3.440	100	PVC	150	7.5252	3.2_T_2680	54.22	63	PVC	150	0.1976
3.2_T_1130	3.500	200	AC	140	0.1702	3.2_T_2682	55.96	63	PVC	150	0.2925
3.2_T_1131	3.510	100	PVC	150	0.0000	3.2_T_2683	54.27	50	PVC	150	0.1920
3.2_T_1132	3.530	160	PVC	150	3.2033	3.2_T_2684	54.36	160	PVC	150	0.1917
3.2_T_1133	3.550	300	AC	140	0.0000	3.2_T_2686	54.42	50	PVC	150	0.0000
3.2_T_1134	3.580	63	PVC	150	0.0833	3.2_T_2687	54.45	110	PVC	150	0.1367
3.2_T_1135	3.640	63	PVC	150	7.9225	3.2_T_2688	54.47	63	PVC	150	0.0164
3.2_T_1136	3.650	63	PVC	150	0.9784	3.2_T_2689	54.65	110	PVC	150	1.6940
3.2_T_1137	3.720	160	PVC	150	0.3199	3.2_T_2691	54.61	63	PVC	150	0.1199
3.2_T_1138	3.730	63	PVC	150	1.1975	3.2_T_2692	54.76	63	PVC	150	0.2446
3.2_T_1139	3.750	110	PVC	150	0.0000	3.2_T_2693	54.77	160	PVC	150	1.0707

ID						ID					
3.2_T_1140	3.760	63	PVC	150	0.0792	3.2_T_2694	54.21	63	PVC	150	0.0000
3.2_T_1141	3.760	200	AC	140	2.6130	3.2_T_2695	57.39	63	PVC	150	0.0674
3.2_T_1143	3.770	63	PVC	150	0.0790	3.2_T_2696	54.88	63	PVC	150	0.0488
3.2_T_1144	3.770	200	AC	140	0.0789	3.2_T_2697	54.86	63	PVC	150	3.3804
3.2_T_1145	3.770	63	PVC	150	0.8681	3.2_T_2698	54.91	50	PVC	150	2.5262
3.2_T_1147	3.850	100	PVC	150	4.0218	3.2_T_2699	56.07	100	PVC	150	0.7167
3.2_T_1148	3.860	63	PVC	150	0.2312	3.2_T_2700	54.95	160	PVC	150	4.4529
3.2_T_1149	3.880	110	PVC	150	0.0000	3.2_T_2701	54.96	63	PVC	150	1.4514
3.2_T_1150	3.890	110	PVC	150	0.0765	3.2_T_2702	54.99	63	PVC	150	7.8276
3.2_T_1151	3.920	63	PVC	150	0.0000	3.2_T_2703	55.06	63	PVC	150	0.1514
3.2_T_1152	3.950	63	PVC	150	0.0000	3.2_T_2704	65.31	63	PVC	150	0.1960
3.2_T_1153	4.000	63	PVC	150	0.0000	3.2_T_2705	55.09	63	PVC	150	0.0216
3.2_T_1154	4.010	63	PVC	150	1.2620	3.2_T_2706	55.10	63	PVC	150	0.1080
3.2_T_1155	4.010	63	PVC	150	0.0000	3.2_T_2707	55.11	63	PVC	150	7.0867
3.2_T_1156	4.020	50	PVC	150	0.0000	3.2_T_2708	55.21	63	PVC	150	0.0324
3.2_T_1157	4.030	63	PVC	150	0.0739	3.2_T_2709	55.29	200	AC	140	2.4389
3.2_T_1158	4.030	200	PVC	150	1.6974	3.2_T_2710	55.46	100	PVC	150	6.2576
3.2_T_1159	4.070	63	PVC	150	0.0732	3.2_T_2711	55.32	110	PVC	150	1.3559
3.2_T_1160	4.080	100	PVC	150	10.509	3.2_T_2712	55.34	110	PVC	150	0.0323
3.2_T_1161	4.100	63	PVC	150	1.0883	3.2_T_2713	55.35	63	PVC	150	1.6562
3.2_T_1162	4.110	110	PVC	150	0.8688	3.2_T_2714	55.42	63	PVC	150	0.0000
3.2_T_1163	4.140	110	PVC	150	3.2329	3.2_T_2715	56.25	110	PVC	150	2.3547
3.2_T_1164	4.160	63	PVC	150	0.0715	3.2_T_2716	55.54	100	PVC	150	0.4395
3.2_T_1165	4.200	160	PVC	150	3.9654	3.2_T_2717	55.54	63	PVC	150	2.0045
3.2_T_1166	4.230	200	AC	140	1.6902	3.2_T_2719	55.65	63	PVC	150	0.1177
3.2_T_1167	4.260	110	PVC	150	0.9781	3.2_T_2720	56.09	110	PVC	150	0.4139
3.2_T_1168	4.290	110	PVC	150	0.2772	3.2_T_2721	55.88	200	PVC	150	1.4915
3.2_T_1169	4.300	160	PVC	150	0.0692	3.2_T_2722	55.69	63	PVC	150	0.7536
3.2_T_1170	4.360	200	AC	140	2.7995	3.2_T_2723	55.75	50	PVC	150	8.1150
3.2_T_1172	4.430	160	PVC	150	4.7669	3.2_T_2724	55.77	63	PVC	150	7.4827
3.2_T_1173	4.440	63	PVC	150	0.0000	3.2_T_2725	55.78	63	PVC	150	0.0053
3.2_T_1174	4.460	63	PVC	150	0.0667	3.2_T_2727	55.99	250	PVC	150	2.0522
3.2_T_1175	4.480	63	PVC	150	1.7272	3.2_T_2728	55.92	50	PVC	150	0.6334
3.2_T_1176	4.490	160	PVC	150	0.0000	3.2_T_2730	56.05	63	PVC	150	0.5311
3.2_T_1177	4.540	110	PVC	150	0.3278	3.2_T_2731	56.03	63	PVC	150	0.0213
3.2_T_1178	5.700	63	PVC	150	1.8285	3.2_T_2732	56.07	50	PVC	150	1.2953
3.2_T_1179	4.560	63	PVC	150	0.0000	3.2_T_2733	56.14	63	PVC	150	0.0583
3.2_T_1180	4.570	63	PVC	150	0.0000	3.2_T_2734	56.16	32	PVC	150	1.7384
3.2_T_1181	4.650	100	PVC	150	0.0000	3.2_T_2736	56.30	63	PVC	150	0.0634
3.2_T_1182	4.670	63	PVC	150	0.0000	3.2_T_2737	56.66	63	PVC	150	0.2259
3.2_T_1183	4.670	63	PVC	150	2.2288	3.2_T_2738	56.94	50	PVC	150	0.9619
3.2_T_1184	4.700	200	AC	140	0.0633	3.2_T_2739	57.41	63	PVC	150	0.0207
3.2_T_1185	4.720	110	PVC	150	0.0000	3.2_T_2740	56.40	63	PVC	150	0.0158
3.2_T_1186	4.720	50	PVC	150	22.131	3.2_T_2741	56.52	63	PVC	150	4.1344
3.2_T_1187	5.440	50	HF	130	89.212	3.2_T_2742	56.62	110	PVC	150	0.0105
3.2_T_1188	4.780	50	PVC	150	9.9034	3.2_T_2743	56.68	110	PVC	150	0.1838

ID	Col2	Col3	Col4	Col5	Col6	ID	Col2	Col3	Col4	Col5	Col6
3.2_T_1189	4.780	110	PVC	150	0.0000	3.2_T_2744	56.71	63	PVC	150	30.890
3.2_T_1190	4.800	63	PVC	150	0.0000	3.2_T_2745	56.76	110	PVC	150	0.0262
3.2_T_1192	4.840	200	AC	140	0.5534	3.2_T_2746	56.87	50	AC	140	0.0209
3.2_T_1193	4.860	110	PVC	150	1.7764	3.2_T_2747	57.20	63	PVC	150	0.5672
3.2_T_1194	4.880	63	PVC	150	0.1221	3.2_T_2748	56.93	63	PVC	150	0.0732
3.2_T_1195	4.880	110	PVC	150	0.0000	3.2_T_2749	56.94	63	PVC	150	0.0052
3.2_T_1196	4.890	110	PVC	150	0.0000	3.2_T_2750	56.97	50	PVC	150	0.1359
3.2_T_1197	4.910	110	PVC	150	0.0000	3.2_T_2751	56.97	63	PVC	150	3.4638
3.2_T_1199	4.910	63	PVC	150	0.0000	3.2_T_2752	57.10	300	AC	140	0.0521
3.2_T_1200	4.910	63	PVC	150	0.4240	3.2_T_2753	57.05	250	AC	140	0.0000
3.2_T_1201	4.920	63	PVC	150	0.6657	3.2_T_2754	58.99	63	PVC	150	0.0101
3.2_T_1202	4.920	63	PVC	150	0.4838	3.2_T_2756	57.16	63	PVC	150	2.4630
3.2_T_1203	4.930	200	PVC	150	2.4174	3.2_T_2757	57.85	63	PVC	150	0.0875
3.2_T_1204	4.940	110	PVC	150	0.0000	3.2_T_2758	57.36	63	PVC	150	3.2951
3.2_T_1205	4.950	110	PVC	150	0.0000	3.2_T_2759	57.37	300	AC	140	0.0156
3.2_T_1206	4.950	63	PVC	150	0.0601	3.2_T_2760	57.38	63	PVC	150	0.0052
3.2_T_1207	4.950	110	PVC	150	0.0000	3.2_T_2761	58.00	63	PVC	150	0.0000
3.2_T_1208	4.950	110	PVC	150	0.0000	3.2_T_2762	57.54	63	PVC	150	0.0104
3.2_T_1209	7.300	160	PVC	150	0.9382	3.2_T_2763	57.55	63	PVC	150	0.0155
3.2_T_1210	4.960	63	PVC	150	0.0601	3.2_T_2764	57.57	63	PVC	150	0.0310
3.2_T_1211	5.970	63	PVC	150	1.8951	3.2_T_2765	57.59	63	PVC	150	1.2353
3.2_T_1212	4.960	100	AC	140	0.0000	3.2_T_2766	78.62	63	PVC	150	0.0644
3.2_T_1213	4.970	110	PVC	150	0.0000	3.2_T_2767	57.61	63	PVC	150	1.6534
3.2_T_1214	4.970	110	PVC	150	0.0000	3.2_T_2768	58.02	63	PVC	150	0.8055
3.2_T_1215	5.000	110	PVC	150	0.0000	3.2_T_2769	57.62	63	PVC	150	1.3379
3.2_T_1216	4.970	63	PVC	150	0.1197	3.2_T_2770	57.55	63	PVC	150	0.0000
3.2_T_1217	4.970	100	HF	130	0.0000	3.2_T_2771	57.75	110	PVC	150	0.0464
3.2_T_1218	4.980	110	PVC	150	0.0000	3.2_T_2772	57.80	50	PVC	150	3.8111
3.2_T_1219	4.980	110	PVC	150	0.0000	3.2_T_2773	58.72	110	PVC	150	0.7097
3.2_T_1220	4.990	110	PVC	150	0.0000	3.2_T_2774	65.02	63	PVC	150	0.0275
3.2_T_1221	4.990	100	PVC	150	0.0000	3.2_T_2775	57.85	63	PVC	150	0.1081
3.2_T_1222	4.990	110	PVC	150	0.0000	3.2_T_2776	57.82	63	PVC	150	0.2935
3.2_T_1223	4.990	110	PVC	150	0.0000	3.2_T_2777	57.94	50	PVC	150	1.9779
3.2_T_1224	5.000	63	PVC	150	0.0000	3.2_T_2778	57.85	63	PVC	150	0.0617
3.2_T_1225	5.000	100	PVC	150	0.0000	3.2_T_2779	57.91	63	PVC	150	0.2261
3.2_T_1226	5.000	110	PVC	150	0.0000	3.2_T_2780	58.37	63	PVC	150	0.0663
3.2_T_1227	5.000	50	PVC	150	0.0000	3.2_T_2781	58.00	63	PVC	150	0.0616
3.2_T_1228	5.000	110	PVC	150	0.0000	3.2_T_2782	58.01	63	PVC	150	0.2463
3.2_T_1229	5.000	110	PVC	150	0.0000	3.2_T_2783	58.06	110	PVC	150	1.0663
3.2_T_1230	5.000	63	PVC	150	0.0000	3.2_T_2784	69.05	63	PVC	150	8.2892
3.2_T_1231	5.000	200	PVC	150	0.0000	3.2_T_2785	58.07	63	PVC	150	3.8133
3.2_T_1232	5.000	63	PVC	150	0.0000	3.2_T_2786	58.09	63	PVC	150	0.5124
3.2_T_1233	5.000	63	PVC	150	0.0000	3.2_T_2787	58.10	63	PVC	150	1.7828
3.2_T_1234	5.000	110	PVC	150	0.0000	3.2_T_2788	58.12	110	PVC	150	0.9578
3.2_T_1235	5.010	110	PVC	150	0.0000	3.2_T_2789	58.16	50	AC	140	0.0410
3.2_T_1236	5.010	110	PVC	150	0.0000	3.2_T_2790	58.17	63	PVC	150	0.0614

3.2_T_1237	5.040	110	PVC	150	0.1182	3.2_T_2791	58.17	63	PVC	150	0.0051
3.2_T_1238	5.040	63	PVC	150	0.0591	3.2_T_2792	58.20	160	PVC	150	2.1275
3.2_T_1239	5.050	110	PVC	150	0.4130	3.2_T_2793	58.31	250	AC	140	0.0102
3.2_T_1240	5.050	110	PVC	150	0.0000	3.2_T_2794	58.63	63	PVC	150	2.5742
3.2_T_1241	5.080	63	PVC	150	0.0000	3.2_T_2795	58.84	63	PVC	150	0.1164
3.2_T_1242	5.080	100	PVC	150	0.2929	3.2_T_2796	58.42	63	PVC	150	1.0597
3.2_T_1243	5.100	110	PVC	150	0.0000	3.2_T_2797	68.69	63	PVC	150	0.2427
3.2_T_1244	7.370	110	PVC	150	0.3633	3.2_T_2798	58.44	63	PVC	150	0.0000
3.2_T_1245	5.140	110	PVC	150	0.8695	3.2_T_2799	67.87	63	PVC	150	0.0000
3.2_T_1246	5.140	50	PVC	150	22.240	3.2_T_2800	123.8	63	PVC	150	0.0385
3.2_T_1247	5.140	63	PVC	150	0.2315	3.2_T_2801	58.54	110	PVC	150	0.0153
3.2_T_1248	5.180	110	PVC	150	12.711	3.2_T_2802	58.68	63	PVC	150	0.0152
3.2_T_1249	5.260	63	PVC	150	20.954	3.2_T_2803	58.77	50	PVC	150	1.5497
3.2_T_1250	5.270	63	PVC	150	0.2261	3.2_T_2804	58.78	100	AC	140	0.6887
3.2_T_1251	5.300	63	PVC	150	0.0000	3.2_T_2805	58.80	63	PVC	150	0.3594
3.2_T_1252	5.330	63	PVC	150	2.0682	3.2_T_2806	58.82	110	PVC	150	1.8319
3.2_T_1253	5.330	63	PVC	150	0.0558	3.2_T_2807	58.83	63	PVC	150	0.2682
3.2_T_1254	5.340	63	PVC	150	0.5014	3.2_T_2808	58.87	50	PVC	150	14.961
3.2_T_1255	5.340	200	PVC	150	3.6763	3.2_T_2809	59.05	100	PVC	150	0.1059
3.2_T_1256	5.360	110	PVC	150	3.2183	3.2_T_2810	59.04	63	PVC	150	0.0303
3.2_T_1258	5.400	110	PVC	150	3.8051	3.2_T_2811	59.04	63	PVC	150	0.1361
3.2_T_1259	5.430	110	PVC	150	0.0548	3.2_T_2812	59.08	63	PVC	150	0.6751
3.2_T_1260	5.470	63	PVC	150	0.0544	3.2_T_2813	59.16	200	AC	140	3.1398
3.2_T_1261	6.360	50	PVC	150	3.6974	3.2_T_2814	59.17	63	PVC	150	0.0050
3.2_T_1262	5.540	63	PVC	150	0.6451	3.2_T_2815	59.59	63	PVC	150	2.1778
3.2_T_1263	5.560	63	PVC	150	0.0000	3.2_T_2816	59.29	63	PVC	150	0.2812
3.2_T_1264	5.560	160	PVC	150	0.1606	3.2_T_2817	59.24	110	PVC	150	0.0251
3.2_T_1265	5.590	160	PVC	150	3.6184	3.2_T_2818	59.27	63	PVC	150	0.0352
3.2_T_1266	5.650	160	PVC	150	0.0527	3.2_T_2819	59.31	110	PVC	150	0.2810
3.2_T_1267	5.680	63	PVC	150	0.0524	3.2_T_2820	59.36	63	PVC	150	0.0251
3.2_T_1268	5.680	50	PVC	150	0.1572	3.2_T_2821	62.52	63	PVC	150	0.0000
3.2_T_1269	5.690	63	PVC	150	2.7222	3.2_T_2822	59.92	63	PVC	150	5.4739
3.2_T_1270	5.710	200	PVC	150	0.0000	3.2_T_2823	59.43	63	PVC	150	0.1202
3.2_T_1271	5.720	63	PVC	150	0.0521	3.2_T_2825	59.53	160	PVC	150	0.4600
3.2_T_1272	5.720	160	PVC	150	2.2365	3.2_T_2826	59.63	63	PVC	150	0.0749
3.2_T_1273	6.590	110	PVC	150	2.3933	3.2_T_2827	60.04	110	PVC	150	0.8725
3.2_T_1274	5.730	63	PVC	150	0.0519	3.2_T_2828	59.72	63	PVC	150	0.0050
3.2_T_1275	5.760	63	PVC	150	0.2069	3.2_T_2829	72.84	63	PVC	150	0.0245
3.2_T_1276	5.810	63	PVC	150	0.0000	3.2_T_2830	59.92	110	PVC	150	0.4023
3.2_T_1277	5.800	63	PVC	150	0.0513	3.2_T_2831	59.84	63	PVC	150	0.3283
3.2_T_1278	5.810	110	PVC	150	0.0512	3.2_T_2832	60.15	110	PVC	150	2.4793
3.2_T_1279	5.830	63	PVC	150	5.6658	3.2_T_2833	59.89	63	PVC	150	0.1591
3.2_T_1280	5.850	110	PVC	150	0.0000	3.2_T_2834	60.37	63	PVC	150	1.5729
3.2_T_1281	5.880	110	PVC	150	0.1013	3.2_T_2835	59.98	63	PVC	150	2.7296
3.2_T_1282	5.880	63	PVC	150	0.0000	3.2_T_2836	59.99	110	PVC	150	0.1687
3.2_T_1283	8.300	110	PVC	150	1.1477	3.2_T_2837	67.29	110	PVC	150	1.0527

3.2_T_1284	5.920	110	PVC	150	0.0000	3.2_T_2838	60.00	63	PVC	150	0.0893
3.2_T_1285	5.930	160	PVC	150	0.0000	3.2_T_2839	60.01	63	PVC	150	0.0694
3.2_T_1286	5.960	63	PVC	150	0.0000	3.2_T_2840	60.09	250	AC	140	0.0000
3.2_T_1287	5.990	63	PVC	150	0.0000	3.2_T_2841	60.09	50	PVC	150	4.4778
3.2_T_1288	6.000	63	PVC	150	0.0496	3.2_T_2842	61.14	63	PVC	150	0.1655
3.2_T_1289	6.000	63	PVC	150	0.0496	3.2_T_2843	60.31	63	PVC	150	7.8924
3.2_T_1290	6.000	63	PVC	150	0.0496	3.2_T_2844	60.32	63	PVC	150	0.9228
3.2_T_1291	6.000	63	PVC	150	0.0000	3.2_T_2845	60.52	50	PVC	150	0.0885
3.2_T_1292	6.000	63	PVC	150	0.0992	3.2_T_2846	60.54	400	HF	130	0.0983
3.2_T_1293	6.000	63	PVC	150	0.0992	3.2_T_2847	61.04	63	PVC	150	1.7069
3.2_T_1294	6.000	63	PVC	150	0.0000	3.2_T_2848	60.61	63	PVC	150	0.7219
3.2_T_1295	6.000	63	PVC	150	0.0000	3.2_T_2849	60.57	63	PVC	150	0.0197
3.2_T_1296	6.000	63	PVC	150	0.0496	3.2_T_2850	60.60	100	AC	140	0.7221
3.2_T_1297	6.000	63	PVC	150	0.0992	3.2_T_2851	60.91	63	PVC	150	0.0586
3.2_T_1298	6.000	63	PVC	150	0.0496	3.2_T_2852	60.67	50	PVC	150	2.7133
3.2_T_1299	6.000	63	PVC	150	0.0000	3.2_T_2853	60.74	63	PVC	150	1.2594
3.2_T_1300	6.000	63	PVC	150	0.0496	3.2_T_2854	60.86	63	PVC	150	4.3038
3.2_T_1301	6.000	63	PVC	150	0.0000	3.2_T_2855	61.09	63	PVC	150	5.6273
3.2_T_1302	8.790	63	PVC	150	8.5016	3.2_T_2856	60.96	63	PVC	150	0.0049
3.2_T_1303	6.090	63	PVC	150	5.2799	3.2_T_2857	63.00	160	PVC	150	0.6425
3.2_T_1304	6.090	63	PVC	150	0.0000	3.2_T_2858	60.98	63	PVC	150	0.1757
3.2_T_1305	6.110	110	PVC	150	0.2922	3.2_T_2859	61.98	110	PVC	150	0.0192
3.2_T_1306	6.130	63	PVC	150	0.0000	3.2_T_2860	61.04	63	PVC	150	0.7412
3.2_T_1307	6.140	63	PVC	150	0.0970	3.2_T_2861	61.02	50	AC	140	0.0927
3.2_T_1308	6.150	300	AC	140	0.0000	3.2_T_2862	61.06	63	PVC	150	0.0341
3.2_T_1309	7.050	110	PVC	150	0.0000	3.2_T_2863	61.08	63	PVC	150	2.4075
3.2_T_1310	6.300	63	PVC	150	0.0472	3.2_T_2864	61.12	63	PVC	150	0.9351
3.2_T_1311	6.310	200	AC	140	0.6603	3.2_T_2865	61.12	63	PVC	150	1.5827
3.2_T_1312	6.350	160	PVC	150	0.0938	3.2_T_2866	61.16	110	PVC	150	1.6987
3.2_T_1313	6.360	110	PVC	150	0.0000	3.2_T_2867	61.24	63	PVC	150	0.0194
3.2_T_1314	6.370	63	PVC	150	0.0000	3.2_T_2868	61.25	63	PVC	150	5.9434
3.2_T_1315	6.390	450	HD	130	0.9780	3.2_T_2869	61.21	50	PVC	150	0.2529
3.2_T_1316	9.550	63	PVC	150	0.0312	3.2_T_2870	61.24	200	AC	140	2.6344
3.2_T_1317	6.420	110	PVC	150	0.0000	3.2_T_2871	63.45	63	PVC	150	1.6935
3.2_T_1318	6.430	63	PVC	150	0.0000	3.2_T_2872	61.29	110	PVC	150	0.1068
3.2_T_1319	6.560	110	PVC	150	0.0000	3.2_T_2873	62.70	63	PVC	150	0.6741
3.2_T_1320	6.470	63	PVC	150	0.0000	3.2_T_2874	61.34	63	PVC	150	0.0049
3.2_T_1321	6.480	63	PVC	150	4.4105	3.2_T_2875	61.35	63	PVC	150	1.8777
3.2_T_1322	6.480	63	PVC	150	0.6432	3.2_T_2876	61.39	110	PVC	150	0.8195
3.2_T_1323	6.480	110	PVC	150	6.2889	3.2_T_2877	61.66	200	PVC	150	0.0338
3.2_T_1324	6.490	63	PVC	150	0.0000	3.2_T_2878	61.42	63	PVC	150	0.0824
3.2_T_1325	6.530	63	PVC	150	0.0000	3.2_T_2879	61.42	63	PVC	150	2.5103
3.2_T_1326	8.860	63	PVC	150	0.3024	3.2_T_2880	61.52	63	PVC	150	0.7741
3.2_T_1327	6.550	200	AC	140	0.2272	3.2_T_2881	61.58	110	PVC	150	0.3239
3.2_T_1328	6.560	63	PVC	150	0.0000	3.2_T_2882	61.60	63	PVC	150	0.0628
3.2_T_1329	6.560	160	PVC	150	0.7255	3.2_T_2883	61.63	63	PVC	150	0.0676

ID	Value	Diameter	Material	C	Flow	ID	Value	Diameter	Material	C	Flow
3.2_T_1330	6.600	200	PVC	150	0.0451	3.2_T_2884	61.63	110	PVC	150	4.6125
3.2_T_1331	6.670	63	PVC	150	0.0000	3.2_T_2885	62.17	63	PVC	150	2.8870
3.2_T_1333	6.770	63	PVC	150	0.0000	3.2_T_2886	61.72	63	PVC	150	0.0000
3.2_T_1334	6.790	63	PVC	150	0.0439	3.2_T_2887	61.76	63	PVC	150	0.0627
3.2_T_1335	6.820	63	PVC	150	0.0000	3.2_T_2888	61.78	150	PVC	150	0.1446
3.2_T_1336	6.890	63	PVC	150	0.1727	3.2_T_2889	61.76	100	PVC	150	0.1205
3.2_T_1337	6.840	200	PVC	150	0.2177	3.2_T_2890	61.79	50	PVC	150	0.4287
3.2_T_1338	6.850	63	PVC	150	0.0000	3.2_T_2891	61.81	50	PVC	150	0.1252
3.2_T_1339	6.860	160	PVC	150	0.0434	3.2_T_2892	62.76	63	PVC	150	1.7787
3.2_T_1340	6.890	63	PVC	150	0.0432	3.2_T_2893	61.90	200	AC	140	0.5962
3.2_T_1341	6.890	63	PVC	150	0.0432	3.2_T_2894	61.99	63	PVC	150	1.9016
3.2_T_1342	6.950	600	HD	130	0.9855	3.2_T_2895	61.97	63	PVC	150	0.1537
3.2_T_1343	6.980	63	PVC	150	0.0852	3.2_T_2896	62.03	63	PVC	150	0.0048
3.2_T_1344	7.040	200	AC	140	2.1573	3.2_T_2897	62.18	63	PVC	150	0.1149
3.2_T_1345	7.040	110	PVC	150	0.0000	3.2_T_2898	62.56	50	PVC	150	13.0321
3.2_T_1346	7.060	63	PVC	150	0.0000	3.2_T_2899	62.30	110	PVC	150	0.0382
3.2_T_1347	7.600	63	PVC	150	0.0784	3.2_T_2900	95.30	63	PVC	150	0.2749
3.2_T_1348	7.080	63	PVC	150	0.0000	3.2_T_2901	62.39	63	PVC	150	3.9885
3.2_T_1349	7.930	63	PVC	150	0.0751	3.2_T_2902	62.52	200	AC	140	0.0381
3.2_T_1350	7.100	160	PVC	150	1.2570	3.2_T_2903	63.56	100	PVC	150	1.0256
3.2_T_1351	7.160	63	PVC	150	11.889	3.2_T_2904	62.58	200	PVC	150	3.3962
3.2_T_1352	7.170	63	PVC	150	0.0415	3.2_T_2905	62.63	50	PVC	150	0.0048
3.2_T_1353	7.180	110	PVC	150	0.0000	3.2_T_2906	62.69	63	PVC	150	0.7122
3.2_T_1354	7.190	200	AC	140	0.7447	3.2_T_2907	62.75	63	PVC	150	0.0047
3.2_T_1355	7.200	160	PVC	150	1.6541	3.2_T_2908	62.80	63	PVC	150	0.5451
3.2_T_1356	7.340	200	AC	140	2.6352	3.2_T_2909	74.18	50	PVC	150	0.1124
3.2_T_1357	7.370	110	PVC	150	0.0404	3.2_T_2910	62.88	63	PVC	150	0.7479
3.2_T_1358	7.390	63	PVC	150	0.0805	3.2_T_2911	62.90	250	AC	140	0.2082
3.2_T_1359	7.450	110	PVC	150	1.9587	3.2_T_2912	62.96	63	PVC	150	0.1040
3.2_T_1360	7.530	63	PVC	150	8.4635	3.2_T_2913	62.97	63	PVC	150	0.0095
3.2_T_1361	7.550	63	PVC	150	2.6425	3.2_T_2914	63.09	63	PVC	150	0.0708
3.2_T_1362	7.560	63	PVC	150	0.0788	3.2_T_2915	63.98	50	PVC	150	0.0931
3.2_T_1363	7.590	63	PVC	150	0.5101	3.2_T_2916	80.74	63	PVC	150	0.0184
3.2_T_1364	9.800	63	PVC	150	0.0911	3.2_T_2919	63.50	250	PVC	150	2.5827
3.2_T_1365	7.630	110	PVC	150	0.3899	3.2_T_2920	63.32	63	PVC	150	3.8782
3.2_T_1366	7.640	63	PVC	150	2.3368	3.2_T_2921	63.32	63	PVC	150	0.0517
3.2_T_1367	7.660	63	PVC	150	7.2699	3.2_T_2922	63.51	63	PVC	150	0.0937
3.2_T_1368	7.740	63	PVC	150	0.2691	3.2_T_2923	63.52	110	PVC	150	0.2390
3.2_T_1369	7.740	100	PVC	150	0.2691	3.2_T_2924	63.52	63	PVC	150	0.9231
3.2_T_1370	7.770	110	PVC	150	0.0000	3.2_T_2925	63.58	63	PVC	150	0.0000
3.2_T_1371	7.810	110	PVC	150	0.0000	3.2_T_2926	63.59	63	PVC	150	0.1311
3.2_T_1373	7.920	160	PVC	150	1.2400	3.2_T_2927	63.74	63	PVC	150	0.8499
3.2_T_1374	7.930	63	PVC	150	0.0375	3.2_T_2928	64.60	160	PVC	150	0.0599
3.2_T_1375	8.030	100	PVC	150	0.4447	3.2_T_2929	83.95	63	PVC	150	0.0567
3.2_T_1376	7.990	200	PVC	150	1.6765	3.2_T_2930	63.80	110	PVC	150	0.6299
3.2_T_1377	7.990	63	PVC	150	2.2715	3.2_T_2931	62.97	63	PVC	150	0.0000

3.2_T_1378	8.020	63	PVC	150	0.0371	3.2_T_2932	64.14	100	PVC	150	0.0557
3.2_T_1379	8.030	63	PVC	150	0.0000	3.2_T_2933	64.23	63	PVC	150	0.0139
3.2_T_1380	8.080	160	PVC	150	1.1415	3.2_T_2934	64.67	63	PVC	150	1.1646
3.2_T_1381	8.090	63	PVC	150	0.0000	3.2_T_2935	64.05	63	PVC	150	0.6227
3.2_T_1382	8.110	63	PVC	150	0.0000	3.2_T_2936	64.20	63	PVC	150	0.0603
3.2_T_1383	8.130	200	PVC	150	3.0382	3.2_T_2937	65.23	110	PVC	150	1.4556
3.2_T_1384	8.170	63	PVC	150	0.0365	3.2_T_2938	64.34	160	PVC	150	0.0833
3.2_T_1385	8.170	200	PVC	150	0.3277	3.2_T_2939	64.29	63	PVC	150	0.0278
3.2_T_1386	8.200	110	PVC	150	21.641	3.2_T_2940	64.30	63	PVC	150	0.0509
3.2_T_1387	8.210	110	PVC	150	0.1812	3.2_T_2941	64.40	63	PVC	150	2.5051
3.2_T_1388	8.290	100	PVC	150	4.7740	3.2_T_2942	64.32	63	PVC	150	7.8299
3.2_T_1389	8.310	200	PVC	150	0.2509	3.2_T_2943	64.42	63	PVC	150	0.7531
3.2_T_1391	8.410	63	PVC	150	0.0708	3.2_T_2945	70.87	63	PVC	150	0.5460
3.2_T_1392	8.450	63	PVC	150	3.3811	3.2_T_2946	69.53	63	PVC	150	0.0214
3.2_T_1393	8.480	63	PVC	150	0.0000	3.2_T_2947	64.88	50	AC	140	0.1055
3.2_T_1394	8.520	110	PVC	150	0.7689	3.2_T_2948	64.90	50	PVC	150	12.039
3.2_T_1395	8.530	63	PVC	150	99.047	3.2_T_2949	65.00	160	PVC	150	0.0229
3.2_T_1396	8.630	63	PVC	150	12.414	3.2_T_2950	67.00	63	PVC	150	1.6039
3.2_T_1397	8.630	300	AC	140	0.3448	3.2_T_2951	65.05	63	PVC	150	0.0229
3.2_T_1398	8.630	110	PVC	150	0.4482	3.2_T_2952	65.20	110	PVC	150	0.7396
3.2_T_1399	8.660	63	PVC	150	0.0000	3.2_T_2953	65.26	63	PVC	150	0.1460
3.2_T_1400	8.690	200	AC	140	3.1164	3.2_T_2954	65.14	110	PVC	150	2.7693
3.2_T_1401	8.710	200	AC	140	0.3076	3.2_T_2955	65.15	63	PVC	150	0.1325
3.2_T_1402	8.750	63	PVC	150	0.1701	3.2_T_2956	65.23	63	PVC	150	0.1141
3.2_T_1403	8.760	63	PVC	150	11.009	3.2_T_2957	65.25	110	PVC	150	0.4288
3.2_T_1405	11.55	63	PVC	150	8.2491	3.2_T_2958	65.38	63	PVC	150	0.0000
3.2_T_1406	8.820	90	PVC	150	0.0675	3.2_T_2959	65.48	63	PVC	150	0.0682
3.2_T_1407	8.820	200	PVC	150	5.9735	3.2_T_2960	65.53	63	PVC	150	0.1317
3.2_T_1408	8.830	110	PVC	150	9.9800	3.2_T_2961	79.36	100	AC	140	0.0713
3.2_T_1409	8.840	160	PVC	150	0.0000	3.2_T_2962	65.98	160	PVC	150	1.5068
3.2_T_1410	11.81	63	PVC	150	0.3276	3.2_T_2963	65.67	63	PVC	150	0.3490
3.2_T_1411	8.870	63	PVC	150	0.0671	3.2_T_2964	65.71	63	PVC	150	3.8231
3.2_T_1412	8.870	63	PVC	150	0.0671	3.2_T_2965	65.80	160	PVC	150	1.1761
3.2_T_1413	8.920	100	AC	140	0.2335	3.2_T_2966	65.83	63	PVC	150	0.0226
3.2_T_1414	12.92	110	PVC	150	0.2534	3.2_T_2967	68.21	63	PVC	150	0.1527
3.2_T_1415	9.040	250	AC	140	2.8658	3.2_T_2968	66.07	63	PVC	150	0.0180
3.2_T_1416	9.040	63	PVC	150	1.0532	3.2_T_2969	96.28	63	PVC	150	0.0464
3.2_T_1417	9.050	200	PVC	150	1.4799	3.2_T_2970	67.18	63	PVC	150	0.0753
3.2_T_1418	9.060	63	PVC	150	0.0000	3.2_T_2971	66.12	63	PVC	150	0.8508
3.2_T_1419	9.070	63	PVC	150	0.0656	3.2_T_2972	66.22	110	PVC	150	0.0045
3.2_T_1420	9.070	63	PVC	150	0.1640	3.2_T_2973	66.22	63	PVC	150	0.3821
3.2_T_1421	9.080	250	PVC	150	0.0000	3.2_T_2974	66.33	63	PVC	150	0.0224
3.2_T_1422	9.090	300	AC	140	0.2619	3.2_T_2975	78.25	63	PVC	150	0.2244
3.2_T_1423	9.140	63	PVC	150	1.4011	3.2_T_2976	66.59	63	PVC	150	0.5275
3.2_T_1424	9.170	160	PVC	150	0.0000	3.2_T_2977	68.28	63	PVC	150	0.1221
3.2_T_1425	9.170	110	PVC	150	0.0000	3.2_T_2978	92.96	50	PVC	150	1.6587

3.2_T_1426	9.240	63	PVC	150	0.0322	3.2_T_2979	67.05	63	PVC	150	0.0710
3.2_T_1427	9.280	200	AC	140	0.6094	3.2_T_2980	69.80	63	PVC	150	0.0128
3.2_T_1428	9.380	110	PVC	150	0.5711	3.2_T_2981	66.76	50	PVC	150	99.591
3.2_T_1429	9.460	63	PVC	150	0.0315	3.2_T_2982	66.82	50	PVC	150	0.0223
3.2_T_1430	9.600	63	PVC	150	0.0310	3.2_T_2983	67.34	63	PVC	150	0.5084
3.2_T_1431	9.570	63	PVC	150	6.6527	3.2_T_2984	66.92	50	PVC	150	0.5026
3.2_T_1432	9.600	63	PVC	150	2.6675	3.2_T_2985	66.98	63	PVC	150	0.0622
3.2_T_1433	9.610	63	PVC	150	0.0620	3.2_T_2986	67.04	63	PVC	150	0.0666
3.2_T_1434	9.620	63	PVC	150	0.0619	3.2_T_2987	67.11	160	PVC	150	0.6565
3.2_T_1435	9.640	63	PVC	150	0.0000	3.2_T_2988	74.64	110	PVC	150	0.0040
3.2_T_1437	9.740	63	PVC	150	10.148	3.2_T_2989	67.14	63	PVC	150	0.0355
3.2_T_1438	9.760	63	PVC	150	0.0305	3.2_T_2990	68.25	63	PVC	150	0.0523
3.2_T_1439	10.38	110	PVC	150	0.1720	3.2_T_2991	67.28	63	PVC	150	1.9864
3.2_T_1440	9.850	63	PVC	150	0.0000	3.2_T_2992	93.83	63	PVC	150	0.0793
3.2_T_1441	9.860	63	PVC	150	0.0302	3.2_T_2993	67.38	63	PVC	150	3.0925
3.2_T_1442	9.890	100	PVC	150	0.3611	3.2_T_2994	73.81	63	PVC	150	1.9196
3.2_T_1443	9.910	63	PVC	150	0.0000	3.2_T_2995	67.65	63	PVC	150	0.0000
3.2_T_1444	11.45	63	PVC	150	1.2995	3.2_T_2996	67.89	63	PVC	150	0.0877
3.2_T_1445	9.920	160	PVC	150	2.0106	3.2_T_2997	67.72	63	PVC	150	1.1693
3.2_T_1446	9.960	200	AC	140	1.2553	3.2_T_2998	67.53	400	HF	130	0.1014
3.2_T_1447	10.05	110	PVC	150	0.0000	3.2_T_2999	92.07	50	PVC	150	2.3601
3.2_T_1448	10.06	63	PVC	150	0.0000	3.2_T_3000	67.69	200	PVC	150	0.0220
3.2_T_1449	10.06	63	PVC	150	0.1479	3.2_T_3001	67.68	63	PVC	150	0.0308
3.2_T_1450	10.08	63	PVC	150	0.0591	3.2_T_3002	67.89	110	PVC	150	0.8374
3.2_T_1451	10.09	63	PVC	150	0.0590	3.2_T_3003	72.87	50	PVC	150	0.9966
3.2_T_1452	10.10	100	PVC	150	4.6857	3.2_T_3004	67.79	63	PVC	150	0.0483
3.2_T_1453	10.11	150	AC	140	0.4417	3.2_T_3005	67.84	63	PVC	150	6.8187
3.2_T_1454	10.11	63	PVC	150	0.0589	3.2_T_3006	68.00	63	PVC	150	1.8777
3.2_T_1455	10.12	110	PVC	150	0.5586	3.2_T_3007	68.05	110	PVC	150	1.3604
3.2_T_1457	10.21	63	PVC	150	0.0874	3.2_T_3008	68.09	50	PVC	150	9.7267
3.2_T_1458	10.24	63	PVC	150	0.0581	3.2_T_3009	68.14	50	PVC	150	0.0393
3.2_T_1459	10.26	63	PVC	150	0.0000	3.2_T_3010	68.16	200	PVC	150	0.4367
3.2_T_1460	10.32	63	PVC	150	0.3749	3.2_T_3011	75.01	63	PVC	150	2.3969
3.2_T_1461	10.33	63	PVC	150	0.0000	3.2_T_3012	71.75	63	PVC	150	0.0290
3.2_T_1462	10.37	63	PVC	150	0.0574	3.2_T_3014	68.45	63	PVC	150	0.1261
3.2_T_1463	10.41	200	AC	140	0.5432	3.2_T_3015	68.72	63	PVC	150	0.0043
3.2_T_1465	10.44	63	PVC	150	0.3135	3.2_T_3016	68.54	63	PVC	150	0.0825
3.2_T_1466	10.48	63	PVC	150	0.8240	3.2_T_3017	68.40	63	PVC	150	0.0435
3.2_T_1467	10.48	63	PVC	150	0.0568	3.2_T_3018	68.58	63	PVC	150	0.1259
3.2_T_1468	10.50	200	AC	140	0.2553	3.2_T_3019	68.64	63	PVC	150	0.0130
3.2_T_1469	10.50	63	PVC	150	0.0567	3.2_T_3020	68.66	110	PVC	150	1.7037
3.2_T_1470	10.58	32	PVC	150	1.7435	3.2_T_3021	68.68	63	PVC	150	5.7339
3.2_T_1471	10.59	200	AC	140	1.5172	3.2_T_3022	68.71	200	PVC	150	0.0780
3.2_T_1472	10.72	160	PVC	150	0.1111	3.2_T_3023	68.77	63	PVC	150	0.0000
3.2_T_1473	10.61	63	PVC	150	0.1683	3.2_T_3024	70.00	63	PVC	150	6.6416
3.2_T_1474	10.67	100	PVC	150	0.0837	3.2_T_3025	91.03	63	PVC	150	0.0098

3.2_T_1475	10.70	110	PVC	150	0.0000	3.2_T_3026	68.99	63	PVC	150	0.0000
3.2_T_1476	10.71	200	PVC	150	4.2512	3.2_T_3027	70.94	63	PVC	150	0.6419
3.2_T_1477	10.74	63	PVC	150	0.0000	3.2_T_3028	68.96	63	PVC	150	0.1813
3.2_T_1478	10.89	63	PVC	150	0.0273	3.2_T_3029	69.14	50	PVC	150	0.1550
3.2_T_1479	10.95	63	PVC	150	0.0544	3.2_T_3030	69.41	200	PVC	150	0.4160
3.2_T_1480	10.98	110	PVC	150	3.5505	3.2_T_3031	69.26	63	PVC	150	0.0043
3.2_T_1481	11.00	63	PVC	150	0.0271	3.2_T_3033	78.26	63	PVC	150	0.0495
3.2_T_1482	11.02	63	PVC	150	0.0540	3.2_T_3035	69.67	300	AC	140	0.0256
3.2_T_1483	11.03	63	PVC	150	0.0000	3.2_T_3036	69.68	63	PVC	150	0.0384
3.2_T_1484	11.10	63	PVC	150	0.0805	3.2_T_3037	69.78	63	PVC	150	2.2693
3.2_T_1485	11.13	63	PVC	150	0.0535	3.2_T_3038	69.87	63	PVC	150	0.0852
3.2_T_1486	11.18	63	PVC	150	0.0533	3.2_T_3039	69.88	63	PVC	150	0.1789
3.2_T_1487	11.22	110	PVC	150	4.4303	3.2_T_3040	69.89	63	PVC	150	0.0213
3.2_T_1488	11.56	50	PVC	150	0.8238	3.2_T_3041	69.93	63	PVC	150	2.3964
3.2_T_1489	11.35	63	PVC	150	0.0787	3.2_T_3042	70.04	110	PVC	150	2.8472
3.2_T_1491	11.37	110	PVC	150	0.0000	3.2_T_3043	70.54	50	PVC	150	2.8822
3.2_T_1492	11.38	63	PVC	150	0.0523	3.2_T_3044	71.64	160	PVC	150	0.4529
3.2_T_1493	11.78	63	PVC	150	0.7580	3.2_T_3045	93.01	63	PVC	150	0.1952
3.2_T_1494	11.42	63	PVC	150	0.0521	3.2_T_3046	70.16	63	PVC	150	0.0594
3.2_T_1495	11.49	63	PVC	150	0.0259	3.2_T_3047	70.21	160	PVC	150	0.0000
3.2_T_1496	11.53	200	PVC	150	1.7815	3.2_T_3048	70.28	63	PVC	150	0.2457
3.2_T_1497	11.63	63	PVC	150	1.1258	3.2_T_3050	70.48	500	HD	130	1.2712
3.2_T_1498	11.67	63	PVC	150	0.2551	3.2_T_3051	70.48	63	PVC	150	2.0777
3.2_T_1499	11.71	63	PVC	150	0.0508	3.2_T_3052	70.52	63	PVC	150	0.0084
3.2_T_1500	11.69	110	PVC	150	1.2727	3.2_T_3053	70.59	110	PVC	150	0.0042
3.2_T_1501	11.87	63	PVC	150	0.0251	3.2_T_3054	70.68	160	PVC	150	1.1919
3.2_T_1502	11.90	63	PVC	150	0.0000	3.2_T_3055	70.66	50	PVC	150	0.5308
3.2_T_1503	11.90	63	PVC	150	1.7758	3.2_T_3056	95.73	63	PVC	150	0.0684
3.2_T_1504	11.91	110	PVC	150	3.0487	3.2_T_3057	71.05	50	HF	130	7.9180
3.2_T_1505	11.92	63	PVC	150	0.7988	3.2_T_3058	79.07	63	PVC	150	0.0904
3.2_T_1506	11.99	110	PVC	150	0.0000	3.2_T_3059	71.19	63	PVC	150	2.2830
3.2_T_1507	12.00	63	PVC	150	0.0000	3.2_T_3060	71.83	63	PVC	150	0.0995
3.2_T_1508	12.00	63	PVC	150	0.0496	3.2_T_3061	71.21	63	PVC	150	1.5257
3.2_T_1509	12.00	63	PVC	150	0.0000	3.2_T_3062	71.31	63	PVC	150	0.0668
3.2_T_1510	12.00	63	PVC	150	0.0496	3.2_T_3063	72.02	63	PVC	150	0.0207
3.2_T_1511	12.00	63	PVC	150	0.0000	3.2_T_3064	71.48	160	PVC	150	0.0458
3.2_T_1512	12.04	63	PVC	150	0.0989	3.2_T_3065	71.44	110	PVC	150	0.0333
3.2_T_1513	12.04	63	PVC	150	0.0247	3.2_T_3066	71.71	63	PVC	150	0.3155
3.2_T_1514	12.05	110	PVC	150	0.2223	3.2_T_3067	71.73	63	PVC	150	5.9047
3.2_T_1515	12.09	63	PVC	150	0.0739	3.2_T_3068	71.93	63	PVC	150	3.4098
3.2_T_1516	12.14	200	AC	140	1.4221	3.2_T_3069	72.01	63	PVC	150	0.5911
3.2_T_1517	12.20	63	PVC	150	5.1713	3.2_T_3070	72.09	63	PVC	150	0.0496
3.2_T_1518	12.26	200	AC	140	2.5725	3.2_T_3071	72.56	63	PVC	150	2.3506
3.2_T_1519	12.27	200	AC	140	0.0728	3.2_T_3072	72.17	110	PVC	150	0.2928
3.2_T_1520	12.30	110	PVC	150	2.7107	3.2_T_3073	72.17	63	PVC	150	0.2021
3.2_T_1521	12.31	63	PVC	150	0.0000	3.2_T_3074	72.36	63	PVC	150	9.3712

3.2_T_1522	12.34	63	PVC	150	0.0241	3.2_T_3075	72.27	50	PVC	150	0.0783
3.2_T_1524	12.36	160	PVC	150	3.2995	3.2_T_3076	72.27	63	PVC	150	0.1071
3.2_T_1525	12.41	110	PVC	150	3.8363	3.2_T_3077	72.33	63	PVC	150	0.0288
3.2_T_1526	12.45	63	PVC	150	0.0717	3.2_T_3078	72.58	63	PVC	150	0.0656
3.2_T_1527	12.45	63	PVC	150	0.0478	3.2_T_3079	72.63	63	PVC	150	0.0656
3.2_T_1528	12.54	63	PVC	150	0.0000	3.2_T_3080	72.49	50	PVC	150	1.4003
3.2_T_1529	12.57	63	PVC	150	1.3740	3.2_T_3081	72.53	63	PVC	150	1.0342
3.2_T_1530	12.61	63	PVC	150	0.0708	3.2_T_3082	97.38	63	PVC	150	1.7178
3.2_T_1531	12.63	63	PVC	150	0.7540	3.2_T_3083	72.62	63	PVC	150	0.0451
3.2_T_1532	12.64	110	PVC	150	0.0236	3.2_T_3084	72.84	50	PVC	150	0.3759
3.2_T_1533	12.72	160	PVC	150	0.1170	3.2_T_3086	80.09	63	PVC	150	1.0704
3.2_T_1534	12.77	110	PVC	150	0.0000	3.2_T_3087	73.00	63	PVC	150	0.0979
3.2_T_1535	12.78	63	PVC	150	0.0000	3.2_T_3088	73.06	63	PVC	150	0.0489
3.2_T_1536	13.04	110	PVC	150	0.1827	3.2_T_3089	73.06	63	PVC	150	6.7916
3.2_T_1537	12.88	63	PVC	150	0.0000	3.2_T_3090	73.09	110	PVC	150	0.1100
3.2_T_1538	12.89	110	PVC	150	0.0462	3.2_T_3091	73.17	50	AC	140	1.4807
3.2_T_1540	13.01	63	PVC	150	0.0687	3.2_T_3092	73.48	63	PVC	150	0.0162
3.2_T_1541	13.03	250	AC	140	0.5939	3.2_T_3093	73.37	110	PVC	150	2.1054
3.2_T_1543	13.09	63	PVC	150	0.0000	3.2_T_3094	73.99	50	PVC	150	0.2937
3.2_T_1544	13.13	200	PVC	150	0.0680	3.2_T_3095	73.59	100	PVC	150	0.0849
3.2_T_1545	13.17	200	PVC	150	3.7744	3.2_T_3096	73.60	63	PVC	150	0.0647
3.2_T_1546	13.19	500	HD	130	0.9476	3.2_T_3097	73.60	63	PVC	150	0.0445
3.2_T_1547	13.25	63	PVC	150	0.0450	3.2_T_3098	74.06	63	PVC	150	0.2291
3.2_T_1548	13.25	200	AC	140	0.7860	3.2_T_3099	73.72	160	PVC	150	0.0040
3.2_T_1549	13.27	63	PVC	150	0.0673	3.2_T_3100	73.79	63	PVC	150	1.6376
3.2_T_1550	13.36	600	HD	130	0.8466	3.2_T_3101	73.81	63	PVC	150	0.0242
3.2_T_1551	13.51	200	PVC	150	1.9392	3.2_T_3102	73.81	160	PVC	150	0.7904
3.2_T_1552	13.58	110	PVC	150	3.3765	3.2_T_3103	74.00	200	PVC	150	0.0563
3.2_T_1553	13.58	450	HD	130	0.0000	3.2_T_3104	74.13	100	PVC	150	0.6906
3.2_T_1554	13.62	100	AC	140	0.6118	3.2_T_3105	74.95	63	PVC	150	0.0635
3.2_T_1555	13.68	63	PVC	150	0.0653	3.2_T_3106	74.26	63	PVC	150	0.0040
3.2_T_1556	13.70	200	AC	140	2.5200	3.2_T_3107	77.70	600	HD	130	0.5248
3.2_T_1557	13.71	200	AC	140	0.0651	3.2_T_3108	74.39	63	PVC	150	1.9125
3.2_T_1558	13.74	63	PVC	150	1.0399	3.2_T_3109	74.86	90	PVC	150	0.2386
3.2_T_1559	13.80	160	PVC	150	1.0138	3.2_T_3110	74.48	110	PVC	150	2.4817
3.2_T_1560	13.90	63	PVC	150	0.0000	3.2_T_3111	75.53	110	PVC	150	0.1182
3.2_T_1561	13.90	150	AC	140	0.0000	3.2_T_3112	74.68	63	PVC	150	0.0399
3.2_T_1562	13.95	63	PVC	150	0.0000	3.2_T_3113	74.73	63	PVC	150	0.0239
3.2_T_1563	13.99	160	PVC	150	2.0213	3.2_T_3116	74.86	63	PVC	150	0.7594
3.2_T_1564	14.01	110	PVC	150	7.8379	3.2_T_3117	74.91	63	PVC	150	0.8106
3.2_T_1565	14.04	63	PVC	150	0.0000	3.2_T_3118	74.99	63	PVC	150	0.0199
3.2_T_1566	14.05	200	AC	140	1.3352	3.2_T_3119	75.22	200	AC	140	0.7836
3.2_T_1567	14.09	200	PVC	150	0.2959	3.2_T_3120	75.76	63	PVC	150	2.6679
3.2_T_1568	14.12	200	AC	140	12.730	3.2_T_3121	91.64	63	PVC	150	0.0033
3.2_T_1569	14.13	200	PVC	150	4.1911	3.2_T_3122	75.48	110	PVC	150	0.0749
3.2_T_1570	14.15	200	PVC	150	1.5145	3.2_T_3123	75.61	110	PVC	150	2.8068

ID						ID					
3.2_T_1571	14.15	63	PVC	150	2.0193	3.2_T_3124	75.69	63	PVC	150	0.0000
3.2_T_1572	14.15	63	PVC	150	0.0210	3.2_T_3125	75.72	110	PVC	150	3.6088
3.2_T_1573	14.15	63	PVC	150	0.0421	3.2_T_3126	75.75	110	PVC	150	0.4558
3.2_T_1574	14.18	63	PVC	150	1.0704	3.2_T_3127	75.93	50	AC	140	0.1921
3.2_T_1575	14.23	250	PVC	150	0.8786	3.2_T_3128	75.96	63	PVC	150	0.1058
3.2_T_1576	14.29	110	PVC	150	1.9785	3.2_T_3129	76.00	63	PVC	150	0.6110
3.2_T_1577	14.30	200	AC	140	2.2060	3.2_T_3130	76.03	63	PVC	150	1.3467
3.2_T_1578	14.31	63	PVC	150	0.0000	3.2_T_3131	76.11	63	PVC	150	0.2620
3.2_T_1579	14.31	200	PVC	150	3.7028	3.2_T_3132	76.11	63	PVC	150	0.4106
3.2_T_1580	14.42	63	PVC	150	27.727	3.2_T_3133	76.15	63	PVC	150	0.1016
3.2_T_1581	14.42	63	PVC	150	0.0619	3.2_T_3134	76.21	50	PVC	150	0.1953
3.2_T_1582	14.44	110	PVC	150	39.045	3.2_T_3135	76.68	63	PVC	150	0.0621
3.2_T_1583	14.46	63	PVC	150	0.0618	3.2_T_3136	77.38	63	PVC	150	1.5502
3.2_T_1584	14.50	100	HF	130	0.2053	3.2_T_3137	78.81	110	PVC	150	1.2993
3.2_T_1585	14.50	63	PVC	150	0.0205	3.2_T_3139	76.78	200	PVC	150	0.1589
3.2_T_1586	14.54	63	PVC	150	0.0614	3.2_T_3140	76.91	110	PVC	150	7.0670
3.2_T_1587	14.54	63	PVC	150	0.1023	3.2_T_3141	77.11	63	PVC	150	1.3704
3.2_T_1589	14.64	63	PVC	150	1.7076	3.2_T_3143	77.58	63	PVC	150	0.5832
3.2_T_1590	14.68	110	PVC	150	10.099	3.2_T_3144	76.98	160	PVC	150	1.5931
3.2_T_1591	14.72	110	PVC	150	0.0000	3.2_T_3145	78.73	150	PVC	150	0.3630
3.2_T_1592	14.73	63	PVC	150	0.4647	3.2_T_3146	77.37	63	PVC	150	3.7817
3.2_T_1593	14.74	200	AC	140	2.5844	3.2_T_3147	78.26	63	PVC	150	0.0647
3.2_T_1594	15.01	200	PVC	150	3.6294	3.2_T_3148	77.33	63	PVC	150	0.0000
3.2_T_1595	15.02	110	PVC	150	7.4909	3.2_T_3149	77.47	63	PVC	150	6.0745
3.2_T_1596	15.08	63	PVC	150	26.660	3.2_T_3150	77.44	63	PVC	150	0.0500
3.2_T_1597	15.16	63	PVC	150	0.0000	3.2_T_3151	77.45	63	PVC	150	0.0577
3.2_T_1598	15.18	160	PVC	150	0.7257	3.2_T_3152	78.34	63	PVC	150	0.0190
3.2_T_1599	15.21	63	PVC	150	0.0196	3.2_T_3153	81.30	63	PVC	150	2.4054
3.2_T_1600	15.30	63	PVC	150	4.2227	3.2_T_3154	77.57	63	PVC	150	0.0422
3.2_T_1601	15.30	63	PVC	150	0.0389	3.2_T_3155	77.75	110	PVC	150	0.1072
3.2_T_1602	15.31	63	PVC	150	0.0000	3.2_T_3156	77.78	63	PVC	150	2.4338
3.2_T_1603	15.56	160	PVC	150	0.0383	3.2_T_3157	77.67	63	PVC	150	0.0652
3.2_T_1604	15.38	63	PVC	150	1.5680	3.2_T_3158	77.74	63	PVC	150	0.0728
3.2_T_1605	15.45	200	AC	140	0.0000	3.2_T_3159	78.41	200	PVC	150	0.0494
3.2_T_1606	15.45	63	PVC	150	0.0193	3.2_T_3160	77.91	63	PVC	150	0.0459
3.2_T_1607	15.52	50	PVC	150	3.4528	3.2_T_3161	120.0	63	PVC	150	0.6076
3.2_T_1608	15.70	63	PVC	150	6.7120	3.2_T_3162	78.00	63	PVC	150	0.0229
3.2_T_1609	15.57	63	PVC	150	0.0000	3.2_T_3163	78.13	160	PVC	150	0.7811
3.2_T_1610	15.71	63	PVC	150	2.5195	3.2_T_3164	78.18	250	AC	140	1.1955
3.2_T_1611	15.77	63	PVC	150	0.0189	3.2_T_3165	78.19	110	PVC	150	0.0343
3.2_T_1612	15.89	50	PVC	150	0.2061	3.2_T_3166	122.9	50	PVC	150	0.1284
3.2_T_1613	15.89	63	PVC	150	0.1874	3.2_T_3167	80.28	250	AC	140	0.0260
3.2_T_1614	15.90	63	PVC	150	0.0187	3.2_T_3168	78.44	63	PVC	150	0.0380
3.2_T_1615	18.37	110	PVC	150	0.7939	3.2_T_3169	78.58	110	PVC	150	0.8106
3.2_T_1616	16.04	110	PVC	150	0.2412	3.2_T_3170	78.64	63	PVC	150	0.0416
3.2_T_1617	16.18	63	PVC	150	0.0000	3.2_T_3171	78.69	63	PVC	150	0.4123

ID	Val1	Size	Material	Coeff	Val2	ID	Val1	Size	Material	Coeff	Val2
3.2_T_1618	16.24	200	PVC	150	3.5558	3.2_T_3172	78.70	160	PVC	150	0.0265
3.2_T_1619	16.27	200	PVC	150	0.0000	3.2_T_3173	105.0	63	PVC	150	0.2013
3.2_T_1620	16.27	63	PVC	150	18.734	3.2_T_3174	79.15	63	PVC	150	0.1918
3.2_T_1621	17.27	63	PVC	150	0.8962	3.2_T_3175	79.00	63	PVC	150	0.4220
3.2_T_1622	16.32	110	PVC	150	1.6602	3.2_T_3176	79.58	63	PVC	150	0.6994
3.2_T_1623	16.33	110	PVC	150	1.6037	3.2_T_3177	89.86	250	AC	140	0.0530
3.2_T_1624	16.36	63	PVC	150	4.8040	3.2_T_3178	107.0	63	PVC	150	0.3089
3.2_T_1625	16.41	32	PVC	150	34.256	3.2_T_3179	80.04	63	PVC	150	0.1711
3.2_T_1626	16.46	63	PVC	150	0.0543	3.2_T_3181	80.25	50	PVC	150	1.0720
3.2_T_1627	16.49	63	PVC	150	0.0000	3.2_T_3182	79.51	50	PVC	150	5.3124
3.2_T_1628	16.50	63	PVC	150	3.8789	3.2_T_3183	79.78	110	PVC	150	0.0112
3.2_T_1629	19.18	63	PVC	150	1.9399	3.2_T_3184	79.79	63	PVC	150	1.0855
3.2_T_1630	16.63	100	PVC	150	0.1790	3.2_T_3185	80.22	63	PVC	150	2.8684
3.2_T_1631	16.63	63	PVC	150	0.6445	3.2_T_3186	79.99	63	PVC	150	0.0484
3.2_T_1632	18.10	63	PVC	150	0.8880	3.2_T_3187	80.15	110	PVC	150	0.0074
3.2_T_1633	16.71	63	PVC	150	0.0000	3.2_T_3188	112.0	110	PVC	150	0.0213
3.2_T_1634	16.76	110	PVC	150	0.0000	3.2_T_3189	80.23	160	PVC	150	0.0482
3.2_T_1635	16.80	63	PVC	150	1.8608	3.2_T_3191	80.43	63	PVC	150	0.4034
3.2_T_1636	16.82	63	PVC	150	0.0531	3.2_T_3192	80.41	63	PVC	150	0.2036
3.2_T_1637	16.92	63	PVC	150	0.0176	3.2_T_3193	114.7	50	PVC	150	0.3245
3.2_T_1638	16.92	110	PVC	150	1.4426	3.2_T_3194	80.44	50	PVC	150	0.0074
3.2_T_1639	18.38	63	PVC	150	10.622	3.2_T_3195	110.3	63	PVC	150	0.0000
3.2_T_1641	16.96	63	PVC	150	0.0176	3.2_T_3196	81.22	90	PVC	150	0.0000
3.2_T_1642	22.89	63	PVC	150	1.2353	3.2_T_3197	80.74	50	AC	140	3.8267
3.2_T_1643	17.04	63	PVC	150	0.9955	3.2_T_3198	80.77	110	PVC	150	4.6621
3.2_T_1644	17.05	63	PVC	150	0.0698	3.2_T_3199	80.87	110	PVC	150	0.0258
3.2_T_1645	17.10	110	PVC	150	1.7759	3.2_T_3200	80.99	63	PVC	150	0.0956
3.2_T_1646	17.13	110	PVC	150	3.7872	3.2_T_3201	81.03	63	PVC	150	3.1042
3.2_T_1647	17.15	63	PVC	150	7.3070	3.2_T_3202	81.07	63	PVC	150	1.5715
3.2_T_1648	17.19	63	PVC	150	1.1773	3.2_T_3203	81.09	63	PVC	150	0.5396
3.2_T_1649	17.22	63	PVC	150	2.7487	3.2_T_3204	82.26	63	PVC	150	5.2761
3.2_T_1650	17.29	63	PVC	150	0.1033	3.2_T_3205	81.33	160	PVC	150	0.0403
3.2_T_1651	17.42	63	PVC	150	0.0684	3.2_T_3207	81.29	63	PVC	150	0.0330
3.2_T_1652	17.42	160	PVC	150	0.0000	3.2_T_3208	81.29	63	PVC	150	0.1135
3.2_T_1653	17.43	63	PVC	150	0.0000	3.2_T_3209	153.5	63	PVC	150	0.3123
3.2_T_1654	17.64	160	PVC	150	9.7889	3.2_T_3210	81.39	160	PVC	150	0.9034
3.2_T_1655	17.52	110	PVC	150	0.0000	3.2_T_3211	81.39	110	PVC	150	0.0000
3.2_T_1656	17.87	63	PVC	150	0.0000	3.2_T_3213	81.46	63	PVC	150	0.0731
3.2_T_1657	17.52	110	PVC	150	3.0577	3.2_T_3214	81.51	63	PVC	150	1.0772
3.2_T_1658	17.56	63	PVC	150	3.4912	3.2_T_3215	81.66	63	PVC	150	0.1239
3.2_T_1659	17.60	110	PVC	150	0.0000	3.2_T_3216	81.88	63	PVC	150	0.1091
3.2_T_1660	17.63	63	PVC	150	8.1056	3.2_T_3217	81.88	50	AC	140	3.9189
3.2_T_1661	17.66	63	PVC	150	0.0169	3.2_T_3218	81.76	63	PVC	150	0.1165
3.2_T_1662	17.69	63	PVC	150	0.0000	3.2_T_3219	88.29	63	PVC	150	4.6021
3.2_T_1663	17.74	110	PVC	150	0.1175	3.2_T_3220	81.92	200	AC	140	0.1308
3.2_T_1664	17.75	63	PVC	150	0.0000	3.2_T_3221	81.92	110	PVC	150	1.9512

3.2_T_1665	17.75	63	PVC	150	0.0168	3.2_T_3222	98.56	63	PVC	150	0.1148
3.2_T_1666	17.76	200	AC	140	0.2515	3.2_T_3223	83.08	63	PVC	150	0.1505
3.2_T_1667	17.79	160	PVC	150	0.0000	3.2_T_3224	82.27	160	PVC	150	0.8357
3.2_T_1669	25.05	32	PVC	150	1.7346	3.2_T_3225	82.76	100	AC	140	1.1258
3.2_T_1670	17.98	63	PVC	150	0.0000	3.2_T_3227	82.55	100	PVC	150	0.2596
3.2_T_1671	18.25	63	PVC	150	1.6309	3.2_T_3228	82.73	63	PVC	150	0.8995
3.2_T_1672	18.03	100	PVC	150	7.4142	3.2_T_3229	82.69	100	PVC	150	0.1548
3.2_T_1674	18.07	63	PVC	150	2.9810	3.2_T_3230	82.83	63	PVC	150	7.1834
3.2_T_1676	18.10	63	PVC	150	0.3289	3.2_T_3231	82.88	250	PVC	150	0.0000
3.2_T_1677	18.10	63	PVC	150	1.2825	3.2_T_3232	82.87	50	HF	130	0.4059
3.2_T_1679	18.15	160	PVC	150	1.8857	3.2_T_3233	83.03	200	PVC	150	1.2583
3.2_T_1680	18.21	63	PVC	150	3.1556	3.2_T_3234	83.16	50	PVC	150	0.1969
3.2_T_1681	18.23	110	PVC	150	0.0163	3.2_T_3236	83.12	63	PVC	150	0.0072
3.2_T_1682	18.25	63	PVC	150	0.0163	3.2_T_3237	83.20	63	PVC	150	1.5634
3.2_T_1683	18.30	63	PVC	150	1.0896	3.2_T_3238	92.24	63	PVC	150	0.1355
3.2_T_1684	18.58	32	PVC	150	1.7301	3.2_T_3239	83.29	63	PVC	150	0.5968
3.2_T_1686	18.37	110	PVC	150	0.1296	3.2_T_3240	83.28	63	PVC	150	0.0572
3.2_T_1687	18.40	63	PVC	150	0.5175	3.2_T_3241	83.35	50	AC	140	0.2250
3.2_T_1688	18.44	63	PVC	150	0.6943	3.2_T_3242	83.76	63	PVC	150	0.0888
3.2_T_1689	18.44	300	PVC	150	3.4377	3.2_T_3243	111.4	110	PVC	150	0.0000
3.2_T_1690	19.29	63	PVC	150	0.0000	3.2_T_3244	88.19	63	PVC	150	0.1316
3.2_T_1692	18.60	63	PVC	150	1.6484	3.2_T_3245	83.62	200	PVC	150	4.2072
3.2_T_1693	18.87	160	PVC	150	9.5725	3.2_T_3246	83.71	110	PVC	150	0.2809
3.2_T_1694	23.97	63	PVC	150	2.1730	3.2_T_3247	84.22	200	PVC	150	0.0884
3.2_T_1695	18.70	200	PVC	150	0.0318	3.2_T_3248	83.80	63	PVC	150	0.0888
3.2_T_1697	18.77	63	PVC	150	0.0159	3.2_T_3249	83.82	50	AC	140	2.2123
3.2_T_1698	18.81	63	PVC	150	0.0317	3.2_T_3250	83.96	63	PVC	150	0.0603
3.2_T_1699	18.83	63	PVC	150	0.9799	3.2_T_3251	84.08	50	AC	140	0.2903
3.2_T_1700	21.26	63	PVC	150	0.0000	3.2_T_3252	84.94	50	PVC	150	0.2909
3.2_T_1701	18.88	63	PVC	150	0.0000	3.2_T_3253	84.10	50	PVC	150	21.976
3.2_T_1702	18.93	63	PVC	150	0.0157	3.2_T_3254	84.12	200	AC	140	0.0389
3.2_T_1703	18.98	50	PVC	150	0.0471	3.2_T_3255	84.76	50	PVC	150	5.2539
3.2_T_1704	18.99	63	PVC	150	0.0000	3.2_T_3256	84.28	63	PVC	150	0.3815
3.2_T_1705	19.02	200	PVC	150	1.1892	3.2_T_3257	89.46	63	PVC	150	0.5423
3.2_T_1706	20.96	200	PVC	150	0.1988	3.2_T_3258	104.6	32	PVC	150	1.7362
3.2_T_1707	19.21	200	PVC	150	1.1621	3.2_T_3259	84.81	63	PVC	150	3.7626
3.2_T_1708	19.17	63	PVC	150	0.0621	3.2_T_3261	84.71	63	PVC	150	0.0141
3.2_T_1709	19.18	63	PVC	150	1.9862	3.2_T_3262	84.82	63	PVC	150	0.0281
3.2_T_1710	19.24	200	PVC	150	0.3713	3.2_T_3263	93.32	50	AC	140	0.5901
3.2_T_1711	19.34	200	PVC	150	0.0308	3.2_T_3264	85.06	110	PVC	150	0.5074
3.2_T_1712	19.35	100	PVC	150	1.0150	3.2_T_3265	85.27	63	PVC	150	1.0542
3.2_T_1713	19.40	63	PVC	150	0.0460	3.2_T_3266	85.32	63	PVC	150	0.0244
3.2_T_1714	19.47	63	PVC	150	0.0765	3.2_T_3267	89.10	160	PVC	150	0.7483
3.2_T_1715	19.49	110	PVC	150	9.9747	3.2_T_3268	85.46	63	PVC	150	0.0244
3.2_T_1716	19.52	160	PVC	150	0.8387	3.2_T_3269	85.52	63	PVC	150	1.7576
3.2_T_1717	19.57	63	PVC	150	0.0000	3.2_T_3270	85.68	63	PVC	150	0.2536

3.2_T_1718	19.57	63	PVC	150	4.9894	3.2_T_3271	85.70	63	PVC	150	0.2987
3.2_T_1719	28.94	63	PVC	150	0.0000	3.2_T_3272	85.78	50	PVC	150	7.8076
3.2_T_1720	19.64	63	PVC	150	0.0000	3.2_T_3273	85.79	63	PVC	150	0.0798
3.2_T_1721	19.65	63	PVC	150	5.4979	3.2_T_3274	85.83	63	PVC	150	0.0867
3.2_T_1722	20.23	63	PVC	150	0.5739	3.2_T_3275	85.91	50	PVC	150	0.3257
3.2_T_1723	20.27	63	PVC	150	0.0000	3.2_T_3276	86.25	110	PVC	150	0.0000
3.2_T_1724	19.84	110	PVC	150	0.0000	3.2_T_3277	86.04	63	PVC	150	0.0692
3.2_T_1725	20.00	63	PVC	150	0.0298	3.2_T_3278	86.21	63	PVC	150	0.4109
3.2_T_1726	20.04	63	PVC	150	0.9062	3.2_T_3279	87.35	200	PVC	150	1.0052
3.2_T_1728	20.05	63	PVC	150	2.7312	3.2_T_3280	86.26	63	PVC	150	0.2623
3.2_T_1729	20.06	110	PVC	150	0.0148	3.2_T_3281	87.05	63	PVC	150	8.1380
3.2_T_1730	20.08	63	PVC	150	0.0000	3.2_T_3282	88.14	63	PVC	150	1.0199
3.2_T_1732	20.15	63	PVC	150	3.5609	3.2_T_3283	86.58	63	PVC	150	1.4440
3.2_T_1733	20.18	63	PVC	150	1.2685	3.2_T_3284	87.80	63	PVC	150	0.6238
3.2_T_1734	20.20	63	PVC	150	0.0000	3.2_T_3285	89.43	32	PVC	150	63.846
3.2_T_1735	20.27	63	PVC	150	5.1539	3.2_T_3286	87.03	160	PVC	150	1.3270
3.2_T_1737	20.30	63	PVC	150	0.1466	3.2_T_3287	87.14	200	PVC	150	0.2254
3.2_T_1738	20.32	63	PVC	150	0.0000	3.2_T_3288	92.52	100	PVC	150	0.8879
3.2_T_1739	20.33	63	PVC	150	0.7614	3.2_T_3289	88.69	63	PVC	150	0.2115
3.2_T_1740	20.37	63	PVC	150	0.0146	3.2_T_3290	87.35	63	PVC	150	0.0000
3.2_T_1742	20.41	63	PVC	150	0.0000	3.2_T_3291	87.48	200	PVC	150	0.3981
3.2_T_1743	20.50	63	PVC	150	0.0436	3.2_T_3292	87.54	63	PVC	150	0.8058
3.2_T_1744	20.50	110	PVC	150	0.5226	3.2_T_3293	87.71	63	PVC	150	0.0339
3.2_T_1745	20.52	63	PVC	150	6.0336	3.2_T_3294	87.73	63	PVC	150	0.7498
3.2_T_1746	20.53	63	PVC	150	0.1160	3.2_T_3295	87.77	200	PVC	150	1.2548
3.2_T_1747	20.74	63	PVC	150	0.5596	3.2_T_3296	93.80	63	PVC	150	4.3000
3.2_T_1748	20.68	63	PVC	150	0.0000	3.2_T_3297	88.41	150	AC	140	0.0000
3.2_T_1749	20.78	63	PVC	150	2.1195	3.2_T_3298	87.87	63	PVC	150	0.3455
3.2_T_1750	20.90	63	PVC	150	0.0570	3.2_T_3299	99.62	63	PVC	150	1.1474
3.2_T_1751	20.92	63	PVC	150	1.3942	3.2_T_3300	88.01	200	PVC	150	0.0406
3.2_T_1752	20.95	63	PVC	150	0.2416	3.2_T_3301	88.19	63	PVC	150	0.0304
3.2_T_1753	21.07	63	PVC	150	0.1130	3.2_T_3302	90.64	63	PVC	150	0.0197
3.2_T_1754	21.08	160	PVC	150	1.1863	3.2_T_3303	88.22	110	PVC	150	1.3529
3.2_T_1755	21.11	50	PVC	150	20.182	3.2_T_3304	89.55	110	PVC	150	3.6528
3.2_T_1756	21.19	63	PVC	150	0.0422	3.2_T_3305	88.43	63	PVC	150	0.3063
3.2_T_1757	21.26	63	PVC	150	2.4927	3.2_T_3306	88.52	63	PVC	150	0.2387
3.2_T_1758	21.28	160	PVC	150	0.0000	3.2_T_3307	88.48	63	PVC	150	0.0067
3.2_T_1759	21.29	63	PVC	150	0.0559	3.2_T_3308	88.52	50	PVC	150	0.2455
3.2_T_1760	21.31	63	PVC	150	0.6566	3.2_T_3310	121.7	63	PVC	150	0.0783
3.2_T_1761	21.40	63	PVC	150	7.8301	3.2_T_3311	88.76	200	AC	140	0.2817
3.2_T_1763	21.43	50	PVC	150	0.0139	3.2_T_3312	88.77	63	PVC	150	1.2876
3.2_T_1764	21.46	63	PVC	150	3.1209	3.2_T_3313	88.91	110	PVC	150	3.2744
3.2_T_1766	21.58	63	PVC	150	0.0138	3.2_T_3314	88.98	110	PVC	150	0.4248
3.2_T_1767	21.78	63	PVC	150	4.0727	3.2_T_3315	88.98	63	PVC	150	0.0401
3.2_T_1768	21.75	50	PVC	150	2.0662	3.2_T_3316	89.08	63	PVC	150	0.2372
3.2_T_1769	21.76	63	PVC	150	2.5848	3.2_T_3317	89.27	63	PVC	150	0.3568

3.2_T_1771	21.83	63	PVC	150	0.1909	3.2_T_3318	120.6	50	PVC	150	0.5827
3.2_T_1772	21.88	63	PVC	150	0.0408	3.2_T_3319	89.40	110	PVC	150	0.1632
3.2_T_1773	21.88	250	PVC	150	0.0000	3.2_T_3320	89.59	50	PVC	150	24.230
3.2_T_1774	21.96	63	PVC	150	0.3117	3.2_T_3321	117.9	63	PVC	150	0.3560
3.2_T_1775	21.98	63	PVC	150	0.0135	3.2_T_3323	90.24	63	PVC	150	0.0429
3.2_T_1776	21.98	63	PVC	150	2.0453	3.2_T_3324	90.73	63	PVC	150	0.1444
3.2_T_1777	22.05	63	PVC	150	1.2420	3.2_T_3325	107.5	63	PVC	150	0.2990
3.2_T_1778	22.10	63	PVC	150	0.0135	3.2_T_3326	89.80	63	PVC	150	0.2552
3.2_T_1779	22.28	63	PVC	150	0.0267	3.2_T_3327	89.89	63	PVC	150	0.5331
3.2_T_1780	22.30	63	PVC	150	0.0668	3.2_T_3328	90.27	63	PVC	150	1.2036
3.2_T_1781	22.34	63	PVC	150	2.6243	3.2_T_3329	89.97	63	PVC	150	1.6807
3.2_T_1782	22.36	63	PVC	150	3.3009	3.2_T_3330	90.06	110	PVC	150	0.6181
3.2_T_1783	22.46	63	PVC	150	0.4241	3.2_T_3331	90.30	63	PVC	150	0.0099
3.2_T_1784	22.48	110	PVC	150	0.0265	3.2_T_3332	124.5	110	PVC	150	0.0048
3.2_T_1785	22.49	63	PVC	150	4.0490	3.2_T_3333	90.48	63	PVC	150	4.7502
3.2_T_1786	29.73	300	PVC	150	0.2203	3.2_T_3334	90.59	160	PVC	150	1.0088
3.2_T_1787	22.58	63	PVC	150	0.0396	3.2_T_3335	92.90	110	PVC	150	3.2424
3.2_T_1788	22.59	63	PVC	150	36.664	3.2_T_3336	90.85	63	PVC	150	0.3670
3.2_T_1789	22.63	63	PVC	150	0.0526	3.2_T_3337	90.85	63	PVC	150	1.8971
3.2_T_1790	22.62	100	PVC	150	5.3167	3.2_T_3338	118.9	63	PVC	150	0.0125
3.2_T_1791	22.64	63	PVC	150	0.0657	3.2_T_3339	90.98	110	PVC	150	0.1407
3.2_T_1792	22.72	200	PVC	150	0.2358	3.2_T_3340	119.3	63	PVC	150	0.5512
3.2_T_1793	22.73	110	PVC	150	0.1702	3.2_T_3341	91.04	250	AC	140	0.1667
3.2_T_1794	22.72	400	HF	130	0.0000	3.2_T_3342	91.06	110	PVC	150	0.0000
3.2_T_1795	22.72	63	PVC	150	0.2228	3.2_T_3343	91.64	63	PVC	150	1.0166
3.2_T_1796	22.91	500	HD	130	4.0283	3.2_T_3344	91.24	63	PVC	150	0.0555
3.2_T_1797	23.00	63	PVC	150	0.0129	3.2_T_3345	91.37	200	PVC	150	0.9285
3.2_T_1798	22.97	63	PVC	150	0.0130	3.2_T_3346	91.53	63	PVC	150	0.3902
3.2_T_1799	23.01	63	PVC	150	2.2639	3.2_T_3347	91.54	63	PVC	150	6.0091
3.2_T_1800	23.04	63	PVC	150	0.0388	3.2_T_3348	91.67	63	PVC	150	0.8734
3.2_T_1801	23.13	100	PVC	150	8.1604	3.2_T_3349	92.44	63	PVC	150	10.787
3.2_T_1802	23.15	63	PVC	150	0.9771	3.2_T_3350	121.1	63	PVC	150	0.0074
3.2_T_1803	23.16	63	PVC	150	0.0129	3.2_T_3351	91.77	63	PVC	150	0.0324
3.2_T_1804	23.90	110	PVC	150	0.3113	3.2_T_3352	91.78	63	PVC	150	0.0454
3.2_T_1805	23.88	200	PVC	150	2.3931	3.2_T_3353	91.91	63	PVC	150	1.4347
3.2_T_1806	23.37	63	PVC	150	0.0255	3.2_T_3354	92.19	63	PVC	150	1.7855
3.2_T_1807	23.39	63	PVC	150	0.0127	3.2_T_3355	92.10	160	PVC	150	3.2254
3.2_T_1808	23.42	63	PVC	150	0.0636	3.2_T_3356	92.10	63	PVC	150	3.7941
3.2_T_1809	23.43	110	PVC	150	0.9148	3.2_T_3357	118.9	63	PVC	150	0.0751
3.2_T_1811	23.57	63	PVC	150	0.0126	3.2_T_3358	92.22	63	PVC	150	0.0291
3.2_T_1812	23.59	160	PVC	150	0.3533	3.2_T_3359	92.36	160	PVC	150	1.4181
3.2_T_1813	23.61	63	PVC	150	0.0000	3.2_T_3360	92.52	63	PVC	150	0.2155
3.2_T_1814	23.62	63	PVC	150	2.0543	3.2_T_3361	92.42	50	HF	130	1.4750
3.2_T_1815	23.67	63	PVC	150	0.3144	3.2_T_3362	92.50	63	PVC	150	0.0901
3.2_T_1816	23.70	63	PVC	150	0.0000	3.2_T_3363	126.5	63	PVC	150	0.0871
3.2_T_1817	23.83	200	AC	140	2.5361	3.2_T_3364	103.0	63	PVC	150	2.8574

3.2_T_1818	23.76	63	PVC	150	0.0752	3.2_T_3365	92.69	63	PVC	150	0.0193
3.2_T_1819	23.78	63	PVC	150	1.2015	3.2_T_3366	93.12	50	PVC	150	0.6073
3.2_T_1820	23.88	110	PVC	150	0.1994	3.2_T_3367	93.23	63	PVC	150	0.3065
3.2_T_1821	23.96	63	PVC	150	1.0433	3.2_T_3368	93.27	63	PVC	150	0.0830
3.2_T_1822	25.95	63	PVC	150	0.1262	3.2_T_3369	93.36	63	PVC	150	0.0096
3.2_T_1823	24.07	63	PVC	150	0.0618	3.2_T_3370	93.99	63	PVC	150	0.0633
3.2_T_1824	24.09	110	PVC	150	0.1236	3.2_T_3371	139.1	63	PVC	150	0.0642
3.2_T_1825	24.12	63	PVC	150	0.8885	3.2_T_3372	94.04	63	PVC	150	3.0670
3.2_T_1827	24.15	63	PVC	150	0.0247	3.2_T_3373	93.55	63	PVC	150	1.9726
3.2_T_1829	24.38	300	AC	140	0.0122	3.2_T_3374	93.58	63	PVC	150	0.0668
3.2_T_1830	24.42	100	AC	140	1.1456	3.2_T_3375	93.65	200	AC	140	0.5944
3.2_T_1831	24.45	300	AC	140	0.0122	3.2_T_3376	93.70	200	AC	140	0.0000
3.2_T_1832	24.48	63	PVC	150	0.0243	3.2_T_3377	93.86	63	PVC	150	2.1154
3.2_T_1833	24.48	63	PVC	150	0.0730	3.2_T_3378	96.27	200	PVC	150	1.1130
3.2_T_1834	24.50	50	PVC	150	0.1944	3.2_T_3379	99.76	63	PVC	150	0.1999
3.2_T_1835	24.59	160	PVC	150	1.1381	3.2_T_3380	93.93	63	PVC	150	4.3889
3.2_T_1836	24.61	63	PVC	150	0.6410	3.2_T_3381	94.00	63	PVC	150	0.0665
3.2_T_1837	24.70	200	AC	140	0.0844	3.2_T_3382	94.78	63	PVC	150	0.1916
3.2_T_1838	24.83	200	PVC	150	0.0120	3.2_T_3383	94.10	110	PVC	150	2.0086
3.2_T_1839	24.83	63	PVC	150	1.4744	3.2_T_3384	94.16	63	PVC	150	0.0854
3.2_T_1840	24.89	200	PVC	150	0.1076	3.2_T_3385	94.19	63	PVC	150	0.2181
3.2_T_1841	24.91	110	PVC	150	0.1673	3.2_T_3386	94.20	63	PVC	150	0.0758
3.2_T_1842	25.00	110	PVC	150	0.2857	3.2_T_3387	98.49	110	PVC	150	0.0000
3.2_T_1843	24.98	63	PVC	150	0.0000	3.2_T_3388	94.79	63	PVC	150	0.7128
3.2_T_1845	25.15	110	PVC	150	0.1893	3.2_T_3389	94.40	63	PVC	150	1.8004
3.2_T_1846	25.23	63	PVC	150	0.1180	3.2_T_3390	94.35	50	PVC	150	0.3187
3.2_T_1847	25.36	63	PVC	150	2.9103	3.2_T_3391	94.39	63	PVC	150	0.1324
3.2_T_1848	26.17	63	PVC	150	0.0569	3.2_T_3392	94.41	63	PVC	150	0.0631
3.2_T_1850	25.40	63	PVC	150	0.0703	3.2_T_3393	94.64	50	HF	130	0.3334
3.2_T_1851	25.41	63	PVC	150	0.0351	3.2_T_3394	172.3	63	PVC	150	0.1417
3.2_T_1852	27.00	32	PVC	150	1.7307	3.2_T_3395	95.92	63	PVC	150	0.0683
3.2_T_1854	25.47	63	PVC	150	0.0234	3.2_T_3396	94.74	63	PVC	150	0.0094
3.2_T_1855	35.93	63	PVC	150	0.0083	3.2_T_3397	109.97	110	PVC	150	0.0162
3.2_T_1856	25.58	63	PVC	150	1.6870	3.2_T_3398	94.99	100	PVC	150	2.9268
3.2_T_1857	31.40	63	PVC	150	2.2754	3.2_T_3399	110.8	63	PVC	150	0.0242
3.2_T_1858	25.62	160	PVC	150	0.6273	3.2_T_3400	102.6	63	PVC	150	0.0058
3.2_T_1859	25.69	63	PVC	150	0.0116	3.2_T_3401	95.05	50	AC	140	0.2255
3.2_T_1860	25.72	110	PVC	150	2.8930	3.2_T_3402	95.46	63	PVC	150	3.1367
3.2_T_1861	25.72	50	PVC	150	0.0000	3.2_T_3403	95.13	63	PVC	150	0.0063
3.2_T_1862	25.83	200	PVC	150	0.0000	3.2_T_3404	95.24	110	PVC	150	0.3844
3.2_T_1863	25.95	63	PVC	150	0.0115	3.2_T_3405	95.17	110	PVC	150	2.2018
3.2_T_1864	25.98	63	PVC	150	0.0229	3.2_T_3406	94.62	63	PVC	150	0.0000
3.2_T_1865	25.98	63	PVC	150	4.8468	3.2_T_3407	95.57	63	PVC	150	1.4140
3.2_T_1866	26.00	100	PVC	150	3.7547	3.2_T_3408	95.62	63	PVC	150	0.0654
3.2_T_1867	26.03	63	PVC	150	3.0871	3.2_T_3409	96.15	63	PVC	150	0.1115
3.2_T_1868	26.06	63	PVC	150	0.0114	3.2_T_3410	112.7	160	PVC	150	0.0344

3.2_T_1869	26.10	110	PVC	150	0.1368	3.2_T_3411	96.95	100	AC	140	0.8719
3.2_T_1870	26.26	63	PVC	150	0.1134	3.2_T_3412	96.05	63	PVC	150	0.5020
3.2_T_1871	26.36	63	PVC	150	0.0000	3.2_T_3413	96.54	200	PVC	150	0.0216
3.2_T_1872	26.43	63	PVC	150	0.1689	3.2_T_3414	96.36	63	PVC	150	0.0185
3.2_T_1874	26.55	63	PVC	150	0.0000	3.2_T_3415	96.14	50	PVC	150	0.0991
3.2_T_1875	26.56	63	PVC	150	0.0000	3.2_T_3416	99.52	63	PVC	150	0.6610
3.2_T_1876	26.87	100	PVC	150	3.7335	3.2_T_3417	96.41	63	PVC	150	0.0618
3.2_T_1877	26.60	50	PVC	150	3.2450	3.2_T_3418	96.53	63	PVC	150	0.8326
3.2_T_1878	26.68	63	PVC	150	1.3613	3.2_T_3419	96.50	50	PVC	150	10.987
3.2_T_1879	26.70	110	PVC	150	0.5017	3.2_T_3420	97.43	63	PVC	150	0.1680
3.2_T_1880	26.83	63	PVC	150	0.1553	3.2_T_3421	96.95	63	PVC	150	0.0645
3.2_T_1881	26.87	63	PVC	150	0.0665	3.2_T_3422	97.01	110	PVC	150	0.0552
3.2_T_1882	26.92	63	PVC	150	1.0062	3.2_T_3423	97.04	160	PVC	150	0.7852
3.2_T_1883	27.07	63	PVC	150	0.0110	3.2_T_3424	97.08	50	AC	140	5.7397
3.2_T_1884	27.08	110	PVC	150	0.2858	3.2_T_3426	97.27	250	AC	140	0.6457
3.2_T_1885	27.10	63	PVC	150	0.0659	3.2_T_3427	97.35	63	PVC	150	4.8402
3.2_T_1886	27.40	63	PVC	150	3.1499	3.2_T_3428	97.91	63	PVC	150	0.5442
3.2_T_1887	37.45	63	PVC	150	4.4115	3.2_T_3429	97.58	63	PVC	150	0.3081
3.2_T_1888	27.12	110	PVC	150	2.4694	3.2_T_3430	98.45	63	PVC	150	0.0061
3.2_T_1889	27.15	160	PVC	150	0.1096	3.2_T_3431	97.82	63	PVC	150	0.5690
3.2_T_1890	27.37	110	PVC	150	0.5438	3.2_T_3433	98.39	63	PVC	150	0.0787
3.2_T_1891	27.41	63	PVC	150	0.3149	3.2_T_3434	99.61	63	PVC	150	0.0000
3.2_T_1892	27.42	63	PVC	150	0.4450	3.2_T_3435	99.55	50	PVC	150	0.5681
3.2_T_1893	28.01	63	PVC	150	0.0744	3.2_T_3436	98.08	63	PVC	150	7.8326
3.2_T_1894	27.55	63	PVC	150	0.0108	3.2_T_3437	98.74	100	AC	140	0.1296
3.2_T_1895	27.59	200	PVC	150	1.1438	3.2_T_3438	98.94	63	PVC	150	1.1764
3.2_T_1896	27.57	50	PVC	150	0.8636	3.2_T_3439	118.6	110	PVC	150	0.0151
3.2_T_1897	27.61	63	PVC	150	0.0324	3.2_T_3440	98.53	160	PVC	150	0.6072
3.2_T_1898	27.64	160	PVC	150	4.8138	3.2_T_3441	99.15	160	PVC	150	0.3663
3.2_T_1899	27.73	63	PVC	150	1.1272	3.2_T_3442	111.0	63	PVC	150	1.1505
3.2_T_1900	27.80	63	PVC	150	0.8457	3.2_T_3443	98.63	50	HF	130	2.9697
3.2_T_1901	27.92	63	PVC	150	0.2239	3.2_T_3444	98.65	63	PVC	150	0.0543
3.2_T_1902	80.41	50	PVC	150	0.0222	3.2_T_3445	98.82	63	PVC	150	1.1235
3.2_T_1903	27.96	50	PVC	150	0.0639	3.2_T_3446	99.03	63	PVC	150	0.0271
3.2_T_1904	28.12	100	PVC	150	0.2434	3.2_T_3447	99.16	63	PVC	150	2.0893
3.2_T_1905	28.02	63	PVC	150	2.8152	3.2_T_3448	112.1	63	PVC	150	5.3884
3.2_T_1906	28.07	63	PVC	150	0.0000	3.2_T_3449	99.79	63	PVC	150	0.5608
3.2_T_1907	28.12	63	PVC	150	0.0635	3.2_T_3450	99.88	63	PVC	150	0.0626
3.2_T_1908	28.12	63	PVC	150	0.0318	3.2_T_3451	124.7	50	PVC	150	0.6089
3.2_T_1909	28.21	63	PVC	150	17.624	3.2_T_3452	99.82	63	PVC	150	0.4801
3.2_T_1910	28.24	63	PVC	150	0.3583	3.2_T_3453	100.8	110	PVC	150	0.0295
3.2_T_1911	28.25	63	PVC	150	0.0632	3.2_T_3455	101.7	63	PVC	150	1.4340
3.2_T_1912	28.30	50	PVC	150	0.1052	3.2_T_3456	99.97	63	PVC	150	0.0060
3.2_T_1913	28.32	63	PVC	150	5.1815	3.2_T_3457	100.1	63	PVC	150	0.1189
3.2_T_1914	28.39	63	PVC	150	0.0315	3.2_T_3458	100.2	50	AC	140	0.1248
3.2_T_1915	28.48	63	PVC	150	0.4912	3.2_T_3459	100.2	63	PVC	150	3.2076

3.2_T_1916	28.48	160	PVC	150	0.3449	3.2_T_3460	100.3	63	PVC	150	0.0148
3.2_T_1917	28.48	63	PVC	150	0.0000	3.2_T_3461	100.4	63	PVC	150	0.0415
3.2_T_1918	28.64	63	PVC	150	36.780	3.2_T_3462	100.5	63	PVC	150	22.437
3.2_T_1919	28.60	63	PVC	150	0.2498	3.2_T_3463	100.5	63	PVC	150	0.2428
3.2_T_1920	29.41	63	PVC	150	0.0810	3.2_T_3464	100.7	63	PVC	150	1.9874
3.2_T_1921	28.90	63	PVC	150	0.2472	3.2_T_3465	102.5	63	PVC	150	0.2266
3.2_T_1922	28.92	50	PVC	150	0.1235	3.2_T_3467	101.1	63	PVC	150	0.1797
3.2_T_1923	28.93	63	PVC	150	0.0000	3.2_T_3468	101.0	63	PVC	150	0.1503
3.2_T_1924	28.93	63	PVC	150	0.2881	3.2_T_3469	102.4	63	PVC	150	0.9037
3.2_T_1925	28.98	63	PVC	150	0.0205	3.2_T_3470	101.9	63	PVC	150	0.7535
3.2_T_1926	28.99	63	PVC	150	0.0205	3.2_T_3471	101.3	63	PVC	150	0.0000
3.2_T_1927	29.04	100	PVC	150	0.4305	3.2_T_3472	101.4	63	PVC	150	2.0629
3.2_T_1928	29.12	63	PVC	150	9.0169	3.2_T_3473	101.5	63	PVC	150	2.5052
3.2_T_1929	29.22	160	PVC	150	0.0204	3.2_T_3474	101.6	63	PVC	150	0.1143
3.2_T_1930	30.21	63	PVC	150	0.0099	3.2_T_3475	102.7	63	PVC	150	4.1168
3.2_T_1931	29.30	63	PVC	150	0.0000	3.2_T_3476	102.4	400	HF	130	0.0553
3.2_T_1932	29.32	63	PVC	150	0.0000	3.2_T_3477	101.7	63	PVC	150	2.3120
3.2_T_1933	29.35	63	PVC	150	0.7708	3.2_T_3478	101.7	110	PVC	150	1.1005
3.2_T_1934	29.43	160	PVC	150	1.4667	3.2_T_3479	102.5	110	PVC	150	0.3340
3.2_T_1935	29.43	200	PVC	150	1.8105	3.2_T_3480	101.9	63	PVC	150	0.7218
3.2_T_1936	29.60	63	PVC	150	0.6235	3.2_T_3481	103.3	63	PVC	150	0.0259
3.2_T_1937	29.61	63	PVC	150	0.3518	3.2_T_3482	102.1	63	PVC	150	0.0233
3.2_T_1938	30.21	63	PVC	150	0.1971	3.2_T_3483	102.1	63	PVC	150	1.8163
3.2_T_1939	29.69	63	PVC	150	0.0501	3.2_T_3484	102.8	63	PVC	150	2.2291
3.2_T_1940	29.70	160	PVC	150	0.8619	3.2_T_3485	102.2	63	PVC	150	0.0961
3.2_T_1941	29.71	63	PVC	150	0.0401	3.2_T_3486	102.8	63	PVC	150	0.2780
3.2_T_1942	29.71	50	PVC	150	0.1402	3.2_T_3487	102.4	63	PVC	150	2.2241
3.2_T_1943	29.72	63	PVC	150	0.0000	3.2_T_3488	102.6	63	PVC	150	0.5514
3.2_T_1944	29.77	63	PVC	150	1.1997	3.2_T_3489	135.2	63	PVC	150	0.5899
3.2_T_1946	29.77	32	PVC	150	13.296	3.2_T_3490	102.9	63	PVC	150	2.3566
3.2_T_1948	29.87	63	PVC	150	0.0000	3.2_T_3491	102.8	100	AC	140	2.3482
3.2_T_1949	32.34	400	HD	130	0.3682	3.2_T_3492	102.8	110	PVC	150	0.8886
3.2_T_1950	29.92	63	PVC	150	0.0199	3.2_T_3494	103.0	63	PVC	150	10.067
3.2_T_1951	29.97	63	PVC	150	5.6913	3.2_T_3496	104.6	50	PVC	150	0.3245
3.2_T_1952	29.97	250	AC	140	0.0099	3.2_T_3497	103.1	160	PVC	150	3.1648
3.2_T_1953	29.99	250	PVC	150	0.0199	3.2_T_3498	104.4	63	PVC	150	2.8889
3.2_T_1954	30.00	63	PVC	150	0.0199	3.2_T_3499	103.3	200	AC	140	0.0663
3.2_T_1955	30.00	63	PVC	150	0.0695	3.2_T_3500	103.3	110	PVC	150	0.4178
3.2_T_1957	30.10	63	PVC	150	9.2761	3.2_T_3501	103.3	63	PVC	150	0.0922
3.2_T_1958	30.13	110	PVC	150	2.2521	3.2_T_3502	103.4	63	PVC	150	4.5248
3.2_T_1959	30.22	50	PVC	150	0.0000	3.2_T_3503	104.9	63	PVC	150	1.2857
3.2_T_1960	30.31	63	PVC	150	0.0000	3.2_T_3504	142.2	63	PVC	150	1.4651
3.2_T_1961	30.32	200	AC	140	0.2847	3.2_T_3505	103.6	63	PVC	150	0.1839
3.2_T_1962	30.35	63	PVC	150	0.3629	3.2_T_3506	103.6	63	PVC	150	0.6807
3.2_T_1963	30.41	63	PVC	150	0.1174	3.2_T_3507	103.7	110	PVC	150	0.3273
3.2_T_1964	30.41	63	PVC	150	0.3621	3.2_T_3508	103.7	200	AC	140	0.7004

3.2_T_1965	30.43	50	PVC	150	0.0294	3.2_T_3509	103.7	63	PVC	150	0.0344
3.2_T_1966	30.43	110	PVC	150	0.1076	3.2_T_3510	103.8	50	HF	130	0.9266
3.2_T_1967	30.49	110	PVC	150	0.0000	3.2_T_3511	104.2	110	PVC	150	0.0600
3.2_T_1968	30.50	63	PVC	150	5.4755	3.2_T_3512	104.0	63	PVC	150	0.4896
3.2_T_1969	30.62	63	PVC	150	0.0097	3.2_T_3513	139.5	63	PVC	150	0.3179
3.2_T_1970	30.56	63	PVC	150	0.2045	3.2_T_3514	121.8	63	PVC	150	0.1638
3.2_T_1971	30.58	63	PVC	150	1.4600	3.2_T_3515	104.4	250	AC	140	0.8581
3.2_T_1972	30.66	110	PVC	150	0.4757	3.2_T_3516	104.4	50	AC	140	0.0770
3.2_T_1973	30.65	63	PVC	150	0.0486	3.2_T_3517	167.8	63	PVC	150	0.0852
3.2_T_1974	30.65	63	PVC	150	0.1845	3.2_T_3519	104.6	200	PVC	150	3.7398
3.2_T_1975	30.77	63	PVC	150	1.3448	3.2_T_3520	105.6	110	PVC	150	0.1974
3.2_T_1976	30.68	110	PVC	150	1.2420	3.2_T_3521	105.0	63	PVC	150	2.3040
3.2_T_1977	30.70	63	PVC	150	0.0000	3.2_T_3522	104.9	63	PVC	150	0.3802
3.2_T_1978	30.73	63	PVC	150	0.0484	3.2_T_3523	105.2	63	PVC	150	1.0162
3.2_T_1979	30.78	160	PVC	150	1.7406	3.2_T_3524	102.2	50	PVC	150	0.3144
3.2_T_1980	30.83	50	PVC	150	0.1062	3.2_T_3525	105.1	110	PVC	150	0.2351
3.2_T_1981	30.80	63	PVC	150	0.0097	3.2_T_3526	111.9	63	PVC	150	0.0585
3.2_T_1982	30.92	200	AC	140	0.6257	3.2_T_3527	105.5	63	PVC	150	0.0282
3.2_T_1983	30.94	63	PVC	150	0.2790	3.2_T_3528	106.9	63	PVC	150	1.3539
3.2_T_1984	31.04	63	PVC	150	0.0671	3.2_T_3529	106.2	63	PVC	150	0.0112
3.2_T_1985	31.05	160	PVC	150	2.2624	3.2_T_3530	158.6	63	PVC	150	0.8597
3.2_T_1986	56.81	32	PVC	150	1.7394	3.2_T_3532	106.2	110	PVC	150	3.1489
3.2_T_1987	31.09	63	PVC	150	0.0383	3.2_T_3533	107.4	63	PVC	150	0.6432
3.2_T_1988	31.14	63	PVC	150	0.1912	3.2_T_3534	168.7	63	PVC	150	0.2381
3.2_T_1989	31.14	300	AC	140	0.4779	3.2_T_3535	107.9	250	PVC	150	2.3474
3.2_T_1990	31.18	63	PVC	150	0.2196	3.2_T_3536	108.2	63	PVC	150	1.0176
3.2_T_1991	31.26	160	PVC	150	0.4381	3.2_T_3537	106.7	50	HF	130	0.1423
3.2_T_1992	43.06	63	PVC	150	0.0207	3.2_T_3538	115.5	63	PVC	150	0.2809
3.2_T_1993	31.51	63	PVC	150	0.0000	3.2_T_3539	106.9	63	PVC	150	0.8741
3.2_T_1994	31.31	63	PVC	150	0.0570	3.2_T_3540	107.3	200	AC	140	1.1424
3.2_T_1995	31.35	200	PVC	150	1.0918	3.2_T_3541	151.5	63	PVC	150	1.0161
3.2_T_1996	31.35	63	PVC	150	1.2152	3.2_T_3542	107.2	110	PVC	150	4.0306
3.2_T_1997	42.72	63	PVC	150	0.0279	3.2_T_3543	140.7	63	PVC	150	0.0402
3.2_T_1998	31.65	63	PVC	150	0.0000	3.2_T_3544	107.3	50	PVC	150	0.1970
3.2_T_1999	31.52	63	PVC	150	1.2939	3.2_T_3545	110.5	63	PVC	150	0.1212
3.2_T_2000	31.62	63	PVC	150	3.1249	3.2_T_3546	107.9	63	PVC	150	0.5739
3.2_T_2001	31.63	50	PVC	150	0.5082	3.2_T_3547	107.6	100	AC	140	0.0608
3.2_T_2002	31.67	63	PVC	150	0.4512	3.2_T_3548	107.7	63	PVC	150	0.4036
3.2_T_2003	31.84	32	PVC	150	1.7386	3.2_T_3549	108.1	50	PVC	150	0.2809
3.2_T_2004	34.65	200	PVC	150	0.0000	3.2_T_3550	231.8	50	PVC	150	0.1310
3.2_T_2005	85.17	63	PVC	150	0.0384	3.2_T_3551	108.2	63	PVC	150	0.6963
3.2_T_2006	31.74	63	PVC	150	0.1032	3.2_T_3552	108.2	200	AC	140	1.0345
3.2_T_2007	31.79	63	PVC	150	0.0281	3.2_T_3553	109.6	63	PVC	150	0.0217
3.2_T_2008	31.81	200	AC	140	0.0000	3.2_T_3554	145.1	63	PVC	150	0.0472
3.2_T_2009	31.81	63	PVC	150	0.0281	3.2_T_3555	117.3	50	PVC	150	1.0075
3.2_T_2010	31.91	63	PVC	150	5.2704	3.2_T_3556	109.5	63	PVC	150	0.3398

ID						ID					
3.2_T_2011	31.94	63	PVC	150	0.0186	3.2_T_3557	109.3	63	PVC	150	0.0109
3.2_T_2012	32.36	63	PVC	150	1.6463	3.2_T_3558	109.4	110	PVC	150	0.0218
3.2_T_2013	32.02	63	PVC	150	0.9482	3.2_T_3559	111.5	63	PVC	150	7.2922
3.2_T_2014	32.09	63	PVC	150	0.0557	3.2_T_3560	109.8	400	HF	130	0.0434
3.2_T_2015	32.15	50	PVC	150	4.5645	3.2_T_3562	109.4	63	PVC	150	0.0626
3.2_T_2016	32.74	63	PVC	150	0.0455	3.2_T_3563	109.5	200	AC	140	0.0490
3.2_T_2017	32.22	63	PVC	150	0.0000	3.2_T_3564	120.6	50	PVC	150	0.3481
3.2_T_2018	32.22	63	PVC	150	6.9745	3.2_T_3566	110.1	110	PVC	150	5.5963
3.2_T_2019	43.79	110	PVC	150	5.8386	3.2_T_3567	110.2	300	AC	140	0.0054
3.2_T_2020	32.28	63	PVC	150	2.4712	3.2_T_3568	112.3	63	PVC	150	0.0186
3.2_T_2021	32.69	200	PVC	150	0.0091	3.2_T_3569	110.7	200	AC	140	0.0188
3.2_T_2022	32.52	110	PVC	150	1.7850	3.2_T_3570	111.0	63	PVC	150	0.0724
3.2_T_2023	32.39	200	PVC	150	3.4920	3.2_T_3571	149.5	50	PVC	150	63.280
3.2_T_2024	32.44	63	PVC	150	1.8167	3.2_T_3572	111.1	63	PVC	150	0.0268
3.2_T_2025	32.62	63	PVC	150	0.0000	3.2_T_3573	111.4	160	PVC	150	0.3315
3.2_T_2026	33.05	63	PVC	150	0.1891	3.2_T_3575	128.5	63	PVC	150	1.2882
3.2_T_2027	32.68	63	PVC	150	0.0182	3.2_T_3576	111.6	63	PVC	150	0.0720
3.2_T_2028	32.70	63	PVC	150	0.0000	3.2_T_3577	111.8	63	PVC	150	0.0080
3.2_T_2029	39.26	200	AC	140	9.8701	3.2_T_3578	112.3	63	PVC	150	0.3922
3.2_T_2030	32.81	63	PVC	150	0.0000	3.2_T_3579	112.4	63	PVC	150	0.0080
3.2_T_2031	33.78	63	PVC	150	0.9253	3.2_T_3580	112.4	110	PVC	150	1.9948
3.2_T_2033	32.99	63	PVC	150	0.0181	3.2_T_3581	114.7	110	PVC	150	0.4699
3.2_T_2034	33.04	63	PVC	150	0.0180	3.2_T_3582	112.6	63	PVC	150	0.8933
3.2_T_2035	33.07	63	PVC	150	0.1170	3.2_T_3583	112.7	63	PVC	150	0.0211
3.2_T_2036	33.09	63	PVC	150	2.7523	3.2_T_3584	112.7	63	PVC	150	0.2113
3.2_T_2037	33.11	63	PVC	150	0.0000	3.2_T_3585	112.7	110	PVC	150	0.5967
3.2_T_2038	34.66	110	PVC	150	5.3161	3.2_T_3586	131.5	63	PVC	150	0.0136
3.2_T_2039	33.20	63	PVC	150	0.1255	3.2_T_3587	121.5	160	PVC	150	0.0245
3.2_T_2040	33.23	50	PVC	150	0.0627	3.2_T_3588	112.9	63	PVC	150	0.1266
3.2_T_2041	33.64	63	PVC	150	0.0885	3.2_T_3589	113.1	63	PVC	150	7.3093
3.2_T_2042	46.23	63	PVC	150	0.0193	3.2_T_3590	113.1	50	PVC	150	2.6537
3.2_T_2043	33.42	200	AC	140	0.3384	3.2_T_3591	113.8	100	HF	130	0.9080
3.2_T_2044	39.97	63	PVC	150	2.9343	3.2_T_3592	113.3	63	PVC	150	0.1812
3.2_T_2045	33.45	63	PVC	150	1.4771	3.2_T_3594	113.8	200	AC	140	1.0095
3.2_T_2046	33.46	63	PVC	150	0.0000	3.2_T_3595	113.8	63	PVC	150	1.0616
3.2_T_2047	33.46	100	PVC	150	1.2900	3.2_T_3596	113.9	450	HD	130	1.0876
3.2_T_2048	33.46	63	PVC	150	0.0267	3.2_T_3597	113.9	50	AC	140	0.2065
3.2_T_2049	34.61	32	PVC	150	13.288	3.2_T_3598	114.0	63	PVC	150	0.5719
3.2_T_2051	33.68	63	PVC	150	0.0354	3.2_T_3599	115.3	63	PVC	150	0.0000
3.2_T_2052	33.71	63	PVC	150	0.0177	3.2_T_3600	114.4	50	PVC	150	1.3109
3.2_T_2053	33.71	63	PVC	150	0.2649	3.2_T_3601	114.6	63	PVC	150	1.2257
3.2_T_2054	33.76	100	PVC	150	2.6365	3.2_T_3602	114.8	63	PVC	150	3.1604
3.2_T_2055	33.83	50	PVC	150	0.0000	3.2_T_3603	114.8	110	PVC	150	2.3414
3.2_T_2056	33.84	63	PVC	150	0.0088	3.2_T_3604	115.5	110	PVC	150	0.9538
3.2_T_2057	33.85	63	PVC	150	0.0264	3.2_T_3605	114.9	160	PVC	150	2.9023
3.2_T_2058	33.89	50	PVC	150	0.0351	3.2_T_3607	115.3	63	PVC	150	0.1962

3.2_T_2059	34.03	63	PVC	150	0.4636	3.2_T_3608	118.6	200	PVC	150	0.1029
3.2_T_2060	34.06	200	AC	140	1.6606	3.2_T_3609	116.1	110	PVC	150	0.6178
3.2_T_2061	34.41	63	PVC	150	0.0087	3.2_T_3610	115.8	110	PVC	150	1.0492
3.2_T_2062	34.09	63	PVC	150	0.0437	3.2_T_3611	116.0	50	PVC	150	0.3105
3.2_T_2063	34.10	63	PVC	150	0.7333	3.2_T_3612	115.8	63	PVC	150	4.8535
3.2_T_2064	34.20	63	PVC	150	0.3308	3.2_T_3613	116.3	250	PVC	150	0.0000
3.2_T_2065	34.38	110	PVC	150	0.3896	3.2_T_3614	124.5	110	PVC	150	4.2432
3.2_T_2066	34.38	63	PVC	150	1.1255	3.2_T_3615	116.7	63	PVC	150	0.3853
3.2_T_2067	35.70	63	PVC	150	0.2585	3.2_T_3616	116.9	63	PVC	150	0.1273
3.2_T_2068	34.42	63	PVC	150	0.0346	3.2_T_3617	116.9	63	PVC	150	5.1492
3.2_T_2069	34.47	63	PVC	150	9.5001	3.2_T_3618	117.0	50	PVC	150	0.4554
3.2_T_2070	34.48	100	PVC	150	1.3207	3.2_T_3619	117.9	200	PVC	150	2.2135
3.2_T_2071	34.63	63	PVC	150	0.0000	3.2_T_3620	117.8	110	PVC	150	0.1516
3.2_T_2072	34.67	160	PVC	150	1.2792	3.2_T_3621	117.5	100	PVC	150	6.1598
3.2_T_2073	34.81	63	PVC	150	3.3263	3.2_T_3622	141.5	90	PVC	150	0.0168
3.2_T_2074	34.86	200	PVC	150	3.6968	3.2_T_3623	117.6	50	PVC	150	0.3696
3.2_T_2075	35.63	110	PVC	150	2.5816	3.2_T_3624	121.1	63	PVC	150	0.0860
3.2_T_2076	35.49	63	PVC	150	0.4110	3.2_T_3625	117.7	63	PVC	150	0.0101
3.2_T_2077	35.00	110	PVC	150	0.1361	3.2_T_3626	165.7	63	PVC	150	0.1599
3.2_T_2078	35.82	110	PVC	150	0.5069	3.2_T_3627	149.6	63	PVC	150	0.0458
3.2_T_2079	34.96	110	PVC	150	0.1277	3.2_T_3628	124.2	63	PVC	150	0.4915
3.2_T_2080	35.09	63	PVC	150	0.0679	3.2_T_3629	149.2	63	PVC	150	0.0539
3.2_T_2081	35.22	110	PVC	150	0.0930	3.2_T_3630	122.6	110	PVC	150	2.2953
3.2_T_2082	35.23	63	PVC	150	0.0676	3.2_T_3631	142.4	63	PVC	150	0.0063
3.2_T_2083	44.50	63	PVC	150	0.0067	3.2_T_3632	150.7	63	PVC	150	0.4564
3.2_T_2084	35.24	50	PVC	150	2.2131	3.2_T_3633	118.5	63	PVC	150	1.6124
3.2_T_2085	35.29	63	PVC	150	2.1846	3.2_T_3634	126.2	200	PVC	150	3.1705
3.2_T_2086	47.66	63	PVC	150	0.1749	3.2_T_3636	118.4	63	PVC	150	0.1106
3.2_T_2087	66.45	63	PVC	150	0.0045	3.2_T_3637	118.5	100	AC	140	0.4873
3.2_T_2088	35.40	63	PVC	150	0.0000	3.2_T_3638	123.7	63	PVC	150	1.1235
3.2_T_2089	35.42	50	AC	140	0.1093	3.2_T_3639	121.8	63	PVC	150	9.6629
3.2_T_2090	35.43	110	PVC	150	1.1342	3.2_T_3640	155.9	250	PVC	150	0.1184
3.2_T_2091	35.47	63	PVC	150	0.0168	3.2_T_3641	119.4	250	PVC	150	2.1447
3.2_T_2092	35.56	110	PVC	150	0.3014	3.2_T_3642	119.5	200	AC	140	1.0790
3.2_T_2093	44.95	63	PVC	150	0.0265	3.2_T_3643	123.3	250	PVC	150	0.0024
3.2_T_2094	35.65	63	PVC	150	0.0835	3.2_T_3644	119.8	63	PVC	150	1.7226
3.2_T_2095	35.87	63	PVC	150	0.0332	3.2_T_3645	119.9	63	PVC	150	2.7079
3.2_T_2097	35.71	63	PVC	150	0.0667	3.2_T_3646	122.7	400	HD	130	0.2838
3.2_T_2098	36.19	110	PVC	150	0.4935	3.2_T_3647	120.7	63	PVC	150	0.1628
3.2_T_2099	35.78	200	AC	140	7.5463	3.2_T_3648	120.9	200	AC	140	0.6969
3.2_T_2100	35.79	63	PVC	150	0.0333	3.2_T_3649	120.9	63	PVC	150	0.4777
3.2_T_2101	35.83	63	PVC	150	0.0083	3.2_T_3650	122.1	63	PVC	150	4.6724
3.2_T_2102	35.87	63	PVC	150	5.4349	3.2_T_3651	121.3	63	PVC	150	0.4247
3.2_T_2103	35.89	50	PVC	150	11.170	3.2_T_3652	121.2	63	PVC	150	0.1769
3.2_T_2104	35.93	50	HF	130	12.013	3.2_T_3653	121.9	50	PVC	150	1.8239
3.2_T_2105	35.95	63	PVC	150	0.0083	3.2_T_3654	122.2	250	PVC	150	0.0049

3.2_T_2106	35.97	110	PVC	150	2.2754	3.2_T_3655	123.4	160	PVC	150	0.1062
3.2_T_2107	36.41	200	AC	140	2.5016	3.2_T_3656	122.5	50	PVC	150	0.0778
3.2_T_2108	36.10	63	PVC	150	0.0660	3.2_T_3657	122.3	110	PVC	150	0.1582
3.2_T_2109	36.12	50	PVC	150	0.2390	3.2_T_3658	122.3	200	AC	140	0.1022
3.2_T_2110	36.12	50	PVC	150	2.4146	3.2_T_3659	122.4	110	PVC	150	0.3040
3.2_T_2111	36.12	63	PVC	150	0.0000	3.2_T_3660	166.1	200	PVC	150	2.7072
3.2_T_2112	37.60	63	PVC	150	0.2138	3.2_T_3661	140.8	110	PVC	150	1.9664
3.2_T_2113	36.25	63	PVC	150	0.0164	3.2_T_3662	123.9	110	PVC	150	3.2374
3.2_T_2114	38.56	150	PVC	150	2.4545	3.2_T_3663	124.3	63	PVC	150	0.2204
3.2_T_2115	36.33	63	PVC	150	0.4260	3.2_T_3664	124.1	63	PVC	150	6.0570
3.2_T_2116	36.35	63	PVC	150	0.0737	3.2_T_3665	124.3	63	PVC	150	2.3247
3.2_T_2117	36.82	110	PVC	150	0.3638	3.2_T_3666	124.2	200	PVC	150	6.5775
3.2_T_2119	61.28	250	PVC	150	0.0874	3.2_T_3667	125.0	63	PVC	150	4.7889
3.2_T_2120	36.51	63	PVC	150	0.6441	3.2_T_3668	125.0	110	PVC	150	0.1524
3.2_T_2121	36.54	63	PVC	150	0.0000	3.2_T_3669	127.2	63	PVC	150	1.0974
3.2_T_2122	36.64	63	PVC	150	3.2576	3.2_T_3670	125.3	50	AC	140	0.8722
3.2_T_2123	36.65	63	PVC	150	0.2274	3.2_T_3671	127.8	63	PVC	150	2.4947
3.2_T_2124	36.65	63	PVC	150	0.0081	3.2_T_3672	125.4	63	PVC	150	0.1994
3.2_T_2125	36.65	63	PVC	150	0.0650	3.2_T_3673	181.6	63	PVC	150	0.6786
3.2_T_2126	36.69	63	PVC	150	0.0325	3.2_T_3674	125.8	50	AC	140	0.1917
3.2_T_2127	42.53	63	PVC	150	0.1400	3.2_T_3675	129.6	63	PVC	150	4.9690
3.2_T_2128	36.78	63	PVC	150	0.0243	3.2_T_3676	167.4	63	PVC	150	0.1138
3.2_T_2129	168.35	63	PVC	150	0.4898	3.2_T_3677	126.1	250	AC	140	0.6964
3.2_T_2130	36.83	63	PVC	150	2.2388	3.2_T_3678	127.5	63	PVC	150	1.3733
3.2_T_2131	36.83	110	PVC	150	0.2909	3.2_T_3679	163.3	63	PVC	150	0.0675
3.2_T_2132	37.67	110	PVC	150	0.8851	3.2_T_3680	130.1	63	PVC	150	9.2877
3.2_T_2133	41.86	63	PVC	150	11.641	3.2_T_3681	176.5	63	PVC	150	0.0388
3.2_T_2134	36.97	500	HD	130	1.1191	3.2_T_3682	126.4	63	PVC	150	0.0942
3.2_T_2135	36.97	50	PVC	150	0.3301	3.2_T_3683	132.9	160	PVC	150	0.0605
3.2_T_2136	36.97	110	PVC	150	0.1771	3.2_T_3684	127.7	200	PVC	150	2.4140
3.2_T_2137	36.98	63	PVC	150	0.1288	3.2_T_3685	132.7	63	PVC	150	0.0651
3.2_T_2138	36.99	63	PVC	150	0.1368	3.2_T_3687	127.6	300	AC	140	0.0000
3.2_T_2139	37.03	63	PVC	150	0.0884	3.2_T_3688	127.4	110	PVC	150	0.0070
3.2_T_2140	39.81	63	PVC	150	0.5832	3.2_T_3689	128.3	63	PVC	150	0.4523
3.2_T_2141	37.10	63	PVC	150	0.1685	3.2_T_3690	128.8	110	PVC	150	2.4885
3.2_T_2142	37.17	110	PVC	150	0.3444	3.2_T_3691	127.6	110	PVC	150	0.0490
3.2_T_2143	37.21	63	PVC	150	0.0080	3.2_T_3692	134.0	63	PVC	150	0.4753
3.2_T_2144	37.23	63	PVC	150	0.1519	3.2_T_3693	127.8	50	PVC	150	0.0419
3.2_T_2145	37.48	63	PVC	150	1.6040	3.2_T_3694	127.9	63	PVC	150	0.0512
3.2_T_2146	37.31	63	PVC	150	0.0399	3.2_T_3695	128.1	50	PVC	150	0.1952
3.2_T_2147	37.46	110	PVC	150	2.9401	3.2_T_3696	128.3	63	PVC	150	4.9803
3.2_T_2148	37.48	63	PVC	150	1.6360	3.2_T_3697	132.7	63	PVC	150	0.3433
3.2_T_2149	37.51	63	PVC	150	0.4920	3.2_T_3698	146.4	50	PVC	150	1.4312
3.2_T_2150	37.61	63	PVC	150	0.0554	3.2_T_3699	138.7	63	PVC	150	3.0164
3.2_T_2151	37.66	110	PVC	150	0.1027	3.2_T_3700	128.4	63	PVC	150	2.3908
3.2_T_2152	37.75	63	PVC	150	0.3391	3.2_T_3701	128.6	63	PVC	150	4.1240

3.2_T_2154	38.05	63	PVC	150	0.0391	3.2_T_3702	128.9	63	PVC	150	5.7478
3.2_T_2155	37.71	63	PVC	150	0.0632	3.2_T_3703	129.0	160	PVC	150	0.0000
3.2_T_2156	37.71	63	PVC	150	0.0474	3.2_T_3705	129.2	63	PVC	150	0.6684
3.2_T_2157	37.77	63	PVC	150	1.3477	3.2_T_3706	161.5	63	PVC	150	0.5972
3.2_T_2158	37.82	63	PVC	150	1.2591	3.2_T_3707	129.4	63	PVC	150	1.0146
3.2_T_2159	37.83	160	PVC	150	3.1870	3.2_T_3708	129.4	63	PVC	150	0.0529
3.2_T_2160	37.85	63	PVC	150	0.0629	3.2_T_3709	130.2	110	PVC	150	0.0526
3.2_T_2161	37.86	63	PVC	150	4.3474	3.2_T_3710	129.5	250	AC	140	0.6299
3.2_T_2162	37.90	110	PVC	150	0.1021	3.2_T_3711	171.8	63	PVC	150	0.1040
3.2_T_2163	38.00	63	PVC	150	0.1253	3.2_T_3712	129.7	160	PVC	150	1.0284
3.2_T_2165	38.07	63	PVC	150	0.0625	3.2_T_3713	129.7	63	PVC	150	0.2065
3.2_T_2166	38.06	63	PVC	150	0.0078	3.2_T_3714	129.7	63	PVC	150	0.0069
3.2_T_2167	38.08	63	PVC	150	0.0235	3.2_T_3715	129.8	63	PVC	150	0.6376
3.2_T_2168	47.62	110	PVC	150	0.0000	3.2_T_3716	130.1	63	PVC	150	1.9259
3.2_T_2169	38.14	63	PVC	150	0.0000	3.2_T_3717	130.5	63	PVC	150	1.9554
3.2_T_2170	38.14	100	PVC	150	0.2497	3.2_T_3718	134.0	160	PVC	150	0.6466
3.2_T_2171	38.15	63	PVC	150	0.9674	3.2_T_3719	143.2	63	PVC	150	0.2163
3.2_T_2172	38.17	63	PVC	150	0.0078	3.2_T_3720	133.4	100	PVC	150	3.0342
3.2_T_2173	38.18	110	PVC	150	0.7796	3.2_T_3721	131.8	110	PVC	150	0.0045
3.2_T_2174	38.42	110	PVC	150	2.8821	3.2_T_3722	132.3	300	AC	140	0.0540
3.2_T_2175	38.22	63	PVC	150	0.0000	3.2_T_3723	133.4	63	PVC	150	0.2566
3.2_T_2176	38.22	63	PVC	150	0.1090	3.2_T_3724	132.4	160	PVC	150	12.412
3.2_T_2177	38.24	63	PVC	150	0.1401	3.2_T_3725	132.4	200	AC	140	0.0427
3.2_T_2178	51.02	63	PVC	150	0.0175	3.2_T_3726	194.8	63	PVC	150	0.9490
3.2_T_2179	38.26	63	PVC	150	0.0000	3.2_T_3727	132.5	63	PVC	150	0.7300
3.2_T_2180	76.49	63	PVC	150	0.0000	3.2_T_3730	133.6	63	PVC	150	9.4065
3.2_T_2181	38.35	110	PVC	150	0.3493	3.2_T_3731	134.2	200	PVC	150	0.7120
3.2_T_2182	37.66	63	PVC	150	0.0000	3.2_T_3732	134.2	250	AC	140	0.0155
3.2_T_2183	38.40	63	PVC	150	0.2713	3.2_T_3733	182.4	50	PVC	150	0.2579
3.2_T_2184	38.40	110	PVC	150	0.0775	3.2_T_3734	134.6	110	PVC	150	0.8224
3.2_T_2185	38.41	250	AC	140	0.0155	3.2_T_3735	134.5	100	AC	140	0.3298
3.2_T_2186	38.57	63	PVC	150	0.0077	3.2_T_3736	134.7	63	PVC	150	0.0287
3.2_T_2188	38.73	63	PVC	150	0.0231	3.2_T_3737	134.8	160	PVC	150	2.0843
3.2_T_2189	38.69	63	PVC	150	0.0231	3.2_T_3738	135.7	63	PVC	150	0.1690
3.2_T_2190	38.74	63	PVC	150	1.9749	3.2_T_3739	193.6	63	PVC	150	0.5566
3.2_T_2191	38.78	63	PVC	150	0.2072	3.2_T_3741	136.1	63	PVC	150	4.2016
3.2_T_2192	112.9	63	PVC	150	0.1028	3.2_T_3742	139.1	63	PVC	150	6.4586
3.2_T_2193	38.85	63	PVC	150	0.0153	3.2_T_3743	135.9	63	PVC	150	0.4293
3.2_T_2194	38.85	63	PVC	150	0.0153	3.2_T_3744	138.9	63	PVC	150	5.5964
3.2_T_2195	38.86	110	PVC	150	0.0000	3.2_T_3745	158.8	63	PVC	150	0.1368
3.2_T_2196	39.02	160	PVC	150	1.0145	3.2_T_3746	136.2	250	PVC	150	2.4923
3.2_T_2197	38.95	160	PVC	150	0.0306	3.2_T_3747	137.1	63	PVC	150	1.4289
3.2_T_2198	39.36	63	PVC	150	0.0983	3.2_T_3748	142.7	63	PVC	150	0.5613
3.2_T_2199	39.02	63	PVC	150	0.0229	3.2_T_3749	167.9	63	PVC	150	0.0638
3.2_T_2200	39.04	63	PVC	150	0.4041	3.2_T_3750	137.2	50	AC	140	0.5769
3.2_T_2201	39.11	63	PVC	150	0.1066	3.2_T_3751	141.4	50	AC	140	0.0021

3.2_T_2202	39.16	63	PVC	150	1.5963	3.2_T_3752	158.1	110	PVC	150	0.3238
3.2_T_2203	39.16	63	PVC	150	0.1444	3.2_T_3753	137.9	160	PVC	150	2.3975
3.2_T_2204	39.17	63	PVC	150	0.0988	3.2_T_3754	139.9	160	PVC	150	3.4075
3.2_T_2205	39.23	63	PVC	150	0.0455	3.2_T_3755	138.9	100	PVC	150	6.3869
3.2_T_2206	39.28	160	PVC	150	1.4929	3.2_T_3756	138.0	63	PVC	150	4.8704
3.2_T_2207	40.07	63	PVC	150	0.2749	3.2_T_3757	138.4	63	PVC	150	0.0430
3.2_T_2208	39.29	63	PVC	150	0.2349	3.2_T_3758	138.2	110	PVC	150	0.0000
3.2_T_2209	39.30	63	PVC	150	0.0076	3.2_T_3759	181.7	63	PVC	150	0.1901
3.2_T_2210	39.33	63	PVC	150	1.2563	3.2_T_3760	138.5	63	PVC	150	0.0022
3.2_T_2212	39.41	63	PVC	150	0.0000	3.2_T_3761	141.5	160	PVC	150	0.3555
3.2_T_2213	40.35	63	PVC	150	0.6935	3.2_T_3762	143.2	300	AC	140	0.0000
3.2_T_2214	39.45	63	PVC	150	0.0151	3.2_T_3763	161.0	63	PVC	150	0.8709
3.2_T_2215	39.62	90	PVC	150	0.0977	3.2_T_3764	139.5	63	PVC	150	3.7404
3.2_T_2216	39.50	100	PVC	150	1.4018	3.2_T_3765	145.0	160	PVC	150	0.0739
3.2_T_2217	39.65	63	PVC	150	0.5481	3.2_T_3766	142.7	63	PVC	150	0.0042
3.2_T_2218	39.69	250	PVC	150	0.0000	3.2_T_3767	139.8	160	PVC	150	0.3770
3.2_T_2219	39.74	63	PVC	150	0.0375	3.2_T_3768	140.0	300	AC	140	0.3105
3.2_T_2220	39.73	63	PVC	150	0.1199	3.2_T_3769	153.6	63	PVC	150	0.0368
3.2_T_2221	39.76	63	PVC	150	1.8194	3.2_T_3770	140.0	110	PVC	150	2.5341
3.2_T_2222	39.78	63	PVC	150	0.0674	3.2_T_3771	140.8	63	PVC	150	0.0254
3.2_T_2223	39.79	50	PVC	150	8.4916	3.2_T_3772	141.6	63	PVC	150	0.7528
3.2_T_2224	39.81	100	PVC	150	0.0823	3.2_T_3773	142.0	63	PVC	150	0.4066
3.2_T_2225	40.03	63	PVC	150	0.0892	3.2_T_3774	142.3	63	PVC	150	0.5817
3.2_T_2226	39.87	63	PVC	150	0.0149	3.2_T_3775	143.1	63	PVC	150	0.0166
3.2_T_2227	40.00	50	PVC	150	0.3870	3.2_T_3776	142.8	160	PVC	150	0.5855
3.2_T_2228	39.94	63	PVC	150	0.0596	3.2_T_3777	142.9	63	PVC	150	1.6496
3.2_T_2229	41.55	250	PVC	150	2.0705	3.2_T_3778	147.1	63	PVC	150	0.0607
3.2_T_2230	40.56	63	PVC	150	0.0000	3.2_T_3779	171.7	63	PVC	150	3.7770
3.2_T_2231	40.00	63	PVC	150	0.0000	3.2_T_3780	145.2	63	PVC	150	5.5211
3.2_T_2232	40.02	300	AC	140	0.0074	3.2_T_3781	145.3	63	PVC	150	0.3421
3.2_T_2233	40.04	63	PVC	150	0.2453	3.2_T_3782	154.9	100	PVC	150	0.4668
3.2_T_2235	42.21	63	PVC	150	0.0071	3.2_T_3783	145.9	50	PVC	150	0.4612
3.2_T_2236	40.25	250	PVC	150	2.0485	3.2_T_3784	145.8	63	PVC	150	0.0020
3.2_T_2237	40.14	63	PVC	150	0.0223	3.2_T_3785	145.9	63	PVC	150	1.3633
3.2_T_2238	40.12	63	PVC	150	0.0297	3.2_T_3786	159.3	63	PVC	150	0.0168
3.2_T_2239	40.15	63	PVC	150	0.0297	3.2_T_3787	147.7	150	AC	140	0.0826
3.2_T_2240	40.21	63	PVC	150	8.8024	3.2_T_3788	146.3	200	AC	140	0.1221
3.2_T_2241	40.16	63	PVC	150	0.0297	3.2_T_3789	157.4	63	PVC	150	0.0586
3.2_T_2242	40.23	63	PVC	150	0.0148	3.2_T_3790	146.4	63	PVC	150	0.1139
3.2_T_2243	40.24	200	PVC	150	1.7828	3.2_T_3791	148.9	63	PVC	150	1.9827
3.2_T_2244	40.28	63	PVC	150	2.2097	3.2_T_3792	158.3	63	PVC	150	0.4776
3.2_T_2245	40.73	63	PVC	150	0.7527	3.2_T_3793	147.9	50	PVC	150	0.1288
3.2_T_2246	40.31	63	PVC	150	0.0295	3.2_T_3794	165.9	110	PVC	150	2.3832
3.2_T_2247	40.31	63	PVC	150	0.0443	3.2_T_3795	207.2	63	PVC	150	0.0302
3.2_T_2248	40.31	100	PVC	150	10.108	3.2_T_3796	147.5	63	PVC	150	0.5349
3.2_T_2249	55.25	63	PVC	150	0.0647	3.2_T_3797	156.7	63	PVC	150	0.0209

3.2_T_2250	40.53	63	PVC	150	2.0562	3.2_T_3798	148.0	160	PVC	150	0.1006
3.2_T_2251	40.34	63	PVC	150	0.1623	3.2_T_3799	148.6	63	PVC	150	1.8853
3.2_T_2252	40.99	63	PVC	150	0.0654	3.2_T_3800	149.0	110	PVC	150	0.8010
3.2_T_2253	40.35	100	PVC	150	0.0590	3.2_T_3801	152.6	63	PVC	150	1.0452
3.2_T_2254	41.30	160	PVC	150	0.4685	3.2_T_3802	149.0	63	PVC	150	1.7784
3.2_T_2255	40.39	63	PVC	150	0.8548	3.2_T_3803	151.9	63	PVC	150	0.0000
3.2_T_2256	48.96	63	PVC	150	0.0730	3.2_T_3804	156.4	400	HF	130	0.0152
3.2_T_2257	40.43	110	PVC	150	0.1620	3.2_T_3805	150.3	63	PVC	150	0.0495
3.2_T_2258	40.56	160	PVC	150	0.5284	3.2_T_3806	152.5	110	PVC	150	0.2205
3.2_T_2259	40.58	63	PVC	150	3.5353	3.2_T_3807	151.0	100	AC	140	0.3706
3.2_T_2260	40.98	110	PVC	150	1.0895	3.2_T_3808	151.1	63	PVC	150	1.4620
3.2_T_2261	40.62	63	PVC	150	0.0073	3.2_T_3809	151.3	110	PVC	150	1.3009
3.2_T_2263	40.70	63	PVC	150	0.0219	3.2_T_3810	152.6	63	PVC	150	0.9128
3.2_T_2264	40.73	63	PVC	150	0.0439	3.2_T_3811	152.3	63	PVC	150	0.6256
3.2_T_2265	51.92	63	PVC	150	0.0573	3.2_T_3812	185.8	63	PVC	150	0.0160
3.2_T_2266	40.79	63	PVC	150	0.0073	3.2_T_3813	150.7	110	PVC	150	0.0375
3.2_T_2268	42.02	63	PVC	150	58.889	3.2_T_3814	153.1	50	PVC	150	0.1944
3.2_T_2269	41.30	63	PVC	150	1.9533	3.2_T_3815	153.9	110	PVC	150	0.4951
3.2_T_2270	41.41	63	PVC	150	0.0288	3.2_T_3816	157.0	63	PVC	150	0.5876
3.2_T_2271	40.87	160	PVC	150	1.0052	3.2_T_3817	154.7	200	PVC	150	0.1655
3.2_T_2272	40.87	50	PVC	150	2.0976	3.2_T_3818	155.8	63	PVC	150	0.1031
3.2_T_2273	40.88	100	AC	140	0.0000	3.2_T_3819	158.6	160	PVC	150	1.7516
3.2_T_2274	40.99	63	PVC	150	1.7646	3.2_T_3820	174.3	63	PVC	150	0.5055
3.2_T_2275	40.88	63	PVC	150	0.0000	3.2_T_3821	160.2	63	PVC	150	0.0000
3.2_T_2276	40.99	63	PVC	150	5.7366	3.2_T_3822	156.2	63	PVC	150	0.0324
3.2_T_2277	40.97	63	PVC	150	0.0218	3.2_T_3823	159.6	63	PVC	150	8.1623
3.2_T_2278	41.03	63	PVC	150	0.0073	3.2_T_3824	158.2	63	PVC	150	1.2233
3.2_T_2279	41.03	110	PVC	150	9.1116	3.2_T_3825	162.8	63	PVC	150	1.5450
3.2_T_2280	41.04	63	PVC	150	0.0145	3.2_T_3826	157.1	63	PVC	150	0.7106
3.2_T_2281	41.06	63	PVC	150	0.0073	3.2_T_3827	158.7	63	PVC	150	2.4968
3.2_T_2282	41.06	63	PVC	150	0.3190	3.2_T_3828	158.3	63	PVC	150	1.2563
3.2_T_2283	41.11	200	AC	140	0.3837	3.2_T_3829	157.8	160	PVC	150	0.0094
3.2_T_2284	41.12	63	PVC	150	0.0145	3.2_T_3830	157.5	63	PVC	150	0.3515
3.2_T_2285	41.14	110	PVC	150	5.8245	3.2_T_3831	158.0	63	PVC	150	0.0019
3.2_T_2286	41.17	63	PVC	150	0.1084	3.2_T_3832	158.0	63	PVC	150	0.0113
3.2_T_2287	41.20	100	PVC	150	4.1754	3.2_T_3833	184.6	160	PVC	150	4.2016
3.2_T_2288	41.21	63	PVC	150	0.0433	3.2_T_3834	158.8	63	PVC	150	5.3781
3.2_T_2289	44.14	63	PVC	150	0.0000	3.2_T_3835	159.1	100	PVC	150	0.0580
3.2_T_2290	41.22	63	PVC	150	0.0939	3.2_T_3836	159.8	200	AC	140	0.5419
3.2_T_2291	45.53	63	PVC	150	0.0327	3.2_T_3837	160.2	110	PVC	150	2.1925
3.2_T_2292	41.48	63	PVC	150	0.0646	3.2_T_3838	161.1	63	PVC	150	0.2052
3.2_T_2293	41.49	63	PVC	150	0.0144	3.2_T_3839	161.5	100	PVC	150	0.4607
3.2_T_2294	41.52	63	PVC	150	0.0358	3.2_T_3840	232.5	110	PVC	150	0.0000
3.2_T_2295	46.31	110	PVC	150	0.0000	3.2_T_3841	162.7	150	AC	140	0.4500
3.2_T_2296	41.77	200	PVC	150	1.5607	3.2_T_3842	163.0	63	PVC	150	2.3934
3.2_T_2297	44.05	63	PVC	150	1.6623	3.2_T_3843	162.7	63	PVC	150	0.0402

3.2_T_2298	41.59	63	PVC	150	0.1074	3.2_T_3844	164.3	110	PVC	150	2.4443
3.2_T_2299	41.64	63	PVC	150	0.0143	3.2_T_3845	190.5	110	PVC	150	0.0000
3.2_T_2300	42.57	63	PVC	150	12.033	3.2_T_3846	176.3	63	PVC	150	0.3918
3.2_T_2301	41.79	200	PVC	150	1.0685	3.2_T_3847	199.8	50	PVC	150	0.6003
3.2_T_2303	41.84	63	PVC	150	0.0285	3.2_T_3848	164.2	50	AC	140	6.6328
3.2_T_2304	42.09	63	PVC	150	5.4448	3.2_T_3849	164.5	110	PVC	150	0.0072
3.2_T_2305	42.21	63	PVC	150	0.2327	3.2_T_3850	169.3	63	PVC	150	0.5081
3.2_T_2306	41.97	200	AC	140	2.3262	3.2_T_3851	168.8	63	PVC	150	0.1728
3.2_T_2307	42.00	63	PVC	150	0.0071	3.2_T_3852	168.5	63	PVC	150	0.0088
3.2_T_2308	42.00	63	PVC	150	0.0213	3.2_T_3853	168.1	160	PVC	150	1.6293
3.2_T_2309	42.00	63	PVC	150	0.0638	3.2_T_3854	168.0	100	HF	130	0.1470
3.2_T_2310	42.01	50	PVC	150	4.0455	3.2_T_3855	168.1	63	PVC	150	2.0770
3.2_T_2311	42.09	63	PVC	150	0.5657	3.2_T_3856	221.6	63	PVC	150	0.3962
3.2_T_2312	42.11	63	PVC	150	0.9048	3.2_T_3857	168.7	50	PVC	150	1.5331
3.2_T_2313	42.17	63	PVC	150	0.2682	3.2_T_3858	169.1	63	PVC	150	0.7481
3.2_T_2314	42.62	63	PVC	150	1.1733	3.2_T_3859	169.2	63	PVC	150	0.3924
3.2_T_2315	42.32	63	PVC	150	0.3095	3.2_T_3860	169.7	63	PVC	150	13.835
3.2_T_2317	42.25	63	PVC	150	0.0634	3.2_T_3861	174.2	63	PVC	150	2.0897
3.2_T_2319	42.31	110	PVC	150	0.1337	3.2_T_3862	175.6	160	PVC	150	0.3018
3.2_T_2321	42.40	63	PVC	150	0.9406	3.2_T_3863	170.1	110	PVC	150	0.8889
3.2_T_2322	42.42	50	PVC	150	0.5333	3.2_T_3864	170.4	110	PVC	150	1.4970
3.2_T_2323	42.42	63	PVC	150	0.0070	3.2_T_3865	171.4	63	PVC	150	0.2847
3.2_T_2324	42.46	50	PVC	150	0.2804	3.2_T_3866	171.5	50	PVC	150	4.3372
3.2_T_2325	42.46	63	PVC	150	1.0795	3.2_T_3867	172.1	200	AC	140	1.2330
3.2_T_2326	51.78	63	PVC	150	0.5404	3.2_T_3868	173.5	200	PVC	150	0.1133
3.2_T_2327	42.50	63	PVC	150	3.3340	3.2_T_3869	176.8	110	PVC	150	4.6443
3.2_T_2328	42.55	63	PVC	150	0.0140	3.2_T_3870	204.3	63	PVC	150	2.9184
3.2_T_2329	42.72	63	PVC	150	1.3378	3.2_T_3871	178.0	300	AC	140	0.3059
3.2_T_2330	43.74	100	PVC	150	0.7010	3.2_T_3872	177.8	600	HD	130	1.1619
3.2_T_2331	42.67	63	PVC	150	0.8511	3.2_T_3873	178.3	250	AC	140	0.1937
3.2_T_2332	42.60	110	PVC	150	0.1398	3.2_T_3875	184.2	50	PVC	150	0.1325
3.2_T_2333	42.60	63	PVC	150	0.0070	3.2_T_3876	182.7	300	AC	140	0.7802
3.2_T_2334	42.65	200	AC	140	0.6699	3.2_T_3877	182.5	110	PVC	150	2.4281
3.2_T_2335	42.63	63	PVC	150	0.0000	3.2_T_3878	250.7	63	PVC	150	38.043
3.2_T_2336	42.93	63	PVC	150	0.0139	3.2_T_3879	184.4	63	PVC	150	2.1662
3.2_T_2337	42.68	160	PVC	150	0.5440	3.2_T_3880	184.5	400	HD	130	0.9811
3.2_T_2338	43.77	110	PVC	150	0.1088	3.2_T_3881	185.4	63	PVC	150	14.618
3.2_T_2339	42.82	63	PVC	150	1.9186	3.2_T_3882	185.3	63	PVC	150	0.3968
3.2_T_2340	42.81	160	PVC	150	1.7940	3.2_T_3883	236.3	63	PVC	150	0.2595
3.2_T_2343	42.81	63	PVC	150	2.2665	3.2_T_3886	195.4	50	PVC	150	3.5749
3.2_T_2344	42.82	100	AC	140	1.1122	3.2_T_3887	189.6	110	PVC	150	0.0612
3.2_T_2345	55.79	63	PVC	150	0.0480	3.2_T_3888	201.7	63	PVC	150	5.5310
3.2_T_2346	42.89	63	PVC	150	0.0625	3.2_T_3889	213.3	63	PVC	150	1.2282
3.2_T_2347	42.89	110	PVC	150	0.0000	3.2_T_3890	193.1	200	PVC	150	1.2022
3.2_T_2348	42.96	63	PVC	150	0.9007	3.2_T_3891	196.9	63	PVC	150	2.0891
3.2_T_2349	43.05	110	PVC	150	0.0069	3.2_T_3892	191.3	450	HD	130	1.1452

3.2_T_2350	43.07	63	PVC	150	0.0000	3.2_T_3893	192.1	200	AC	140	0.9810
3.2_T_2351	43.13	63	PVC	150	0.0552	3.2_T_3894	192.7	110	PVC	150	5.4880
3.2_T_2352	43.13	50	PVC	150	0.1104	3.2_T_3895	193.1	160	PVC	150	1.1651
3.2_T_2353	43.17	63	PVC	150	0.3723	3.2_T_3896	203.4	200	AC	140	0.5371
3.2_T_2355	43.68	63	PVC	150	0.0341	3.2_T_3897	198.7	200	PVC	150	0.0974
3.2_T_2357	43.37	63	PVC	150	0.0069	3.2_T_3898	201.7	63	PVC	150	1.1745
3.2_T_2358	43.38	63	PVC	150	0.0069	3.2_T_3899	196.7	160	PVC	150	0.8415
3.2_T_2359	43.38	63	PVC	150	1.0841	3.2_T_3900	211.0	160	PVC	150	0.0409
3.2_T_2360	43.38	63	PVC	150	0.0206	3.2_T_3901	198.9	300	AC	140	0.9368
3.2_T_2361	44.30	100	PVC	150	0.3897	3.2_T_3902	199.0	63	PVC	150	0.6746
3.2_T_2362	43.46	110	PVC	150	0.0000	3.2_T_3903	199.7	110	PVC	150	1.7930
3.2_T_2363	43.53	63	PVC	150	5.2168	3.2_T_3904	202.0	63	PVC	150	0.0030
3.2_T_2364	43.47	110	PVC	150	0.0069	3.2_T_3905	201.4	110	PVC	150	1.3008
3.2_T_2365	43.61	63	PVC	150	0.0410	3.2_T_3906	277.2	63	PVC	150	0.1246
3.2_T_2366	57.74	63	PVC	150	0.0155	3.2_T_3907	202.0	300	PVC	150	0.0030
3.2_T_2367	43.71	63	PVC	150	0.4903	3.2_T_3908	203.8	63	PVC	150	0.6544
3.2_T_2368	43.72	110	PVC	150	0.2383	3.2_T_3909	203.9	63	PVC	150	0.4817
3.2_T_2369	45.10	200	PVC	150	0.0858	3.2_T_3910	217.9	300	PVC	150	2.1600
3.2_T_2370	43.83	63	PVC	150	0.0068	3.2_T_3911	207.1	160	PVC	150	2.5655
3.2_T_2371	43.85	63	PVC	150	0.2240	3.2_T_3912	208.4	110	PVC	150	0.9126
3.2_T_2372	43.88	63	PVC	150	0.8073	3.2_T_3913	210.3	63	PVC	150	0.2874
3.2_T_2373	43.94	63	PVC	150	0.2710	3.2_T_3914	230.4	250	PVC	150	2.6444
3.2_T_2374	43.95	63	PVC	150	0.3048	3.2_T_3915	212.6	160	PVC	150	1.9576
3.2_T_2375	43.95	63	PVC	150	0.1084	3.2_T_3916	217.8	63	PVC	150	0.1613
3.2_T_2376	47.57	200	PVC	150	1.7707	3.2_T_3917	224.5	63	PVC	150	0.0000
3.2_T_2377	44.07	250	PVC	150	2.1952	3.2_T_3918	227.0	63	PVC	150	0.9559
3.2_T_2378	44.01	63	PVC	150	0.0744	3.2_T_3919	213.5	100	AC	140	3.3034
3.2_T_2379	44.05	50	PVC	150	0.0135	3.2_T_3920	214.3	63	PVC	150	0.3556
3.2_T_2382	44.35	160	PVC	150	0.1409	3.2_T_3921	215.8	100	AC	140	1.3929
3.2_T_2383	44.21	200	PVC	150	2.5313	3.2_T_3922	214.8	200	PVC	150	1.7237
3.2_T_2384	62.57	63	PVC	150	0.2997	3.2_T_3923	215.3	160	PVC	150	0.8670
3.2_T_2385	44.20	100	PVC	150	2.2356	3.2_T_3924	215.4	63	PVC	150	1.7746
3.2_T_2386	44.29	63	PVC	150	0.0067	3.2_T_3925	221.2	63	PVC	150	0.0632
3.2_T_2387	44.29	63	PVC	150	0.3965	3.2_T_3926	225.5	200	PVC	150	0.0924
3.2_T_2389	44.34	63	PVC	150	0.1880	3.2_T_3927	221.0	63	PVC	150	1.3211
3.2_T_2390	44.35	110	PVC	150	0.5906	3.2_T_3928	221.3	110	PVC	150	0.4290
3.2_T_2391	44.42	63	PVC	150	0.1273	3.2_T_3930	222.0	400	HD	130	0.3460
3.2_T_2392	44.49	63	PVC	150	0.0000	3.2_T_3931	236.9	63	PVC	150	0.1345
3.2_T_2393	44.54	100	AC	140	0.2607	3.2_T_3932	227.8	200	AC	140	3.3262
3.2_T_2394	44.59	63	PVC	150	0.2336	3.2_T_3933	226.0	300	HF	130	0.0303
3.2_T_2395	44.61	63	PVC	150	5.7781	3.2_T_3934	228.3	200	AC	140	0.6010
3.2_T_2396	44.62	63	PVC	150	0.5537	3.2_T_3935	230.7	63	PVC	150	3.1034
3.2_T_2398	44.68	63	PVC	150	1.2525	3.2_T_3936	244.3	63	PVC	150	0.0841
3.2_T_2399	44.69	160	PVC	150	0.0067	3.2_T_3937	231.4	110	PVC	150	9.6835
3.2_T_2400	44.70	63	PVC	150	5.9530	3.2_T_3938	245.4	63	PVC	150	0.7156
3.2_T_2401	44.81	63	PVC	150	0.1594	3.2_T_3939	237.7	63	PVC	150	1.3175

3.2_T_2402	44.81	200	AC	140	0.2391	3.2_T_3940	371.2	110	PVC	150	0.1291
3.2_T_2404	44.91	63	PVC	150	0.0795	3.2_T_3941	246.3	63	PVC	150	4.5015
3.2_T_2406	45.00	63	PVC	150	0.0066	3.2_T_3942	243.5	110	PVC	150	5.8312
3.2_T_2407	45.03	63	PVC	150	0.6214	3.2_T_3943	248.3	200	PVC	150	2.7529
3.2_T_2408	45.05	63	PVC	150	0.0132	3.2_T_3944	289.4	63	PVC	150	1.1962
3.2_T_2409	45.06	63	PVC	150	3.4881	3.2_T_3945	359.3	63	PVC	150	0.4904
3.2_T_2410	45.14	250	PVC	150	0.0000	3.2_T_3946	246.3	160	PVC	150	0.9101
3.2_T_2411	45.19	63	PVC	150	1.8180	3.2_T_3947	246.6	250	PVC	150	0.0036
3.2_T_2412	45.23	200	AC	140	0.6449	3.2_T_3948	249.7	63	PVC	150	0.9095
3.2_T_2413	45.27	63	PVC	150	0.0000	3.2_T_3949	250.3	300	HF	130	0.0000
3.2_T_2414	45.33	63	PVC	150	12.186	3.2_T_3950	301.5	200	PVC	150	0.9548
3.2_T_2416	45.70	63	PVC	150	6.8196	3.2_T_3951	252.7	300	HD	130	1.1413
3.2_T_2417	45.35	63	PVC	150	0.0066	3.2_T_3952	256.6	110	PVC	150	0.0731
3.2_T_2418	45.36	63	PVC	150	1.5422	3.2_T_3953	254.2	200	AC	140	0.0141
3.2_T_2419	45.45	63	PVC	150	0.9170	3.2_T_3954	295.7	63	PVC	150	0.7861
3.2_T_2420	45.37	100	PVC	150	0.8069	3.2_T_3955	258.0	160	PVC	150	2.3212
3.2_T_2421	45.43	63	PVC	150	2.5947	3.2_T_3956	259.0	63	PVC	150	1.3115
3.2_T_2422	45.48	63	PVC	150	0.0131	3.2_T_3957	260.7	200	PVC	150	0.1302
3.2_T_2423	45.60	63	PVC	150	2.7544	3.2_T_3959	260.7	450	HD	130	0.7843
3.2_T_2424	45.46	63	PVC	150	0.0131	3.2_T_3961	261.8	600	HD	130	0.6696
3.2_T_2425	45.52	63	PVC	150	5.5584	3.2_T_3962	302.2	110	PVC	150	0.1517
3.2_T_2426	45.53	100	PVC	150	2.9352	3.2_T_3963	263.4	63	PVC	150	2.9617
3.2_T_2427	45.56	63	PVC	150	0.0261	3.2_T_3964	269.2	63	PVC	150	0.0100
3.2_T_2429	45.62	63	PVC	150	0.2414	3.2_T_3965	266.5	160	PVC	150	0.8298
3.2_T_2430	45.62	63	PVC	150	0.4241	3.2_T_3966	274.8	63	PVC	150	1.0397
3.2_T_2431	57.09	63	PVC	150	0.0521	3.2_T_3967	276.2	63	PVC	150	0.1779
3.2_T_2432	45.64	63	PVC	150	2.6153	3.2_T_3968	334.7	250	PVC	150	0.0045
3.2_T_2433	45.65	63	PVC	150	6.1226	3.2_T_3969	279.9	63	PVC	150	0.2255
3.2_T_2434	45.66	63	PVC	150	4.5889	3.2_T_3970	495.6	63	PVC	150	1.9063
3.2_T_2435	45.67	63	PVC	150	0.0261	3.2_T_3971	283.0	160	PVC	150	2.6603
3.2_T_2436	52.74	63	PVC	150	0.0621	3.2_T_3972	289.1	300	AC	140	0.4387
3.2_T_2438	45.76	100	AC	140	0.9432	3.2_T_3973	291.8	500	HD	130	0.9914
3.2_T_2439	45.76	100	PVC	150	2.3026	3.2_T_3975	307.1	63	PVC	150	16.922
3.2_T_2440	45.83	100	PVC	150	1.9419	3.2_T_3976	341.2	63	PVC	150	0.2913
3.2_T_2441	45.96	63	PVC	150	0.1749	3.2_T_3977	395.4	600	HD	130	1.6434
3.2_T_2442	47.40	200	PVC	150	1.7520	3.2_T_3978	301.3	50	AC	140	0.9612
3.2_T_2443	46.07	63	PVC	150	0.0065	3.2_T_3979	302.1	63	PVC	150	0.0946
3.2_T_2444	46.10	63	PVC	150	2.0337	3.2_T_3980	305.8	250	PVC	150	0.0000
3.2_T_2446	46.22	63	PVC	150	0.0644	3.2_T_3981	315.3	110	PVC	150	0.2719
3.2_T_2447	46.17	63	PVC	150	3.9650	3.2_T_3982	416.4	63	PVC	150	8.2566
3.2_T_2448	46.18	63	PVC	150	2.2497	3.2_T_3983	335.6	200	PVC	150	0.6173
3.2_T_2449	46.22	63	PVC	150	0.0386	3.2_T_3984	337.8	600	HD	130	0.9314
3.2_T_2450	46.24	63	PVC	150	4.9888	3.2_T_3985	352.9	63	PVC	150	0.1620
3.2_T_2451	46.26	110	PVC	150	1.0424	3.2_T_3986	388.0	200	PVC	150	2.6871
3.2_T_2452	46.26	50	PVC	150	1.0230	3.2_T_3987	364.0	200	PVC	150	1.1228
3.2_T_2454	46.48	50	PVC	150	0.1857	3.2_T_3988	356.5	250	HD	130	0.6663

3.2_T_2455	46.51	63	PVC	150	0.9728	3.2_T_3989	373.0	110	PVC	150	0.0040
3.2_T_2456	46.51	110	PVC	150	1.4975	3.2_T_3990	464.6	200	PVC	150	0.2345
3.2_T_2457	46.78	63	PVC	150	4.4727	3.2_T_3991	459.2	160	PVC	150	1.4020
3.2_T_2458	46.54	63	PVC	150	0.0384	3.2_T_3992	391.5	110	PVC	150	0.2334
3.2_T_2459	46.60	63	PVC	150	0.5877	3.2_T_3994	413.1	110	PVC	150	7.3102
3.2_T_2460	46.87	110	PVC	150	0.5144	3.2_T_3995	432.1	63	PVC	150	3.5289
3.2_T_2461	56.60	63	PVC	150	0.0578	3.2_T_3996	471.4	110	PVC	150	10.986
3.2_T_2462	46.69	63	PVC	150	1.2622	3.2_T_3997	465.2	63	PVC	150	0.0275
3.2_T_2463	46.87	63	PVC	150	0.0064	3.2_T_3998	478.6	110	PVC	150	1.7400
3.2_T_2464	46.89	63	PVC	150	0.0190	3.2_T_3999	487.0	200	PVC	150	0.0135
3.2_T_2465	47.22	110	PVC	150	0.0630	3.2_T_4000	1361.2	600	HD	130	1.6751
3.2_T_2466	47.04	63	PVC	150	0.0316	3.2_T_4001	3.200	63	PVC	150	0.2795
3.2_T_2467	47.04	63	PVC	150	0.0696	3.2_T_4002	2.590	63	PVC	150	0.1147
3.2_T_2468	47.05	100	PVC	150	0.2088	3.2_T_4003	135.6	63	PVC	150	0.0637
3.2_T_2469	43.90	63	PVC	150	0.0000	3.2_T_4004	17.17	200	PVC	150	0.0000
3.2_T_2470	49.44	200	PVC	150	0.0903	3.2_T_4005	147.7	200	PVC	150	0.0000
3.2_T_2471	47.08	63	PVC	150	3.4707	3.2_T_4006	321.9	400	HF	130	0.0000
3.2_T_2472	47.12	63	PVC	150	0.0632	3.2_T_4007	13.15	400	HF	130	0.0000
3.2_T_2473	48.41	63	PVC	150	0.3259	3.2_T_4008	79.91	63	PVC	150	0.0000
3.2_T_2474	47.19	200	PVC	150	0.0946	3.2_T_4009	68.84	63	PVC	150	0.0000
3.2_T_2475	47.22	63	PVC	150	3.7253	3.2_T_4010	29.05	110	PVC	150	0.0000
3.2_T_2476	47.23	50	PVC	150	0.0252	3.2_T_4011	215.5	250	PVC	150	0.0000
3.2_T_2477	47.63	160	PVC	150	1.0875	3.2_T_4012	7.940	250	PVC	150	0.0000
3.2_T_2478	47.26	63	PVC	150	1.0329	3.2_T_4013	130.2	200	AC	140	0.0000
3.2_T_2479	47.29	63	PVC	150	0.0063	3.2_T_4014	20.46	200	AC	140	0.0000
3.2_T_2480	47.30	63	PVC	150	0.0063	3.2_T_4015	1.870	63	PVC	150	0.0000
3.2_T_2481	49.73	63	PVC	150	8.3498	3.2_T_4016	60.24	63	PVC	150	0.0000
3.2_T_2482	47.33	63	PVC	150	3.3142	3.2_T_4017	121.2	63	PVC	150	0.6929
3.2_T_2483	47.35	63	PVC	150	0.0503	3.2_T_4018	250.6	63	PVC	150	0.6924
3.2_T_2484	47.37	63	PVC	150	1.0808	3.2_T_4019	7.140	63	PVC	150	0.0417
3.2_T_2485	47.38	63	PVC	150	0.0880	3.2_T_4020	1.250	63	PVC	150	0.2375
3.2_T_2486	48.25	100	PVC	150	2.5538	3.2_T_4021	5.930	63	PVC	150	0.0502
3.2_T_2487	47.44	50	PVC	150	0.1506	3.2_T_4022	235.8	63	PVC	150	0.0644
3.2_T_2489	47.51	110	PVC	150	0.0063	3.2_T_4023	15.28	63	PVC	150	0.0000
3.2_T_2490	47.72	63	PVC	150	1.1851	3.2_T_4024	16.99	63	PVC	150	0.0000
3.2_T_2491	47.60	63	PVC	150	0.1126	3.2_T_4025	18.24	200	PVC	150	0.4244
3.2_T_2492	47.72	110	PVC	150	1.1664	3.2_T_4026	109.0	200	PVC	150	0.4097
3.2_T_2493	47.66	63	PVC	150	0.0187	3.2_T_4027	20.71	200	AC	140	0.8334
3.2_T_2495	47.72	63	PVC	150	0.0624	3.2_T_4028	240.0	200	AC	140	0.8347
3.2_T_2496	47.73	160	PVC	150	2.7000	3.2_T_4029	59.52	63	PVC	150	0.0650
3.2_T_2498	47.86	50	PVC	150	0.0062	3.2_T_4030	1.640	63	PVC	150	0.0000
3.2_T_2499	47.86	63	PVC	150	0.4851	3.2_T_4031	7.270	160	PVC	150	0.0000
3.2_T_2500	47.88	50	PVC	150	0.1368	3.2_T_4032	38.01	160	PVC	150	0.0000
3.2_T_2501	47.90	63	PVC	150	3.6411	3.2_T_4033	22.79	300	PVC	150	0.0000
3.2_T_2502	47.90	63	PVC	150	0.0062	3.2_T_4034	14.09	300	PVC	150	0.0000
3.2_T_2503	47.98	200	AC	140	2.2644	3.2_T_4035	5.860	200	PVC	150	0.0000

ID	Length	Diameter	Material	C	Value	ID	Length	Diameter	Material	C	Value
3.2_T_2504	47.98	63	PVC	150	0.0310	3.2_T_4036	6.600	200	PVC	150	0.0000
3.2_T_2505	47.99	63	PVC	150	0.1117	3.2_T_4037	27.63	200	PVC	150	0.0000
3.2_T_2506	47.99	63	PVC	150	0.0310	3.2_T_4038	5.630	200	PVC	150	0.0000
3.2_T_2507	48.07	160	PVC	150	0.1734	3.2_T_4039	5.190	250	PVC	150	0.0000
3.2_T_2508	48.13	110	PVC	150	0.3340	3.2_T_4040	66.93	250	PVC	150	0.0000
3.2_T_2509	48.38	63	PVC	150	2.0241	3.2_T_4041	8.620	63	PVC	150	0.0345
3.2_T_2510	48.28	63	PVC	150	0.6474	3.2_T_4042	93.21	63	PVC	150	0.0639
3.2_T_2511	48.27	63	PVC	150	0.0062	3.2_T_4043	1.020	63	PVC	150	0.0000
3.2_T_2512	48.29	63	PVC	150	0.5486	3.2_T_4044	35.50	63	PVC	150	0.0671
3.2_T_2516	48.66	63	PVC	150	0.0000	3.2_T_4045	66.14	63	PVC	150	0.0000
3.2_T_2517	48.77	63	PVC	150	0.0061	3.2_T_4046	1.360	63	PVC	150	0.0000
3.2_T_2518	48.84	63	PVC	150	0.0427	3.2_T_4047	1.090	63	PVC	150	0.0000
3.2_T_2519	49.33	63	PVC	150	0.4888	3.2_T_4048	55.73	63	PVC	150	0.0641
3.2_T_2520	48.91	63	PVC	150	1.0284	3.2_T_4049	10.72	63	PVC	150	0.0000
3.2_T_2521	48.92	63	PVC	150	0.2130	3.2_T_4050	2.220	63	PVC	150	0.0000
3.2_T_2522	48.92	63	PVC	150	0.0791	3.2_T_4051	4.410	63	PVC	150	0.0675
3.2_T_2523	49.40	63	PVC	150	2.1270	3.2_T_4052	4.050	63	PVC	150	0.0734
3.2_T_2524	48.97	63	PVC	150	1.7446	3.2_T_4053	47.49	63	PVC	150	0.0063
3.2_T_2527	49.01	63	PVC	150	0.0182	3.2_T_4054	1.010	63	PVC	150	0.0000
3.2_T_2528	49.03	63	PVC	150	3.9585	3.2_T_4055	69.70	63	PVC	150	0.0128
3.2_T_2529	49.04	63	PVC	150	0.0364	3.2_T_4056	1.330	63	PVC	150	0.0000
3.2_T_2530	49.05	63	PVC	150	11.925	3.2_T_4057	7.140	63	PVC	150	0.0834
3.2_T_2531	49.08	63	PVC	150	4.2880	3.2_T_4058	1.940	63	PVC	150	0.0000
3.2_T_2532	49.18	110	PVC	150	6.3430	3.2_T_4059	54.11	63	PVC	150	0.0000
3.2_T_2533	49.21	63	PVC	150	0.4960	3.2_T_4060	2.130	63	PVC	150	0.0000
3.2_T_2534	49.21	63	PVC	150	1.3973	3.2_T_4061	65.14	63	PVC	150	0.0640
3.2_T_2537	49.36	200	PVC	150	6.3859	3.2_T_4062	1.000	63	PVC	150	0.0000
3.2_T_2539	49.38	63	PVC	150	0.0060	3.2_T_4063	46.01	63	PVC	150	0.0647
3.2_T_2540	49.42	63	PVC	150	0.9878	3.2_T_4064	3.630	63	PVC	150	0.0821
3.2_T_2541	49.43	63	PVC	150	5.0226	3.2_T_4065	2.170	63	PVC	150	0.1374
3.2_T_2542	49.51	63	PVC	150	0.8236	3.2_T_4066	1.480	63	PVC	150	0.0000
3.2_T_2543	49.46	63	PVC	150	0.0241	3.2_T_4067	97.93	110	PVC	150	0.0000
3.2_T_2544	49.46	63	PVC	150	0.2347	3.2_T_4068	18.89	300	PVC	150	3.4671
3.2_T_2545	49.50	50	AC	140	0.4210	3.2_T_4069	14.34	150	PVC	150	2.5111
3.2_T_2546	49.60	110	PVC	150	0.4441	3.2_T_4070	10.46	500	HD	130	4.0423
3.2_T_2547	65.58	63	PVC	150	0.2860	3.2_T_4071	14.30	400	HF	130	0.0000
3.2_T_2548	49.64	63	PVC	150	1.3732						

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