TRAFFIC CONCEPTS, INC.

Traffic Impact Studies • Feasibility • Traffic Signal Design • Traffic Counts •Expert Testimony

April 17, 2020

Mr. Randolph L. Kazazian III
Vice President of Real Estate
Henley Enterprises
54 Jaconnet Street
Newton Highlands, MA 02461

RE: Traffic Exemption Statement
Valvoline – 334 Gorsuch Road
Westminster, Maryland
T/C 3638

Dear Mr. Kazazian:

Traffic Concepts, Inc. has conducted a comparative trip generation analysis for the proposed Valvoline quick lubrication vehicle service shop with four (4) service bays and a 3,620 gsf veterinary clinic that previously operated on the subject site. The site address is 334 Gorsuch Road, Westminster and is situated on the southeast quadrant of MD 140 (Baltimore Boulevard) and Gorsuch Road. The site has a direct full movement access to Gorsuch Road.

The weekday peak hour trip generation data for both the proposed Valvoline Shop and the former veterinary clinic were determined with the *Institute of Transportation Engineers; Trip Generation Manual, 10th Edition* (ITE). Additional data generated by the Valvoline Corporate Office is also provided to show the actual number of vehicle services completed on a weekday at an existing Valvoline Shop, which offers similar services as the proposed Westminster Shop. This Valvoline shop is located in Howard County at 4215 MD 103 (Montgomery Road).

The ITE trip generation data for a Quick Lubrication Vehicle Shop (LUC 941) was applied to the proposed Valvoline Shop in order to determine the new site generated weekday peak hour trips. The independent variable used to determine the new site trips are the four (4) proposed service bays. The former veterinary clinic weekday trips were generated using the Animal Hospital/Veterinary Clinic land use (LUC 640) with a floor area of 3,620 gross square feet. The ITE forecasted weekday peak hour trips are provided on the following page.

7525 Connelley Drive • Suite B • Hanover, MD 21076 • Phone (410) 760-2911 • Fax (410) 760-2915

Table I: Trip Generation

Weekday Peak Hour New Site Trips	AM			PM		
	IN	OUT	Total	IN	OUT	Total
Quick Lubrication Vehicle Shop (941) Per Four (4) Service bays	8	4	12	11	8	19
Animal Hospital/Veterinary Clinic (640) Per 1,000 SQ. FT. GFA – 3.620 GFA	9	4	13	5	8	13
Difference	-1	0	-1	+6	0	+6

Source: *Institute of Transportation Engineers; Trip Generation Manual, 10th Edition*

According to the ITE data provided on Table I, the proposed Valvoline shop when compared to the veterinary clinic would generate one (1) fewer weekday AM peak hour trip and six (6) additional weekday PM peak hour trips. The additional six trips generated during the weekday PM peak hour would have a minimal impact to the existing site access point at Gorsuch Road and at the nearby intersections when compared to the existing traffic volumes.

The data shown on Table II, was collected from a Howard County Valvoline shop and represents the actual number of vehicles serviced at the shop each day. As previously stated, the Howard County shop provides the same vehicle service proposed at the Westminster Valvoline shop. The complete data set for the year 2017 is provided as an attachment.

The data for this shop shows an average of 51 vehicles serviced each weekday. A vehicle trip is defined as a one directional movement that is either entering or exiting from the driveway. Therefore, the number of weekday average daily trips at the proposed Valvoline driveway is 102.

Table II: Valvoline Data (Vehicles Serviced per day Year: 2017)

Valvoline Store # BA0009	Day of the Week	Vehicles Serviced per Day
BA0009	**Monday**	**55**
BA0009	**Tuesday**	**44**
BA0009	**Wednesday**	**47**
BA0009	**Thursday**	**49**
BA0009	**Friday**	**62**
Total Vehicles Serviced (Weekday)		**257(Visits) / 5 (Days) = 51**

Source: Valvoline 2017 Service Data

The project developer expects the proposed Westminster shop, after a period of time, would service 50 vehicle per day that would also generate 102 average weekday trips. We would expect the weekday peak hour trips would be no more than fifteen percent of the average daily trips. Using the actual Valvoline data, the expected weekday peak hour trips generated by the proposed Westminster Valvoline Shop are 15. This finding compares well to the 12 AM peak hour trips and the 19 PM peak hour trips generated with the ITE data. Therefore, we believe the actual Valvoline data validates the ITE data in terms of the weekday peak hour driveway volume.

Based on this generation analysis, Traffic Concepts, Inc. concludes the proposed use would generate weekday peak hour trips that are similar to the previous animal clinic. With this finding, we also conclude the proposed Valvoline Shop with four service bays would have a minimal impact on the existing commercial access and on the surrounding roadway network.

We also note that the MDOT SHA threshold for conducting a traffic impact analysis is fifty (50) weekday peak hour trips. As shown with this analysis using ITE traffic data, the proposed Valvoline shop would generate 12 AM weekday peak hour trips and 19 PM weekday PM peak hour trips. Therefore, from a MDOT SHA standpoint, this project would not meet the 50-weekday peak hour trip threshold that initiates the requirements to conduct a full Traffic Impact Study. However, during the site plan review period, we would expect to provide the City of Westminster and MDOT SHA with detailed site access information that would include intersection controls and peak hour volume.

If you have any questions or require additional information, please feel free to contact our office at your convenience.

Sincerely,

TRAFFIC CONCEPTS, INC.

Mark Keeley

Mark Keeley, PTP
MKeeley@traffic-concepts.com

Attachment: ITE 10th edition Trip Information
Valvoline Corporate Vehicle Service Data

Quick Lubrication Vehicle Shop
(941)

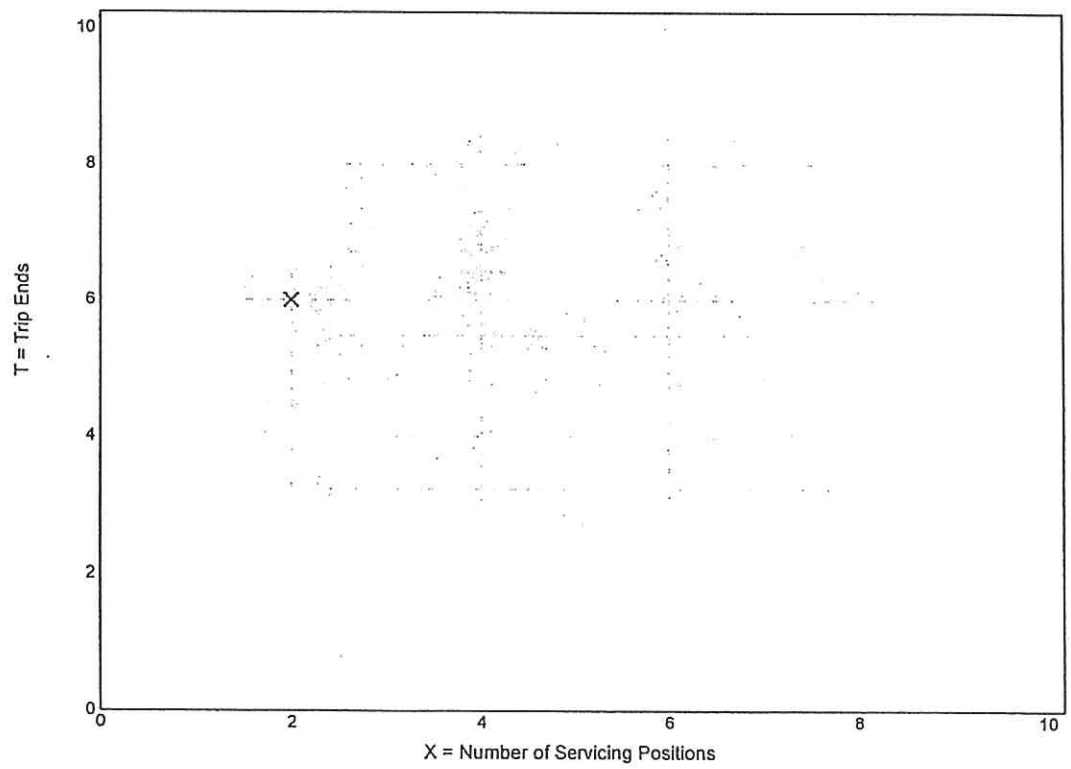
Vehicle Trip Ends vs:	Servicing Positions
On a:	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.
Setting/Location:	General Urban/Suburban
Number of Studies:	1
Avg. Num. of Servicing Positions:	2
Directional Distribution:	67% entering, 33% exiting

Vehicle Trip Generation per Servicing Position

Average Rate	Range of Rates	Standard Deviation
3.00	3.00 - 3.00	*

Data Plot and Equation

Caution – Small Sample Size



X Study Site

- - - - Average Rate

Fitted Curve Equation: Not Given

R^2= ****

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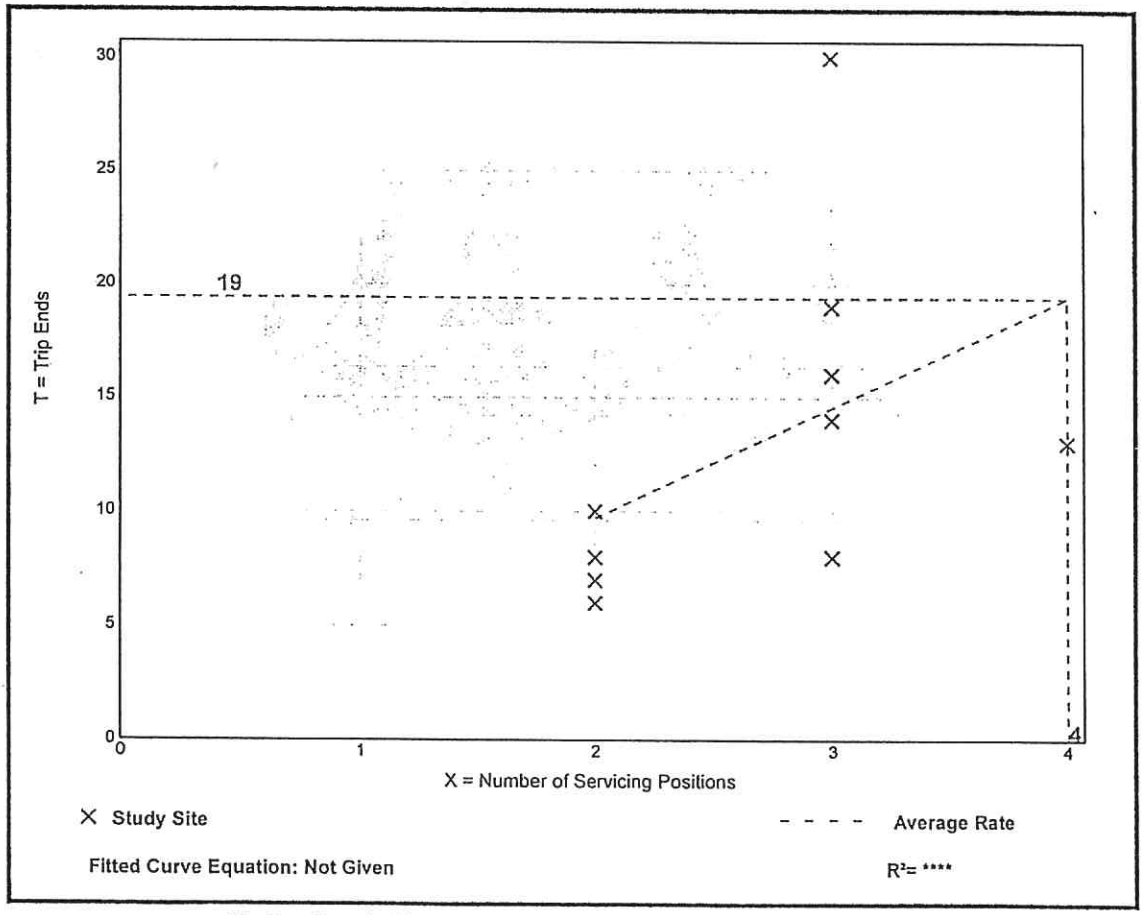
Quick Lubrication Vehicle Shop
(941)

Vehicle Trip Ends vs:	Servicing Positions
On a:	Weekday,
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	General Urban/Suburban
Number of Studies:	10
Avg. Num. of Servicing Positions:	3
Directional Distribution:	56% entering, 44% exiting

Vehicle Trip Generation per Servicing Position

Average Rate	Range of Rates	Standard Deviation
4.85	2.67 - 10.00	2.25

Data Plot and Equation



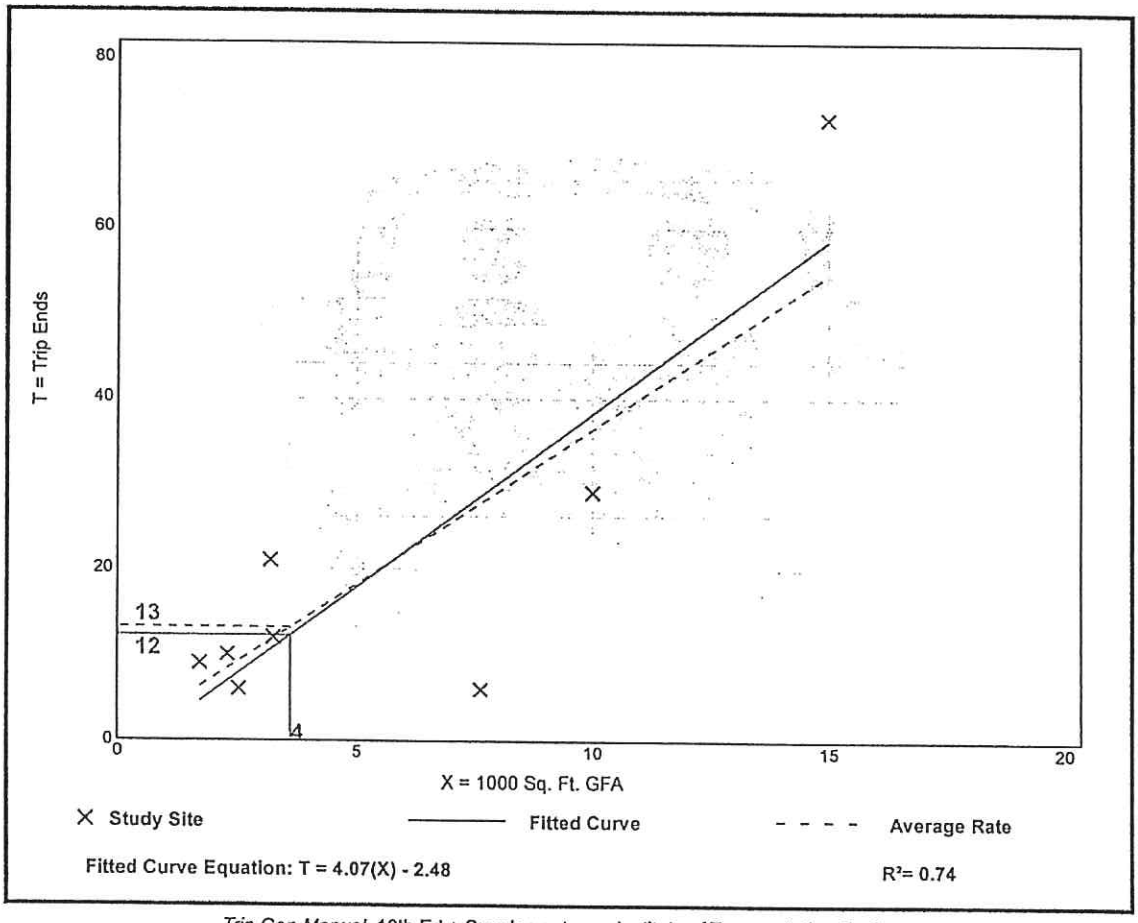
Animal Hospital/Veterinary Clinic
(640)

Vehicle Trip Ends vs:	1000 Sq. Ft. GFA
On a:	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.
Setting/Location:	General Urban/Suburban
Number of Studies:	8
Avg. 1000 Sq. Ft. GFA:	6
Directional Distribution:	67% entering, 33% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.64	0.79 - 6.56	1.78

Data Plot and Equation



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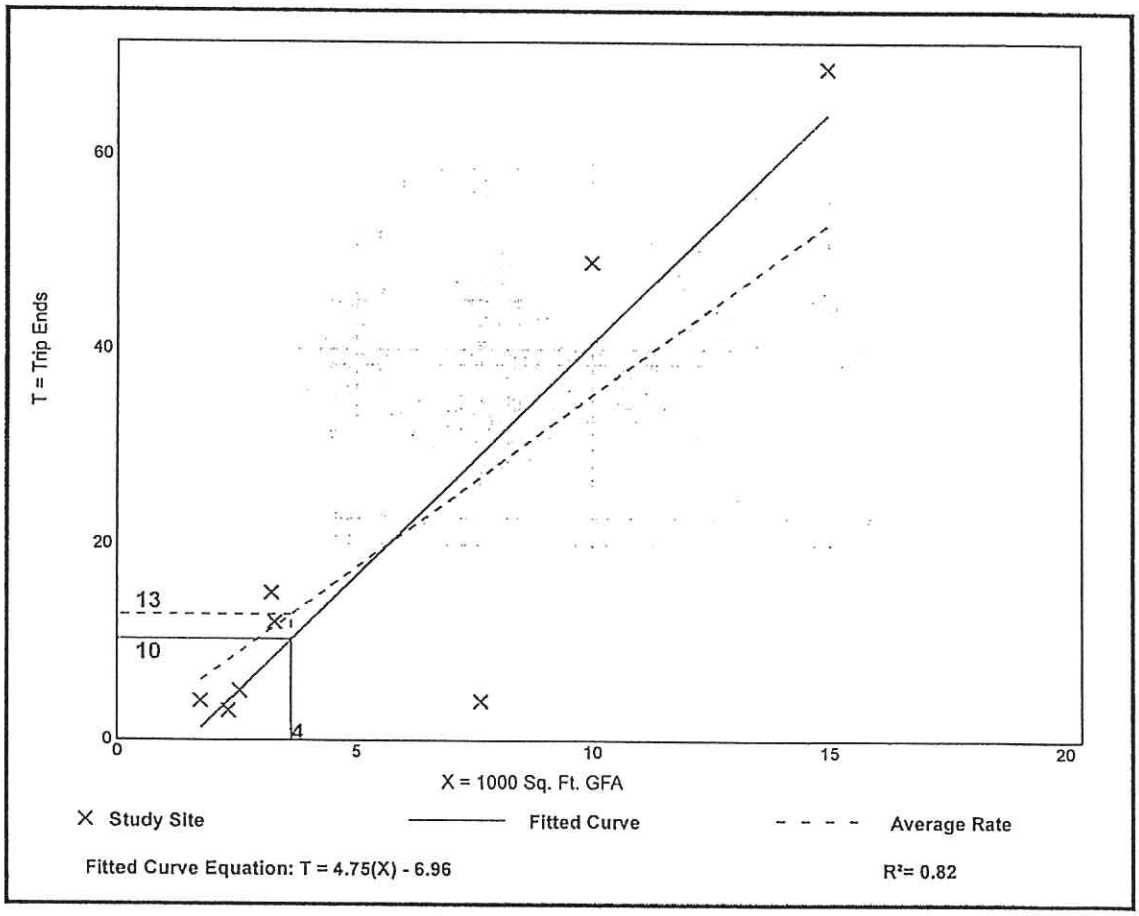
Animal Hospital/Veterinary Clinic
(640)

Vehicle Trip Ends vs:	1000 Sq. Ft. GFA
On a:	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.
Setting/Location:	General Urban/Suburban
Number of Studies:	8
Avg. 1000 Sq. Ft. GFA:	6
Directional Distribution:	40% entering, 60% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.53	0.53 - 4.90	1.80

Data Plot and Equation



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Site Location: 4215 Montgomery Road, Ellicott City MD

Date	Store	Total Oil Changes
02-Jan-17	BA0009	56
03-Jan-17	BA0009	30
04-Jan-17	BA0009	34
05-Jan-17	BA0009	40
06-Jan-17	BA0009	34
07-Jan-17	BA0009	33
08-Jan-17	BA0009	40
09-Jan-17	BA0009	61
10-Jan-17	BA0009	53
11-Jan-17	BA0009	50
12-Jan-17	BA0009	34
13-Jan-17	BA0009	51
14-Jan-17	BA0009	63
15-Jan-17	BA0009	42
16-Jan-17	BA0009	70
17-Jan-17	BA0009	38
18-Jan-17	BA0009	53
19-Jan-17	BA0009	38
20-Jan-17	BA0009	45
21-Jan-17	BA0009	67
22-Jan-17	BA0009	42
23-Jan-17	BA0009	41
24-Jan-17	BA0009	38
25-Jan-17	BA0009	42
26-Jan-17	BA0009	47
27-Jan-17	BA0009	47
28-Jan-17	BA0009	67
29-Jan-17	BA0009	40
30-Jan-17	BA0009	48
31-Jan-17	BA0009	42
01-Feb-17	BA0009	45
02-Feb-17	BA0009	38
03-Feb-17	BA0009	46
04-Feb-17	BA0009	68
05-Feb-17	BA0009	54
06-Feb-17	BA0009	49
07-Feb-17	BA0009	40
08-Feb-17	BA0009	37
09-Feb-17	BA0009	39
10-Feb-17	BA0009	48
11-Feb-17	BA0009	53
12-Feb-17	BA0009	47
13-Feb-17	BA0009	57
14-Feb-17	BA0009	50
15-Feb-17	BA0009	35
16-Feb-17	BA0009	35

17-Feb-17	BA0009	56
18-Feb-17	BA0009	81
19-Feb-17	BA0009	34
20-Feb-17	BA0009	62
21-Feb-17	BA0009	35
22-Feb-17	BA0009	29
23-Feb-17	BA0009	26
24-Feb-17	BA0009	74
25-Feb-17	BA0009	70
26-Feb-17	BA0009	52
27-Feb-17	BA0009	50
28-Feb-17	BA0009	50
01-Mar-17	BA0009	44
02-Mar-17	BA0009	53
03-Mar-17	BA0009	50
04-Mar-17	BA0009	69
05-Mar-17	BA0009	51
06-Mar-17	BA0009	52
07-Mar-17	BA0009	41
08-Mar-17	BA0009	36
09-Mar-17	BA0009	39
10-Mar-17	BA0009	53
11-Mar-17	BA0009	75
12-Mar-17	BA0009	45
13-Mar-17	BA0009	63
14-Mar-17	BA0009	3
15-Mar-17	BA0009	30
16-Mar-17	BA0009	41
17-Mar-17	BA0009	56
18-Mar-17	BA0009	89
19-Mar-17	BA0009	60
20-Mar-17	BA0009	33
21-Mar-17	BA0009	44
22-Mar-17	BA0009	52
23-Mar-17	BA0009	48
24-Mar-17	BA0009	64
25-Mar-17	BA0009	72
26-Mar-17	BA0009	56
27-Mar-17	BA0009	44
28-Mar-17	BA0009	52
29-Mar-17	BA0009	41
30-Mar-17	BA0009	40
31-Mar-17	BA0009	50
01-Apr-17	BA0009	70
02-Apr-17	BA0009	50
03-Apr-17	BA0009	42
04-Apr-17	BA0009	41

05-Apr-17	BA0009	37
06-Apr-17	BA0009	36
07-Apr-17	BA0009	65
08-Apr-17	BA0009	73
09-Apr-17	BA0009	46
10-Apr-17	BA0009	39
11-Apr-17	BA0009	46
12-Apr-17	BA0009	40
13-Apr-17	BA0009	48
14-Apr-17	BA0009	74
15-Apr-17	BA0009	56
17-Apr-17	BA0009	62
18-Apr-17	BA0009	41
19-Apr-17	BA0009	53
20-Apr-17	BA0009	39
21-Apr-17	BA0009	60
22-Apr-17	BA0009	48
23-Apr-17	BA0009	42
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29-Apr-17	BA0009	55
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03-May-17	BA0009	46
04-May-17	BA0009	35
05-May-17	BA0009	50
06-May-17	BA0009	69
07-May-17	BA0009	43
08-May-17	BA0009	49
09-May-17	BA0009	40
10-May-17	BA0009	52
11-May-17	BA0009	39
12-May-17	BA0009	55
13-May-17	BA0009	72
14-May-17	BA0009	26
15-May-17	BA0009	60
16-May-17	BA0009	45
17-May-17	BA0009	48
18-May-17	BA0009	49
19-May-17	BA0009	59
20-May-17	BA0009	62
21-May-17	BA0009	52
22-May-17	BA0009	65

23-May-17	BA0009	50
24-May-17	BA0009	53
25-May-17	BA0009	57
26-May-17	BA0009	65
27-May-17	BA0009	76
28-May-17	BA0009	35
29-May-17	BA0009	39
30-May-17	BA0009	38
31-May-17	BA0009	53
01-Jun-17	BA0009	62
02-Jun-17	BA0009	56
03-Jun-17	BA0009	65
04-Jun-17	BA0009	53
05-Jun-17	BA0009	54
06-Jun-17	BA0009	55
07-Jun-17	BA0009	43
08-Jun-17	BA0009	69
09-Jun-17	BA0009	74
10-Jun-17	BA0009	79
11-Jun-17	BA0009	37
12-Jun-17	BA0009	55
13-Jun-17	BA0009	43
14-Jun-17	BA0009	61
15-Jun-17	BA0009	63
16-Jun-17	BA0009	79
17-Jun-17	BA0009	76
18-Jun-17	BA0009	35
19-Jun-17	BA0009	48
20-Jun-17	BA0009	68
21-Jun-17	BA0009	60
22-Jun-17	BA0009	53
23-Jun-17	BA0009	76
24-Jun-17	BA0009	70
25-Jun-17	BA0009	51
26-Jun-17	BA0009	50
27-Jun-17	BA0009	51
28-Jun-17	BA0009	38
29-Jun-17	BA0009	66
30-Jun-17	BA0009	87
01-Jul-17	BA0009	68
02-Jul-17	BA0009	39
03-Jul-17	BA0009	86
05-Jul-17	BA0009	56
06-Jul-17	BA0009	69
07-Jul-17	BA0009	74
08-Jul-17	BA0009	55
09-Jul-17	BA0009	41

10-Jul-17	BA0009	53
11-Jul-17	BA0009	56
12-Jul-17	BA0009	61
13-Jul-17	BA0009	47
14-Jul-17	BA0009	72
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16-Jul-17	BA0009	54
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22-Jul-17	BA0009	75
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12-Aug-17	BA0009	64
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15-Aug-17	BA0009	42
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20-Aug-17	BA0009	53
21-Aug-17	BA0009	43
22-Aug-17	BA0009	38
23-Aug-17	BA0009	64
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25-Aug-17	BA0009	69

26-Aug-17	BA0009	62
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28-Aug-17	BA0009	51
29-Aug-17	BA0009	29
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16-Sep-17	BA0009	52
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18-Sep-17	BA0009	50
19-Sep-17	BA0009	43
20-Sep-17	BA0009	39
21-Sep-17	BA0009	52
22-Sep-17	BA0009	58
23-Sep-17	BA0009	75
24-Sep-17	BA0009	36
25-Sep-17	BA0009	50
26-Sep-17	BA0009	41
27-Sep-17	BA0009	54
28-Sep-17	BA0009	49
29-Sep-17	BA0009	77
30-Sep-17	BA0009	65
01-Oct-17	BA0009	60
02-Oct-17	BA0009	48
03-Oct-17	BA0009	49
04-Oct-17	BA0009	46
05-Oct-17	BA0009	45
06-Oct-17	BA0009	72
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08-Oct-17	BA0009	51
09-Oct-17	BA0009	64
10-Oct-17	BA0009	51
11-Oct-17	BA0009	35

12-Oct-17	BA0009	63
13-Oct-17	BA0009	59
14-Oct-17	BA0009	68
15-Oct-17	BA0009	40
16-Oct-17	BA0009	47
17-Oct-17	BA0009	47
18-Oct-17	BA0009	51
19-Oct-17	BA0009	55
20-Oct-17	BA0009	74
21-Oct-17	BA0009	65
22-Oct-17	BA0009	53
23-Oct-17	BA0009	52
24-Oct-17	BA0009	42
25-Oct-17	BA0009	41
26-Oct-17	BA0009	45
27-Oct-17	BA0009	58
28-Oct-17	BA0009	65
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30-Oct-17	BA0009	39
31-Oct-17	BA0009	36
01-Nov-17	BA0009	35
02-Nov-17	BA0009	48
03-Nov-17	BA0009	59
04-Nov-17	BA0009	69
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06-Nov-17	BA0009	49
07-Nov-17	BA0009	46
08-Nov-17	BA0009	48
09-Nov-17	BA0009	41
10-Nov-17	BA0009	76
11-Nov-17	BA0009	72
12-Nov-17	BA0009	55
13-Nov-17	BA0009	40
14-Nov-17	BA0009	54
15-Nov-17	BA0009	44
16-Nov-17	BA0009	49
17-Nov-17	BA0009	73
18-Nov-17	BA0009	102
19-Nov-17	BA0009	54
20-Nov-17	BA0009	58
21-Nov-17	BA0009	61
22-Nov-17	BA0009	67
24-Nov-17	BA0009	52
25-Nov-17	BA0009	52
26-Nov-17	BA0009	45
27-Nov-17	BA0009	47
28-Nov-17	BA0009	47

29-Nov-17	BA0009	38
30-Nov-17	BA0009	45
01-Dec-17	BA0009	46
02-Dec-17	BA0009	67
03-Dec-17	BA0009	43
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13-Dec-17	BA0009	49
14-Dec-17	BA0009	65
15-Dec-17	BA0009	46
16-Dec-17	BA0009	76
17-Dec-17	BA0009	43
18-Dec-17	BA0009	63
19-Dec-17	BA0009	53
20-Dec-17	BA0009	52
21-Dec-17	BA0009	57
22-Dec-17	BA0009	73
23-Dec-17	BA0009	63
24-Dec-17	BA0009	27
26-Dec-17	BA0009	66
27-Dec-17	BA0009	69
28-Dec-17	BA0009	65
29-Dec-17	BA0009	82
30-Dec-17	BA0009	63
31-Dec-17	BA0009	31
		18863

Valvoline Store # BA0009	Day of the Week	ADT per Weekday
BA0009	Monday	55
BA0009	Tuesday	44
BA0009	Wednesday	47
BA0009	Thursday	49
BA0009	Friday	62
BA0009	Saturday	66
BA0009	Sunday	45