2005 Maine Fuels Report
and
Status of MTBE Ban Report

Prepared for: The Joint Standing Committee on Natural Resources

Prepared by: The Maine Department of Environmental Protection
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017
(207) 287-2437

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Cover: Portland Pipeline, South Portland Maine. Photo by Cathy Richardson, DEP

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Section I: Executive Summary

Background. The Department of Environmental Protection (DEP) submits this report in accordance with Maine Revised Statutes Title 38, Section 585-H, enacted by the Maine Legislature in 2000. At that time, the Legislature established the goal to eliminate methyl-tertiary butyl ether (MTBE) in gasoline sold in the state by January 1, 2003. DEP is required to monitor and report on levels of MTBE in shipments of gasoline to storage terminals in Maine. The Department is also required to work collaboratively at a regional level to develop alternatives of the use of MTBE as a gasoline additive. In addition the Department has included the required report on the status of the MTBE ban in Maine within this report.

Although shipments of gasoline to Maine still contain MTBE as an octane-enhancer, the concentrations of MTBE are much lower than when Maine received reformulated gasoline. During the second special session of the 121st Legislature, Section 585-H was revised and Section 585-I enacted to reflect a statewide ban on MTBE beginning on January 1, 2007.

Maine began participating in the federal Reformulated Gasoline (RFG) program in January 1995 as part of the state's plan to comply with the federal Clean Air Act Amendments of 1990. The RFG delivered in Maine contained higher levels of MTBE than gasoline sold here prior to implementing the program. Subsequently, MTBE began appearing in public and private water supplies more frequently and at higher concentrations than had been reported in prior years.

This prompted Maine to petition the United States Environmental Protection Agency (EPA) to allow the state to opt-out of the RFG program based on the risk to ground water posed by MTBE. EPA approved the petition provided several conditions were met, including implementing a replacement fuel program that achieved reductions of certain air emissions (volatile organic compounds). Therefore, the Maine Board of Environmental Protection adopted Chapter 119 *Motor Vehicle Fuel Volatility Limit*, which required 7.8 Reid Vapor Pressure gasoline in the seven southern counties from May 1st to September 15th of each year. Having met the conditions, the effective date for withdrawal from the RFG program was March 10, 1999. In May of 2001, the Department submitted a fuels waiver request for 7.8 RVP fuel under the authority of 211 (c) of the Clean Air Act. The waiver received final approval on March 6, 2002 and became effective on April 5, 2002.

The DEP anticipated that MTBE levels in gasoline would drop to levels sold in Maine prior to initial implementation of the RFG program (1995). Under the RFG program, the MTBE levels were 11% by volume; compared to pre-RFG levels of MTBE which were typically 2 to 3 percent by volume in regular grade gasoline.

2005 Fuel Results - MTBE. In 2005 the MTBE levels returned to the typical level of conventional gasoline in direct contrast to the significantly increased levels of MTBE seen in 2004. The levels of MTBE have decreased by over half from last year's average of 4.49 % by volume to 2.07 % by volume for 2005. In fact, in 2005 the number of shipments more than tripled with less than .1% by weight of oxygenated fuel. In comparison, RFG contains at least 2% by weight oxygenate. In 2004, 38 of 284 shipments contained 2% oxygen by weight compared to 35 out of 307 shipments containing 2% oxygen by weight in 2005. This equates to 11.4 % of the fuel shipments Maine received last year was RFG

2005 Fuel Component Levels. The DEP tracks not only the levels of MTBE but also other gasoline components including sulfur, benzene, and aromatics. Sulfur in 2005 decreased from the weighted average of 94.39 parts per million (ppm) in 2004 to 88.97 ppm in 2005. It is important to note that pursuant to federal law in January 2005 the refinery average sulfur in gasoline was reduced to 30 ppm, a corporate average of 90 ppm, and a per gallon cap of 300 ppm. Beginning in 2006 this average becomes even tighter with a per gallon cap of 80 ppm. 2005 Benzene levels were similar to levels seen in 2004 (0.81%). Average aromatic levels went up from 22.84 percent by volume in 2004 to 28.23 percent in 2005. See Table 1 for a summary of all 2005 gasoline component concentrations.

Federal Fuel Update. Late in the year the Energy Policy Act of 2005 (EPACT) passed in Congress. The passage of this Act finally ended several contentious years of debate in Congress over a comprehensive Energy Bill. Some of the key sections included in EPACT were a renewable fuels standard, the elimination of the oxygenate requirement for RFG, the ability of attainment states in the Ozone Transport Region to opt-in to RFG, and the ability of States to obtain temporary fuel waivers during supply emergencies. In addition the bill directed a federal study of the feasibility of national or regional fuels to improve fuel fungiblity, reduce price volatility and enhance fuel quality, consistency and supply.

Maine's MTBE Ban Status. The Department is required by March 1, 2006 to submit to the Natural Resources Committee status report on the implementation of the MTBE ban for Maine. To meet this requirement, the Department contacted the five fuel terminals in the state that distribute gasoline and asked for a progress report toward meeting the statutory goal of having gasoline containing no more than ½ of 1 percent by volume of MTBE by January 1, 2007. All terminals have reported that they will be in compliance with the statutory requirements in advance of the January 1, 2007 deadline. .

TABLE 1 DATA SUMMARY

Weighted Average for:	RVP (psi)	Oxygen (wt %)	MTBE (% vol)	Other Oxy. (% vol) TAME	Other Oxy. (% vol) ETBE	Other Oxy. (% vol) ETOH	Other Oxy. (% vol) MEOH	Other Oxy. (% vol) TBA	Other Oxy. (% vol) DIPE	Other Oxy. (% vol) 2-Butanol	Benz. (% vol)	Aro. (% vol)	Sulf. (ppm)
1st Quarter	12.62	0.49	2.53	1.23	0.53	0.00	0.00	0.48	2.86	0.00	0.77	25.02	66.2
2nd Quarter	7.96	0.43	2.32	0.63	0.53	0.00	0.00	0.15	0.00	0.05	0.71	29.74	80.71
3rd Quarter	8.53	0.25	1.35	0.13	0.28	0.00	0.00	0.11	0.00	0.00	0.90	31.64	112.97
4th Quarter	12.77	0.41	2.18	0.63	0.03	0.00	0.09	0.11	0.00	0.00	0.79	25.86	91.91
Ozone Season	7.99	0.32	1.72	0.36	0.35	0.00	0.00	0.16	0.00	0.05	0.79	30.24	89.4
Full Year	10.37	0.39	2.07	0.54	0.46	0	0.09	0.2	2.86	0.05	0.81	28.23	88.97

Section II: Introduction

A. Background

The federal reformulated gasoline (RFG) program was designed to reduce emissions of motor vehicle pollutants. To comply with the RFG program, gasoline must achieve a set of emission performance standards and meet a minimum oxygen content requirement. Refiners have opted to comply with the oxygen requirement by selling RFG containing methyl tertiary-butyl ether (MTBE) at 11 percent by volume. In comparison, conventional gasoline has MTBE in amounts of 2-3 percent by volume or less, while some premium blends can contain as much as 9 percent MTBE.

Methyl tertiary-butyl ether (MTBE) is a gasoline additive that replaced lead as an octane enhancer since 1979. MTBE is a member of a group of chemicals commonly known as fuel oxygenates. Oxygenates are added to conventional fuel to increase its octane and RFG to increase the level of oxygen to reduce emissions and improve overall combustion efficiency. MTBE is used in gasoline throughout the United States to reduce carbon monoxide (wintertime oxy-fuel) and ozone levels (RFG) caused by auto emissions.

In 1991 Maine volunteered to phase into the RFG program and began selling RFG in January of 1995. States with voluntary RFG programs were required to decide by December 30, 1997, whether they wanted to remain in the program, otherwise procedures required them to stay in the program through 2003.

With the distribution of RFG in southern Maine, there was public concern over the potential threat to ground water quality. MTBE is more water soluble than other gasoline components and is persistent in ground water. MTBE is considered by the United States Environmental Protection Agency (EPA) as a possible carcinogen, Class C, and has a very low odor and taste detection threshold.

In 1997, the Maine Bureau of Health reported MTBE in 7% of Maine public water supplies. These incidents of groundwater contamination prompted Governor King to direct a ground water investigation to determine the extent of MTBE in public and private water supplies. Maine did not want to commit to continued participation in the RFG program through the year 2003 until the ground water testing was completed. In *The Presence of MTBE and Other Gasoline Compounds in Maine's Drinking Water* report (1998), MTBE was reported to be detected (1ppb detection limit) in approximately 16% of the public water supplies and 951 private wells sampled in Maine.

As a result of this study, in October 1998 Maine petitioned EPA under 40 CFR 80.72(a) to opt-out of the RFG program based on the unacceptable risk to ground water posed by MTBE. A subsequent waiver request was submitted to EPA

requesting approval for a 7.8 RVP fuel rather than the 7.2 RVP fuel adopted by the BEP. The request for the 7.8 fuel was approved despite the increase in VOC emissions for 7.8 RVP fuel. EPA approved the petition; the effective date for withdrawal from the RFG program was March 10, 1999.

The Department anticipated that if RFG levels for MTBE (eleven percent by volume) were not required, then the levels of MTBE would drop to the levels for conventional gas sold in Maine prior to participation in the RFG program. However, the Department also anticipated MTBE would not be totally eliminated since the petroleum industry continues to rely on MTBE as an octane enhancer in gasoline fuel production.

At the direction of the 120th legislature, the Department collects data on gasoline sold in Maine to determine the MTBE levels in gasoline. The Department tracks not only the levels of MTBE but also other gasoline components including sulfur, benzene, and aromatics. The data collection was also intended to track the progress made towards the goal of eliminating MTBE in gasoline sold in Maine (the 120th legislature also set an MTBE elimination date goal of January 2003). This goal was not met, and during the second special session of the 121st Legislature, MTBE was banned in gasoline fuels, beginning on January 1, 2007.

The State of Maine is also required to promote and actively participate in regional efforts to develop alternatives of the use of MTBE as a gasoline additive. As a result of that requirement, the Northeast States for Coordinated Air Use Management (NESCAUM) completed a study in the summer of 2001, of the potential effects on public health and the environment, and on the regulatory and economic impacts of using ethanol as an oxygenate.

In 1999, a Northeast Regional Fuels Task Force was established at the direction of the New England Governors Association to look at regional solutions to address the MTBE issue. This Task Force's objectives are to maximize the air quality benefits and public health benefits of reformulated gasoline, reduce the amount of MTBE in the gasoline supply to protect water resources, promote a regionally consistent clean fuels program, and to minimize the impact of fuel quality changes on gasoline supply and price.

For the past several years, the task force worked with the petroleum and ethanol industries and environmental groups to forge a compromise in legislative language on a Congressional bill that would phase the elimination of MTBE and require a national fuel with a renewable content requirement with clean air performance benefits. This language eventually became attached to the proposed Energy Bill. The Energy Policy Act of 2005 passed in July of 2005 without a ban on MTBE, but did include a renewable fuels standard as well as removing the oxygenate requirement from the RFG program.

B. Legislative Requirement

38 M.R.S.A. §585-H, enacted by the Legislature in 2000, requires MTBE monitoring and reductions. This section was amended by the 121st Legislature during the second special session in 2004 to reflect a ban on MTBE. Those changes are reflected below by strikeouts. Specifically the rule now reads:

"The department shall monitor shipments of gasoline to storage terminals in this State and compile annual reports showing the levels of methyl tertiary butyl ether, referred to as "MTBE", in gasoline brought into this State.

The department shall promote and actively participate in regional efforts by state regulatory agencies in the Northeast to develop alternatives to the use of MTBE as a gasoline additive. ~~In these efforts, the department shall work toward the goal of the elimination of MTBE in gasoline sold in the State by January 1, 2003 in a manner that:~~

~~1. Market constraints. Adequately accounts for market constraints related to supply and pricing; and~~

~~2. Lowest environmental impact. Based on thorough analysis and evaluation of alternatives to the use of MTBE, ensures the lowest possible total environmental impact.~~

The department shall annually, no later than February 1st of each year, present a report to the joint standing committee of the Legislature having jurisdiction over natural resources matters on the levels of MTBE in gasoline brought into this State ~~and the progress made in achieving the goal of eliminating MTBE in gasoline sold in the State by January 1, 2003~~. The committee may report out to any session of any Legislature legislation relating to MTBE use in gasoline."

In addition to the changes made to §585-H, §585-I was added. §585-I was enacted to read:

"The following provisions apply to the sale of MTBE in the State.

1. *Definition. For purposes of this section, "MTBE" means the gasoline oxygenate methyl tertiary butyl ether.*

2. *Prohibition on sale. Beginning January 1, 2007, a person may not sell, offer for sale, distribute or blend in this State gasoline that contains more than ½ of 1% by volume MTBE that is intended for sale for ultimate consumers in this State."*

3. *Emergency order. Notwithstanding subsection 2, whenever the commissioner finds that a danger to public health or safety exists due to low supply of gasoline in the State, the commissioner may issue an emergency order waiving the sales prohibition in subsection 2.*

Sec. 5. Report. By March 1, 2006, the Department of Environmental Protection shall present a report to the joint standing committee of the Legislature having jurisdiction over natural resources matters on the implementation and status of the prohibition on the sale of gasoline containing more than ½ of 1% by volume methyl tertiary butyl ether, or MTBE.

C. 211 (c) Waiver

Following the 1990 Clean Air Act Amendments, Governor John McKernan, Jr. opted Maine's non-attainment counties[1] into the federal reformulated gasoline program (RFG) on June 26, 1991. The sale of reformulated gasoline began on January 1, 1995.

On October 13, 1998, Governor King sent a letter to EPA requesting permission to opt- out of the RFG program. EPA approved the request to opt-out, with March 10, 1999 as the effective date, contingent upon three conditions being met by the Department. Those conditions were as follows: (1) Maine identifies a replacement fuel measure or other measure to provide VOC reductions equivalent to those yielded by RFG; (2) Maine provide a schedule for implementing the replacement measure; and (3) Maine provide an explanation of the impact to the State Implementation Plan[2].

To meet the first condition, on March 14, 1999, the Maine Board of Environmental Protection subsequently amended Chapter 119 *Motor Vehicle Fuel Volatility Limit*, a conventional low volatility fuel regulation. This amended regulation required all gasoline have a Reid Vapor Pressure no greater than 7.8 psi during the period between May 1, 1999 and September 15, 1999 and reduced to 7.2 psi during the period between May 1, 2000 and September 15, 2000 and continuing every year thereafter. This regulation applied to gasoline that is distributed or marketed by bulk gasoline terminals, or is directly imported to gasoline service stations or bulk gasoline plants in York, Cumberland, Sagadahoc, Androscoggin, Kennebec, Knox and Lincoln Counties. However, there was concern of a limited number of refiners making 7.2 RVP fuel. This could result in a potential supply disruption. In the event of a major supply disruption, the most likely "replacement" fuel would be RFG with its required oxygen levels i.e. 11% MTBE by volume. Due to continued concerns of potential groundwater contamination from MTBE, an oxygenate used in RFG, the risk of increased levels of MTBE in gasoline shipped to Maine was not acceptable. Therefore, on April 20, 2000 the Maine Board of Environmental Protection amended Chapter 119 *Motor Vehicle Fuel Volatility Limit* to repeal the requirement that gasoline sold in the seven southern counties must have a Reid Vapor Pressure of 7.2 psi or less during the summer months. The current 7.8 RVP gasoline with no restrictions on oxygen levels has resulted in MTBE levels equal to or below typical conventional gasoline (2 to 3% by volume).

Maine is prohibited from adopting a non-identical state control under section 211(c)(4) of the Clean Air Act (CAA). EPA has promulgated nationally

[1] Hancock and Waldo counties were subsequently opted-out of the RFG program on December 28. 1994.
[2] On January 22, 1999 EPA extended the effective date of Maine's withdrawal from the RFG program until March 10, 1999 "in order to provide time for EPA and the State to reach agreement on such replacement program."

applicable federal standards for the RVP levels of motor vehicle gasoline under sections 211(c) and 211(h) of the CAA. Section 211(c)(4)(A) of the CAA prohibits non-identical state regulation of fuel characteristics or components for which EPA has adopted a control or prohibition. In accordance with Section 211(c)(4)(C), EPA may approve a non-identical state fuel control as a State Implementation Plan (SIP) provision, provided the state demonstrates that the measure is necessary to achieve the national primary or secondary ambient air quality standards that the plan implements. EPA can approve a state fuel requirement as necessary only if no other measure exists that would bring about timely attainment, or if other measures exist but are unreasonable or impracticable.

Therefore, Maine submitted to EPA in accordance with Section 211 (c), a fuels waiver request for a 7.8 RVP gasoline that was accepted on May 29, 2001. EPA subsequently published in the Federal Register on December 6, 2001 a proposal to approve the waiver and request comments. The comment period ended on January 9, 2002 with no comments received. Final approval of the waiver was received on March 6, 2002 and became effective on April 5, 2002.

Section III: Data

A. Data Collection

In addition to the requirements of 38 MRSA § 585-H, Chapter 119 *Motor Vehicle Fuel Volatility Limit* requires the following records to be kept at the bulk gasoline terminals:

> *"Any owner or operator of a bulk gasoline terminal shall maintain records on the Reid Vapor Pressure, oxygen content, oxygenate, benzene, aromatics, and sulfur of any gasoline that is delivered to or distributed from such terminal. Such records shall be maintained for at least three years and shall be available for inspection during normal business hours, and copies shall be provided to the Commissioner or his representative upon request."*

The Department requested the information listed above from each bulk gasoline terminal carrying automotive gasoline. A bulk gasoline terminal refers to a storage facility that has a daily average throughput of more than 20,000 gallons of gasoline.

In cooperation with the Maine Petroleum Association, the Department developed a quarterly reporting form for the terminals to fill out and submit to the Department (Appendix A). In addition, the Department requested the date of delivery, the number of barrels delivered, and any other significant information.

The following bulk gasoline terminals carry automotive gasoline and reported gasoline data to the Department:

Terminal	Location
Gulf	Portland
Irving	Bucksport
Exxon-Mobil	Portland
Motiva	Portland
Webber	Searsport

No data was obtained from any trucking of fuel into the state.

B. Maine Data on MTBE and Other Oxygenates

During calendar year 2005, as in previous years, MTBE was present in almost all gasoline shipments containing oxygenates. MTBE was either the sole oxygenate or in formulations containing one or more of the following oxygenates: Tertiary Amyl Methyl Ether (TAME) and Ethyl Tertiary Butyl Ether (ETBE), Methanol (MEOH), T-butanol (TBA), Sec-butanol and diisopropyl ether (DIPE). Fourteen shipments of gasoline contained no MTBE at all, only other oxygenates either alone or in combination. In some shipments, there were up to three different oxygenates plus MTBE in the gasoline delivered to the bulk terminals. This is, according to the petroleum industry, a common occurrence. In fact according to the petroleum industry, oxygenates can also occur as a natural byproduct of the refining process.

During the year 2005 gasoline contained 2.07 percent by volume MTBE and a 0.39 percent weighted average oxygen level (Table 2). The MTBE volume percent nearly halved between 2004 and 2005 to 2.07 percent by volume.

Table 2: MTBE & Other Oxygenates

Weighted Ave for:	Oxygen Wt %	MTBE Vol %	TAME Vol %	ETBE Vol %	MEOH Vol %	Ethanol Vol %	T-butanol Vol %
2003 Data	0.48	2.38	0.93	0.73	0.18	0.01	0.22
2004 Data	0.91	4.49	2.08	2.40	0.04	0.13	0.40
2005 Data	0.39	2.07	0.54	0.46	0.09	0	0.2

Weighted Ave for:	isobutanol Vol %	Sec-butanol Vol %	N-Propanol Vol %	DIPE Vol %
2003 Data	0.22	0.26	0	1.40
2004 Data	0	0	0.16	0.81
2005 Data	0	0.05	0	2.86

As a reference, Reformulated Gasoline (RFG) required a minimum oxygen level of 2 percent by weight in gasoline. For MTBE this equates to 11 percent by volume. Conventional gasoline prior to RFG commonly contained between 3 to 5 percent by volume MTBE in regular grades and as much as 9 percent by volume in premium blends.

The oxygenate data sorted by the date of delivery is listed by each quarter (Appendix B), and for ozone season (Appendix C).

Table 3 summarizes the MTBE content in Maine fuel reported during 2004.

Table 3: Shipment Summary

Number of shipments of gasoline 307
Number of shipments with no oxygenate ..... .64
Number of shipments with MTBE only..... 193
Number of shipments with MTBE plus other oxygenates..... ..48
Number of shipments with an other oxygenate but no MTBE 4
Number of shipments with MTBE only with oxygen levels
greater than 2% by weight 35
Number of shipments with oxygen levels greater than 2%
by weight containing oxygenates other than MTBE alone..... ..13

For all shipments of gasoline:

MTBE	2.07% by volume
Weighted average oxygen level	0.39% by weight

Figure 1 depicts the levels of MTBE in gasoline by quarters for 2003, 2004, and 2005. The level of MTBE in gasoline decreased in 2005. These levels are more in line with the levels we have seen in past years and what we expected when we opted-out of the RFG program.

Figure 2 is a scatter-diagram of the percent volume of MTBE by delivery date for 2005 and Figure 3 depicts the volume percent of MTBE for 2003, 2004, and 2005 by shipment. Figure 4 is a scatter-diagram of the percent weight oxygen by delivery date and Figure 5 shows the percent weight oxygen levels for 2003, 2004, and 2005 by shipment. Table 4 summarizes the other (non-MTBE) oxygenates in the Maine fuel reported during 2005.

Table 4: Other Oxygenates Reported

Oxygenate	Number of Shipments	Percent Oxygenate (by volume)
TAME	22	0.54
ETBE	12	0.46
Ethanol	0	0
MEOH	1	0.09
T-butanol	22	0.2
N-propanol	0	0
DIPE	2	2.86
Sec-butanol	7	0.05

Overall, the levels of MTBE have dropped since the state withdrew from the federal RFG program and implemented a "low volatility" gasoline program starting in 1999.[3]

[3] RFG was required only in the seven southern Maine counties.

Figure 1 % Vol MTBE by Quarter 2005

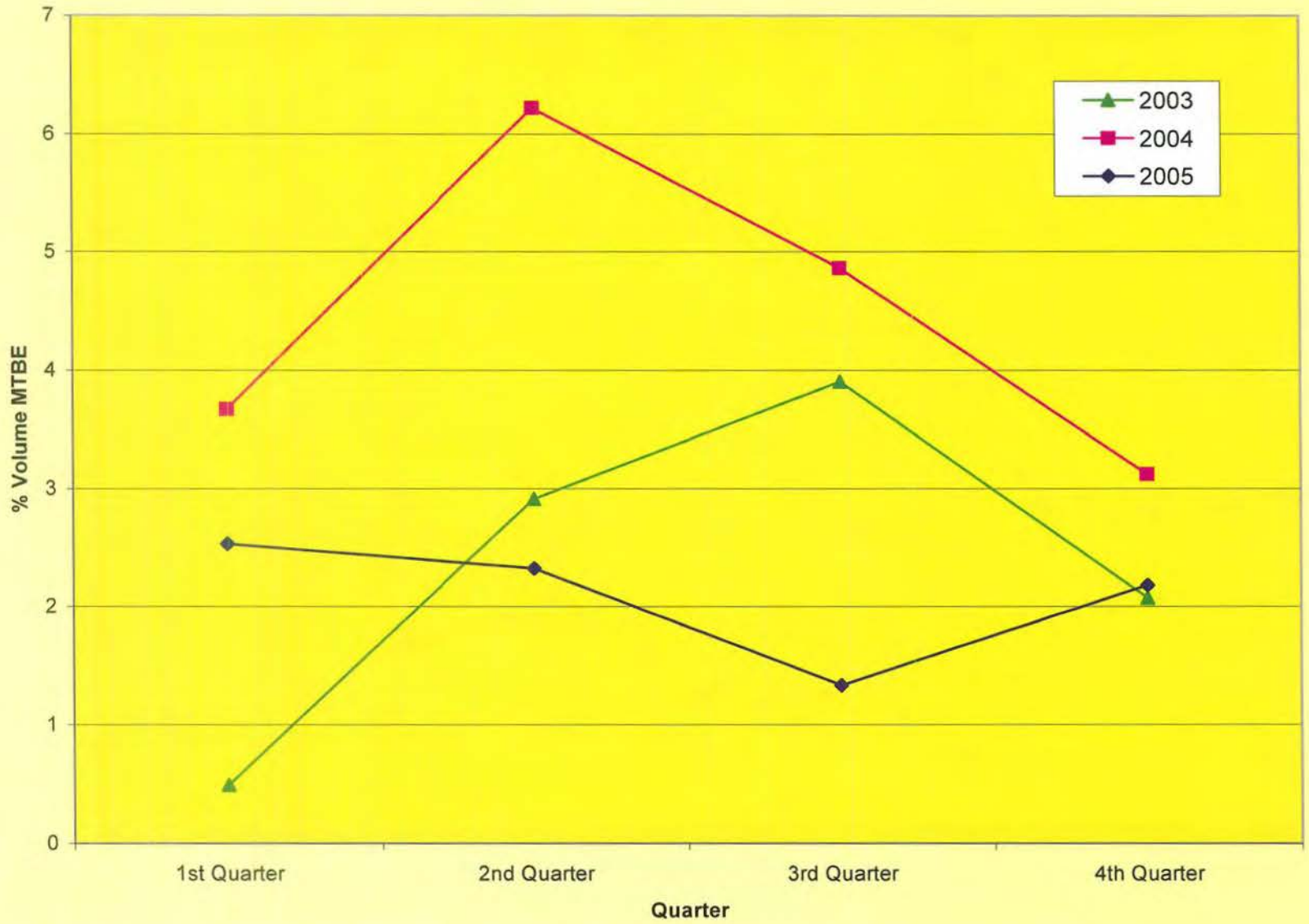


Figure 2
MTBE (Vol %) by Delivery Date
2005

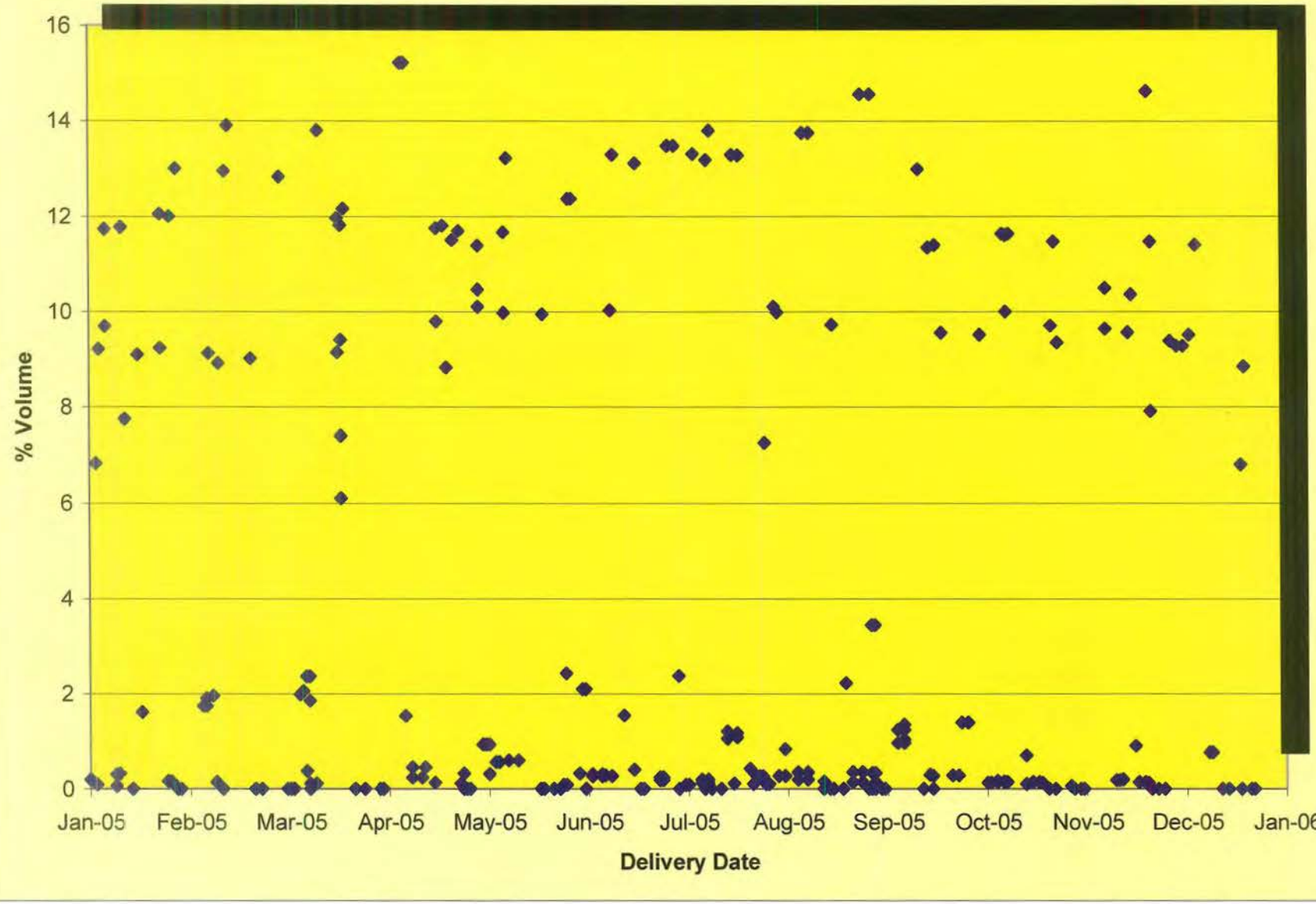


Figure 3
MTBE (vol %) by Shipment

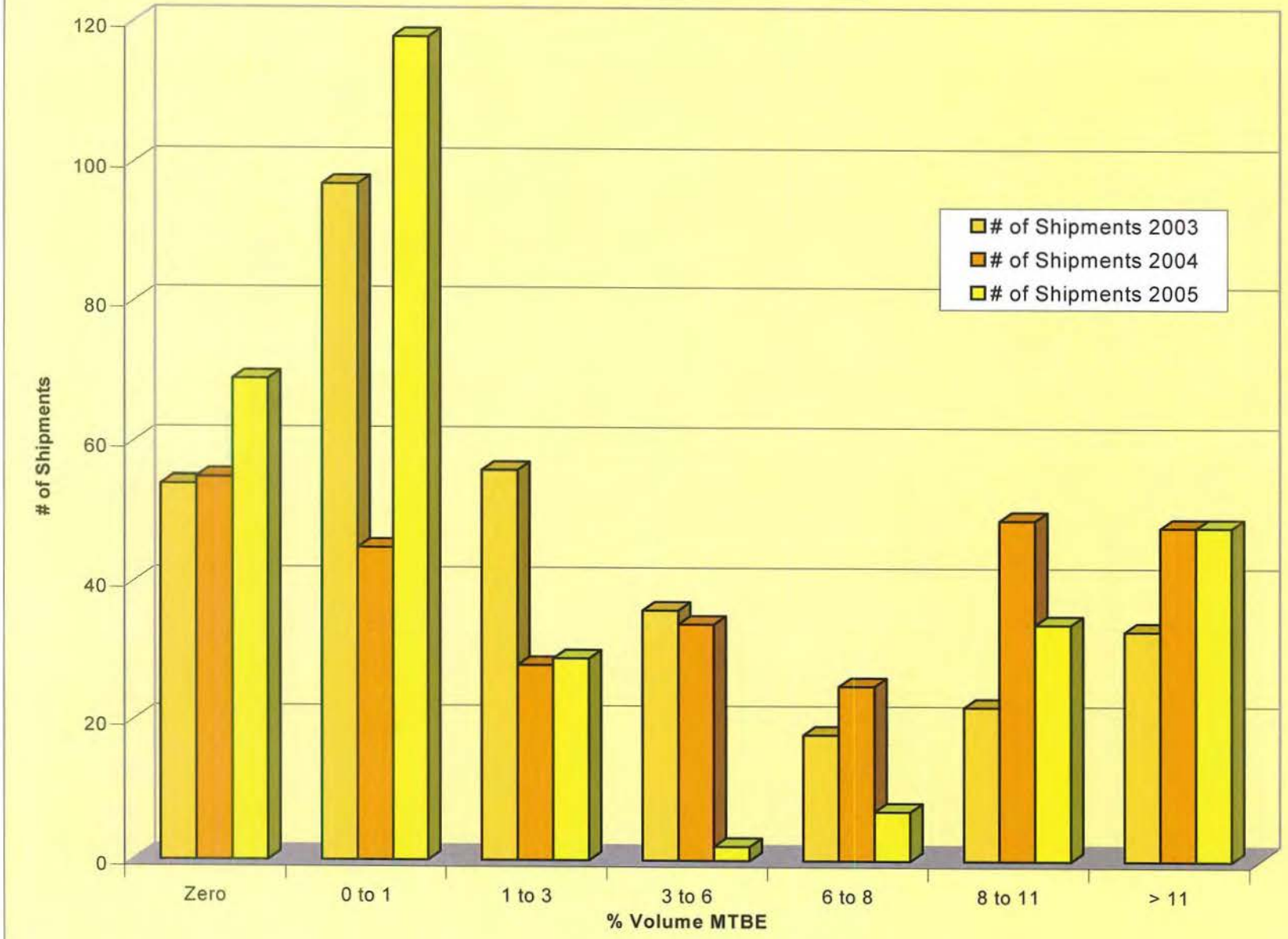
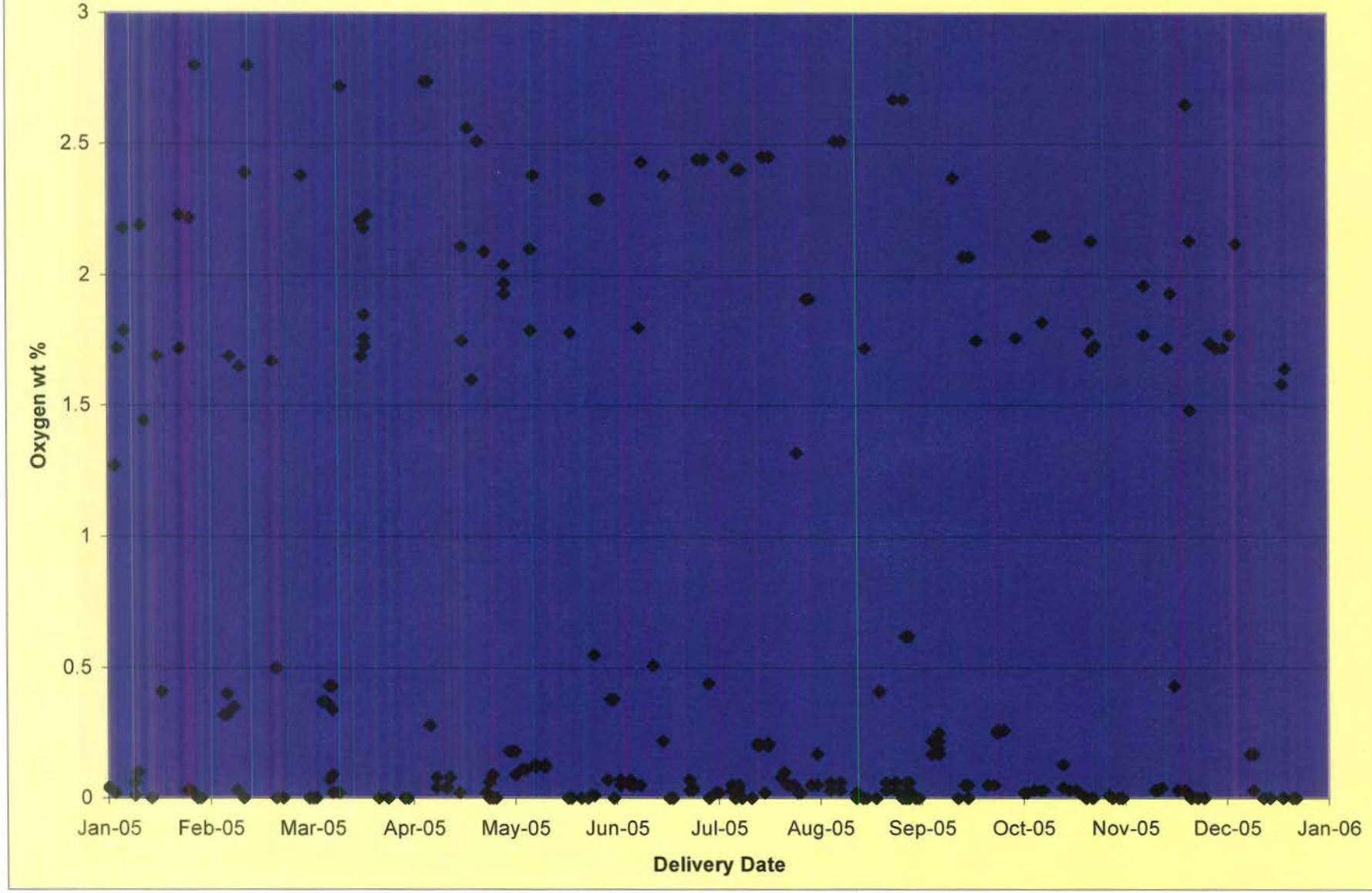


Figure 4
Oxygen (wt%) by Delivery Date
2005



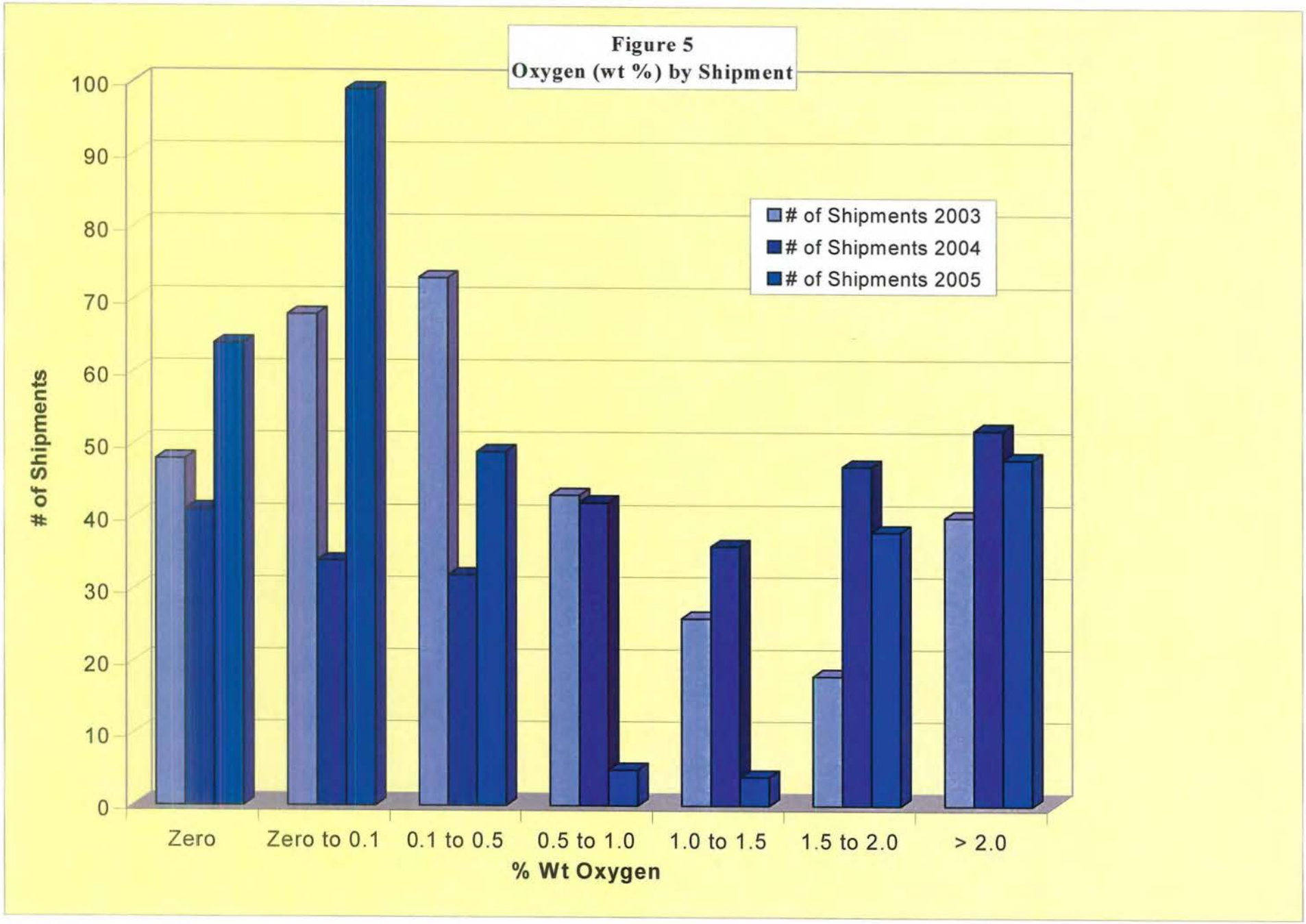


Figure 5
Oxygen (wt %) by Shipment
# of Shipments 2003
# of Shipments 2004
# of Shipments 2005
# of Shipments
100
90
80
70
60
50
40
30
20
10
0
Zero
Zero to 0.1
0.1 to 0.5
0.5 to 1.0
1.0 to 1.5
1.5 to 2.0
> 2.0
% Wt Oxygen

C. Maine Data on Other Gasoline Components: Sulfur, Benzene, and Aromatics

Table 5 lists the statewide weighted averages of benzene, aromatics and sulfur in the 2005 fuel compared to 2004 and 2003 fuel, plus Phase 1 and Phase 2 Reformulated Gasoline (RFG).

Table 5: Other Gasoline Components

Weighted Averages for:	Sulfur	Benzene	Aromatics
2005 Data	88.97 ppm	0.81 % Vol	28.23 % Vol
2004 Data	94.39 ppm	0.81 % Vol	22.84 % Vol
2003 Data	156.7 ppm	0.96 % Vol	27.68 % Vol
Ave. Phase I RFG	170 ppm	0.8% Vol	26.3 % Vol
Ave Phase II RFG	150 ppm	0.8 % Vol	24.0 % Vol

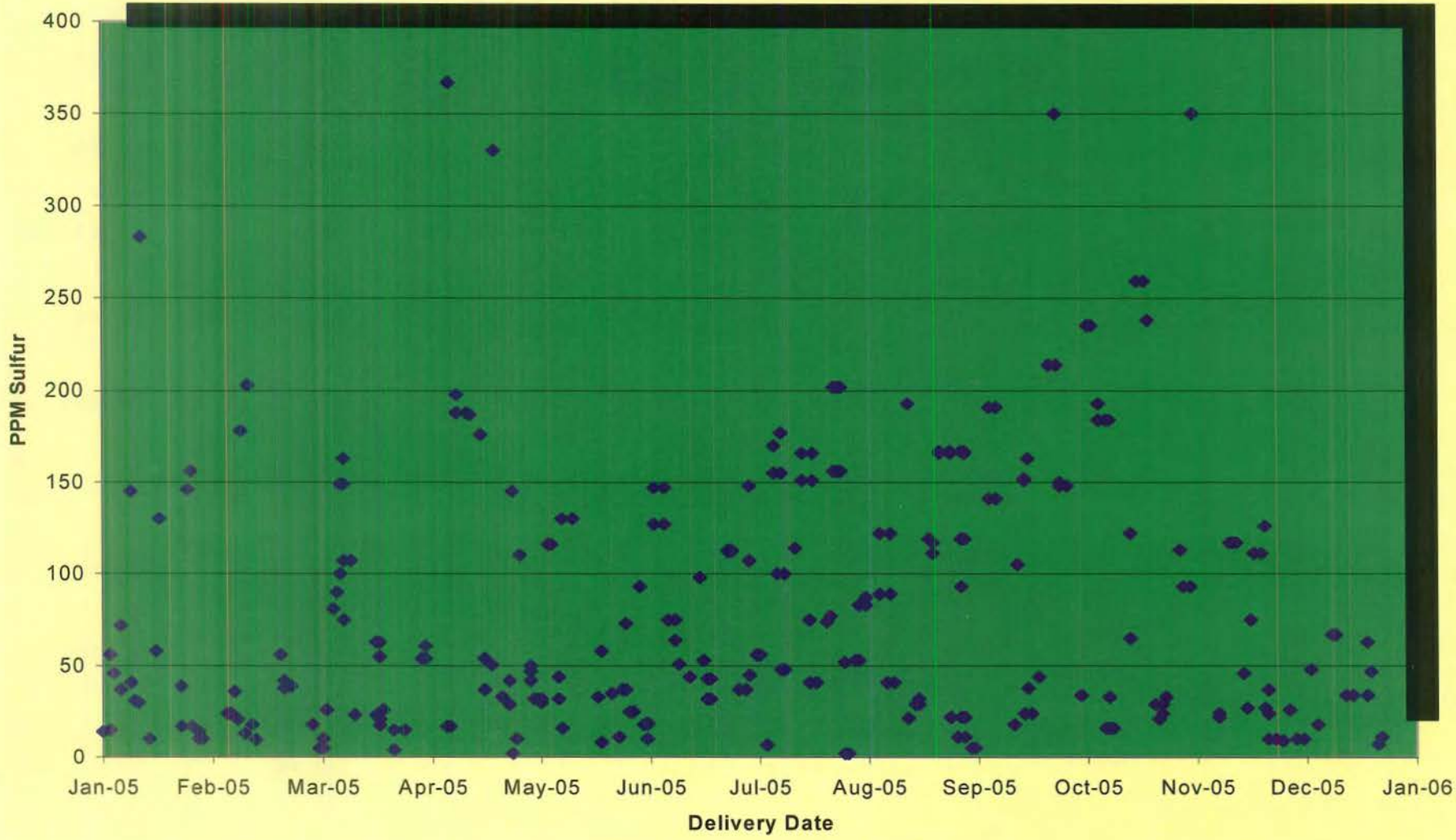
Note: Phase 1 RFG started in 1995. Phase 2 RFG started in 2000. Maine opted-out of the RFG program in 1999.

The sulfur levels in 2005 dropped due to the implementation of the Tier 2 federal requirements for sulfur levels to meet a 30 ppm average sulfur level with an 80 ppm cap by January 1, 2006. Figure 6 is a scatter-diagram of the ppm sulfur by delivery date and Figure 7 shows the ppm of sulfur for 2003, 2004, and 2005 by shipment. Figure 7-A shows the barrels of sulfur by range of sulfur (i.e. so many barrels for those deliveries with less than 100 ppm sulfur).

RFG is required to have a 1-percent benzene cap. The overall average level of benzene in gasoline in 2005 remained the same as the 2004 level; it was 0.81% and just about equal to the RFG average benzene content. Benzene was reported in 43 (or 14 %) of 307 shipments, at levels of 1 % or greater by volume, with maximum levels as high as 2.95 % by volume. Figure 8 is a scatter-diagram of the percent volume benzene by delivery date, and Figure 9 shows the percent volume benzene levels for 2003, 2004, and 2005 by shipment.

The concentration of aromatics in gasoline for 2005 was 28.23 % by volume, higher than in RFG and higher than the levels reported in Maine gasoline in 2004 and 2003. Figure 10 is a scatter-diagram of the percent volume aromatics in 2005 by delivery date, and Figure 11 shows the percent volume aromatic levels for 2003, 2004, and 2005 by shipment.

Figure 6
PPM Sulfur by Delivery Date
2005



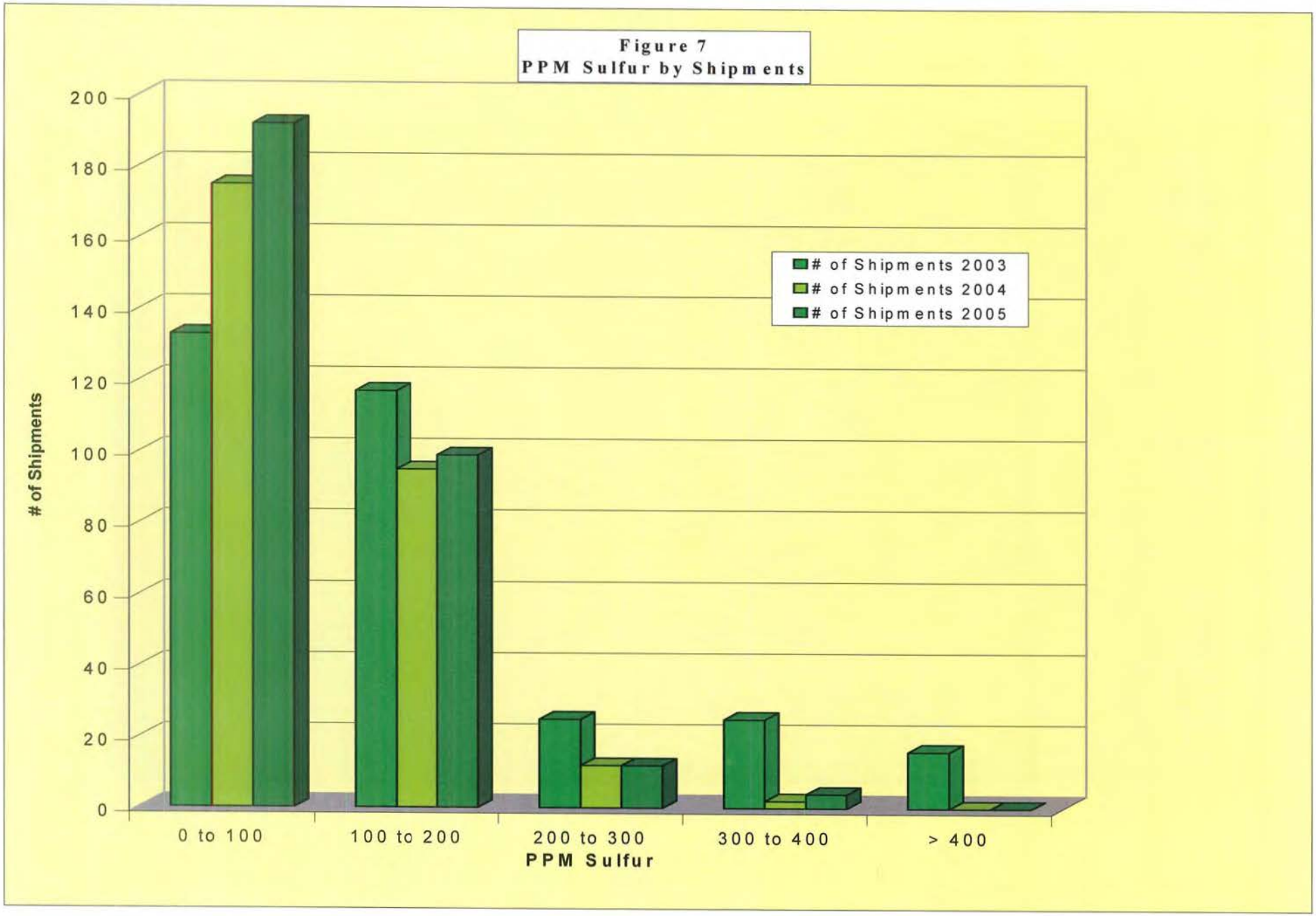


Figure 7
PPM Sulfur by Shipments
200
180
160
140
120
100
80
60
40
20
0
# of Shipments
# of Shipments 2003
# of Shipments 2004
# of Shipments 2005
0 to 100
100 to 200
200 to 300
300 to 400
> 400
PPM Sulfur

Figure 7-A
PPM Sulfur by Barrel of Fuel

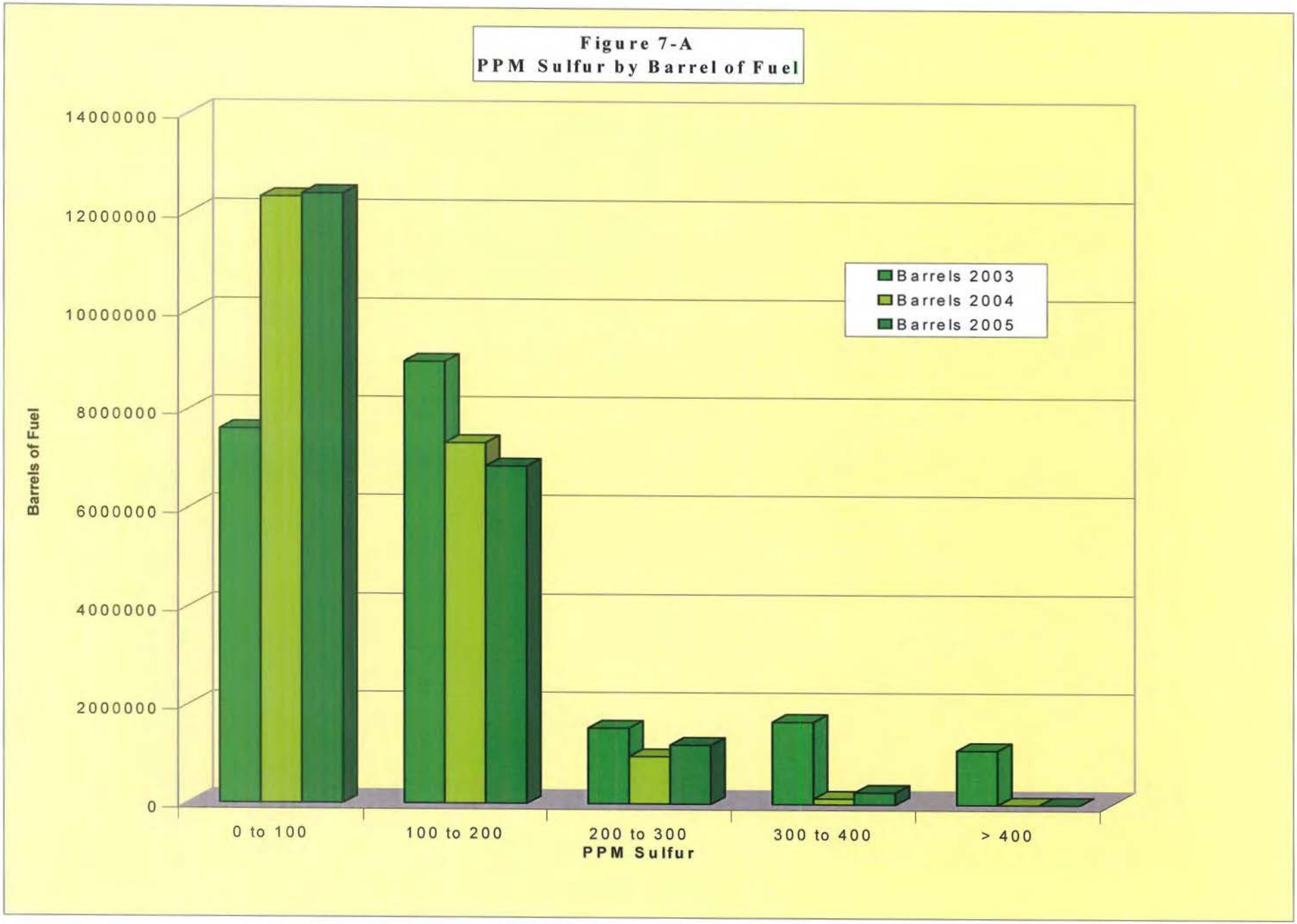
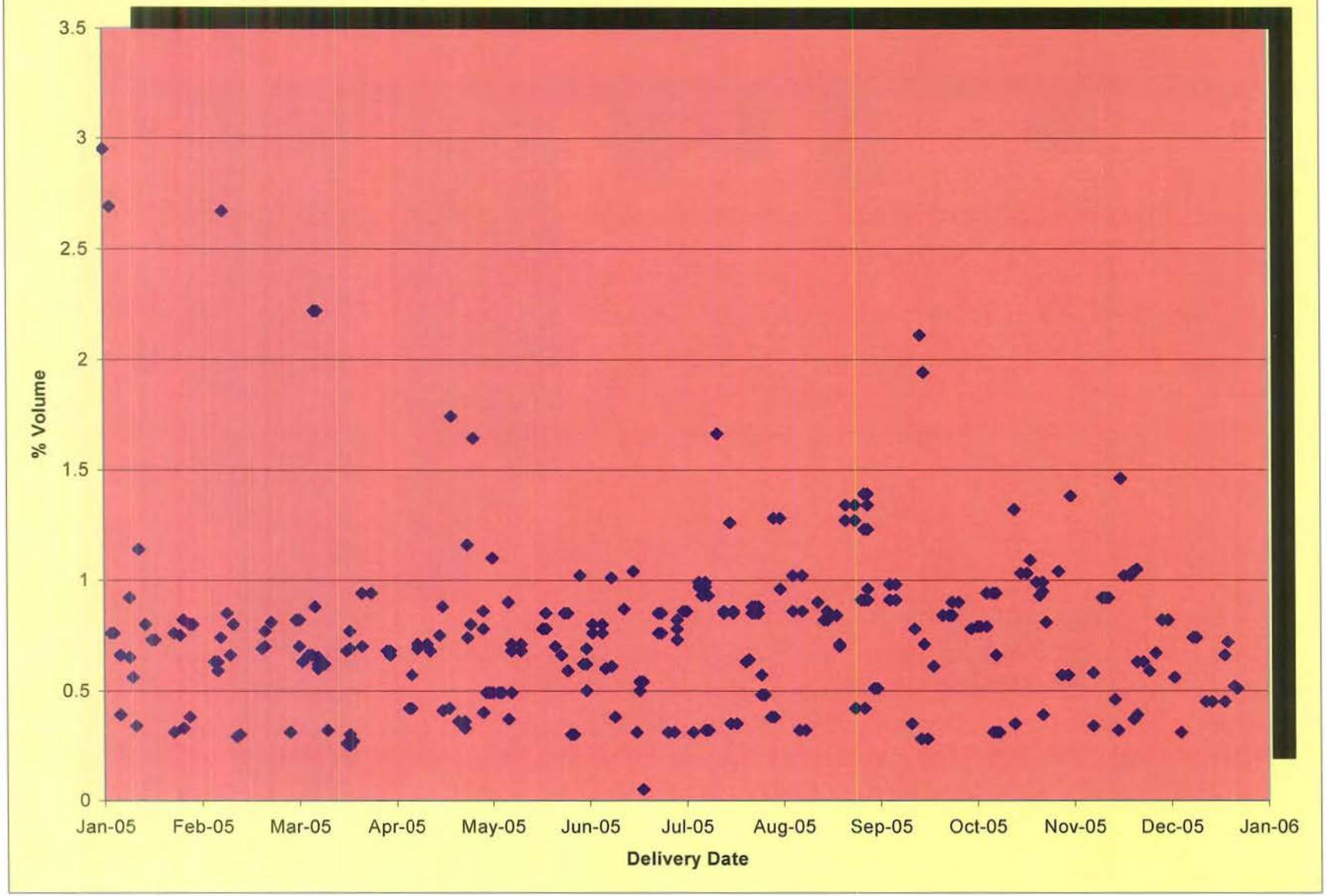


Figure 8
Benzene (% vol) by Delivery Date 2005



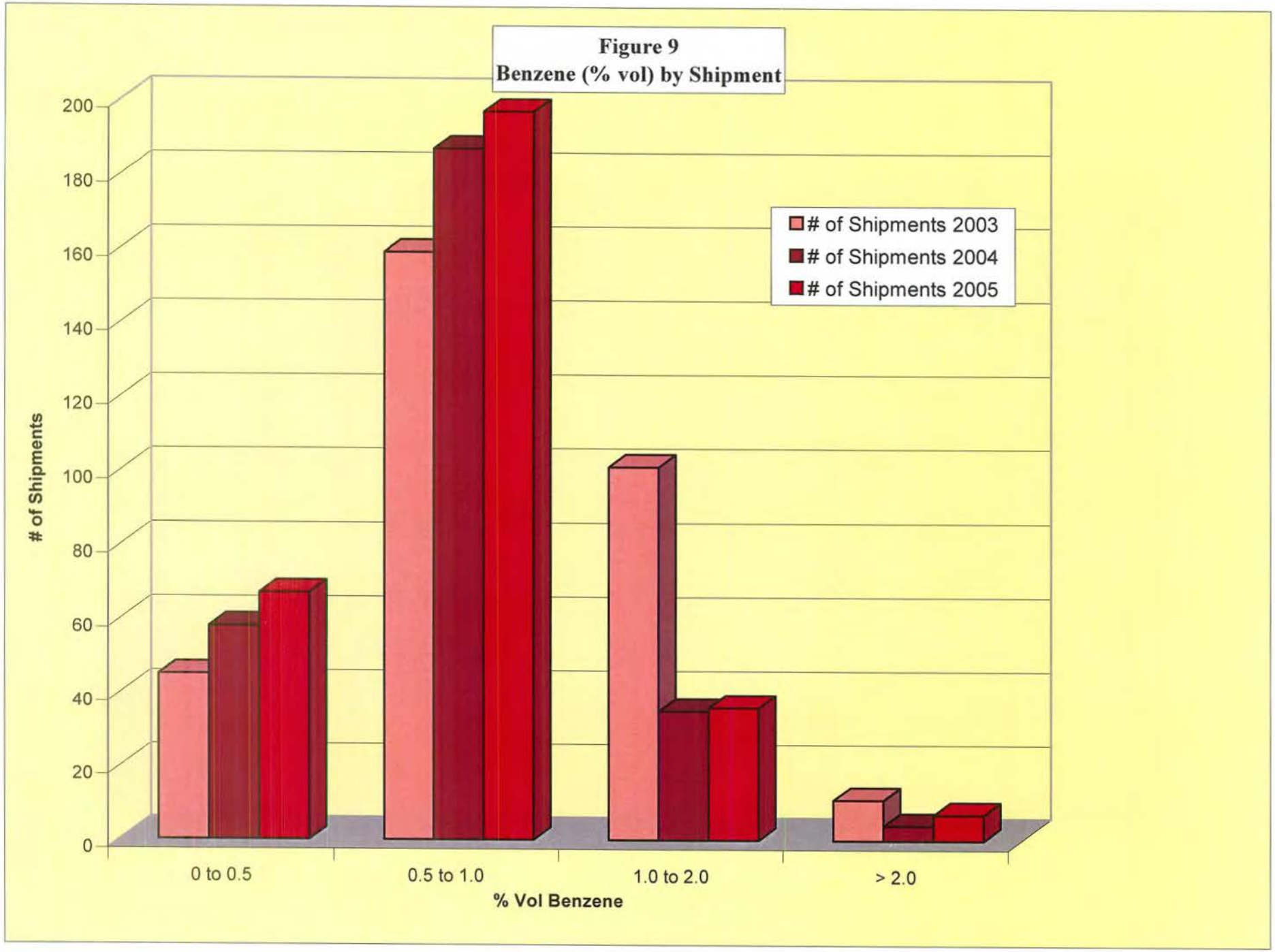


Figure 9
Benzene (% vol) by Shipment
200
180
160
140
120
100
80
60
40
20
0
# of Shipments
# of Shipments 2003
# of Shipments 2004
# of Shipments 2005
0 to 0.5
0.5 to 1.0
1.0 to 2.0
> 2.0
% Vol Benzene

Figure 10
Aromatics (% vol) by Delivery Date
2005

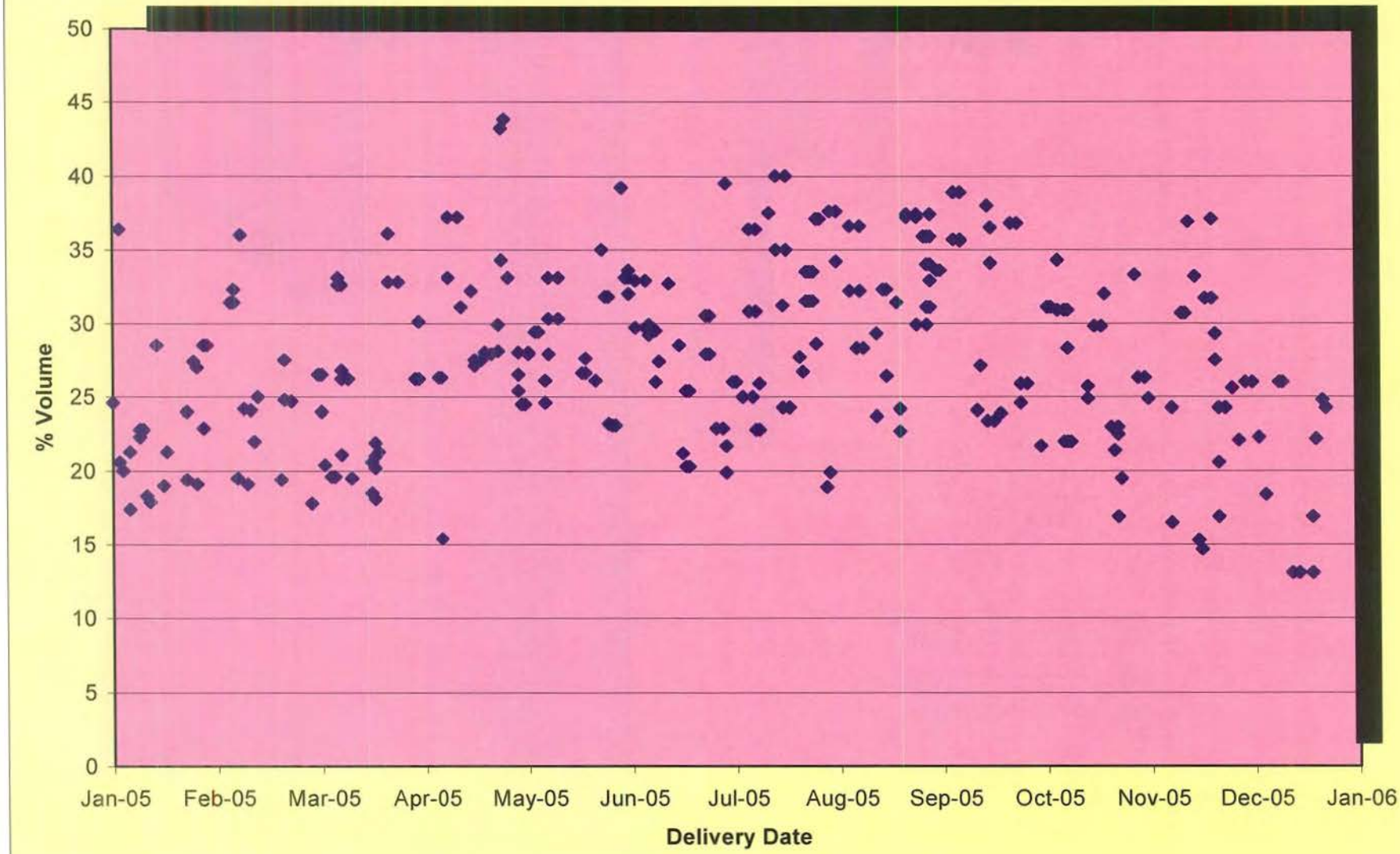
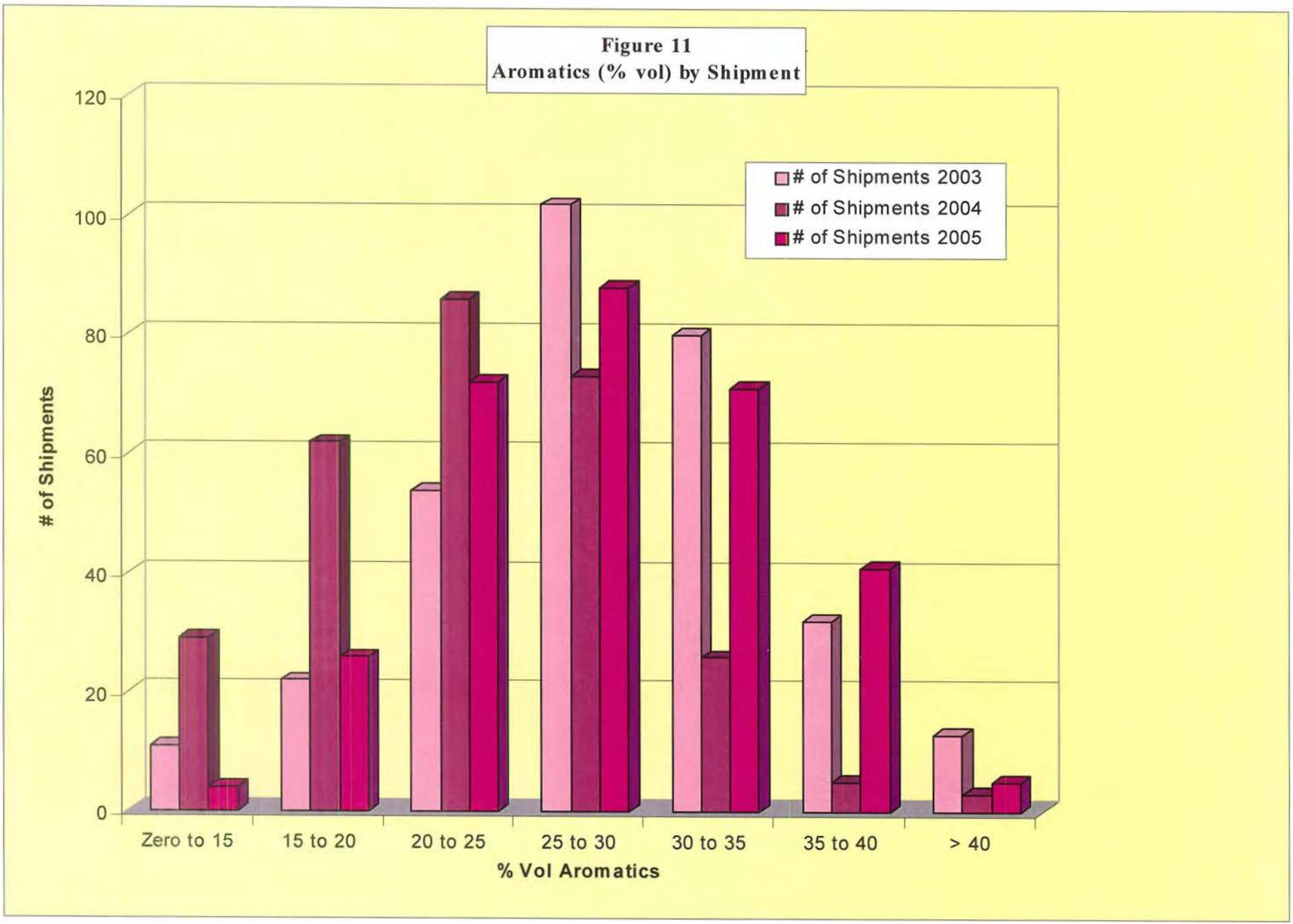


Figure 11
Aromatics (% vol) by Shipment



D. Maine Data on Reid Vapor Pressure

Chapter 119 *Motor Vehicle Fuel Volatility Limit* requires that the Reid Vapor Pressure (RVP) of gasoline sold in Maine from May 1 to September 15 of each year shall not exceed 9.0 pounds per square inch (psi). Chapter 119 further limits the RVP of all gasoline sold in York, Cumberland, Sagadahoc, Androscoggin, Kennebec, Knox and Lincoln counties to not exceed 7.8 psi from May 1 to September 15 of each year.

The ozone season is from May 1 to September 15th of each year, which correlates to the period when 7.8 RVP is required in Maine's seven southern counties. Low volatility gas is required during the ozone season to reduce emissions of volatile organic compounds, which are precursors to ozone formation.

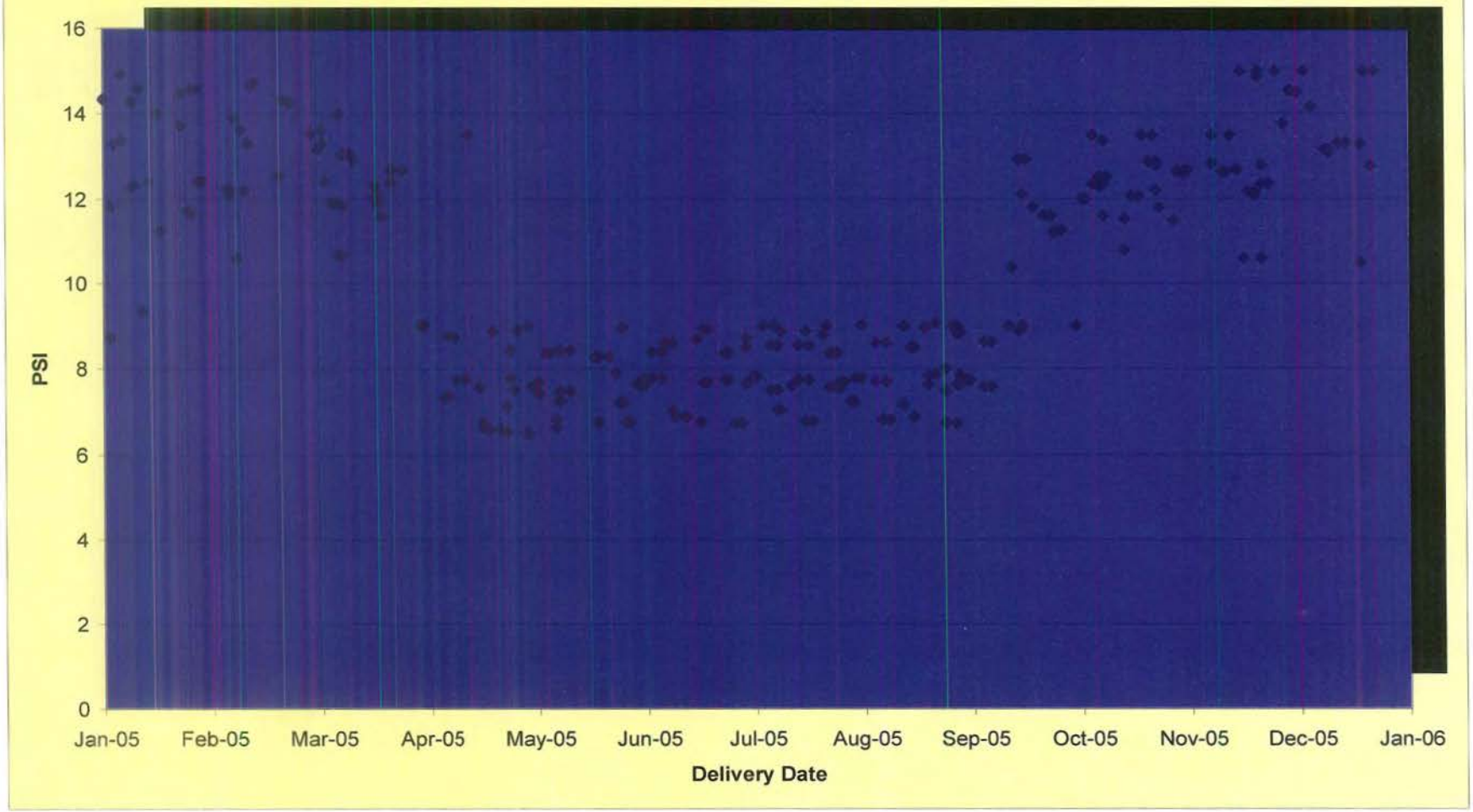
The average of all fuel sold during ozone season in Maine beginning in May through mid-September is shown below in Table 6. A summary of the RVP is sorted by the date of delivery by quarter (Appendix B) and by ozone season (Appendix C).

Table 6: RVP Averages

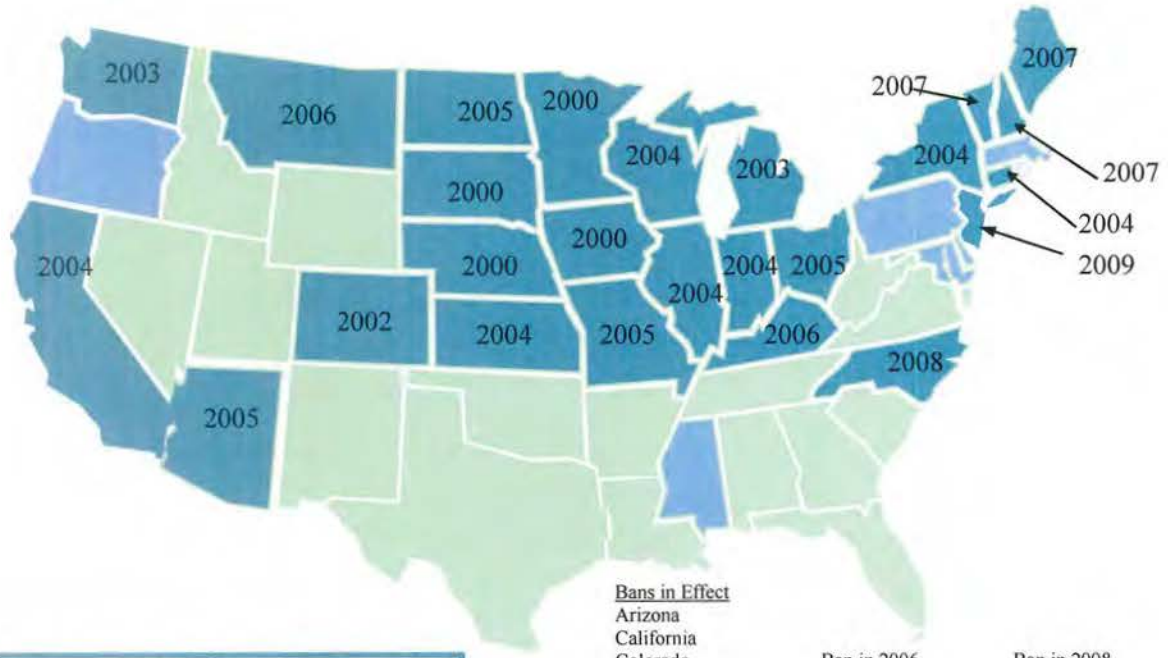
RVP Reported	RVP Average
Ozone Season, 7 counties	7.43 psi
Ozone Season, statewide	7.99 psi
Entire Year, Statewide	10.37 psi

Figure 12 is a scatter-diagram of the Reid Vapor Pressure by delivery date.

Figure 12
RVP by Delivery Date
2005



MAP 1: State MTBE Bans



Bans Currently in Place or Enacted: 26 states + Washoe County, Nevada
States enacting bans in 2005: 7 states: Montana, New Hampshire, New Jersey, North Carolina, North Dakota, Rhode Island and Vermont.

Bans Considered in 2005: 6 states
Delaware (will carryover), Maryland (study underway), Massachusetts (pending), Mississippi (failed), Oregon (failed) and Pennsylvania (pending).

Bans in Effect
Arizona
California
Colorado
Connecticut
Illinois
Indiana
Iowa
Kansas
Michigan
Minnesota
Missouri
Nebraska
Nevada
New York
North Dakota
Ohio
South Dakota
Washington
Wisconsin

Ban in 2006
Kentucky
Montana

Ban in 2007
Maine
New Hampshire
Rhode Island
Vermont

Ban in 2008
North Carolina

Ban in 2009
New Jersey

API State Government Relations
October 24, 2005

Section IV: Overview of Federal Action on RFG/MTBE

A. Congressional Actions on Sulfur Levels in Gasoline:

"Beginning in 2004, the nation's refiners and importers of gasoline had the flexibility to manufacture gasoline with a range of sulfur levels as long as all of their production was capped at 300 parts per million (ppm) and their annual corporate average sulfur levels were 120 ppm. In 2005, the refinery average was set at 30 ppm, with a corporate average of 90 ppm and a cap of 300 ppm. Both of the average standards could be met with use of credits generated by other refiners who reduced sulfur levels early. Finally, in 2006, refiners must meet a 30 ppm average sulfur level with a maximum cap of 80 ppm. Gasoline produced for sale in parts of the Western U.S. were allowed to meet a 150 ppm refinery average and a 300 ppm cap through 2006 but will have to meet the 30 ppm average/80 ppm cap by 2007."[4]

B. Congressional Action on MTBE

Congressional action on MTBE was a contentious issue again in 2005 as it has been for the past few years. The Energy Bill passed both the House and Senate in July 2005 and was signed into law by President Bush. The following is a summary of the fuel related provisions in the Energy Bill taken from a memo written by Eric Skelton for the NESCAUM Mobile Source Committee on October 19, 2005.

Energy Policy Act of 2005 sections pertaining to fuels:

SEC. 1501. RENEWABLE CONTENT OF GASOLINE. Requires the EPA Administrator to promulgate regulations to ensure that gasoline, on an annual average basis, contains applicable volumes of renewable fuel. In the absence of regulations, the percentage of renewable fuel in gasoline, on a volume basis, shall be 2.78 percent for calendar year 2006. The applicable volume for calendar years 2006 through 2012 shall be in accordance with the following table:

Calendar Year	**10^9 Gallons**
2006	4.0
2007	4.7
2008	5.4
2009	6.1
2010	6.8
2011	7.4
2012	7.5

[4] EPA420-F-99-051 December 1999 Regulatory Announcement EPA's Program for Cleaner Vehicles and Cleaner Gasoline pg 2.

Through calendar year 2012, 1 gallon of cellulosic biomass ethanol or waste derived ethanol shall be considered to be the equivalent of 2.5 gallons of renewable fuel. For calendar year 2013 and each calendar year thereafter, the applicable volume shall contain a minimum of 250,000,000 gallons that are derived from cellulosic biomass, and the 2.5-to-1 ratio will no longer apply. Small refineries have until calendar year 2011 to comply with the requirements.

SEC. 1504. ELIMINATION OF OXYGEN CONTENT REQUIREMENT FOR REFORMULATED GASOLINE (AND MAINTENANCE OF TOXIC AIR POLLUTANT EMISSIONS REDUCTIONS AND CONSOLIDATION OF VOC-CONTROL REGIONS). Amends Section 211(k) of the Clean Air Act (42 U.S.C. 7545(k)) by eliminating the various provisions for an oxygen content requirement. Adds a new Section 211 (k)(1)(B) to the Clean Air Act, maintaining as a baseline, the reduction of the average annual aggregate emissions of toxic air pollutants for reformulated gasoline produced or distributed by refiners and importers during calendar years 2001 and 2002. Provides for regional protection of toxics reduction baselines, by establishing Petroleum Administration for Defense Districts (PADD).

Requires the EPA Administrator by no later than July 1, 2007, to promulgate final regulations to control hazardous air pollutants from motor vehicles and motor vehicle fuels, as authorized under section 202(l) of the Clean Air Act. If the Administrator promulgates final regulations that achieve and maintain greater overall reductions in emissions of air toxics from reformulated gasoline, as compared to the reductions that would be achieved under new section 211(k)(1)(B) of the Clean Air Act, then the new section becomes null and void and regulations promulgated there under are rescinded and have no further effect.

Requires the EPA Administrator to revise the reformulated gasoline regulations under subpart D of part 80 of title 40, Code of Federal Regulations, to consolidate the regulations applicable to VOC-Control Regions 1 and 2 under section 80.41 by eliminating the less stringent requirements applicable to gasoline designated for VOC-Control Region 2 and instead apply the more stringent requirements applicable to gasoline designated for VOC-Control Region 1. Presently, the 48 contiguous States and the District of Columbia are assigned to control regions as follows for purposes of establishing specifications for reformulated gasoline:

Reformulated gasoline covered areas which are located in the following States are included in VOC-Control Region 1:

Alabama, Arizona, Arkansas, California, Colorado, District of Columbia, Florida, Georgia, Kansas, Louisiana, Maryland, Mississippi, Missouri, Nevada, New Mexico, North Carolina, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Virginia

Reformulated gasoline covered areas which are located in the following States are included in VOC-Control Region 2:

Connecticut, Delaware, Idaho, Illinois, Indiana, Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Montana, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, Washington, West Virginia, Wisconsin, Wyoming

SEC. 1505. PUBLIC HEALTH AND ENVIRONMENTAL IMPACTS OF FUELS AND FUEL ADDITIVES. Amends Section 211(b) of the Clean Air Act to require the EPA Administrator to conduct a health, air quality, and water resources study on the effects of increased use of various MTBE substitutes in gasoline.

SEC. 1506. ANALYSES OF MOTOR VEHICLE FUEL CHANGES. Adds Section 211(q) to the Clean Air Act, requiring the EPA Administrator to analyze the changes in emissions and air quality due to the fuel changes enacted as a result of the Energy Policy Act. Also requires the EPA Administrator to study the effects of ethanol in gasoline on permeation through rubber and plastic motor vehicle system components and resultant increase in evaporative emissions.

SEC. 1507. ADDITIONAL OPT-IN AREAS UNDER REFORMULATED GASOLINE PROGRAM. Adds Section 211(k)(6)(B) to the Clean Air Act, allowing states in the Ozone Transport Region to opt into the reformulated gasoline program. The EPA Administrator may delay commencement of the program if it is determined that there is insufficient capacity to supply reformulated gasoline.

SEC. 1508. DATA COLLECTION (RENEWABLE FUELS SURVEY). Requires the EPA Administrator to conduct and publish a monthly survey of renewable fuels demand in the motor vehicle fuels market, addressing the quantity produced, blended, imported, and demanded, and market price data.

SEC. 1509. FUEL SYSTEM REQUIREMENTS HARMONIZATION STUDY. Requires a joint EPA and Department of Energy study of Federal, State, and local requirements concerning motor vehicle fuels, including requirements relating to reformulated gasoline, volatility, oxygenated fuel, and diesel fuel; and other requirements that vary from State to State, region to region, or locality to locality. The study shall assess the effect on supply, quality, and price of fuels, the effect on achievement of national, regional, and local air quality standards and goals and related environmental and public health protection standards and goals. The study shall also assess the effect on domestic refiners, the fuel distribution system, and industry investment in new capacity.

Furthermore, the study shall assess the effect of the requirements on emissions from vehicles, refiners, and fuel handling facilities, and assess the feasibility of developing national or regional motor vehicle fuel slates for the 48 contiguous States that, while protecting and improving air quality at the national, regional, and local levels, could enhance flexibility in the fuel distribution infrastructure, improve fuel fungibility,

reduce price volatility and costs to consumers and producers, provide increased liquidity to the gasoline market, and enhance fuel quality, consistency, and supply.

The study shall further assess the feasibility of providing incentives, and the need for the development of national standards, necessary to promote cleaner burning motor vehicle fuel and the extent to which improvements in air quality and any increases or decreases in the price of motor fuel can be projected to result from the Tier II requirements for conventional gasoline and vehicle emission systems, on-road and off-road diesel rules, the reformulated gasoline program, the renewable content requirements, State programs regarding gasoline volatility, and any other requirements imposed by the Federal Government, States or localities affecting the composition of motor fuel.

SEC. 1511. RENEWABLE FUEL. Adds Section 212 to the Clean Air Act, providing loan guarantees for demonstration projects for production of cellulosic biomass ethanol and sucrose-derived ethanol. Also provides for grants to assist producers in developing production facilities.

SEC. 1512. CONVERSION ASSISTANCE FOR CELLULOSIC BIOMASS, WASTE-DERIVED ETHANOL, APPROVED RENEWABLE FUELS. Adds Section 211(r) to the Clean Air Act to provide grants to merchant producers of cellulosic biomass ethanol, waste-derived ethanol, and approved renewable fuels to assist producers in building production facilities.

SEC. 1513. BLENDING OF COMPLIANT REFORMULATED GASOLINES. Adds Section 211(s) to the Clean Air Act to allow limited blending of ethanol-blended and non-ethanol-blended reformulated gasoline, provided that winter gasoline may not be blended with summer gasoline during the summer ozone season.

SEC. 1541. (TEMPORARY WAIVERS DURING SUPPLY EMERGENCIES &) REDUCING THE PROLIFERATION OF BOUTIQUE FUELS. Section 211(c)(4)(C) of the Clean Air Act (42 U.S.C. 7545(c)(4)(C)) is amended by adding a new clause, providing that the EPA Administrator may temporarily waive a control or prohibition respecting the use of a fuel or fuel additive when extreme and unusual fuel or fuel additive supply circumstances exist in a State or region which prevent the distribution of an adequate supply of the fuel or fuel additive to consumers. A further amendment is added, prohibiting the Administrator from increasing the number of fuels beyond the number approved as of September 1, 2004. The Administrator is required to publish a list of the approved fuels. Substitution of fuels is permitted, provided that it does not increase the total number of fuels on the list.

This section further requires a joint study by EPA and the Department of Energy of the effects on air quality, on the number of fuel blends, on fuel availability, on fuel fungibility, and on fuel costs of SIP provisions for boutique fuels. The primary focus of the study will be to determine how to develop a Federal fuels system that maximizes

motor fuel fungibility and supply, addresses air quality requirements, and reduces motor fuel price volatility including that which has resulted from the proliferation of boutique fuels, and to recommend to Congress such legislative changes as are necessary to implement such a system.

The final Bill did not provide a nationwide MTBE ban or a "Safe Harbor" for MTBE producers. A "safe harbor" would have allowed the MTBE producers freedom from defective product liability. Due to the damage caused by Hurricanes Katrina and Rita, both the House and Senate considered bills, since tabled, that would make additional changes to the Energy Bill including reducing the number of "boutique" fuels states can adopt and "would amend the fuel emergency waiver provisions of the new energy bill to stipulate that "a state shall be held harmless" and not be required to revise its SIP to account for emissions that result from a temporary waiver granted by the EPA Administrator during a fuel supply emergency."[56] The House and Senate bills will most likely not be reconsidered until next year because of other priorities in both Houses.

[5] Comparison of Imhofe and Barton Bill, by Eric Skelton of NESCAUM October 20, 2005.

Section V:Progress Toward the Goal of Eliminating MTBE in Maine

As previously mentioned in this report, 38 M.R.S.A. §585-I, enacted in the second special session of the 121st Legislature in April 2004, bans the sale of gasoline containing more than 0.05 % MTBE. Specifically:

"Beginning January 1, 2007, a person may not sell, offer for sale, distribute or blend in this State gasoline that contains more than ½ of 1% by volume MTBE that is intended for sale for ultimate consumers in this State."

By March 1, 2006 the Department is required to report to the joint standing committee of the Legislature having jurisdiction over natural resources, on the implementation and status of the prohibition on the sale of gasoline containing more than ½ of 1 percent by volume of MTBE. In accordance with this requirement, the Department is submitting that information as a component of this report.

Department Staff contacted the five terminals that receive their gasoline by Barge. Those five terminals are the same terminals the Department collects the quarterly fuels data from each year to provide the fuels report to the Legislature. Those five terminals are referenced in Section III of this report. The one change to the terminals is the transfer of ownership of the Motiva terminal to Citgo as of February 1, 2006.

At this time each terminal is on track to meet the requirements of the MTBE ban on January 1, 2007 although each has a slightly different schedule as described below:

- The Irving terminal in Searsport intends to bring in compliant fuel beginning in May of 2006 so that all of the fuel in the tank will comply far in advance of the January 1, 2007 deadline.

- The Exxon-Mobil terminal also intends to bring in the compliant fuel early, beginning in June or July of 2006.

- The Gulf terminal will also bring in compliant fuel early but not until later in the year, sometime between July and October of 2006.

- The Webber terminal in Searsport is supplied by Gulf, therefore; the Webber terminal will also begin receiving compliant fuel sometime between July and October of 2006.

- Ownership of the Motiva terminal will be transferred to Citgo on February 1, 2006. In anticipation of the ownership transfer Citgo submitted information regarding its other terminal operations that they believe will also apply to the Portland terminal once they take ownership. According to the official at Citgo, all of their distribution network will be MTBE free by the summer 2006 due to other state MTBE bans.

Section VI: Other State and Regional Activities

A. New Hampshire opt-out of RFG and 211 (c) Fuels Waiver Request

Maine opted out of the RFG program in 1999 and New Hampshire (NH) filed a similar request in 2001. In 2001, at the direction of both the Governor and the General Court, the New Hampshire Department of Environmental Services (DES) submitted the necessary documentation to EPA to request that New Hampshire opt-out of the RFG program and requested a fuels waiver. NH proposed replacing the emissions reductions of federal RFG with a state regulated fuel (NH Code of Administrative Rules Env.-A 1611, "Oxygen Flexible Reformulated Gasoline, OFRFG") that achieves similar benefits. Simultaneously, DES requested that EPA revise their RFG rules at 40 CFR 80.72(b)(3)(V)[7] requiring the State to remain in the program until January 1, 2004 or provide other such relief as to allow New Hampshire to opt-out early. The EPA declined to address DES's request. After lengthy review and comment, and after January 1, 2004, EPA on January 22, 2004 proposed approval of New Hampshire's opt-out petition and OFRFG rule in the Federal Register. The proposed approval was subject to a 30-day comment period. If there were no significant adverse comments, particularly from the petroleum industry and MTBE suppliers, it was anticipated that EPA final approval would follow soon after the close of the comment period. However, during the comment period EPA received significant adverse comments from industry and MTBE suppliers, which prevented approval of the request. At this time the proposal is undergoing additional review by EPA.

In response to the likelihood the waiver would not be approved by EPA, the NH legislature in 2004 passed legislation requiring the NH DES to opt out of RFG and adopt the Ozone Transport Commission (OTC) suite of rules to replace the emission reductions previously provided by RFG. That path did not require a 211(C) fuels waiver and would have made it easier for NH to opt out of the RFG program.

In the spring of 2005 the NH legislature eliminated the requirement to opt-out of RFG, but kept the requirement to adopt the OTC suite of rules. In addition, with the passage of the Energy Bill and the elimination of the oxygenate requirement for RFG, NH is currently considering completely withdrawing their petition to opt-out of RFG because the RFG of the future could effectively be NH's OFRFG. A decision will be made at a later time. In addition New Hampshire has banned MTBE as of January 1, 2007 to be in sync with Maine, Vermont, and Rhode Island.

B. MTBE bans in Connecticut and New York

Currently the Ban on MTBE in Connecticut and New York implemented on January 1, 2004 remains in effect. There still appears to be little impact from the switch to ethanol oxygenated fuel and the program continues to run smoothly.

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[7] See http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr80_00.html

C. Regional Fuel Initiative

One initiative being considered on a regional basis is a so-called "Regional RFG". NESCAUM is evaluating the benefits of a regional fuel that meets the requirements of RFG but does not contain MTBE. Several Northeast states (Maine, VT, RI, CT, NY, NH and NJ) have banned the use of MTBE and in some cases other oxygenates, in the gasoline sold. The development of a "regional RFG" strategy has been made easier by the passage of the Energy Policy Act of 2005, which removes the oxygenate requirement from RFG and allows states in the Ozone Transport Region to sell required RFG in attainment areas as well as non-attainment areas. The sale of a "regional RFG" would certainly reduce the number of fuels sold in the Northeast. NESCAUM has been spearheading this effort and recently representatives from the NESCAUM states and NESCAUM staff met with representatives from the American Petroleum Institute (API) and other business representatives from the fuels marketing industry to discuss the feasibility of a regional fuel. The Industry agreed to work with the states and NESCAUM on the development of a regional RFG program but had some concerns regarding a regional fuel. The main concern was on the timing of introduction of the regional RFG. Additional concerns were: volume losses due to the removal of oxygenates, and how a region-wide MTBE ban could also affect supply. Industry representatives generally did agree that with fewer fuels, terminals would have an easier time providing storage capacity for the necessary fuel. NESCAUM has also been in discussions with the mid-Atlantic states on the development of a regional RFG strategy for the entire ozone transport region.

APPENDIX A: Quarterly Reporting Form

		RVP	Oxygen	MTBE	Other Oxygenate(s) in Fuel		BENZ	ARO	SULF		
Date of transfer	Octane	(psi)	(% wt O_2)	(% Vol)	(Other Oxy. Name)	(% Vol)	(% Vol)	(% Vol)	(ppm)	Barrels	Notes

APPENDIX B: All Data by Quarter

1st Quarter Data by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	Other Oxygenate(s) in Fuel (% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Gulf	01/01/05	88	14.33	0.04	0.19			2.95	24.6	14	80994
Irving	01/03/05	87	11.82	0.02	0.09			2.69	36.4	15	103871
Webber	01/03/05	87	8.7	1.27	6.83			0.76	20.6	56	59881.72
Motiva	01/04/05	87	13.29	1.72	9.21			0.76	20	46	137,582.24
Exxon-Mobil	01/06/05	87	13.38	1.79	9.69			0.66	21.3	72	7764
Exxon-Mobil	01/06/05	93	14.92	2.18	11.73			0.39	17.4	37	39012
Gulf	01/09/05	87	14.27	0.01	0.06			0.92	22.8	145	85121
Exxon-Mobil	01/09/05	87	12.27	0.06	0.3			0.65	22.3	41	175000
Motiva	01/10/05	87	12.33	0.1	0.32			0.56	22.8	31	161,471.61
Motiva	01/11/05	93	14.58	2.19	11.77			0.34	18.3	30	22,144.76
Gulf	01/12/05	88	9.35	1.44	7.75			1.14	17.9	283	110294
Gulf	01/14/05	89	12.42	0	0			0.8	28.5	10	64675
Exxon-Mobil	01/16/05	87	13.98	1.69	9.09			0.73	19	58	45289
Exxon-Mobil	01/17/05	87	11.26	0.41	1.61	TAME	0.67	0.73	21.3	130	60683
Irving	01/23/05	93	14.46	2.23	12.05			0.31	24	17	16386
Irving	01/23/05	87	13.71	1.72	9.23			0.76	19.4	39	16827
Motiva	01/25/05	87	11.72	0.03	0.16			0.75	27.4	146	50,060.56
Exxon-Mobil	01/25/05	87	11.72	0.03	0.16			0.75	27.4	146	139932

1st Quarter Data by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	(% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Exxon-Mobil	01/26/05	93	14.56	2.22	12			0.33	19.1	17	42047
Irving	01/26/05	87	11.66	0.03	0.15			0.82	27	156	118657
Motiva	01/28/05	93	14.57	2.8	13	ETBE TAME TBA	5 0.8 4	0.38	22.9	14	4,977.34
Exxon-Mobil	01/28/05	87	12.42	0	0			0.8	28.5	10	169209
Motiva	01/29/05	87	12.42	0	0			0.8	28.5	10	60,479.66
Exxon-Mobil	02/05/05	87	12.23	0.32	1.74			0.63	31.4	24	171497
Motiva	02/06/05	87	12.1	0.4	1.9			0.59	32.3	24	74,395.94
Gulf	02/06/05	90	12.23	0.32	1.74			0.63	31.4	24	75155
Irving	02/07/05	87	13.88	1.69	9.12			0.74	19.5	36	44801
Webber	02/08/05	89	10.59	0.35	1.95			2.67	36	21	59517.49
Exxon-Mobil	02/09/05	87	13.62	0.03	0.14			0.85	24.2	178	158682
Gulf	02/10/05	89	12.2	1.65	8.91			0.66	19.1	13	149842
Motiva	02/11/05	87	13.31	0	0			0.8	24.1	203	158,895.20
Exxon-Mobil	02/12/05	93	14.65	2.39	12.95			0.29	22	18	25671
Motiva	02/13/05	93	14.72	2.8	13.9	ETBE TAME TBA	0.6 0.8 0.2	0.3	25	9.52	24,503.55
Exxon-Mobil	02/20/05	87	12.53	1.67	9.01			0.69	19.4	56	22499
Motiva	02/21/05	87	14.3	0.5	0	DIPE	3	0.7	27.5	42	57,976.26
Exxon-Mobil	02/21/05	87	14.33	0	0			0.77	24.8	38	164480
Irving	02/23/05	87	14.24	0	0			0.81	24.7	39	110541

1st Quarter Data by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	(% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Exxon-Mobil	03/01/05	93	13.52	2.38	12.83			0.31	17.8	18	22649
Exxon-Mobil	03/03/05	87	13.16	0	0			0.82	26.5	5	172255
Motiva	03/04/05	87	13.3	0	0			0.7	24	10	66,367.21
Gulf	03/04/05	88	13.6	0	0			0.82	26.5	5	71744
Gulf	03/05/05	87	12.42	0	0			0.63	20.4	26	133796
Exxon-Mobil	03/07/05	87	11.9	0.37	1.98			0.66	19.6	81	155718
Motiva	03/08/05	87	11.9	0.37	2.05			0.66	19.6	89.9	95,095.29
Gulf	03/09/05	93	13.98	0.07	0.37			0.88	33.1	100	10166
Gulf	03/09/05	87	10.68	0.43	2.36			2.22	32.6	149	19680
Motiva	03/10/05	87	13.04	0.09	0	TBA	0.4	0.6	26.8	163	104,964.86
Gulf	03/10/05	88	13.05	0.02	0.11			0.62	26.2	107	80907
Exxon-Mobil	03/10/05	87	13.05	0.02	0.11			0.62	26.2	107	71761
Irving	03/10/05	87	11.83	0.34	1.85			0.65	21.1	75	74448
Webber	03/10/05	87	10.66	0.43	2.36			2.22	32.6	149	40323.65
Exxon-Mobil	03/12/05	87	13.05	0.02	0.11			0.62	26.2	107	53462
Motiva	03/13/05	93	12.92	2.72	13.8	ETBE TAME TBA	0.3 0.7 0.4	0.32	19.5	23.21	22,215.43
Exxon-Mobil	03/19/05	87	12.05	1.69	9.14			0.68	20.6	63	75906
Exxon-Mobil	03/19/05	93	12.32	2.21	11.96			0.26	18.5	23	27209
Motiva	03/20/05	87	11.91	1.85	7.4	ETBE TAME	0.6 2.5	0.77	21.9	62.82	39,061.16
Motiva	03/20/05	93	12.08	1.76	6.1	TAME DIPE	2.3 1.8	0.3	20.2	17.47	7,928.82
Exxon-Mobil	03/20/05	93	12.1	2.18	11.81			0.25	18.1	21	14063
Exxon-Mobil	03/20/05	87	11.99	1.73	9.4			0.69	21	55	83990
Irving	03/21/05	93	11.59	2.23	12.16			0.27	21.3	26	16375

1st Quarter Data by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	(% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Motiva	03/24/05	87	12.4	0	0			0.7	36.1	4	69,424.32
Gulf	03/24/05	90	12.68	0	0			0.94	32.8	15	45297
Exxon-Mobil	03/27/05	87	12.68	0	0			0.94	32.8	15	177134
Weighted Average			**12.62**	**0.49**	**2.53**	**TAME**	**1.23**	**0.84**	**25.02**	**66.20**	
						ETBE	**0.77**				
						TBA	**0.48**				
						DIPE	**2.86**				

2nd Quarter Data by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	(% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Exxon-Mobil	04/01/05	87	9.02	0	0			0.68	26.2	54	130102
Gulf	04/02/05	87	9.02	0	0			0.68	26.2	54	108901
Motiva	04/02/05	87	8.98	0	0			0.66	30.1	60.8	95,026.54
Webber	04/08/05	94	7.32	2.74	15.22			0.42	26.3	17	24,606.93
Gulf	04/09/05	94	7.35	2.74	15.22			0.42	26.3	17	35041
Webber	04/09/05	87	8.75	0.28	1.53			0.57	15.4	367	79,782.98
Exxon-Mobil	04/11/05	87	8.71	0.08	0.45			0.69	33.1	198	50096
Exxon-Mobil	04/11/05	87	7.73	0.04	0.23			0.71	37.2	188	138758
Motiva	04/14/05	87	7.73	0.04	0.23			0.71	37.2	188	82,869.32
Irving	04/15/05	87	13.5	0.08	0.45			0.68	31.1	187	49833
Exxon-Mobil	04/18/05	87	7.56	0.02	0.13			0.75	32.2	176	79937
Exxon-Mobil	04/19/05	87	6.74	1.75	9.79			0.88	27.5	54	84944
Exxon-Mobil	04/19/05	93	6.64	2.11	11.75			0.41	27.1	37	38818
Motiva	04/21/05	93	6.58	2.56	11.8	ETBE TAME TBA	0.9 1.2 0.3	0.42	27.5	50.59	16,243.07
Gulf	04/22/05	89	8.86	1.6	8.82	TBA	0.04	1.74	28	330	50169
Motiva	04/24/05	93	6.59	2.51	11.5	ETBE TAME TBA	1 1.0 0.4	0.36	27.9	32.98	23,157.67
Gulf	04/26/05	87	7.12	0.02	0.11			0.36	29.9	29	80229
Exxon-Mobil	04/26/05	93	6.53	2.09	11.69			0.33	28.1	42	21811

2nd Quarter Data by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	Other Oxygenate(s) in Fuel (% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Exxon-Mobil	04/27/05	87	7.78	0	0			1.16	43.2	2	99785
Exxon-Mobil	04/27/05	87	8.43	0.06	0.32			0.74	34.3	145	50282
Gulf	04/28/05	90	7.5	0	0			0.8	43.8	10	91914
Motiva	04/28/05	87	7.50	0.09	0	ETBE	0.60	0.8	43.8	10	70,216.67
Exxon-Mobil	04/29/05	87	8.89	0	0			1.64	33.1	110	49837
Irving	05/02/05	87	9	1.93	10.46			0.86	26.5	47	73424
Irving	05/02/05	93	6.47	2.04	11.38			0.4	25.4	42	25028
Motiva	05/02/05	87	6.51	1.97	10.1	ETBE TBA	0.4 0.3	0.78	28	50	44,450.86
Gulf	05/03/05	87	7.58	0.18	0.93	TAME	0.07	0.49	24.5	32	29706
Motiva	05/04/05	87	7.58	0.18	0.93	TAME	0.07	0.49	24.5	32	55,035.55
Gulf	05/05/05	87	7.41	0.09	0.31	TBA	0.22	1.1	27.9	32	63416
Exxon-Mobil	05/05/05	87	7.68	0.18	0.93	TAME	0.7	0.49	28	30	15046
Exxon-Mobil	05/07/05	87	8.36	0.11	0.56			0.49	29.4	116	138943
Motiva	05/08/05	87	8.36	0.11	0.56			0.49	29.4	116	67,437.06
Exxon-Mobil	05/10/05	87	6.82	1.79	9.97			0.9	26.1	44	80755
Exxon-Mobil	05/10/05	93	6.63	2.1	11.66			0.37	24.6	32	48815
Motiva	05/10/05	93	6.63	2.1	11.66			0.37	24.6	32	9,219.10
Gulf	05/11/05	93	7.25	2.38	13.22			0.49	27.9	16	40086
Gulf	05/11/05	89	8.42	0.12	0.59			0.68	30.3	130	16784

2nd Quarter Data by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	(% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Exxon-Mobil	05/11/05	87	8.42	0.12	0.59	2 Butanol	0.05	0.68	30.3	130	43035
Exxon-Mobil	05/11/05	87	7.47	0.13	0.59	2 Butanol	0.06	0.71	33.1	130	57131
Motiva	05/11/05	87	7.47	0.13	0.59	2 Butanol	0.02	0.71	33.1	130	79,259.00
Motiva	05/11/05	87	8.42	0.12	0.59	2 Butanol	0.05	0.68	30.3	130	9,367.15
Exxon-Mobil	05/14/05	87	8.42	0.12	0.59	2 Butanol	0.05	0.68	30.3	130	72171
Exxon-Mobil	05/14/05	87	7.47	0.13	0.59	2 Butanol	0.06	0.71	33.1	130	45762
Gulf	05/21/05	88	8.26	0	0			0.78	26.6	33	62144
Exxon-Mobil	05/21/05	87	8.26	0	0			0.78	26.6	33	109007
Exxon-Mobil	05/22/05	87	6.76	1.78	9.94			0.85	27.6	58	80447
Motiva	05/22/05	87	8.26	0	0			0.78	26.6	8.26	43,600.92
Irving	05/25/05	87	8.28	0	0			0.7	26.1	35	106088
Exxon-Mobil	05/27/05	87	7.9	0	0			0.66	35	11	179339
Gulf	05/28/05	87	7.2	0.01	0.08			0.85	31.8	37	59664
Webber	05/29/05	88	8.96	0.55	2.42	TAME	0.69	0.59	23.2	73	59,121.93
Motiva	05/29/05	87	7.2	0.01	0.08			0.85	31.8	37	20,009.83
Exxon-Mobil	05/30/05	93	6.76	2.29	12.37			0.3	23.1	25	53267
Motiva	05/31/05	93	6.76	2.29	12.37	TBA	0.05	0.3	23.1	25	4,872.52
Gulf	06/02/05	88	7.65	0.07	0.32			1.02	39.2	93	80127
Gulf	06/03/05	88	7.6	0.38	2.09			0.62	33.1	18	19955
Exxon-Mobil	06/04/05	87	7.77	0	0			0.69	32	19	20777
Exxon-Mobil	06/04/05	87	7.6	0.38	2.09			0.62	33.1	18	39690
Motiva	06/04/05	87	7.7	0	0			0.5	33.6	10	91,906.52

2nd Quarter Data by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	Other Oxygenate(s) in Fuel (% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Exxon-Mobil	06/06/05	87	8.38	0.05	0.3			0.8	29.7	127	109051
Exxon-Mobil	06/06/05	87	7.78	0.07	0.26	TBA	0.06	0.76	32.9	147	74515
Motiva	06/09/05	87	7.78	0.07	0.26	TBA	0.06	0.76	32.9	147	83,039.34
Motiva	06/09/05	87	8.38	0.05	0.3			0.8	29.7	127	40,705.69
Gulf	06/10/05	88	8.6	0.05	0.28			0.6	29.2	75	77254
Exxon-Mobil	06/10/05	87	8.6	0.05	0.28			0.6	29.9	75	58023
Motiva	06/10/05	87	8.6	0.05	0.28			0.6	29.9	75	47,337.29
Irving	06/12/05	87	8.58	0.05	0.27			0.61	29.5	75	79711
Exxon-Mobil	06/12/05	87	7.03	1.8	10.02			1.01	26	64	83960
Motiva	06/13/05	93	6.9	2.43	13.29	2 Butanol	0.21	0.38	27.4	51	12,927.19
Gulf	06/16/05	88	6.88	0.51	1.54	TAME ETBE	1.3 0.18	0.87	32.7	44	79037
Webber	06/19/05	87	8.69	0.22	0.4	ETBE TAME	0.75 0.16	1.04	28.5	98	58,493.00
Exxon-Mobil	06/20/05	93	6.76	2.38	13.11			0.31	21.2	53	65799
Motiva	06/20/05	93	6.76	2.38	13.11			0.31	21.2	53	14,945.50
Exxon-Mobil	06/21/05	87	7.68	0	0			0.54	25.4	32	124824
Exxon-Mobil	06/21/05	87	8.92	0	0			0.5	20.3	43	129078
Motiva	06/22/05	87	7.68	0	0			0.54	25.4	32	49,547.15
Motiva	06/22/05	87	8.92	0	0			0.05	20.3	43	26,340.60
Exxon-Mobil	06/27/05	87	8.37	0.07	0.24			0.85	27.9	112	87266
Exxon-Mobil	06/27/05	87	7.74	0.03	0.18			0.76	30.5	113	70936
Gulf	06/28/05	88	8.37	0.04	0.24			0.85	27.9	112	35179

2nd Quarter Data by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	(% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Gulf	06/28/05	88	7.74	0.03	0.18			0.76	30.5	113	30120
Motiva	06/28/05	87	8.37	0.04	0.24			0.85	27.9	112	35,089.75
Motiva	06/28/05	87	7.74	0.03	0.18			0.76	30.5	113	65,066.30
Exxon-Mobil	06/30/05	93	6.73	2.44	13.48			0.31	22.9	37	8887
Weighted Average			**7.96**	**0.43**	**2.32**	**TAME**	**0.63**	**0.71**	**29.74**	**80.71**	
						ETBE	**0.53**				
						TBA	**0.15**				
						2-butanol	**0.05**				

3rd Quarter Data by Date of Delivery

			RVP	Oxygen	MTBE	Other Oxygenate(s) in Fuel		BENZ	ARO	SULF	
Terminal	Date of transfer	Octane	(psi)	(% wt O_2)	(% Vol)	(Other Oxy. Name)	(% Vol)	(% Vol)	(% Vol)	(ppm)	Barrels
Motiva	07/02/05	93	6.73	2.44	13.48			0.31	22.9	37	12,964.55
Gulf	07/03/05	87	8.5	0.44	2.37			0.73	21.7	148	19387
Gulf	07/03/05	93	7.65	0	0			0.82	39.5	45	20131
Exxon-Mobil	07/03/05	87	8.72	0	0			0.78	19.9	107	78992
Exxon-Mobil	07/05/05	87	7.81	0.02	0.08			0.86	26	56	100428
Gulf	07/06/05	87	7.81	0.02	0.08			0.86	26	56	99366
Motiva	07/06/05	87	7.81	0.02	0.084			0.86	26	56	39,310.65
Irving	07/08/05	93	9.0	2.45	13.31			0.31	25	6.7	22,000
Exxon-Mobil	07/10/05	87	7.51	0.05	0.12	TAME	0.13	0.99	36.4	170	100447
Exxon-Mobil	07/10/05	87	8.54	0.03	0.19			0.97	30.8	155	117324
Irving	07/11/05	87	9.0	0	0			0.93	25	100	115,000
Motiva	07/12/05	87	7.51	0.05	0.12	TBA	0.13	0.99	36.4	177	68,815.36
Motiva	07/12/05	87	8.54	0.03	0.19			0.97	30.8	155	34,827.50
Exxon-Mobil	07/12/05	93	7.05	2.4	13.18			0.32	22.8	48	27726
Gulf	07/13/05	87	8.86	0	0			0.93	25.9	100	43603
Motiva	07/13/05	93	7.05	2.4	13.8			0.32	22.8	48	16,911.80
Gulf	07/16/05	87	7.6	0	0			1.66	37.5	114	71643
Exxon-Mobil	07/18/05	87	7.74	0.21	1.2			0.86	40	166	97017
Exxon-Mobil	07/18/05	87	8.54	0.2	1.05			0.85	35	151	105742
Exxon-Mobil	07/20/05	93	6.78	2.45	13.29	TBA	0.21	0.35	24.3	41	9968
Webber	07/20/05	87	8.89	0.02	0.11			1.26	31.2	75	64386

3rd Quarter Data by Date of Delivery

			RVP	Oxygen	MTBE	Other Oxygenate(s) in Fuel		BENZ	ARO	SULF	
Terminal	Date of transfer	Octane	(psi)	(% wt O_2)	(% Vol)	(Other Oxy. Name)	(% Vol)	(% Vol)	(% Vol)	(ppm)	Barrels
Motiva	07/21/05	87	8.54	0.2	1.08			0.85	35	151	46,190.76
Motiva	07/21/05	87	7.74	0.21	1.17			0.86	40	166	46,385.81
Motiva	07/22/05	93	6.78	2.45	13.28	TBA	0.21	0.35	24.3	41	22,771.05
Gulf	07/25/05	87	8.8	0.08	0.42			0.63	27.7	74	71802
Exxon-Mobil	07/25/05	87	8.8	0.08	0.42			0.63	27.7	74	124865
Irving	07/26/05	87	9.0	0.1	0.098			0.64	26.7	77	89,000
Exxon-Mobil	07/27/05	87	8.36	0.05	0.26			0.85	31.5	156	77623
Exxon-Mobil	07/27/05	87	7.58	0.05	0.26			0.88	33.5	202	44493
Motiva	07/28/05	87	7.58	0.05	0.26			0.88	33.5	202	34,920.55
Motiva	07/28/05	87	8.36	0.05	0.26			0.85	31.5	156	14,981.99
Gulf	07/29/05	88	8.36	0.05	0.26			0.85	31.5	156	38531
Gulf	07/29/05	88	7.58	0.05	0.26			0.88	33.5	202	57306
Gulf	07/30/05	88	7.69	0.02	0.1			0.48	37.1	2	70452
Exxon-Mobil	07/30/05	87	7.54	1.32	7.26	TAME	0.08	0.57	28.6	52	100352
Motiva	07/31/05	87	7.69	0.02	0.1			0.48	37.1	2	98,084.45
Gulf	08/02/05	94	7.25	1.91	10.1	TAME	0.48	0.38	18.9	53	29579
Motiva	08/03/05	87	7.78	0.05	0.27			1.28	37.6	83	20,176.29
Webber	08/03/05	94	7.23	1.91	9.98			0.38	19.9	53	9664
Exxon-Mobil	08/05/05	87	9.02	0.17	0.83	TAME	0.12	0.96	34.2	87	73719
Exxon-Mobil	08/05/05	87	7.78	0.05	0.27			1.28	37.6	83	79134

3rd Quarter Data by Date of Delivery

			RVP	Oxygen	MTBE	Other Oxygenate(s) in Fuel		BENZ	ARO	SULF	
Terminal	Date of transfer	Octane	(psi)	(% wt O_2)	(% Vol)	(Other Oxy. Name)	(% Vol)	(% Vol)	(% Vol)	(ppm)	Barrels
Exxon-Mobil	08/09/05	87	7.71	0.03	0.19			1.02	36.6	122	106937
Exxon-Mobil	08/09/05	87	8.59	0.06	0.34			0.86	32.2	89	136091
Exxon-Mobil	08/11/05	93	6.82	2.51	13.75	TBA	0.21	0.32	28.3	41	27141
Motiva	08/12/05	87	7.71	0.03	0.19			1.02	36.6	122	35,168.15
Motiva	08/12/05	87	8.59	0.06	0.34			0.86	32.2	89	48,390.66
Motiva	08/13/05	93	6.82	2.51	13.75	TBA	0.21	0.32	28.3	41	28,713.24
Gulf	08/17/05	88	7.17	0.02	0.15			0.9	23.7	193	88723
Motiva	08/17/05	87	7.17	0.02	0	ETBE	0.15	0.9	23.7	193	55,627.56
Exxon-Mobil	08/17/05	87	7.17	0.02	0.15			0.9	23.7	193	266808
Irving	08/17/05	87	9.0	0	0			0.9	29.3	21.4	104,000
Exxon-Mobil	08/19/05	87	8.49	0	0			0.82	32.3	29	115028
Motiva	08/20/05	87	8.49	0	0			0.82	32.3	29	41,847.43
Exxon-Mobil	08/20/05	87	6.89	1.72	9.72			0.86	26.4	32	30194
Webber	08/23/05	87	8.96	0	0			0.84	31.4	119	58559
Exxon-Mobil	08/24/05	87	7.63	0.41	2.22			0.71	24.2	117	25538
Exxon-Mobil	08/24/05	87	7.83	0.41	2.22			0.7	22.7	111	100515
Exxon-Mobil	08/26/05	87	7.87	0.03	0.14			1.34	37.4	166	59600
Exxon-Mobil	08/26/05	87	9.06	0.06	0.35			1.27	37.2	167	58481
Gulf	08/29/05	88	8.0	0.06	0.35			1.27	37.2	167	50196
Gulf	08/29/05	87	7.48	0.03	0.14			1.34	37.4	166	19720
Exxon-Mobil	08/29/05	93	6.74	2.67	14.56	TBA	0.27	0.42	29.9	22	37816

3rd Quarter Data by Date of Delivery

			RVP	Oxygen	MTBE	Other Oxygenate(s) in Fuel		BENZ	ARO	SULF	
Terminal	Date of transfer	Octane	(psi)	(% wt O_2)	(% Vol)	(Other Oxy. Name)	(% Vol)	(% Vol)	(% Vol)	(ppm)	Barrels
Irving	08/31/05	87	9.0	0	0			0.91	35.9	11	104,000
Gulf	09/01/05	87	9.0	0	0			0.91	35.9	93	40450
Motiva	09/01/05	93	6.74	2.67	14.56	TBA	0.27	0.42	29.9	22	15,989.26
Exxon-Mobil	09/01/05	87	8.82	0.06	0.33			1.39	31.1	167	24712
Exxon-Mobil	09/01/05	87	7.64	0.62	3.44			1.23	34	119	18074
Gulf	09/02/05	87	8.82	0.06	0.33			1.39	31.1	167	6677
Gulf	09/02/05	87	7.64	0.62	3.44			1.23	34	119	25626
Motiva	09/02/05	87	7.87	0.03	0.14			1.34	37.4	166	34,731.65
Motiva	09/02/05	87	8.84	0	0			0.91	35.9	11	39,979.14
Exxon-Mobil	09/02/05	87	8.88	0	0			0.96	32.9	22	95141
Exxon-Mobil	09/04/05	87	7.73	0	0			0.51	33.6	5	94553
Gulf	09/05/05	88	7.73	0	0			0.51	33.6	5	59925
Motiva	09/05/05	87	7.73	0	0			0.51	33.6	5	35,555.68
Exxon-Mobil	09/09/05	87	8.62	0.22	1.23			0.98	35.7	191	76998
Exxon-Mobil	09/09/05	87	7.58	0.17	0.96			0.91	38.9	141	91080
Gulf	09/11/05	88	7.58	0.19	1.03			0.91	38.9	141	24000
Gulf	09/11/05	88	8.62	0.25	1.34			0.98	35.6	191	29351
Motiva	09/11/05	87	7.58	0.17	0.96			0.91	38.9	141	10,000.00
Motiva	09/11/05	87	8.62	0.22	1.23			0.98	35.7	191	60970.44
Irving	09/16/05	93	9.0	2.37	12.99			0.35	24.1	18	13000
Webber	09/17/05	87	10.38	0	0			0.78	27.1	105	58371

3rd Quarter Data by Date of Delivery

			RVP	Oxygen	MTBE	Other Oxygenate(s) in Fuel		BENZ	ARO	SULF	
Terminal	Date of transfer	Octane	(psi)	(% wt O_2)	(% Vol)	(Other Oxy. Name)	(% Vol)	(% Vol)	(% Vol)	(ppm)	Barrels
Motiva	09/19/05	87	8.88	0.05	0.29			2.11	38	151	49,685.60
Exxon-Mobil	09/19/05	87	8.88	0.05	0.29			2.11	38	152	89371
Exxon-Mobil	09/19/05	93	12.94	2.07	11.34			0.28	23.4	24	42254
Exxon-Mobil	09/20/05	87	12.12	0	0			0.71	34.1	38	74367
Irving	09/20/05	87	9.0	0.05	0.27			1.94	36.5	163	115000
Motiva	09/21/05	93	12.94	2.07	11.39			0.28	23.4	24	10,822.59
Exxon-Mobil	09/23/05	87	11.81	1.75	9.55			0.61	23.9	44	41116
Exxon-Mobil	09/26/05	87	11.62	0.05	0.28			0.84	36.8	214	205009
Gulf	09/28/05	88	11.6	0.05	0.28			0.84	36.8	350	59837
Motiva	09/28/05	87	11.62	0.05	0.28			0.84	36.8	214	59,582.85
Gulf	09/29/05	87	11.2	0.25	1.39	TAME	0.07	0.9	25.9	148	25973
Motiva	09/29/05	87	11.24	0.26	1.39	TAME	0.07	0.84	24.6	150	85,006.31
Weighted Average			**8.53**	**0.25**	**1.35**	**TAME**	**0.13**	**0.90**	**31.64**	**112.97**	
						ETBE	**0.28**				
						TBA	**0.11**				
Shaded cells are questionable data not included in the calculations											

4th Quarter Data by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	Other Oxygenate(s) in Fuel (% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Exxon-Mobil	10/01/05	87	11.26	0.26	1.39	TAME	0.07	0.9	25.9	148	154463
Irving	10/05/05	87	9	1.76	9.51			0.78	21.7	34	38029
Exxon-Mobil	10/07/05	87	12.00	0.02	0.13			0.79	31.1	235	159718
Motiva	10/08/05	87	12.00	0.02	0.13			0.79	31.10	235	60,428.72
Exxon-Mobil	10/10/05	87	12.37	0.03	0.14			0.94	30.9	184	114660
Irving	10/10/05	87	13.5	0.03	0.17			0.79	34.3	193	89538
Gulf	10/12/05	87	12.3	0.03	0.15			0.94	30.9	184	60590
Exxon-Mobil	10/12/05	93	12.53	2.15	11.63			0.31	22	16	6989
Gulf	10/13/05	87	11.6	1.82	10			0.66	28.3	33	52670
Gulf	10/13/05	93	12.5	2.15	11.6			0.31	22	16	19999
Motiva	10/13/05	87	13.37	0.03	0.14			0.94	30.90	184	82,247.02
Exxon-Mobil	10/13/05	87	12.37	0.03	0.14			0.94	30.9	184	114660
Motiva	10/14/05	93	12.53	2.15	11.63			0.31	22.00	16	19,436.82
Webber	10/19/05	93	10.79	0.13	0.7			0.35	25.7	65	8009.65
Webber	10/19/05	88	11.54	0.04	0.1	TAME	0.24	1.32	24.9	122	44419.74
Exxon-Mobil	10/21/05	87	12.07	0.03	0.14			1.03	29.8	259	170152
Motiva	10/23/05	87	12.07	0.03	0.14			1.03	29.80	259	70,641.79
Irving	10/24/05	87	13.5	0.02	0.12			1.09	32	238	70010
Exxon-Mobil	10/26/05	87	12.89	0	0			0.99	23	29	187298
Irving	10/27/05	87	13.5	1.78	9.7			0.93	21.4	21	39215

4th Quarter Data by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	(% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Gulf	10/28/05	87	12.8	0	0			0.99	23	29	49606
Motiva	10/28/05	87	12.89	0.00	0.00			0.99	23.00	29	76,288.35
Exxon-Mobil	10/28/05	93	12.8	2.13	11.47			0.39	16.9	24	30014
Webber	10/28/05	87	12.21	1.71	9.7			0.95	22.5	24	38688.31
Gulf	10/29/05	87	11.8	1.73	9.35			0.81	19.5	33	52738
Gulf	11/02/05	87	11.5	0.01	0.06	ETBE	0.03	1.04	33.3	113	79523
Exxon-Mobil	11/03/05	87	12.66	0	0			0.57	26.3	93	214778
Gulf	11/05/05	87	12.6	0	0			0.57	26.3	93	50192
Motiva	11/05/05	87	12.66	0.00	0.00			0.57	26.30	93	70,004.12
Gulf	11/06/05	89	12.7	0	0			1.38	24.9	350	55021
Irving	11/13/05	87	13.5	1.77	9.64			0.58	24.3	24	40394
Irving	11/13/05	93	12.84	1.96	10.49			0.34	16.5	22	4830
Exxon-Mobil	11/16/05	87	12.65	0.03	0.18			0.92	30.7	117	200470
Motiva	11/17/05	87	12.65	0.03	0.18			0.92	30.70	117	54,580.71
Irving	11/18/05	87	13.5	0.04	0.2			0.92	36.9	117	66000
Gulf	11/20/05	94	12.7	1.72	9.56			0.46	33.2	46	40415
Irving	11/21/05	93	15	1.93	10.36			0.32	15.3	27	51038
Gulf	11/22/05	87	10.6	0.43	0.9	TAME Methanol	1.25 0.09	1.46	14.7	75	74882
Exxon-Mobil	11/23/05	87	12.18	0.03	0.14			1.02	31.7	111	174841

4th Quarter Data by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	(% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Gulf	11/25/05	87	12.1	0.03	0.14			1.02	37.1	111	49791
Motiva	11/25/05	87	12.18	0.03	0.14			1.02	31.70	111	75,116.31
Exxon-Mobil	11/26/05	93	14.87	2.65	14.63			0.37	27.5	27	14980
Irving	11/26/05	87	15	0.02	0.12			1.04	29.3	126	19925
Motiva	11/27/05	93	12.80	2.13	11.47			0.39	16.90	24	10,155.27
Exxon-Mobil	11/27/05	87	12.36	0	0			0.63	24.3	10	180581
Webber	11/27/05	88	10.59	1.48	7.91			1.05	20.6	37	59573.59
Motiva	11/29/05	87	12.36	0.00	0.00			0.63	24.30	10	54,925.55
Irving	12/01/05	87	15	0	0			0.59	25.6	9	71723
Exxon-Mobil	12/03/05	87	13.77	1.74	9.38			0.67	22.1	26	45471
Exxon-Mobil	12/05/05	87	14.54	1.72	9.28			0.82	26	10	142095
Gulf	12/07/05	87	14.5	1.72	9.28			0.82	26	10	55684
Irving	12/09/05	87	15	1.77	9.51			0.56	22.3	48	91223
Exxon-Mobil	12/11/05	93	14.16	2.12	11.4			0.31	18.4	18	19960
Exxon-Mobil	12/15/05	87	13.17	0.17	0.76	TBA	0.11	0.74	26	67	170097
Gulf	12/16/05	88	13.1	0.03	0.76	TBA	0.11	0.74	26	67	96265
Motiva	12/16/05	87	13.17	0.17	0.76	TBA	0.11	0.74	26	67	55,292.33
Exxon-Mobil	12/19/05	87	13.32	0	0			0.45	13.1	34	159589
Motiva	12/21/05	87	13.32	0.00	0.00			0.45	13.10	34	65,052.90
Gulf	12/25/05	87	13.3	0	0			0.45	13.1	34	94947

4th Quarter Data by Date of Delivery

			RVP	Oxygen	MTBE	Other Oxygenate(s) in Fuel		BENZ	ARO	SULF	
Terminal	Date of transfer	Octane	(psi)	(% wt O_2)	(% Vol)	(Other Oxy. Name)	(% Vol)	(% Vol)	(% Vol)	(ppm)	Barrels
Gulf	12/25/05	88	10.5	1.58	6.81	TAME	1.41	0.66	16.9	63	80744
Irving	12/26/05	87	15	1.64	8.85			0.72	22.2	47	45470
Exxon-Mobil	12/28/05	87	12.78	0	0			0.52	24.8	7	164634
Irving	12/29/05	87	15	0	0			0.51	24.3	11	81101
Motiva	12/07/06	87	14.54	1.72	9.28			0.82	26.00	10	70,770.08
Motiva	12/28/06	87	12.79	0.00	0.00			0.52	24.80	7	59,835.00
Weighted Average			**12.77**	**0.41**	**2.18**	**TAME**	**0.63**	**0.79**	**25.86**	**91.91**	
						ETBE	**0.03**				
						TBA	**0.11**				
						Methanol	**0.09**				
Whole Year Weighted Average			**10.37**	**0.39**	**2.07**	**TAME**	**0.54**	**0.81**	**28.23**	**88.97**	
						ETBE	**0.46**				
						TBA	**0.2**				
						Methanol	**0.09**				
						2-butanol	**0.05**				
						DIPE	**2.86**				

APPENDIX C: Ozone Season Data

Ozone Season by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	(% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Irving	05/02/05	87	9	1.93	10.46			0.86	26.5	47	73424
Irving	05/02/05	93	6.47	2.04	11.38			0.4	25.4	42	25028
Motiva	05/02/05	87	6.51	1.97	10.1	ETBE TBA	0.4 0.3	0.78	28	50	44,450.86
Gulf	05/03/05	87	7.58	0.18	0.93	TAME	0.07	0.49	24.5	32	29706
Motiva	05/04/05	87	7.58	0.18	0.93	TAME	0.07	0.49	24.5	32	55,035.55
Gulf	05/05/05	87	7.41	0.09	0.31	TBA	0.22	1.1	27.9	32	63416
Exxon-Mobil	05/05/05	87	7.68	0.18	0.93	TAME	0.7	0.49	28	30	15046
Exxon-Mobil	05/07/05	87	8.36	0.11	0.56			0.49	29.4	116	138943
Motiva	05/08/05	87	8.36	0.11	0.56			0.49	29.4	116	67,437.06
Exxon-Mobil	05/10/05	87	6.82	1.79	9.97			0.9	26.1	44	80755
Exxon-Mobil	05/10/05	93	6.63	2.1	11.66			0.37	24.6	32	48815
Motiva	05/10/05	93	6.63	2.1	11.66			0.37	24.6	32	9,219.10
Gulf	05/11/05	93	7.25	2.38	13.22			0.49	27.9	16	40086
Gulf	05/11/05	89	8.42	0.12	0.59			0.68	30.3	130	16784
Exxon-Mobil	05/11/05	87	8.42	0.12	0.59	2 Butanol	0.05	0.68	30.3	130	43035
Exxon-Mobil	05/11/05	87	7.47	0.13	0.59	2 Butanol	0.06	0.71	33.1	130	57131
Motiva	05/11/05	87	7.47	0.13	0.59	2 Butanol	0.02	0.71	33.1	130	79,259.00
Motiva	05/11/05	87	8.42	0.12	0.59	2 Butanol	0.05	0.68	30.3	130	9,367.15
Exxon-Mobil	05/14/05	87	8.42	0.12	0.59	2 Butanol	0.05	0.68	30.3	130	72171
Exxon-Mobil	05/14/05	87	7.47	0.13	0.59	2 Butanol	0.06	0.71	33.1	130	45762

Ozone Season by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	(% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Gulf	05/21/05	88	8.26	0	0			0.78	26.6	33	62144
Exxon-Mobil	05/21/05	87	8.26	0	0			0.78	26.6	33	109007
Exxon-Mobil	05/22/05	87	6.76	1.78	9.94			0.85	27.6	58	80447
Motiva	05/22/05	87	8.26	0	0			0.78	26.6	8.26	43,600.92
Irving	05/25/05	87	8.28	0	0			0.7	26.1	35	106088
Exxon-Mobil	05/27/05	87	7.9	0	0			0.66	35	11	179339
Gulf	05/28/05	87	7.2	0.01	0.08			0.85	31.8	37	59664
Webber	05/29/05	88	8.96	0.55	2.42	TAME	0.69	0.59	23.2	73	59,121.93
Motiva	05/29/05	87	7.2	0.01	0.08			0.85	31.8	37	20,009.83
Exxon-Mobil	05/30/05	93	6.76	2.29	12.37			0.3	23.1	25	53267
Motiva	05/31/05	93	6.76	2.29	12.37	TBA	0.05	0.3	23.1	25	4,872.52
Gulf	06/02/05	88	7.65	0.07	0.32			1.02	39.2	93	80127
Gulf	06/03/05	88	7.6	0.38	2.09			0.62	33.1	18	19955
Exxon-Mobil	06/04/05	87	7.77	0	0			0.69	32	19	20777
Exxon-Mobil	06/04/05	87	7.6	0.38	2.09			0.62	33.1	18	39690
Motiva	06/04/05	87	7.7	0	0			0.5	33.6	10	91,906.52
Exxon-Mobil	06/06/05	87	8.38	0.05	0.3			0.8	29.7	127	109051
Exxon-Mobil	06/06/05	87	7.78	0.07	0.26	TBA	0.06	0.76	32.9	147	74515
Motiva	06/09/05	87	7.78	0.07	0.26	TBA	0.06	0.76	32.9	147	83,039.34
Motiva	06/09/05	87	8.38	0.05	0.3			0.8	29.7	127	40,705.69
Gulf	06/10/05	88	8.6	0.05	0.28			0.6	29.2	75	77254
Exxon-Mobil	06/10/05	87	8.6	0.05	0.28			0.6	29.9	75	58023

Ozone Season by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	(% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Motiva	06/10/05	87	8.6	0.05	0.28			0.6	29.9	75	47,337.29
Irving	06/12/05	87	8.58	0.05	0.27			0.61	29.5	75	79711
Exxon-Mobil	06/12/05	87	7.03	1.8	10.02			1.01	26	64	83960
Motiva	06/13/05	93	6.9	2.43	13.29	2 Butanol	0.21	0.38	27.4	51	12,927.19
Gulf	06/16/05	88	6.88	0.51	1.54	TAME ETBE	1.3 0.18	0.87	32.7	44	79037
Webber	06/19/05	87	8.69	0.22	0.4	ETBE TAME	0.75 0.16	1.04	28.5	98	58,493.00
Exxon-Mobil	06/20/05	93	6.76	2.38	13.11			0.31	21.2	53	65799
Motiva	06/20/05	93	6.76	2.38	13.11			0.31	21.2	53	14,945.50
Exxon-Mobil	06/21/05	87	7.68	0	0			0.54	25.4	32	124824
Exxon-Mobil	06/21/05	87	8.92	0	0			0.5	20.3	43	129078
Motiva	06/22/05	87	7.68	0	0			0.54	25.4	32	49,547.15
Motiva	06/22/05	87	8.92	0	0			0.05	20.3	43	26,340.60
Exxon-Mobil	06/27/05	87	8.37	0.07	0.24			0.85	27.9	112	87266
Exxon-Mobil	06/27/05	87	7.74	0.03	0.18			0.76	30.5	113	70936
Gulf	06/28/05	88	8.37	0.04	0.24			0.85	27.9	112	35179
Gulf	06/28/05	88	7.74	0.03	0.18			0.76	30.5	113	30120
Motiva	06/28/05	87	8.37	0.04	0.24			0.85	27.9	112	35,089.75
Motiva	06/28/05	87	7.74	0.03	0.18			0.76	30.5	113	65,066.30
Exxon-Mobil	06/30/05	93	6.73	2.44	13.48			0.31	22.9	37	8887
Motiva	07/02/05	93	6.73	2.44	13.48			0.31	22.9	37	12,964.55
Gulf	07/03/05	87	8.5	0.44	2.37			0.73	21.7	148	19387

Ozone Season by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	(% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Gulf	07/03/05	93	7.65	0	0			0.82	39.5	45	20131
Exxon-Mobil	07/03/05	87	8.72	0	0			0.78	19.9	107	78992
Exxon-Mobil	07/05/05	87	7.81	0.02	0.08			0.86	26	56	100428
Gulf	07/06/05	87	7.81	0.02	0.08			0.86	26	56	99366
Motiva	07/06/05	87	7.81	0.02	0.084			0.86	26	56	39,310.65
Irving	07/08/05	93	9.0	2.45	13.31			0.31	25	6.7	22,000
Exxon-Mobil	07/10/05	87	7.51	0.05	0.12	TAME	0.13	0.99	36.4	170	100447
Exxon-Mobil	07/10/05	87	8.54	0.03	0.19			0.97	30.8	155	117324
Irving	07/11/05	87	9.0	0	0			0.93	25	100	115,000
Motiva	07/12/05	87	7.51	0.05	0.12	TBA	0.13	0.99	36.4	177	68,815.36
Motiva	07/12/05	87	8.54	0.03	0.19			0.97	30.8	155	34,827.50
Exxon-Mobil	07/12/05	93	7.05	2.4	13.18			0.32	22.8	48	27726
Gulf	07/13/05	87	8.86	0	0			0.93	25.9	100	43603
Motiva	07/13/05	93	7.05	2.4	13.8			0.32	22.8	48	16,911.80
Gulf	07/16/05	87	7.6	0	0			1.66	37.5	114	71643
Exxon-Mobil	07/18/05	87	7.74	0.21	1.2			0.86	40	166	97017
Exxon-Mobil	07/18/05	87	8.54	0.2	1.05			0.85	35	151	105742
Exxon-Mobil	07/20/05	93	6.78	2.45	13.29	TBA	0.21	0.35	24.3	41	9968
Webber	07/20/05	87	8.89	0.02	0.11			1.26	31.2	75	64386

Ozone Season by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	Other Oxygenate(s) in Fuel (% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Motiva	07/21/05	87	8.54	0.2	1.08			0.85	35	151	46,190.76
Motiva	07/21/05	87	7.74	0.21	1.17			0.86	40	166	46,385.81
Motiva	07/22/05	93	6.78	2.45	13.28	TBA	0.21	0.35	24.3	41	22,771.05
Gulf	07/25/05	87	8.8	0.08	0.42			0.63	27.7	74	71802
Exxon-Mobil	07/25/05	87	8.8	0.08	0.42			0.63	27.7	74	124865
Irving	07/26/05	87	9.0	0.1	0.098			0.64	26.7	77	89,000
Exxon-Mobil	07/27/05	87	8.36	0.05	0.26			0.85	31.5	156	77623
Exxon-Mobil	07/27/05	87	7.58	0.05	0.26			0.88	33.5	202	44493
Motiva	07/28/05	87	7.58	0.05	0.26			0.88	33.5	202	34,920.55
Motiva	07/28/05	87	8.36	0.05	0.26			0.85	31.5	156	14,981.99
Gulf	07/29/05	88	8.36	0.05	0.26			0.85	31.5	156	38531
Gulf	07/29/05	88	7.58	0.05	0.26			0.88	33.5	202	57306
Gulf	07/30/05	88	7.69	0.02	0.1			0.48	37.1	2	70452
Exxon-Mobil	07/30/05	87	7.54	1.32	7.26	TAME	0.08	0.57	28.6	52	100352
Motiva	07/31/05	87	7.69	0.02	0.1			0.48	37.1	2	98,084.45
Gulf	08/02/05	94	7.25	1.91	10.1	TAME	0.48	0.38	18.9	53	29579
Motiva	08/03/05	87	7.78	0.05	0.27			1.28	37.6	83	20,176.29
Webber	08/03/05	94	7.23	1.91	9.98			0.38	19.9	53	9664
Exxon-Mobil	08/05/05	87	9.02	0.17	0.83	TAME	0.12	0.96	34.2	87	73719
Exxon-Mobil	08/05/05	87	7.78	0.05	0.27			1.28	37.6	83	79134

Ozone Season by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	(% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Exxon-Mobil	08/09/05	87	7.71	0.03	0.19			1.02	36.6	122	106937
Exxon-Mobil	08/09/05	87	8.59	0.06	0.34			0.86	32.2	89	136091
Exxon-Mobil	08/11/05	93	6.82	2.51	13.75	TBA	0.21	0.32	28.3	41	27141
Motiva	08/12/05	87	7.71	0.03	0.19			1.02	36.6	122	35,168.15
Motiva	08/12/05	87	8.59	0.06	0.34			0.86	32.2	89	48,390.66
Motiva	08/13/05	93	6.82	2.51	13.75	TBA	0.21	0.32	28.3	41	28,713.24
Gulf	08/17/05	88	7.17	0.02	0.15			0.9	23.7	193	88723
Motiva	08/17/05	87	7.17	0.02	0	ETBE	0.15	0.9	23.7	193	55,627.56
Exxon-Mobil	08/17/05	87	7.17	0.02	0.15			0.9	23.7	193	266808
Irving	08/17/05	87	9.0	0	0			0.9	29.3	21.4	104,000
Exxon-Mobil	08/19/05	87	8.49	0	0			0.82	32.3	29	115028
Motiva	08/20/05	87	8.49	0	0			0.82	32.3	29	41,847.43
Exxon-Mobil	08/20/05	87	6.89	1.72	9.72			0.86	26.4	32	30194
Webber	08/23/05	87	8.96	0	0			0.84	31.4	119	58559
Exxon-Mobil	08/24/05	87	7.63	0.41	2.22			0.71	24.2	117	25538
Exxon-Mobil	08/24/05	87	7.83	0.41	2.22			0.7	22.7	111	100515
Exxon-Mobil	08/26/05	87	7.87	0.03	0.14			1.34	37.4	166	59600
Exxon-Mobil	08/26/05	87	9.06	0.06	0.35			1.27	37.2	167	58481
Gulf	08/29/05	88	8.0	0.06	0.35			1.27	37.2	167	50196
Gulf	08/29/05	87	7.48	0.03	0.14			1.34	37.4	166	19720
Exxon-Mobil	08/29/05	93	6.74	2.67	14.56	TBA	0.27	0.42	29.9	22	37816
Irving	08/31/05	87	9.0	0	0			0.91	35.9	11	104,000
Gulf	09/01/05	87	9.0	0	0			0.91	35.9	93	40450

Ozone Season by Date of Delivery

Terminal	Date of transfer	Octane	RVP (psi)	Oxygen (% wt O_2)	MTBE (% Vol)	Other Oxygenate(s) in Fuel (Other Oxy. Name)	Other Oxygenate(s) in Fuel (% Vol)	BENZ (% Vol)	ARO (% Vol)	SULF (ppm)	Barrels
Motiva	09/01/05	93	6.74	2.67	14.56	TBA	0.27	0.42	29.9	22	15,989.26
Exxon-Mobil	09/01/05	87	8.82	0.06	0.33			1.39	31.1	167	24712
Exxon-Mobil	09/01/05	87	7.64	0.62	3.44			1.23	34	119	18074
Gulf	09/02/05	87	8.82	0.06	0.33			1.39	31.1	167	6677
Gulf	09/02/05	87	7.64	0.62	3.44			1.23	34	119	25626
Motiva	09/02/05	87	7.87	0.03	0.14			1.34	37.4	166	34,731.65
Motiva	09/02/05	87	8.84	0	0			0.91	35.9	11	39,979.14
Exxon-Mobil	09/02/05	87	8.88	0	0			0.96	32.9	22	95141
Exxon-Mobil	09/04/05	87	7.73	0	0			0.51	33.6	5	94553
Gulf	09/05/05	88	7.73	0	0			0.51	33.6	5	59925
Motiva	09/05/05	87	7.73	0	0			0.51	33.6	5	35,555.68
Exxon-Mobil	09/09/05	87	8.62	0.22	1.23			0.98	35.7	191	76998
Exxon-Mobil	09/09/05	87	7.58	0.17	0.96			0.91	38.9	141	91080
Gulf	09/11/05	88	7.58	0.19	1.03			0.91	38.9	141	24000
Gulf	09/11/05	88	8.62	0.25	1.34			0.98	35.6	191	29351
Motiva	09/11/05	87	7.58	0.17	0.96			0.91	38.9	141	10,000.00
Motiva	09/11/05	87	8.62	0.22	1.23			0.98	35.7	191	60970.44
Weighted Average			**7.99**	**0.32**	**1.72**	**TAME**	**0.36**	**0.79**	**30.24**	**89.40**	
						ETBE	**0.35**				
						TBA	**0.16**				
						2-butanol	**0.05**				
Shaded cells are questionable data not included in the calculations											