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FINAL REPORT

STATE OF RHODE ISLAND

#2 HEATING OIL DATA COLLECTION PROGRAM

AUGUST 27, 1979 - MAY 22, 1980

PREPARED BY THE GOVERNOR'S ENERGY OFFICE

Pursuant to Cooperative Agreement
No. ~~DE~~ FC01-79EI10297
with

The United States Department of Energy

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DISCLAIMER

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ACKNOWLEDGEMENT

The Governor's Energy Office acknowledges and thanks the Rhode Island fuel oil dealers who participated in the #2 fuel oil data collection program. Without their cooperation, this effort would not have been possible.

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I. INTRODUCTION

It is estimated that of the approximately 300,000 households in the State of Rhode Island, approximately 70% are heated with #2 fuel oil. Recognizing this heavy dependence and the serious problems that would therefore result from a shortage, the Governor's Energy Office during July and August of 1979 conducted a one-time survey of the approximately 250 #2 fuel oil retail dealers in the state. The dealers were identified primarily from the yellow pages of the telephone books.

The information that was sought included name of supplier(s), storage capacity, number of customers, historic deliveries and historic inventories. The total number of dealers who responded to each question ranged between 39 and 190. While the participation was somewhat limited, the survey nevertheless provided the Energy Office with its first profile of the state's retail #2 heating oil dealers.

While the collection of historic data may be of interest, the collection of accurate and up-to-date data on the price and supply of #2 oil is absolutely vital to ensure that adequate supplies are available to the approximately 200,000 dependent Rhode Island households. The collection of up-to-date data was made possible by an $18,846 grant from the United States Department of Energy, Region I. It is this data collection program that is the subject of this report.

II. THE SURVEY

An attempt was made in August, 1979 to persuade the 36 dealers who had participated in weekly retail price surveys during past heating seasons to participate in the 1979-1980 expanded survey which would include in addition to a question on retail price, questions on wholesale price, inventories and sales. Regrettably, only 15 of the 36 dealers agreed to participate initially. The 21 dealers who refused to participate generally cited either an inability to assemble the necessary figures or a belief that the information being requested was proprietary in nature.

The survey was conducted on a weekly basis from August 27, 1979 to May 22, 1980 with just two exceptions. No survey was conducted during the week of December 24 due to the year-end holidays. For office staffing reasons, the survey was also omitted during the week of April 21.

As mentioned, the first survey was conducted on August 27. By the September 4 survey, some dealers became unwilling to provide their wholesale costs, citing a fear that we were trying to compute their profits. These dealers were nevertheless not reluctant to identify their supplier(s). Rather than drop these dealers from the survey, the Energy Office began to call their suppliers for their wholesale prices. From September 4 through September 17, we obtained wholesale prices from five suppliers and from September 24 to the end of the survey, we collected wholesale prices from six suppliers.

On September 24, one dealer dropped out, thus reducing the survey to 14 participants. The survey was reduced to 13 dealers on November 19 when a second dealer dropped out.

In February, an attempt was made once again to persuade those 23 dealers who were refusing to cooperate to participate in the survey. Of those dealers, 11 agreed to participate, thus expanding the survey size to 24 dealers on March 4. Three of these additional 11 dealers, however, said they would not answer the question on wholesale price.

At the same time, it was decided to ask the retail price of the 12 dealers who still refused to participate in the complete survey. On March 4, we thus had 24 dealers who responded to the entire survey and an additional 12 dealers who responded only to the question on retail price.

On March 11, one of the 11 new respondents had second thoughts and was therefore added to the group that responded only to the retail price question.

From March 11 until the end of the survey on May 22, we therefore had 23 dealers who responded to all questions and 13 dealers who responded to the retail price question only.

A summary of dealer participation is thus as follows:

	RETAIL PRICE	WHOLESALE PRICE	INVENTORY	DELIVERIES
August 27	15	15	15	15
Sept. 4 - Sept. 17	15	12	15	15
Sept. 24 - Nov. 13	14	11	14	14
Nov. 19 - Feb. 26	13	10	13	13
March 4	36	18	24	24
March 11 - May 22	36	17	23	23

Because of the small size of the state, no attempt was made to divide it into regions. However, the 36 dealers who participated in the retail price portion of the survey represent 22 of the state's 39 cities and towns and the 23 dealers for whom we have complete figures represent 19 cities and towns. A comparison of the figures for dealers from different parts of the state shows that there are no discernable statistical differences.

III. PRICES

A. RETAIL PRICE

The average retail price of #2 fuel oil, the price paid by the consumer to the fuel oil dealer, was 83.3¢ per gallon when the survey began on August 27 (see Table 1 and Figure 1). When the survey ended on May 22, the average price had risen 17.8¢ or 21% to 101.1¢ per gallon.

The most precipitous rise occurred between December 17 and March 4. During this 11-week period, the price went from 87.9¢ per gallon to 99.5¢, an increase of 11.6¢ or 13%.

B. WHOLESALE PRICE

The wholesale or rack price is the price the dealer pays his supplier for his product. The average wholesale price on August 27 was 66.73¢ per gallon (see Table 2 and Figure 2). By May 22, the figure had risen to 81.54¢, an increase of 14.81¢ per gallon or 22%. 83% of the increase in the average retail price during the survey period can thus be accounted for by the increase in the average wholesale price.

As with retail price, the sharpest increase in the average wholesale price occurred between December 17 and March 4 when prices were 10.90¢ or 16%. The increase in the average wholesale price thus accounted for 94% of the increase in the average retail price during this period.

C. DEALER MARGINS

The dealer margin is the difference between the wholesale price that the dealer pays for his product and the retail price for which he sells it to his customers. The average dealer margin rose from 16.57¢ per gallon to 19.56¢ during the survey period, an increase of 2.99¢ or 18% (see Table 3). This means that 17% of the increase in retail price during the survey period can be attributed to increased dealer margins.

TABLE 1

#2 HEATING OIL RETAIL PRICE SUMMARY
(cents per gallon)

	AVERAGE RETAIL PRICE	HIGH	LOW
8/27	83.3	84.9	80.4
9/ 4	84.3	84.9	81.9
9/10	84.3	84.9	81.9
9/17	84.6	84.9	83.9
9/24	85.1	85.9	83.9
10/ 2	85.3	86.4	84.9
10/ 9	85.2	86.4	84.9
10/15	85.2	86.4	84.9
10/22	86.1	87.9	84.9
10/29	86.4	87.9	84.9
11/ 5	86.4	87.9	84.9
11/13	87.3	88.9	84.9
11/19	87.3	88.9	84.9
11/26	87.3	88.9	84.9
12/ 3	87.4	88.9	84.9
12/10	87.4	88.9	84.9
12/17	87.9	89.9	84.9
1/ 3	89.4	94.9	84.9
1/ 7	92.6	94.9	89.9
1/15	93.5	94.9	89.9
1/22	93.9	95.9	89.9
1/29	95.2	97.8	91.9
2/ 5	95.7	97.9	91.9
2/12	97.6	99.9	93.9
2/19	98.2	99.9	93.9
2/26	98.4	99.9	93.9
3/ 4	99.5	102.0	95.9
3/11	99.7	102.0	96.9
3/18	100.0	102.0	96.9
3/25	100.1	102.0	96.9
4/ 2	100.3	102.0	96.9
4/ 9	100.8	102.0	96.9
4/15	100.8	102.0	96.9
4/29	100.8	102.0	96.9
5/ 7	100.8	102.0	96.9
5/13	100.8	102.0	96.9
5/22	101.1	107.4	99.4

FIGURE 1 - AVERAGE RETAIL PRICE

(cents per gallon)

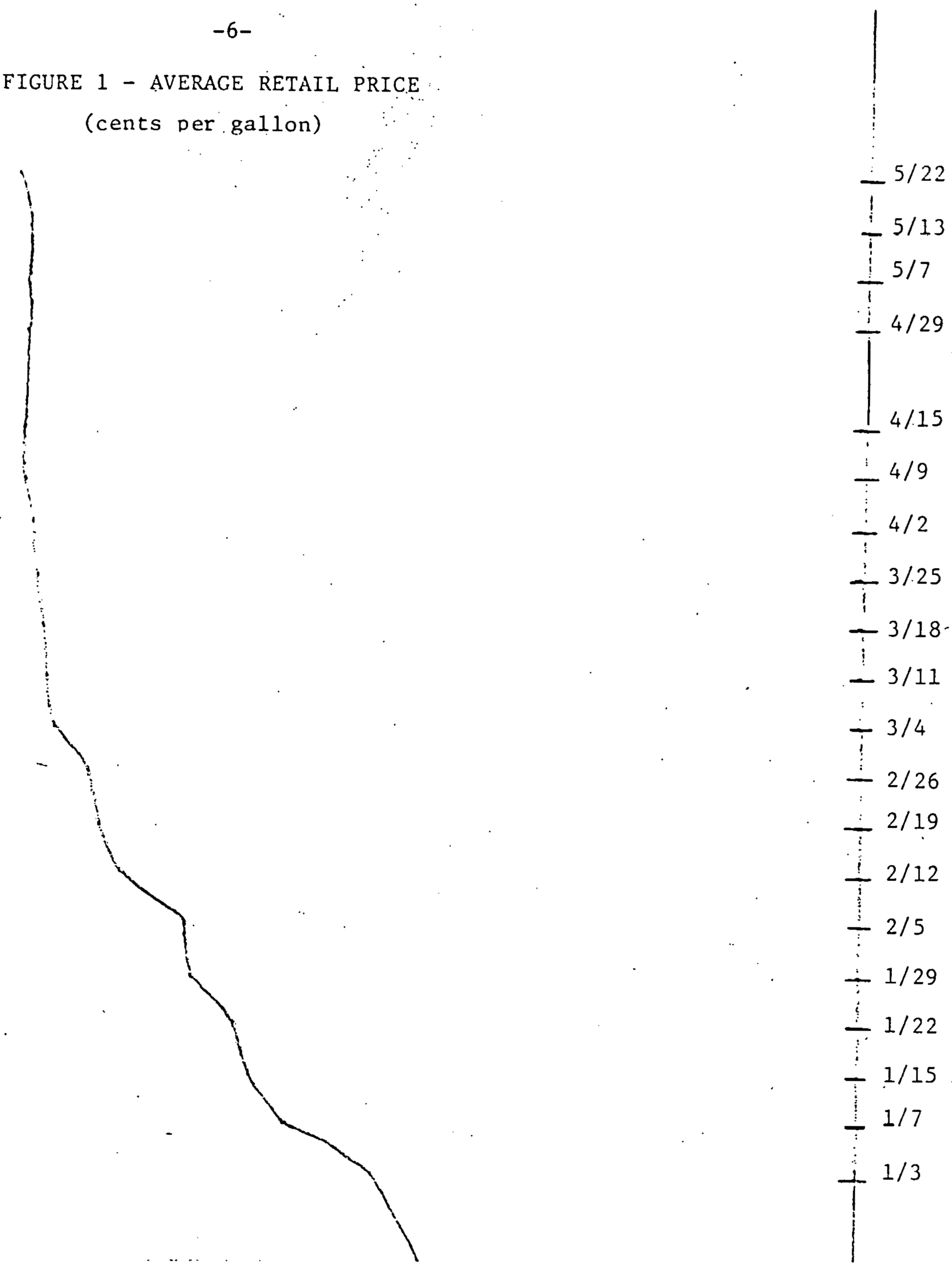


TABLE 2

#2 HEATING OIL WHOLESALE PRICE SUMMARY
(cents per gallon)

	AVERAGE WHOLESALE PRICE	HIGH	LOW
8/27	66.73	72.95	57.70
9/ 4	67.76	72.95	62.70
9/10	67.43	72.95	62.70
9/17	67.42	72.95	62.70
9/24	67.65	72.95	62.70
10/ 2	68.11	74.60	62.70
10/ 9	68.10	74.40	62.70
10/15	67.85	72.95	62.70
10/22	68.52	72.95	62.70
10/29	68.62	72.95	62.70
11/ 5	68.90	74.80	62.70
11/13	69.49	74.80	62.70
11/19	68.75	70.70	62.70
11/26	68.75	70.70	62.70
12/ 3	68.75	70.70	62.70
12/10	69.14	71.60	62.70
12/17	69.43	71.60	62.70
1/ 3	70.69	72.75	65.70
1/ 7	73.52	74.90	65.70
1/15	74.15	76.75	68.70
1/22	75.02	76.75	68.70
1/29	75.95	76.75	70.70
2/ 5	76.34	77.15	74.70
2/12	77.99	79.75	74.70
2/19	78.89	79.75	76.70
2/26	79.09	81.75	76.70
3/ 4	80.33	81.75	77.70
3/11	80.43	81.75	77.70
3/18	80.80	82.75	77.70
3/25	80.80	82.75	77.70
4/ 2	81.04	82.75	77.70
4/ 9	81.19	82.75	77.70
4/15	81.20	82.75	77.70
4/29	81.20	82.75	77.70
5/ 7	81.20	82.75	77.70
5/13	81.20	82.75	77.70
5/22	81.54	82.75	79.20

FIGURE 2 - AVERAGE WHOLESALE PRICE

(cents per gallon)

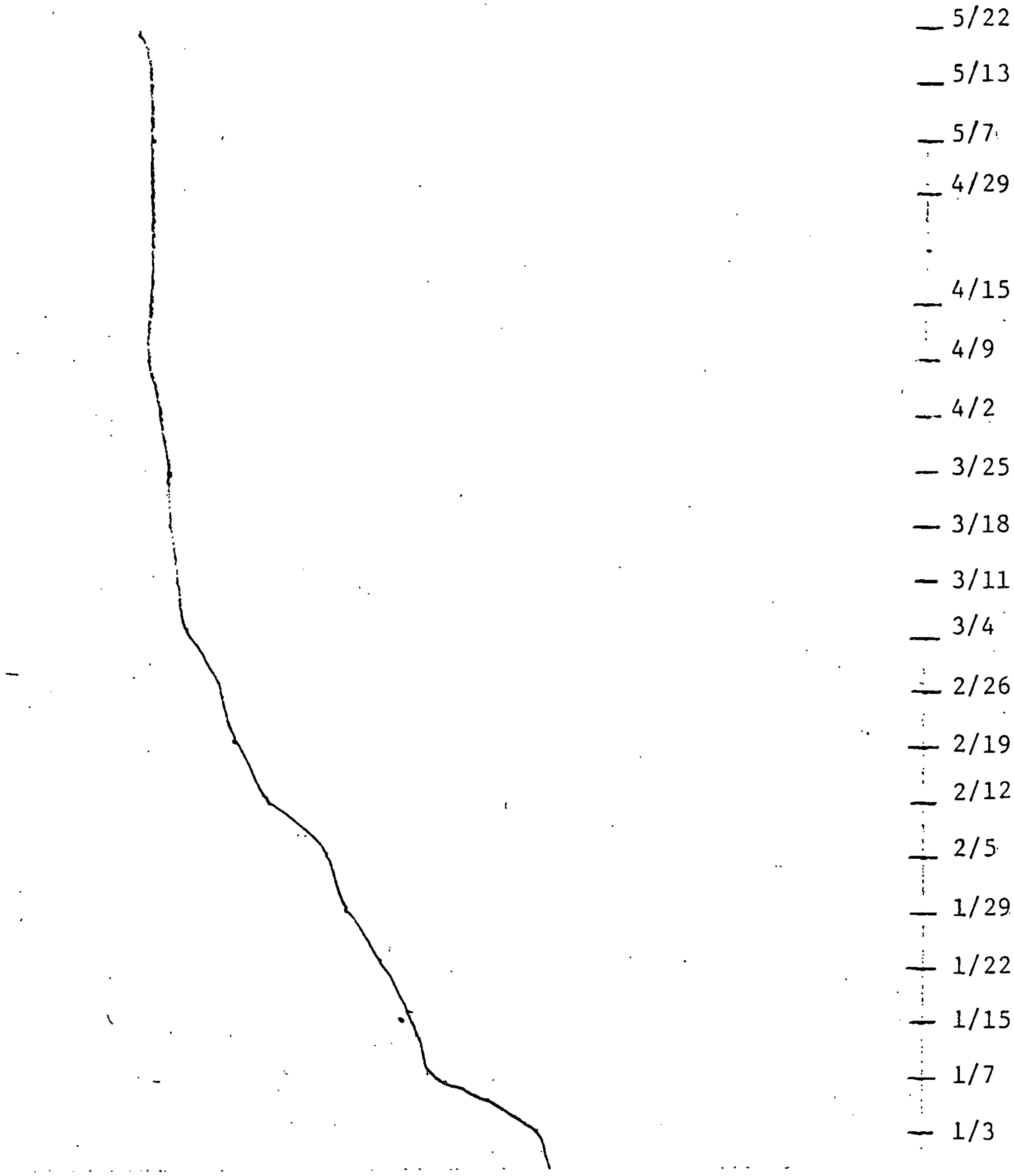


TABLE 3

RETAILER MARGINS (cents per gallon)

	AVERAGE	HIGH	LOW
8/27	16.57	22.70	11.95
9/ 4	16.54	21.70	11.95
9/10	16.87	21.70	11.95
9/17	17.18	21.70	11.95
9/24	17.45	21.70	11.95
10/ 2	17.19	23.70	11.95
10/ 9	17.10	23.70	11.95
10/15	17.35	23.70	11.95
10/22	17.58	23.70	11.95
10/29	17.78	23.70	12.95
11/ 5	17.50	23.70	12.10
11/13	17.81	23.70	12.10
11/19	18.55	23.70	16.20
11/26	18.55	23.70	16.20
12/ 3	18.65	25.20	16.20
12/10	18.26	25.20	15.30
12/17	18.47	25.20	15.30
1/ 3	18.71	24.20	16.30
1/ 7	19.08	24.20	15.00
1/15	19.35	25.20	17.00
1/22	18.88	25.20	14.20
1/29	19.25	23.20	16.20
2/ 5	19.36	23.20	15.20
2/12	19.61	23.20	17.00
2/19	19.31	23.20	15.20
2/26	19.31	23.20	15.20
3/ 4	19.07	22.20	15.20
3/11	19.27	22.20	17.15
3/18	19.20	22.20	16.20
3/25	19.30	24.20	16.20
4/ 2	19.26	24.20	17.15
4/ 9	19.51	24.20	17.15
4/15	19.60	24.20	17.15
4/29	19.60	24.20	17.15
5/ 7	19.60	24.20	17.15
5/13	19.60	24.20	17.15
5/22	19.56	25.70	17.15

As can be seen, there is a wide variation of dealer margins among dealers, although the variation was less at the end of the survey than it was at the beginning. In general, the dealers who began the survey with low margins raised them more than the companies that began with high margins.

In computing the dealer margins from March 4 to the end of the survey, dealers who reported retail price only were excluded.

IV. INVENTORIES

The one-time fuel oil dealer survey conducted in July and August of 1979 identified 63 retail dealers in the state with 10,741,500 gallons of storage capacity. 127 of the dealers surveyed reported that they had no storage capacity. The remaining 60-70 dealers in the state refused to answer the question. We therefore estimate that there is approximately 14 million gallons of dealer storage capacity in the state.

Before the survey was expanded on March 4, the weekly survey respondents had approximately 3.7 million gallons of storage capacity. After the survey was expanded, the respondents had approximately 3.9 million gallons of storage capacity. This represents about 28% of total dealer storage capacity in the state.

The dealers in the survey had a wide range of storage capacities. Several of the dealers had none at all, while one dealer had a capacity of 2,500,000 gallons.

Inventories ranged from between 70% and 90% of capacity from the beginning of the survey until late February. From February 26 until the end of the survey, inventories ranged between 17% and 60% of capacity, with a low figure of 658,525 gallons reported for April 29 (see Table 4 and Figure 3).

No dealer complained of an inability to maintain inventory at desired levels during the duration of the survey.

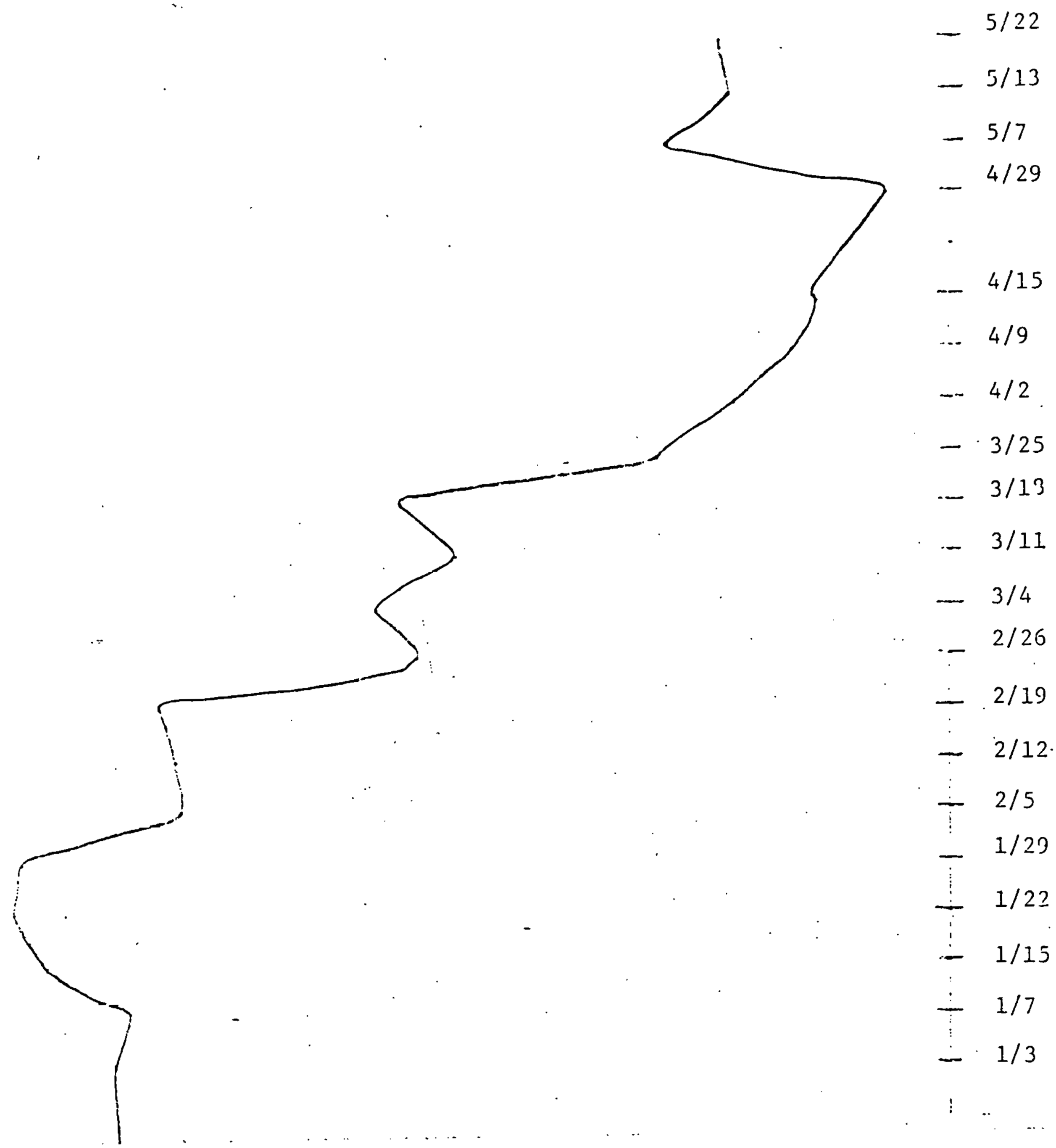
TABLE 4

INVENTORIES

	GALLONS	% OF CAPACITY
8/27	3,281,769	89%
9/ 4	3,303,325	89%
9/10	3,319,411	90%
9/17	3,298,875	89%
9/24	3,147,109	85%
10/ 2	3,114,507	84%
10/ 9	3,130,008	85%
10/15	2,915,983	79%
10/22	2,842,736	77%
10/29	2,754,485	74%
11/ 5	2,939,363	79%
11/13	2,764,949	75%
11/19	2,713,995	73%
11/26	2,645,243	71%
12/ 3	2,835,647	77%
12/10	2,696,873	73%
12/17	2,903,771	78%
1/ 3	2,965,754	80%
1/ 7	2,925,179	79%
1/15	3,212,948	87%
1/22	3,307,500	89%
1/29	3,279,665	89%
2/ 5	2,588,201	70%
2/12	2,601,287	70%
2/19	2,670,643	72%
2/26	2,072,476	56%
3/ 4	2,211,762	60%
3/11	1,976,725	51%
3/18	2,133,297	55%
3/25	1,371,755	35%
4/ 2	1,130,606	29%
4/ 9	974,544	25%
4/15	803,905	21%
4/29	658,525	17%
5/ 7	1,332,878	34%
5/13	1,147,109	29%
5/22	1,188,152	30%

FIGURE 3 - INVENTORIES

(gallons)



V. DELIVERIES

During the survey period, approximately 325,000,000 gallons of #2 fuel oil were sold in the state. The dealers included in the survey reported a total of 45,635,625 gallons sold during the survey (see Table 5 and Figure 4). This represents approximately 14% of total sales during this period. Had all 23 of the dealers that were reporting sales from March 4 until the end of the survey been participating from the beginning of the survey, the total sales reported would have been about 55,000,000 gallons or approximately 17% of total sales.

There was a wide variation among the individual dealers in their weekly sales. For the May 22 survey, which had the lowest sales of the survey period, the range was between 2,000 and 165,750 gallons. The March 4 survey, which had the highest sales of the survey period, contained a range between 5,331 and 529,750 gallons.

The dealers estimate that their sales for the 1979-80 heating season were down between 20-25%. Reasons cited for the decline include a milder than average winter, fuel switching and conservation.

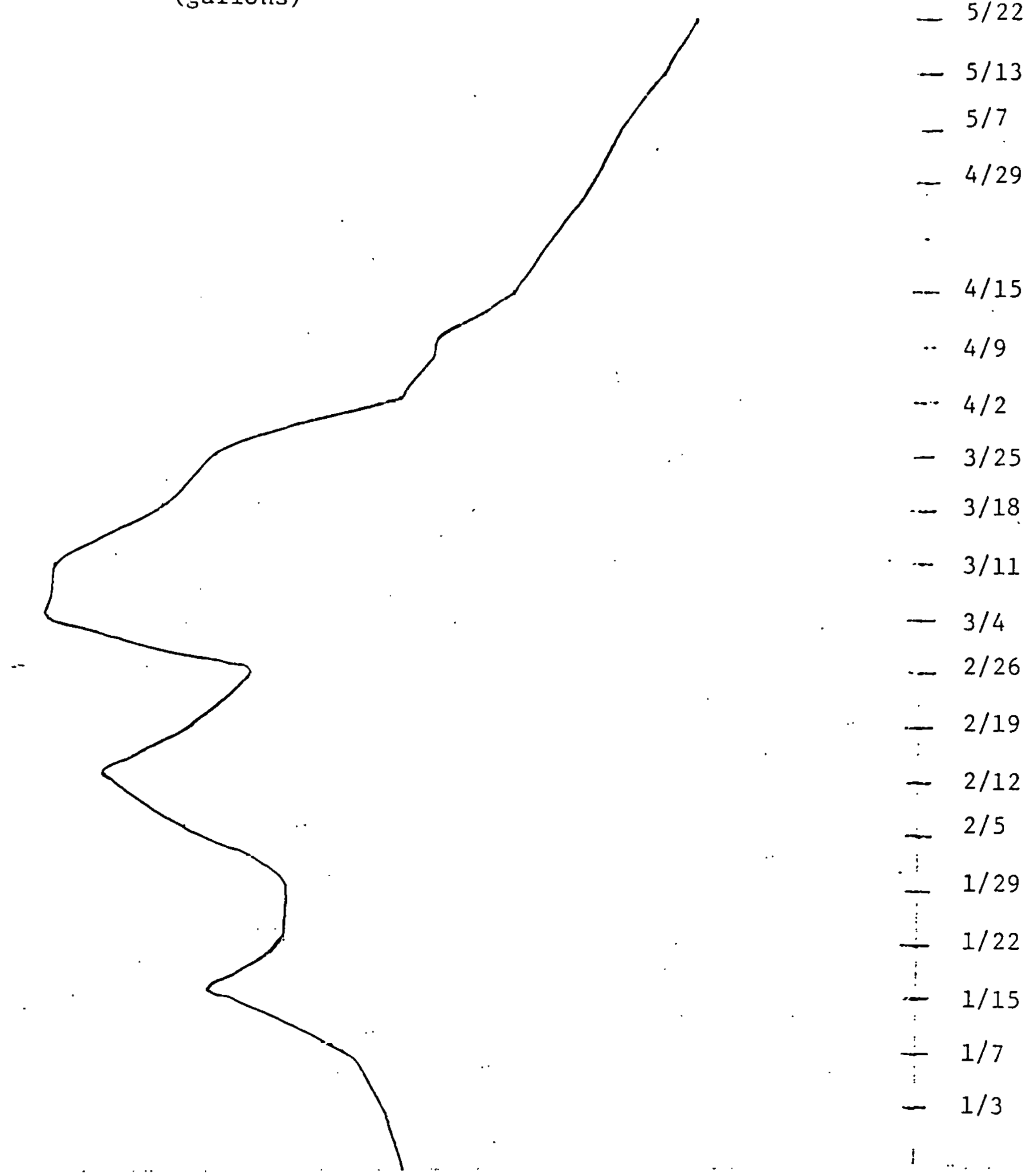
TABLE 5

DELIVERIES

	GALLONS
8/27	376,929
9/ 4	379,423
9/10	435,599
9/17	448,878
9/24	412,827
10/ 2	515,291
10/ 9	490,622
10/15	537,535
10/22	583,597
10/29	542,484
11/ 5	777,434
11/13	852,548
11/19	885,803
11/26	1,078,630
12/ 3	1,458,465
12/10	1,511,138
12/17	1,402,613
1/ 3	1,501,228
1/ 7	1,597,113
1/15	1,974,434
1/22	1,788,141
1/29	1,773,513
2/ 5	2,063,518
2/12	2,308,999
2/19	2,042,574
2/26	1,859,849
3/ 4	2,423,551
3/11	2,398,386
3/18	2,134,748
3/25	1,951,958
4/ 2	1,454,452
4/ 9	1,344,077
4/15	1,158,925
4/29	941,154
5/ 7	831,073
5/13	734,668
5/22	663,448

FIGURE 4 - DELIVERIES

(gallons)



VI. RECOMMENDATIONS

Future surveys will be even more valuable than this one because we will have data from previous years to use as a comparison. We therefore strongly recommend that the Department of Energy continue to fund data collection efforts.

We further recommend that the data continue to be collected by the states rather than the federal government. Over the past few years, we have had close contact with many fuel oil dealers and have gained their trust in the process. In the future, it is therefore likely that the dealers would prefer dealing with us rather than establishing a new procedure with the federal government.

In the future, we would also prefer to administer the survey bi-weekly rather than weekly. When it is considered that many dealers need to be called several times to obtain the necessary information, it can be seen that the weekly survey imposes a heavy burden on us as well as the dealers. We would revert to a weekly survey, however, during times of shortages.