

EMB REPORT NO. 75-GAS-5

AIR POLLUTION EMISSION TEST

EMISSIONS FROM GASOLINE MARKETING
OPERATIONS AT
STANDARD OIL COMPANY OF CALIFORNIA
RETAIL STATION
DAVIS, CALIFORNIA

MAY 1975



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air and Waste Management
Office of Air Quality Planning and Standards
Emission Measurement Branch
Research Triangle Park, North Carolina

EMB REPORT NO. 75-GAS-5
STANDARD OIL COMPANY OF CALIFORNIA
RETAIL STATION
I-80 @ MACE BLVD.
DAVIS, CALIFORNIA

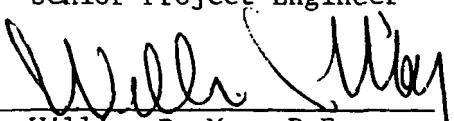
TASK 3, CONTRACT NO. 68-02-1407

B.E.E.PROJECT NO. 00-4659-01

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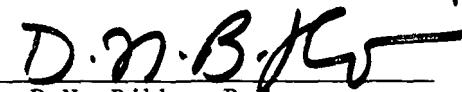

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TABLE OF CONTENTS

	<u>PAGE NO.</u>
I. INTRODUCTION	1
II. SUMMARY OF RESULTS	2
A. Determination of Potential Emissions	
B. Determination of Actual Vapors Recovered	
C. Underground Tank Vent Emissions	
D. Calculation of Average Volumetric Recovery Factors and Recovery Efficiencies	
E. Apparent Outlying Points	
F. Vehicle Summary	
G. Explosimeter Readings	
H. Fueling Difficulties	
I. RVP, O ₂ , N ₂ and ASTM Distillation Results	
III. PROCESS DESCRIPTION AND OPERATION	34
A. Station Operations	
B. Sampling Procedures	
APPENDICES	
A. Test Results	
B. Calculated Data	
C. Sampling and Analytical Procedures	
D. Laboratory Results	
E. Daily Log Sheets	
F. Project Participants	

I. INTRODUCTION

Under Section 110 of the Clean Air Act of 1970, as amended, the States are required to submit implementation plans for the control of pollutants for which a national primary and/or secondary ambient air quality standard has been established. Since such standards have been established for hydrocarbons, and because it has been determined that hydrocarbon emissions during vehicle fueling can contribute significantly to the ambient hydrocarbon concentrations, information is required concerning the effectiveness of the various source control techniques applicable to retail gasoline marketing operations.

The STANDARD OIL COMPANY of California Environmental research station at I-80 and Mace Blvd, Davis, California, is equipped with devices for hydrocarbon emission reduction and was selected for an emission testing program by the Office of Air Quality Planning and Standards. Testing was conducted by BETZ ENVIRONMENTAL ENGINEERS, INC. personnel during August 5-16, 1974.

This retail station employs the vapor balance or displacement approach to hydrocarbon emission control. The gasoline vapors normally displaced by the liquid gasoline and lost to the atmosphere during vehicle refueling are returned to the underground fuel storage tanks for subsequent recovery by displacement during bulk gasoline delivery.

The vapor recovery system at this station is designed such that the vapor return piping for each product grade is independent. Each underground tank is vented to

atmosphere through a separate riser. For testing purposes, the station is equipped such that one dispenser island can be operated independently from a set of auxiliary storage tanks while the other two islands operate from the main storage tanks. This configuration was used during testing.

During the test period, four equipment configurations were used. These were: (1) An EMCO-WHEATON vapor recovery nozzle and an OPW-7UN nozzle operating simultaneously on the two regular grade dispensers, (2) One EMCO-WHEATON nozzle operating alone, (3) Two OPW-7UN nozzles operating simultaneously with no pressure-vacuum switch on the underground tank vent, and (4) Two OPW-7UN nozzles operating simultaneously with a pressure vacuum switch on the tank vent.

Testing was performed during 486 vehicle fuelings to determine potential hydrocarbon emissions actual hydrocarbon emissions, and the vapor recovery efficiencies of the various system configurations. Two bulk gasoline deliveries were monitored to determine the recovery efficiency during transfers from tankers to the underground tank

II. SUMMARY OF RESULTS

The field data for the vehicle refuelings are compiled chronologically in Appendix A. This listing includes all data. The complete listing for each fueling is given on two pages. The four different system configurations evaluated during testing are identified as follows:

1. One EMCO-WHEATON nozzle and one OPW nozzle operated concurrently with no pressure/vacuum (PV) valve on the underground tank vent. August 5-7.

Coded as EMCO-WHEATON/OPW.

2. One EMCO-WHEATON nozzle only and no PV valve on vent. August 8, Coded as EMCO-WHEATON/NOPV.
3. Two OPW nozzles operated concurrently with no PV valve on the vent. August 9, 12, 13, 14. Coded as OPW/NOPV.
4. Two OPW nozzles operated concurrently with a PV valve on the vent. August 15-16. Coded as OPW/PV.

The type of fueling can be determined from Appendix A by referring to the column "Leak Check Result". The entry "PS-BSL" denotes a fueling that qualifies as baseline data. "NO-NBL" denotes a normally fueled test vehicle. "NO-ATB" denotes an attempted baseline that was not successful. The data under this category were not used in any calculations.

The test scope included the calculation of hydrocarbon recoveries and system efficiencies on a mass as well as volumetric basis. Due to malfunctioning hydrocarbon analyzers, all the hydrocarbon concentrations reported are meaningless and thus it is not possible to perform calculations on a mass basis. The results of testing on a volumetric basis are presented below.

A. Determination of Potential Emissions

In order to determine the amount of potential emissions from a vehicle during fueling, every second or third vehicle fueled was designated as a baseline vehicle and special procedures were followed to ensure that all the hydrocarbon vapors were displaced through the vapor return system. To accomplish this, all atmospheric vents

on the vehicle fuel tank were blocked and special care was taken to ensure a tight leak-free fillpipe-nozzle interface. If there was no leakage at the interface (as detected by an explosimeter) and the vehicle fuel tank proved leak-free during a subsequent leak check, then the vehicle fueling was turned a baseline and the calculated results were used to formulate a potential emission relationship for each system configuration. A linear relationship was assumed to exist between the volume of vapor returned to volume of liquid dispensed ratio versus the difference between the initial vehicle tank liquid temperature and the dispensed liquid temperature. For the baseline data obtained during each configuration test, this relationship by least squares is :

$$\begin{aligned} \text{EMCO-WHEATON/OPW: } & (V/L) \text{ potential} = 0.923 - 0.017\Delta T_{vd} \\ \text{EMCO-WHEATON/NOPV: } & (V/L) \text{ potential} = \text{Not Determined} \\ \text{OPW/NOPV: } & (V/L) \text{ potential} = 0.981 - 0.012\Delta T_{vd} \\ \text{OPW/PV: } & (V/L) \text{ potential} = 0.953 - 0.013\Delta T_{vd} \end{aligned}$$

Where: (V/L) potential = volume of vapors returned to volume of liquid dispensed ratio, (ft^3/ft^3).

ΔT_{vd} = difference between initial vehicle tank liquid temperature and the dispensed fuel temperature.

A relationship for the EMCO-WHEATON/NOPV configuration was not determined since only one successful baseline test was obtained during this phase.

A comparison of the baseline data to the predicted equation for each configuration is given in Figures 1-4. The calculated data is listed in Appendix B, pages B1 - B10.

B. Determination of Actual Vapors Recovered

For the vehicles that were designated as non-baseline or test fuelings, no special procedures were followed during testing. The attendant fueled the vehicle according to normal, routine practices.

The calculated results of testing are presented in Appendix B, pages B11 - B20. All the results are presented, however, in the cases where necessary data were missing, that fueling was not included in any further calculations. These cases are noted in the results tabulation in Appendix B. Most of these deletions were caused by the inability to obtain an initial fuel tank temperature because of anti-siphon devices installed in the vehicle fill-pipe.

The results are presented for all four cases in Figures 8,9,14 & 17. These figures represent all the data collected using each of the four nozzles and compare the actual emission data to the potential emissions predicted from the baseline correlation.

C. Underground Tank Vent Emissions

1. General

Standard had installed a valving system on the underground tank atmospheric vent. The system was designed so that when the pressure in the underground tank became greater than +0.15" H₂O gauge the tank would vent to the atmosphere through a dry gas meter. The system also allowed the tank to draw in air through a dry gas meter in the event that the pressure became less than -0.15" H₂O gauge. The following is a summary of

the inbreathing and outbreaking of the underground storage tank:

For testing on 8/15 and 8/16 a different pressure/vacuum valving system was installed operating in the range of +1.0 " H_2O gauge to -4.0 " H_2O gauge.

<u>Date</u>	<u>Inbreathing (Ft³)</u>	<u>Outbreathing (Ft³)</u>
8/5	10.049	0.0
8/6	29.636	0.0
8/7	14.400	0.0
8/8	5.517	0.0
8/9	43.199	1.043
8/12	46.765	3.611
8/13	- 3.446	0.577
8/14	14.209	0.122
8/15	1.142	0.0
8/16	0.0	0.0

The negative reading of August 13, 1974, was probably due to misreading the dry gas meter.

2. Bulk Gasoline Drops

During the sampling, two bulk drops occurred.

- a. August 9 - 4350 gallons Low Lead
- b. August 15 - 2070 gallons Low Lead

On August 9, outbreaking of 1.043 ft³ was recorded while on August 15, no losses were recorded from the underground tank vent. The bulk drop therefore could be considered as having a 100% efficiency during the second drop and possibly slightly less than 100% during the first. It is not known whether or not the outbreaking on the 9th occurred during the drop or while normal fueling operations were being conducted.

Vehicle refueling was curtailed during bulk drops. Also, inbreathing was observed at the nozzles through the use of the dry gas meter even though the nozzles were bagged.

D. Calculation of Average Volumetric Recovery Factors and Recovery Efficiencies

Average volumetric emission factors and efficiencies for three conditions are listed below. No factors can be developed for the EMCO-WHEATON/NOPV condition due to lack of baseline data. The average potential volumetric emission factor for the test car data set based on the correlation developed from the baseline vehicles is denoted as (\bar{V}/L) pot. The average volumetric recovery for the test car data is denoted as (\bar{V}/L) Act. The difference between the average potential emission and the average recovery is the average emission to the atmosphere at the automobile. The ratio of the average recovery to the average potential emission results in an average volumetric recovery efficiency at the vehicle. The averages are weighted and are not a simple median of the individual vehicle factors and efficiencies. The weighting mechanism is basically the amount of fuel dispensed for the individual fuelings. This procedure prevents a very large or a very small fueling from having a disproportionate impact on the calculated averages.

<u>Condition</u>	<u>(\bar{V}/L) POT., ft³/ft³</u>	<u>(\bar{V}/L) ACT., ft³/ft³</u>	<u>POT.-ACT., ft³/ft³</u>	<u>% EFF.</u>
EMCO-WHEATON/OPW	.820	.623	.197	75.9
OPW/NOPV	.876	.706	.170	80.7
OPW/PV	.985	.757	.228	76.8

Since the emissions from the underground tanks were zero during the test periods for three of the four conditions, the total system emission factors and recovery efficiencies are the same as those calculated at the vehicle. During the OPW/NOPV condition test period, 5.353 ft³ of vapor was emitted from the underground tank. This would yield a system loss of .174 ft³/ft³ and a system efficiency of 76.8%, where:

$$\text{system loss} = (\overline{V/L}) \text{ POT.} - (\overline{V/L}) \text{ ACT.} + (\overline{V/L}) \text{ vented}$$

$$\text{system efficiency} = 100 (\text{Volume returned} + \text{volume vented}) \div \text{Volume potential}$$

There were times when one of the dispensed fuel recording pyrometers gave obviously erroneous readings. The data reflects values obtained from the other dispensed fuel recording pyrometer. This problem is discussed completely in Section VB of this report and occurred on August 12, 1974, for automobiles A1 to A31 and A37 to A38.

There are two factors introduced for testing purposes that could possibly have an effect on the measured performance of the vapor recovery system. First, the dry gas meters which were installed to measure the volume of vapors returned added a significant pressure drop in the vapor return piping system. This pressure drop ranged from 0.15 to 0.25 "H₂O, depending on the flow rate. This increased resistance to flow would increase the pressure at the nozzle-filipipe interface and provide a larger driving force for leakage at the interface.

The second factor would be the pressure-vacuum valving system used to measure underground tank venting. This system is designed so that the underground tank vent is closed when the pressure is between -0.15 and +0.15 "H₂O gauge. The normal vent configuration consists of a 2" pipe which vents to the ambient atmosphere. Un-

der non-flow conditions, the normal vent configuration would maintain the underground tanks at atmospheric pressure. With the P-V system installed, a pressure in the range -0.15 to +0.15 " H_2O is maintained in the underground tanks. When the underground tank pressure is between -0.15 " H_2O gauge and atmospheric, there is an additional driving force present which might partially offset the added flow resistance contributed by the dry gas meter. However, the simultaneous operation of a tested and a non-tested dispenser could tend to yield higher recoveries at non-tested dispensers and possibly lower recoveries at the tested dispenser. This would happen because the meter-less line would be the path of least resistance to flow.

In the case where the underground tank pressure is between atmospheric and +0.15 " H_2O gauge, a back pressure could be set up in the recovery system and tend to increase losses at the vehicle.

No quantitative estimates can be made regarding the magnitude of the effect on the recovery system efficiency by the above two factors, either alone or their interacting affects.

A similar discussion applies to the +1.0 " H_2O to -4.0 " H_2O gauge valving system.

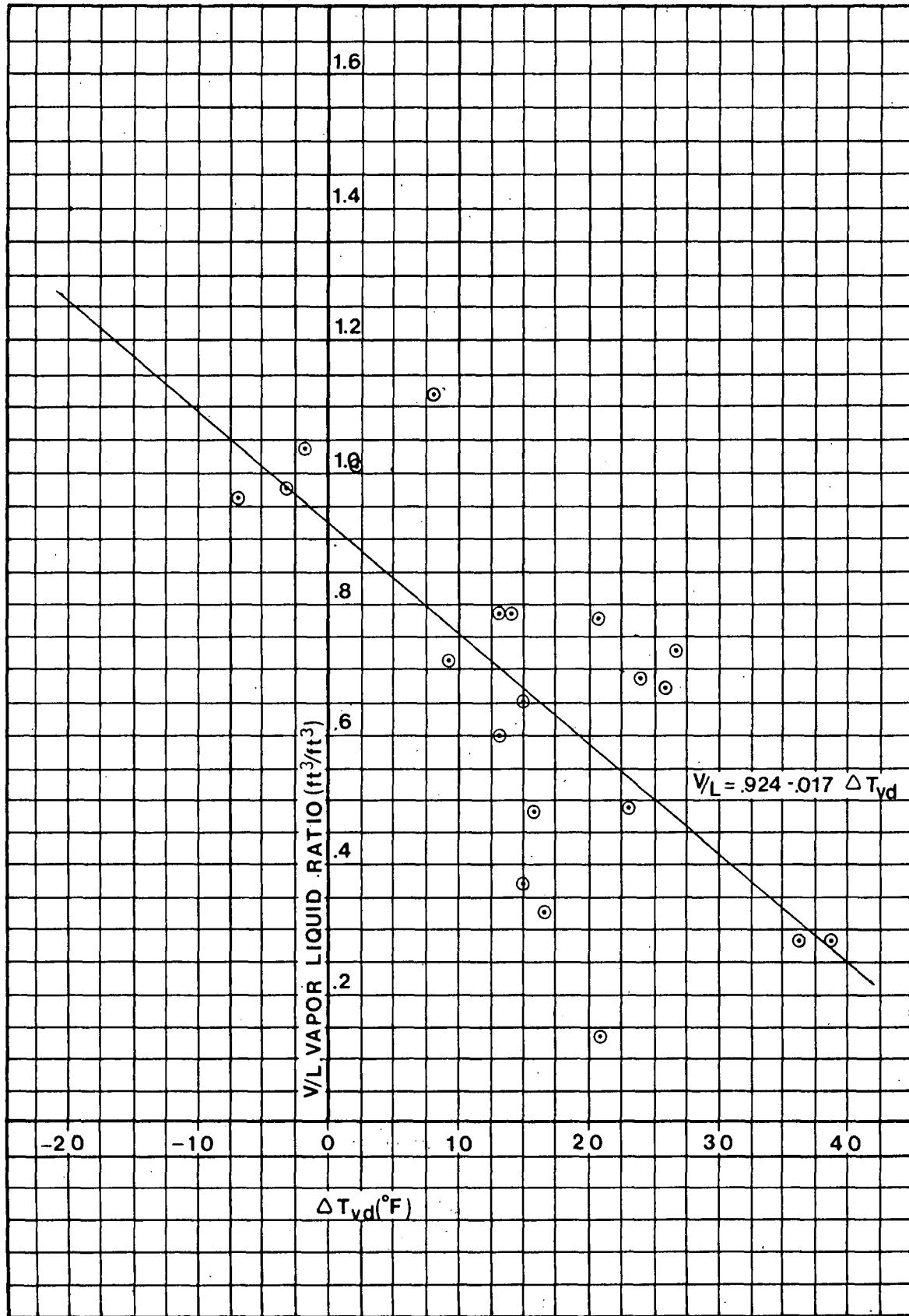


FIGURE 1 - BASELINE DATA EMCO-WHEATON/OPW

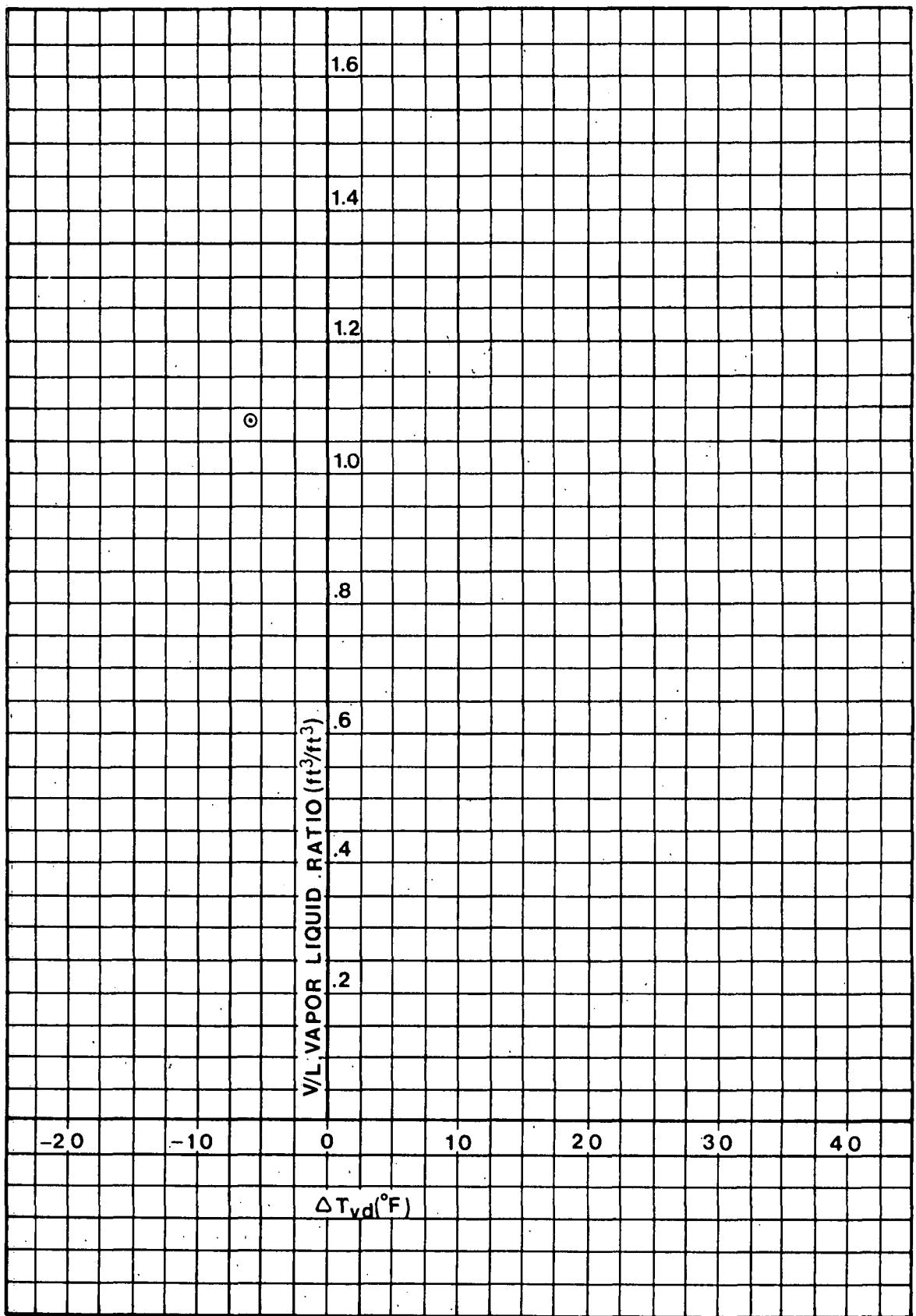


FIGURE 2 - BASELINE DATA EMCO-WHEATON/NOPV

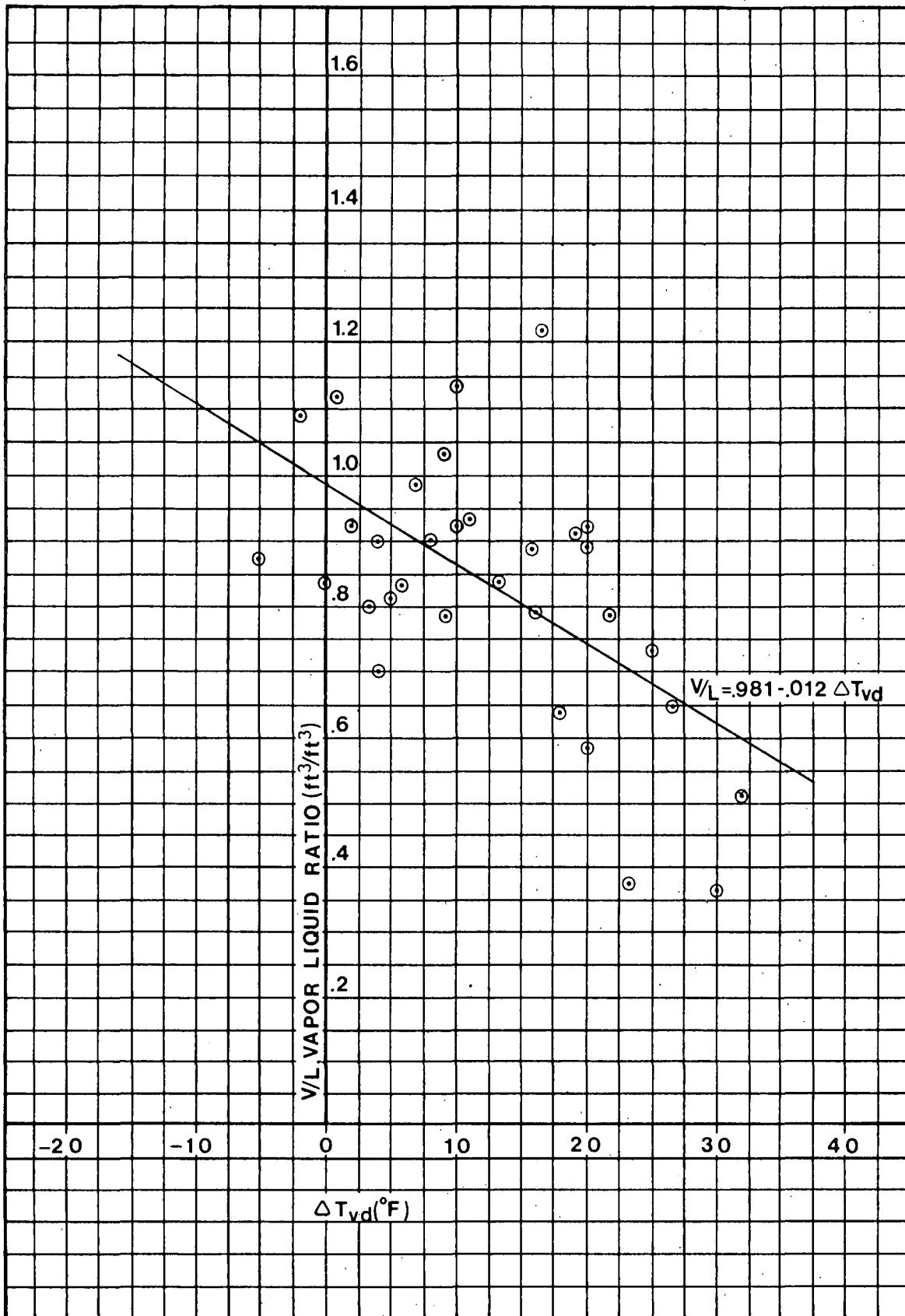


FIGURE 3 - BASELINE DATA - OPW/NOPV

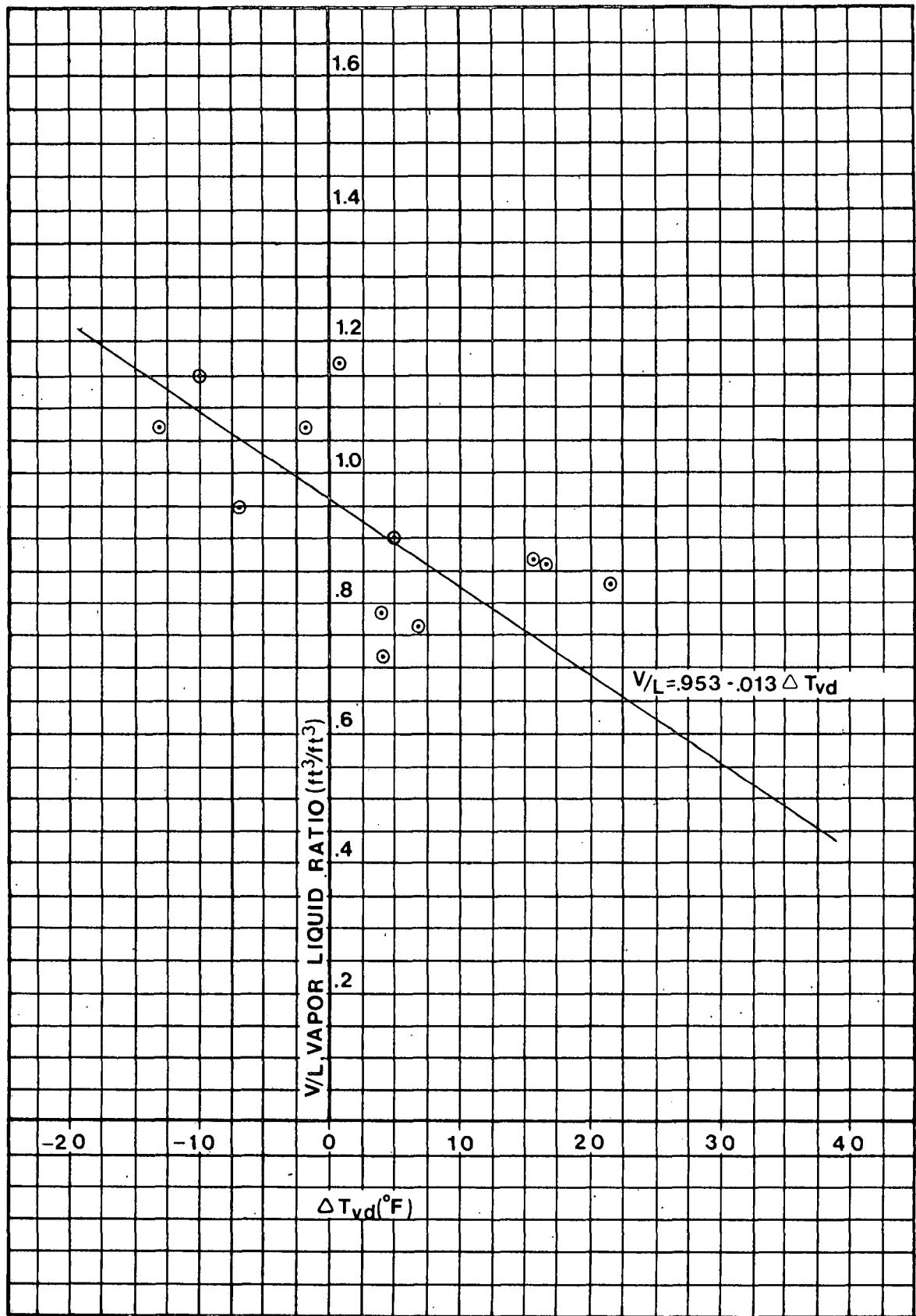


FIGURE 4 - BASELINE DATA - OPW/PV

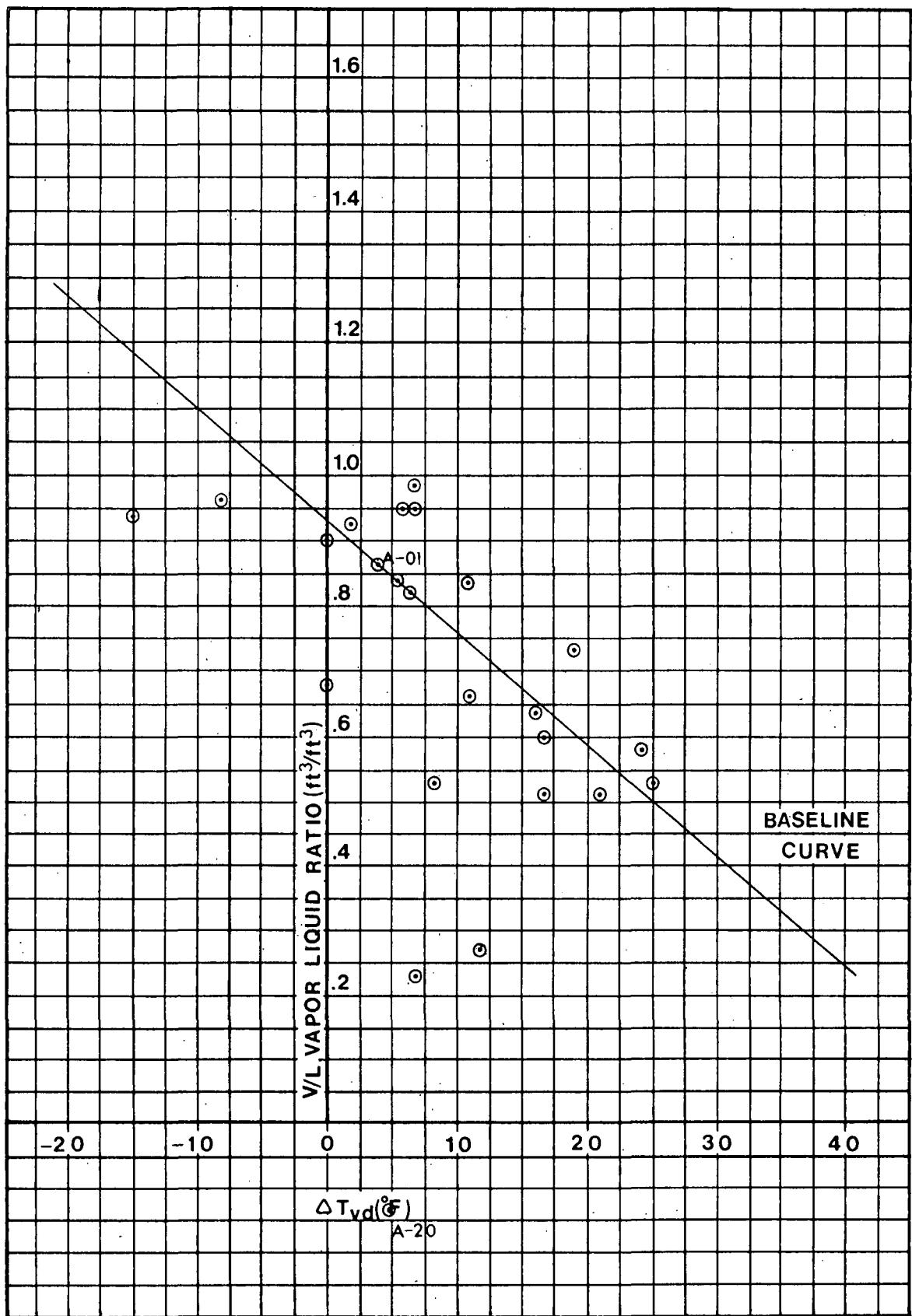


FIGURE 5 - NON BASELINE DATA 8/5/74 EMCO-WHEATON/OPW

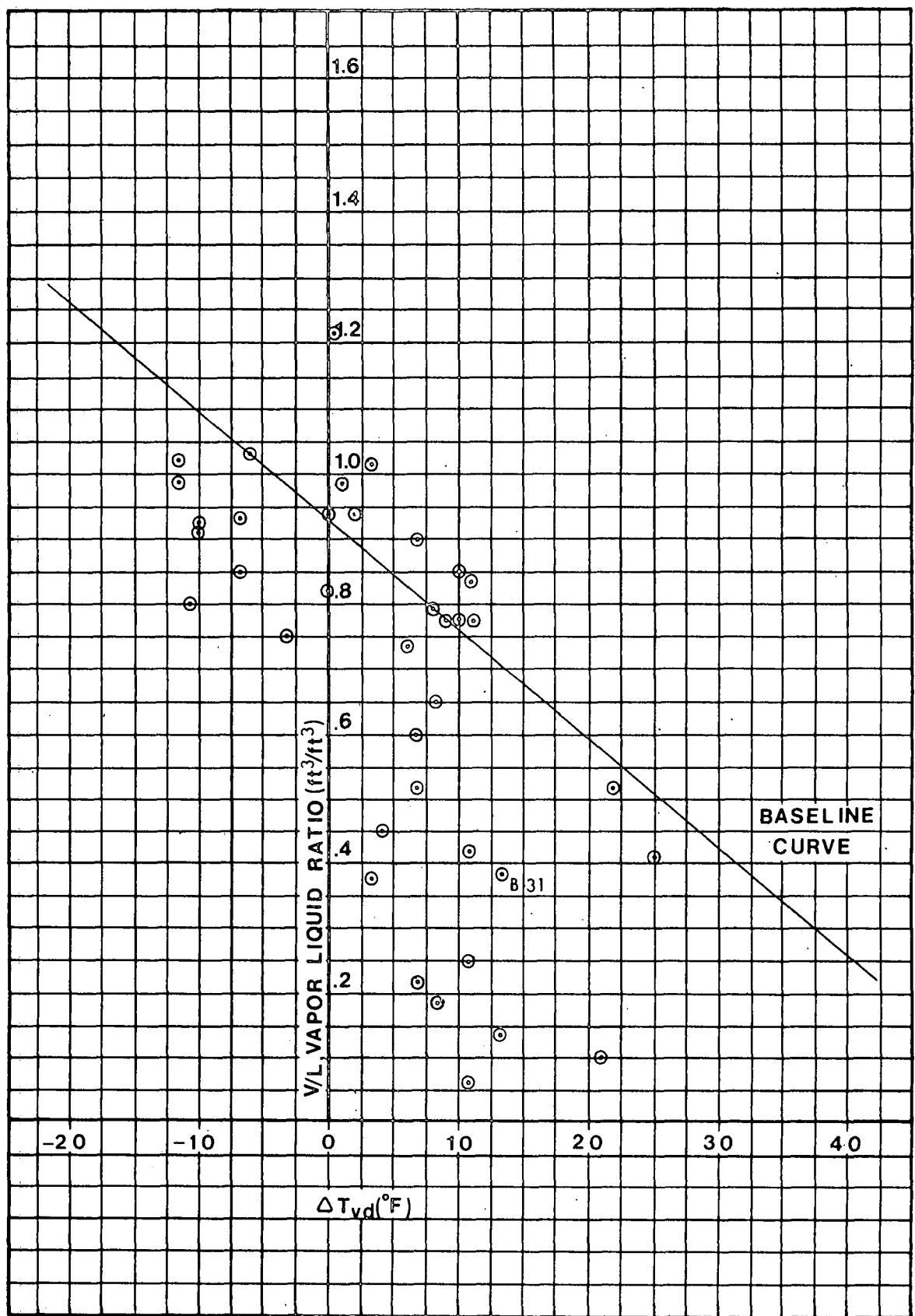


FIGURE 6 NON BASELINE DATA 8/6/74 EMCO-WHEATON/OPW

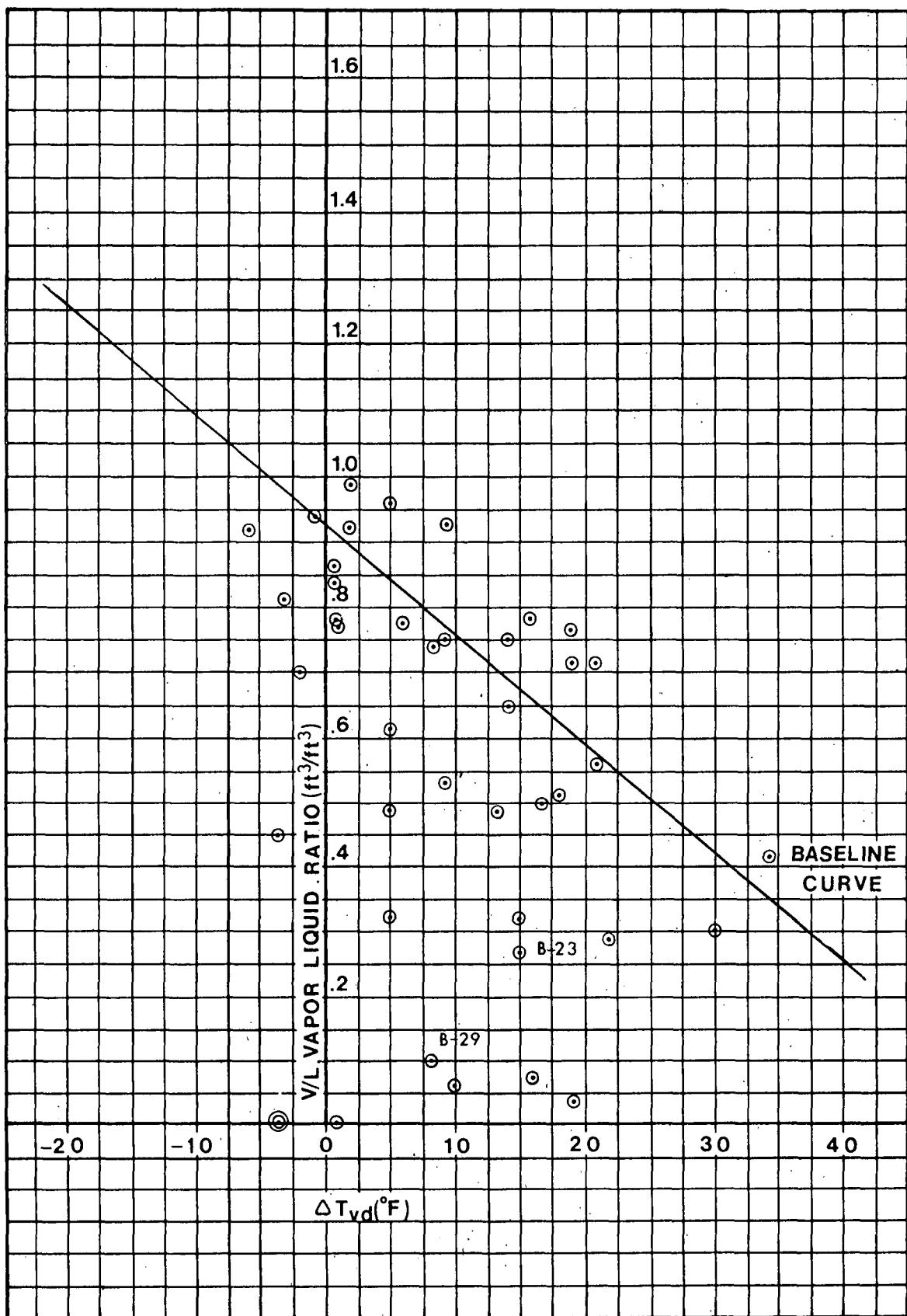


FIGURE 7 NON BASELINE DATA 8/7/74 EMCO-WHEATON/OPW

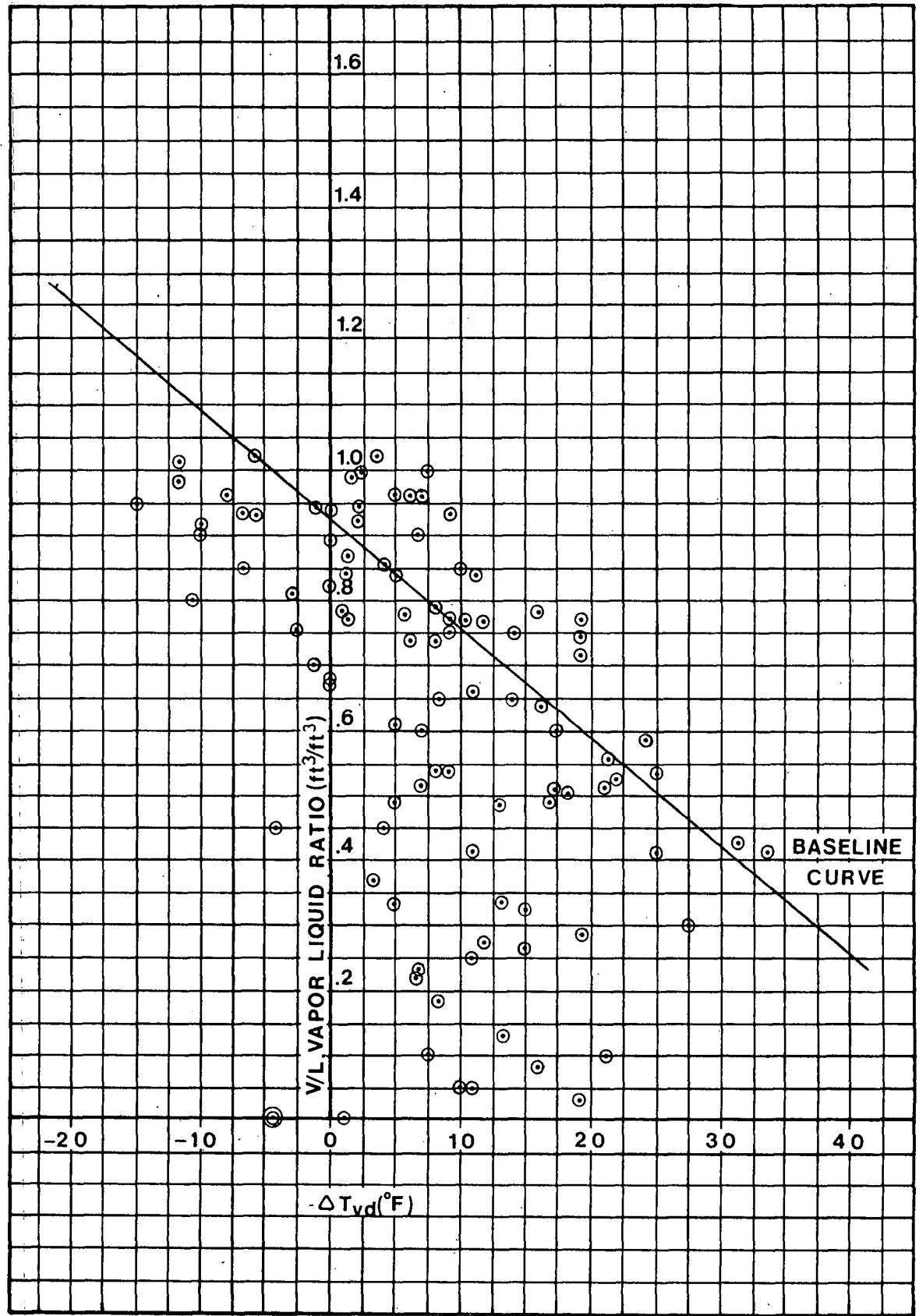


FIGURE 8 NON BASELINE DATA ALL EMCO-WHEATON/OPW

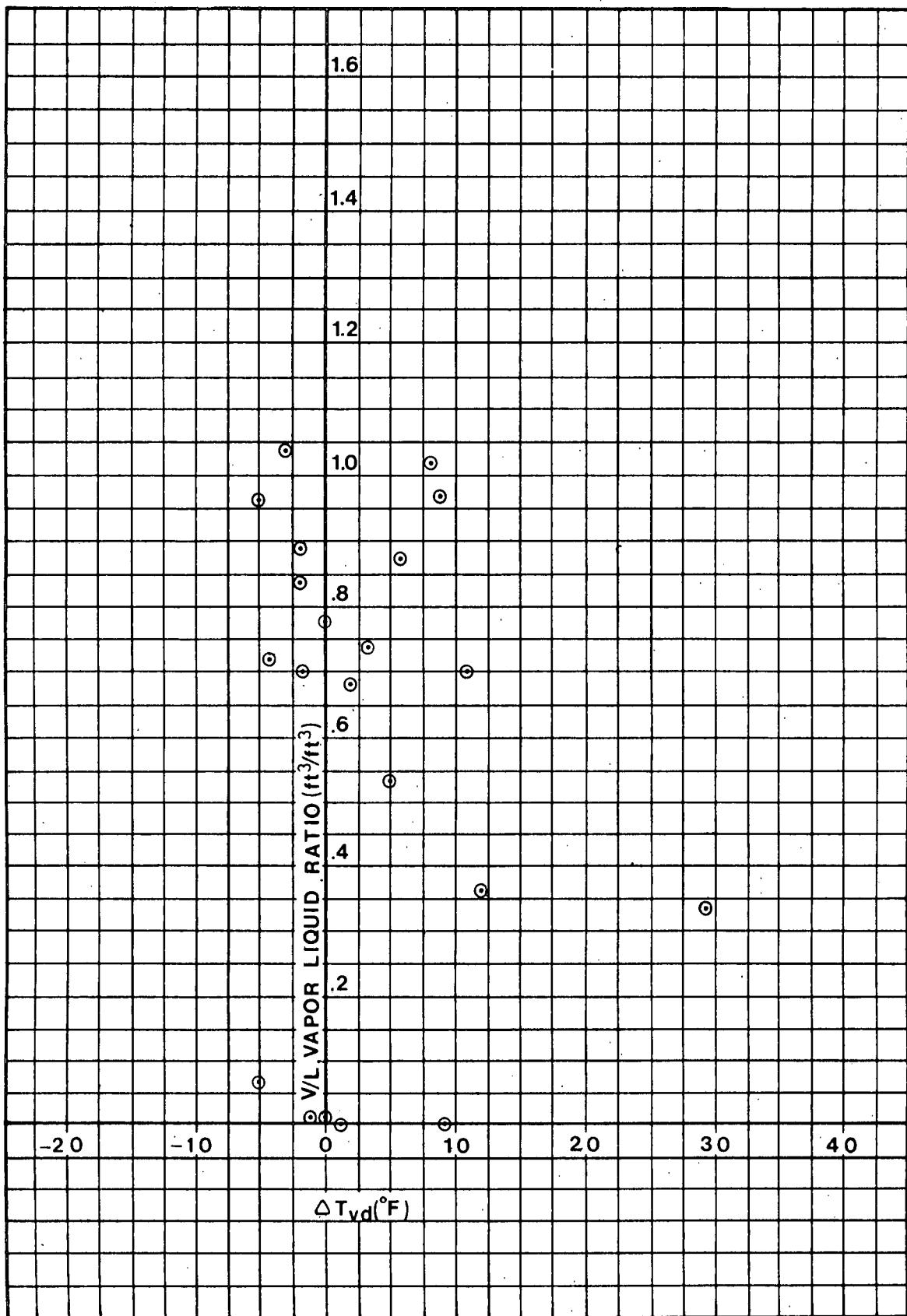


FIGURE 9 NON BASELINE DATA 8/8/74 EMCO-WHEATON/NOPV

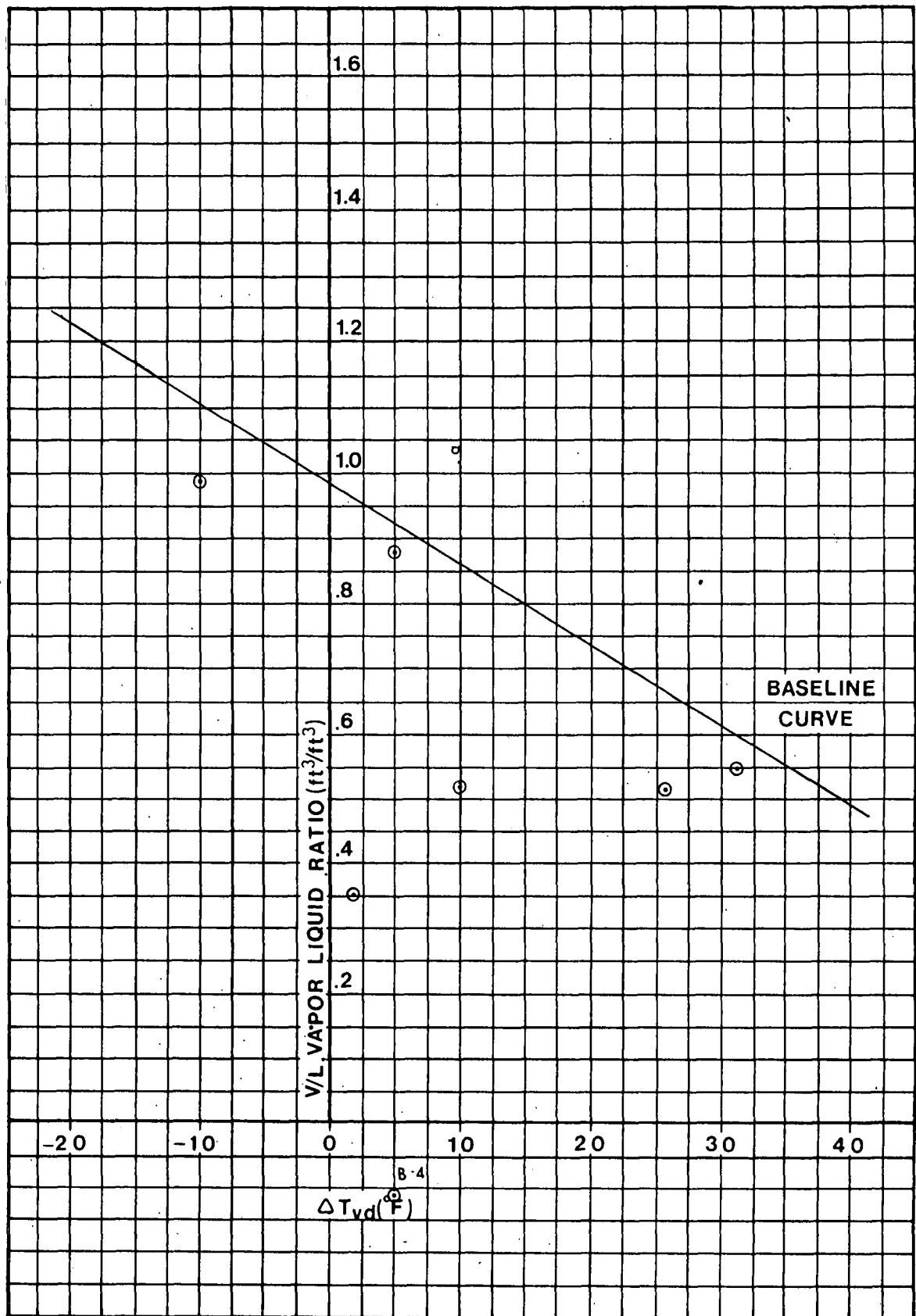


FIGURE 10 NON BASELINE DATA 8/9/74 OPW/NOPV

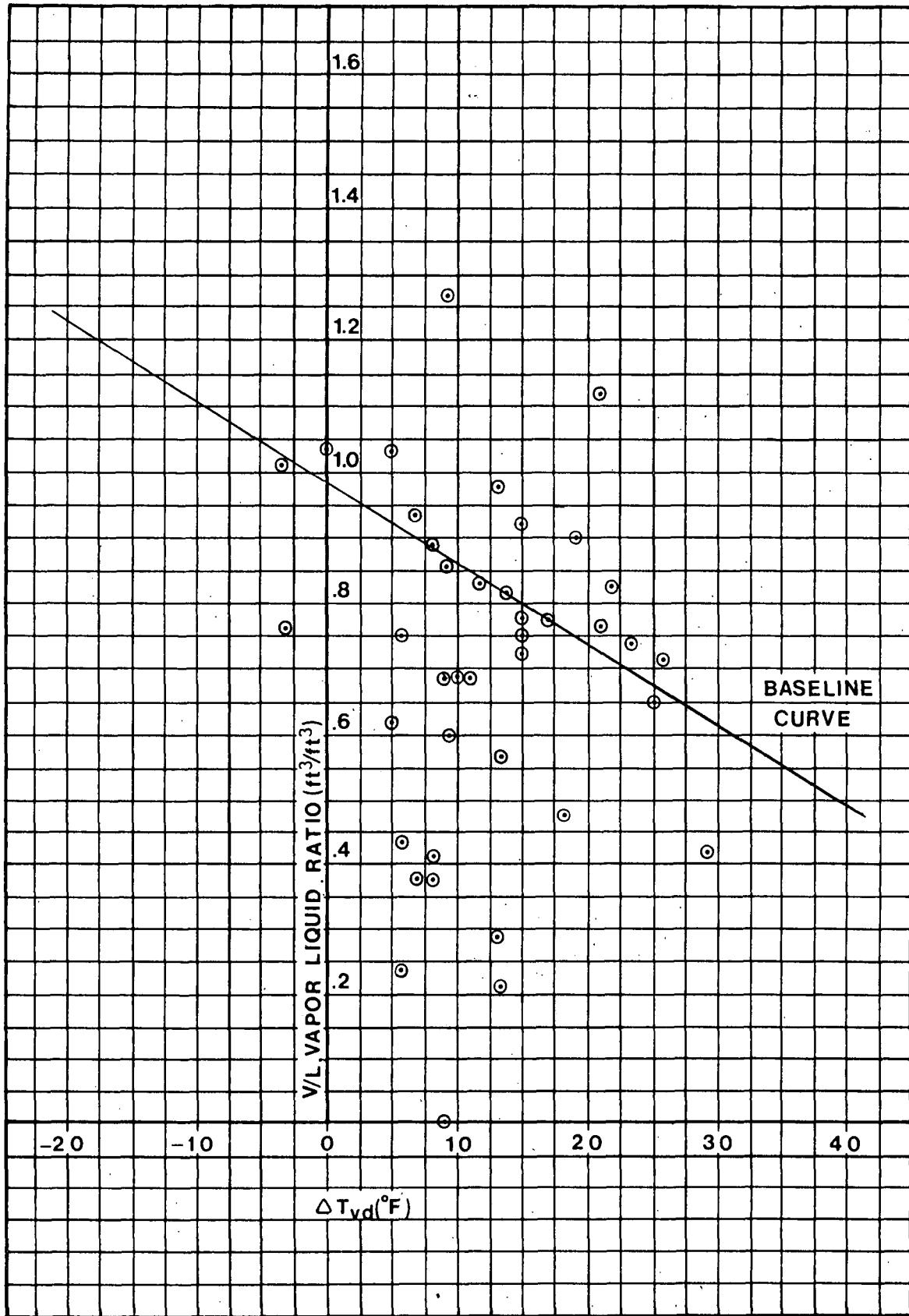


FIGURE 11 NON BASELINE DATA 8/12/74 OPW/NOPV

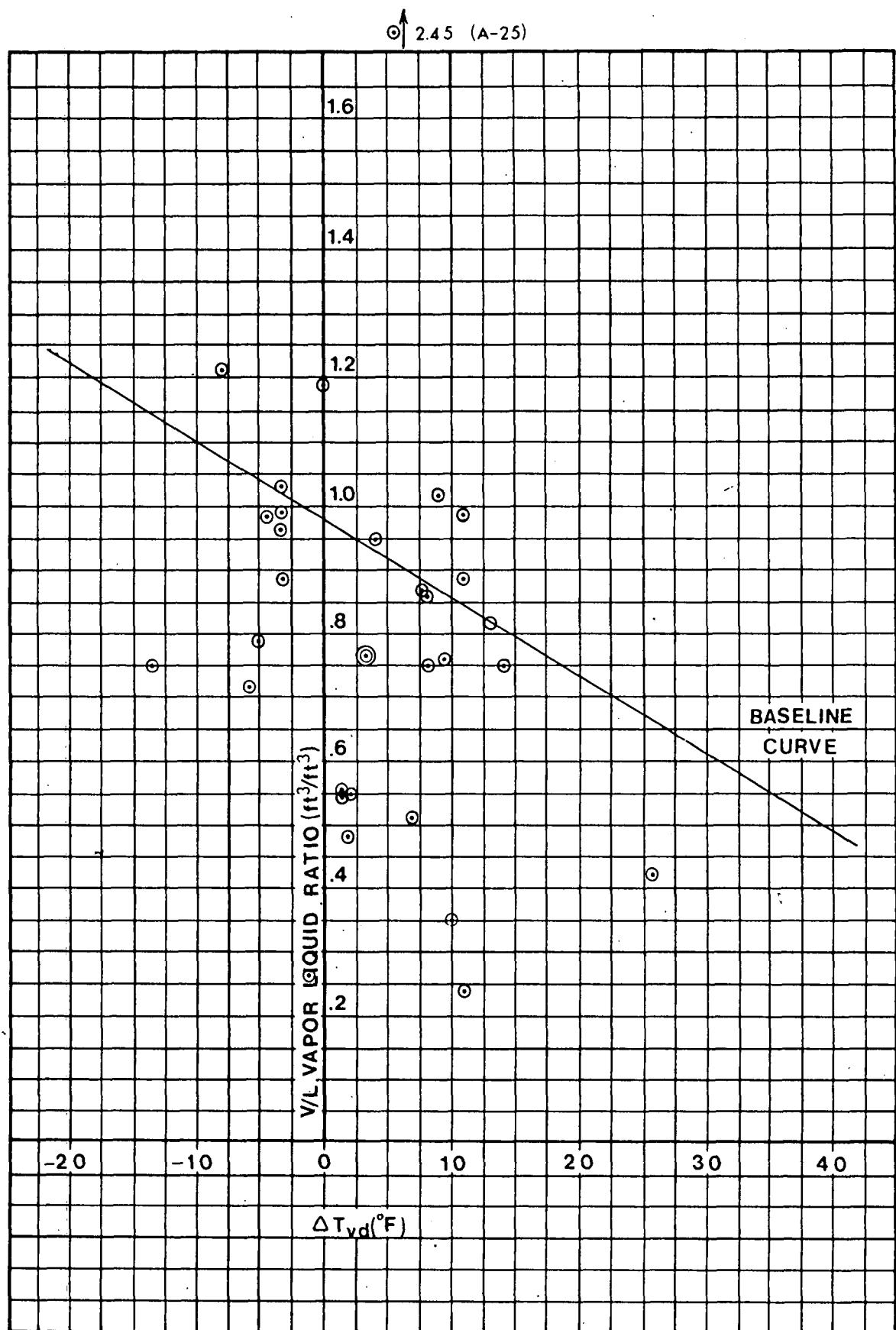
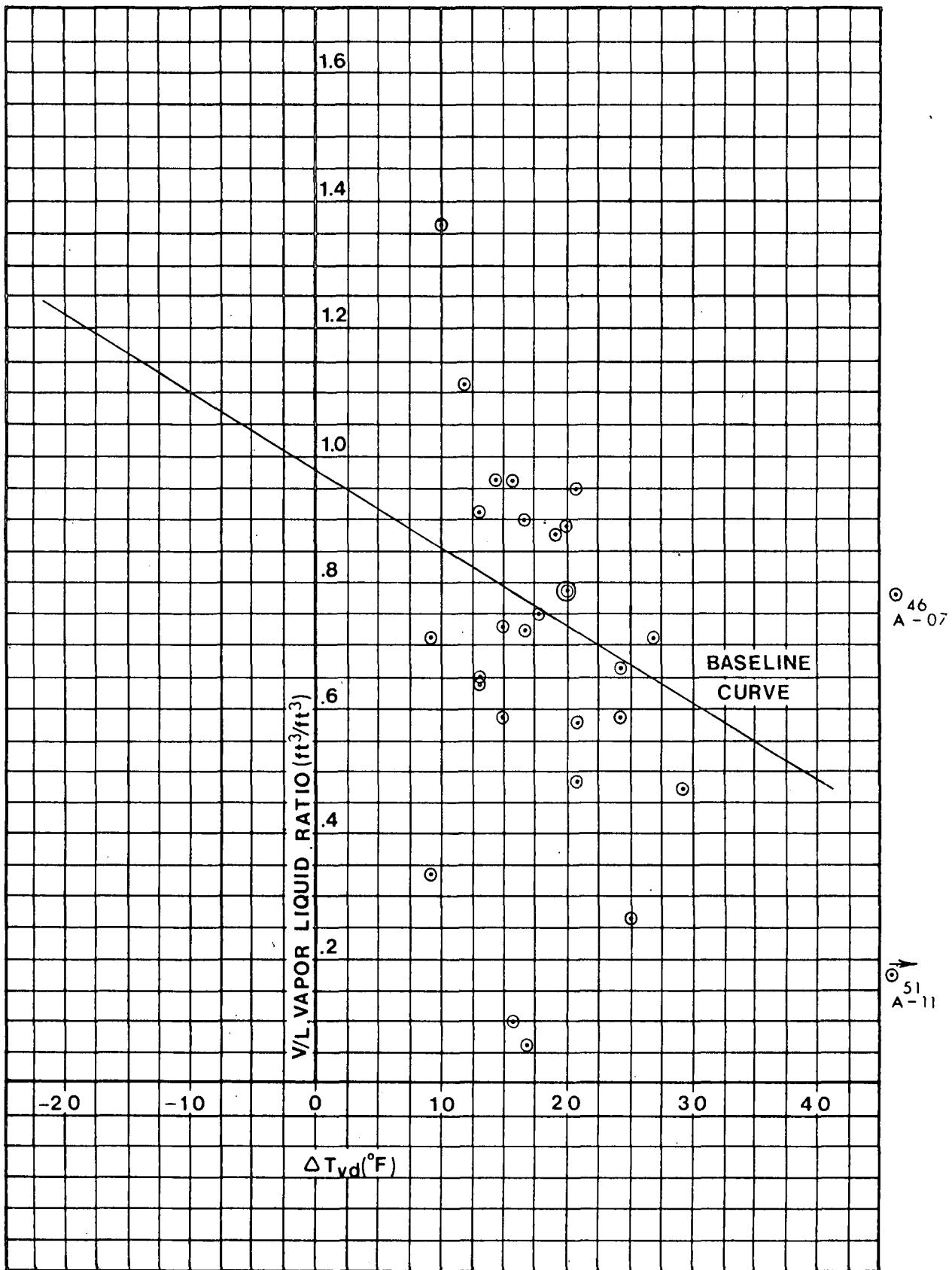


FIGURE 12 NON BASELINE DATA 8/13/74 OPW/NOPV



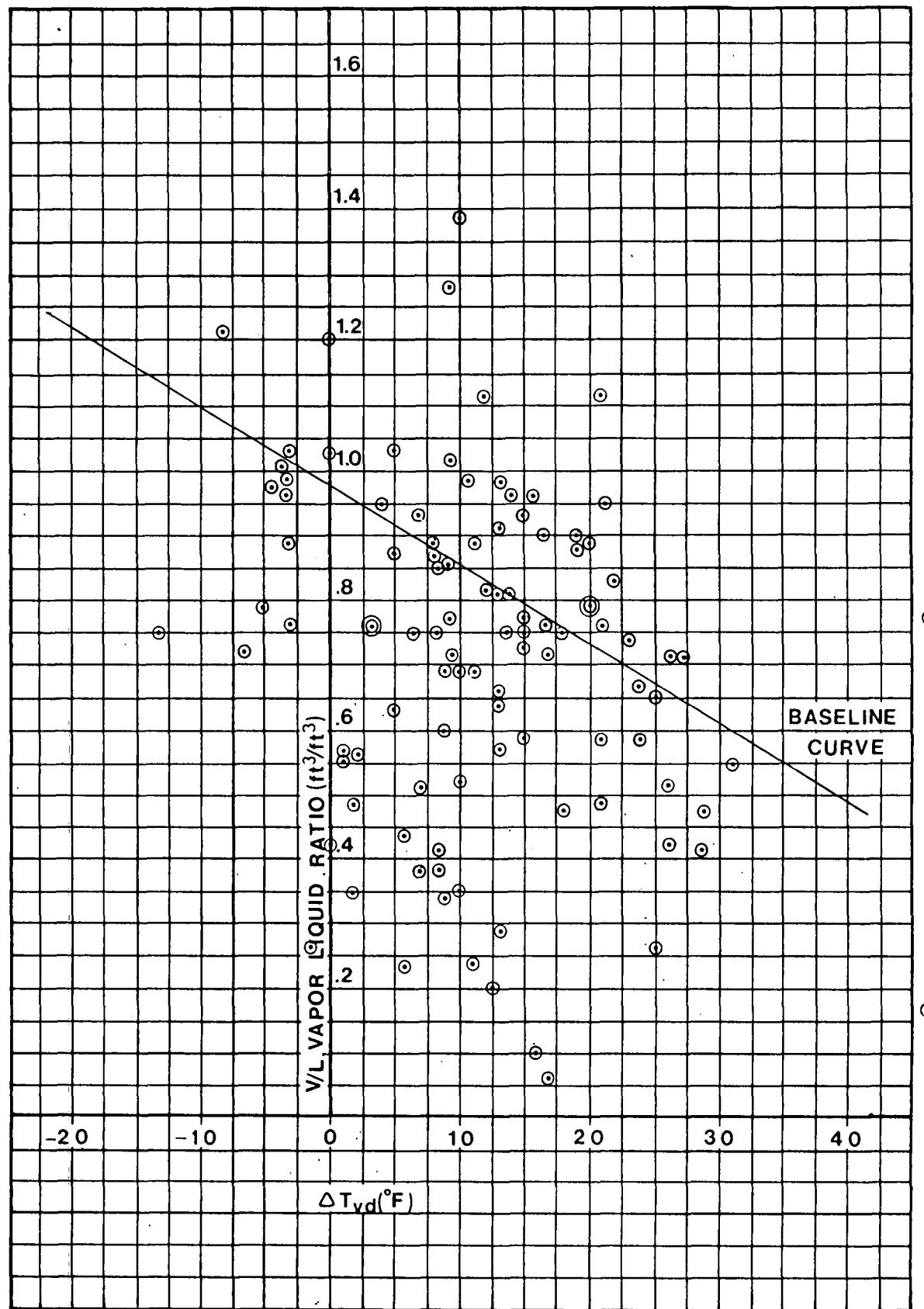


FIGURE 14 NON BASELINE DATA ALL OPW/NOPV

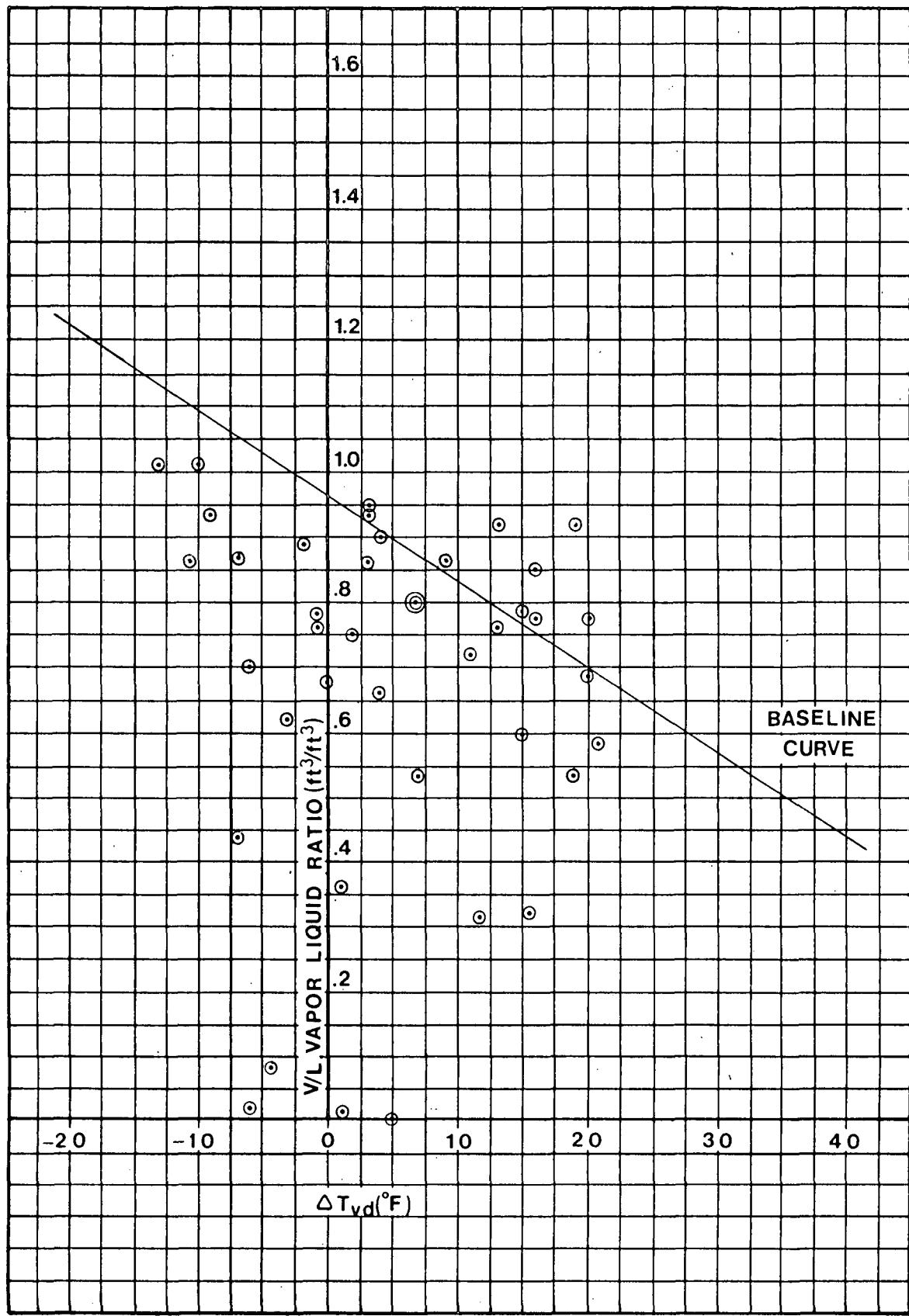


FIGURE 15 NON BASELINE DATA 8/15/74 OPW/PV

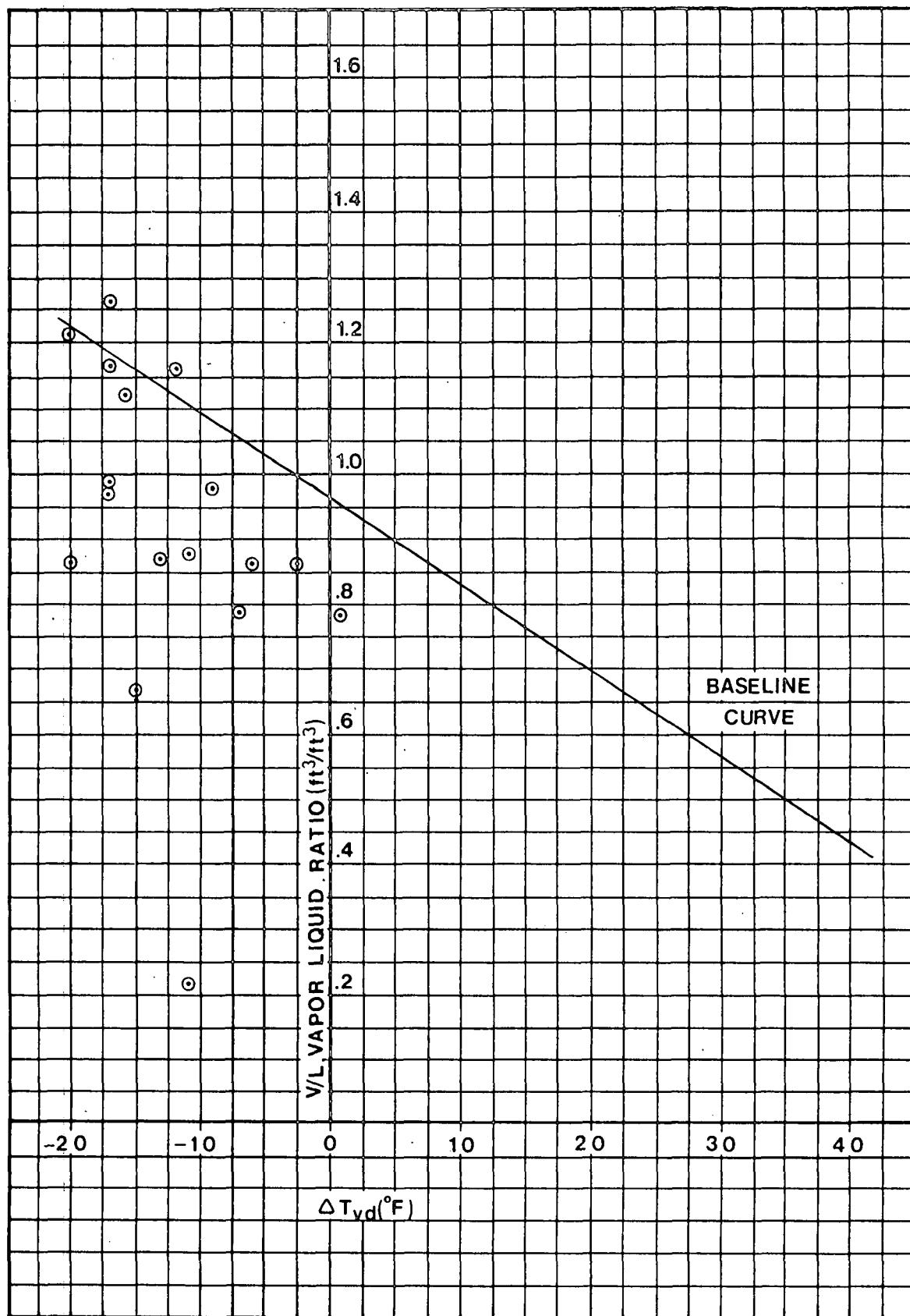


FIGURE 16 NON BASELINE DATA 8/16/74 OPW/PV

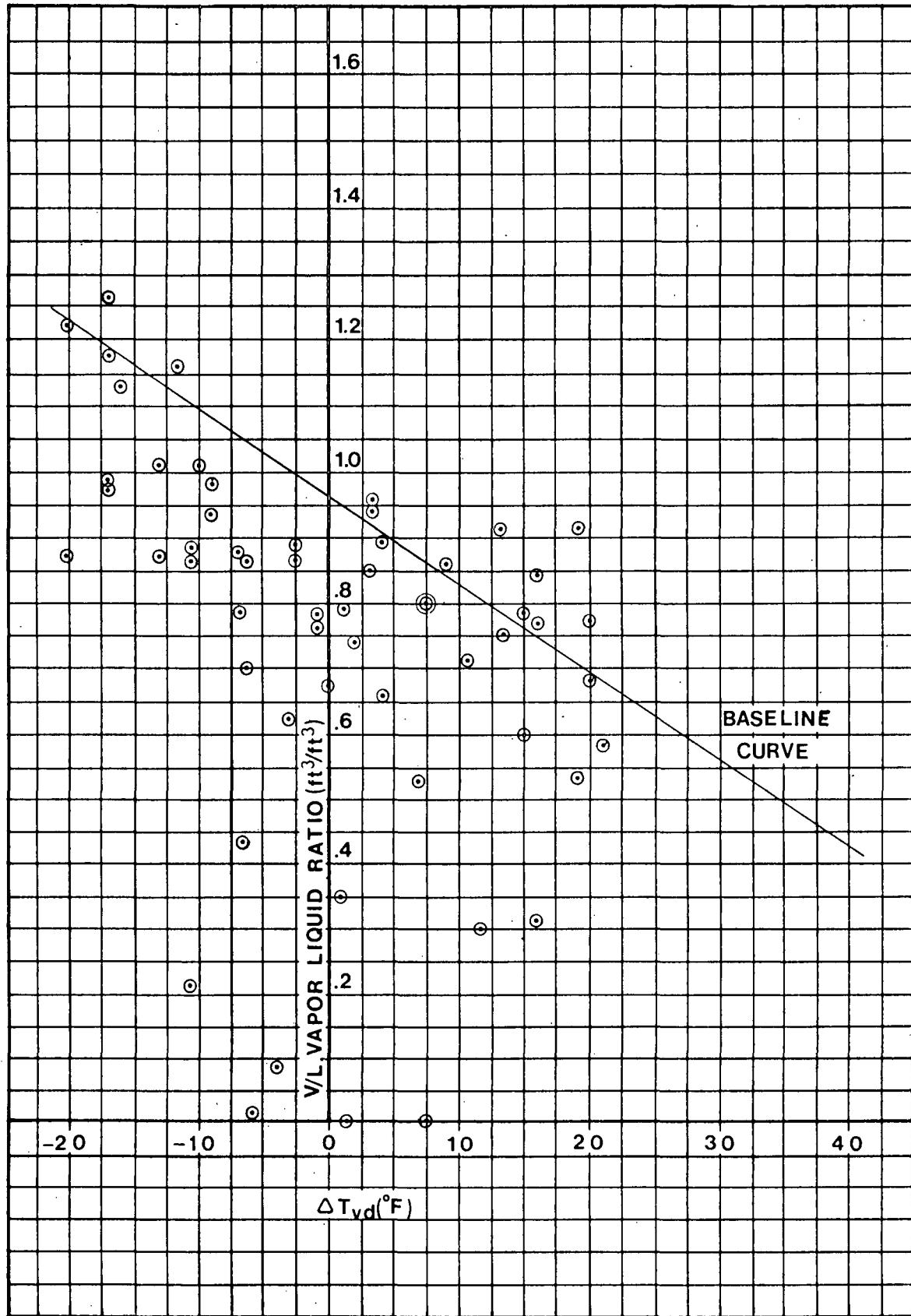


FIGURE 17 NON BASELINE DATA ALL OPW/PV

E. Apparent Outlying Points

1. Baseline Data - The baseline data contains no apparent outlying points.
2. Non-Baseline Data - Because the data point scatter was so great, there were only two instances that could definitely be considered as apparent outlying points.

Those points were 8/5, A-20 and 8/9, B-04. For these vehicles the dry gas meter was observed to be running backwards.

Other known problems occurred with points 8/6, B-31; 8/7, B-23; and 8/7, B-29 (gasoline leaks) and with point 8/5, A-1 (spitback).

F. Vehicle Summary

A summary of the vehicles tested and into which category each falls is outlined below:

<u>Date</u>	<u>Vehicles Tested</u>	<u>Baseline</u>	<u>Non-Baseline</u>	<u>Attempted Baseline</u>
8/5/74	38	3	25	10
8/6/74	67	11	42	14
8/7/74	60	7	44	9
EMCO-WHEATON/OPW	165	21	111	33
 <i>8/8/74</i>				
EMCO-WHEATON/NOPV	34	1	21	12
 <i>8/9/74</i>				
8/12/74	25	5	11	9
8/13/74	73	10	40	23
8/14/74	53	8	35	10
OPW/NOPV	52	9	32	11
	203	32	118	53
 <i>8/15/74</i>				
8/16/75	63	11	44	8
OPW/PV	26	3	17	6
	89	14	61	14
TOTAL	491	69	311	111

G. Explosimeter Readings

Explosimeter readings for non-baseline automobiles are summarized below:

Percent LEL	NUMBER OF VEHICLES													AVE.	
	0	5	10	15	20	25	35	40	45	55	60	65	80	100	
EMCO/WHEATON/OPW (EW)	4		3		2	1		1	1	2	3		1	39	77%
EMCO-WHEATON/OPW (OPW)	14				1	4		1			1	1		32	64%
EMCO-WHEATON/NOPV	3					1	1				2			14	75%
OPW/NOPV	41		2		3				1		4	1		66	60%
OPW/PV	19	1	2	1					1			1		36	61%
TOTAL	81	1	7	2	10	2	1	1	3	3	10	2	1	187	65%

H. Fueling Difficulties

There was one (1) occurrence of spitback. It is unknown why spitback occurred, but it may have been due to the configuration of the automobile fill pipe.

There were only two difficulties encountered that were due to the recovery system. One was being able to latch the vapor return sleeve so that the nozzle remained in the automobile fill pipe without assistance on some models of automobiles. The other difficulty was keeping the liquid and vapor return hoses from tangling. These difficulties did not present major problems however.

I. RVP, Distillation, O₂ & N₂ Results

The Reid Vapor Pressure (RVP) of volatile nonviscous petroleum products differs

from the true vapor pressure of the sample due to some small sample vaporization and the presence of water vapor and air in the confined space. RVP samples were taken from 71 automobiles and from the underground storage tanks. RVP samples were taken in accordance with ASTM method D270-65 and determinations were made in accordance with ASTM method D323-72. Briefly, gasoline was withdrawn into a glass bottle, the bottle tightly capped, and then stored in an ice bath until delivery to the laboratory.

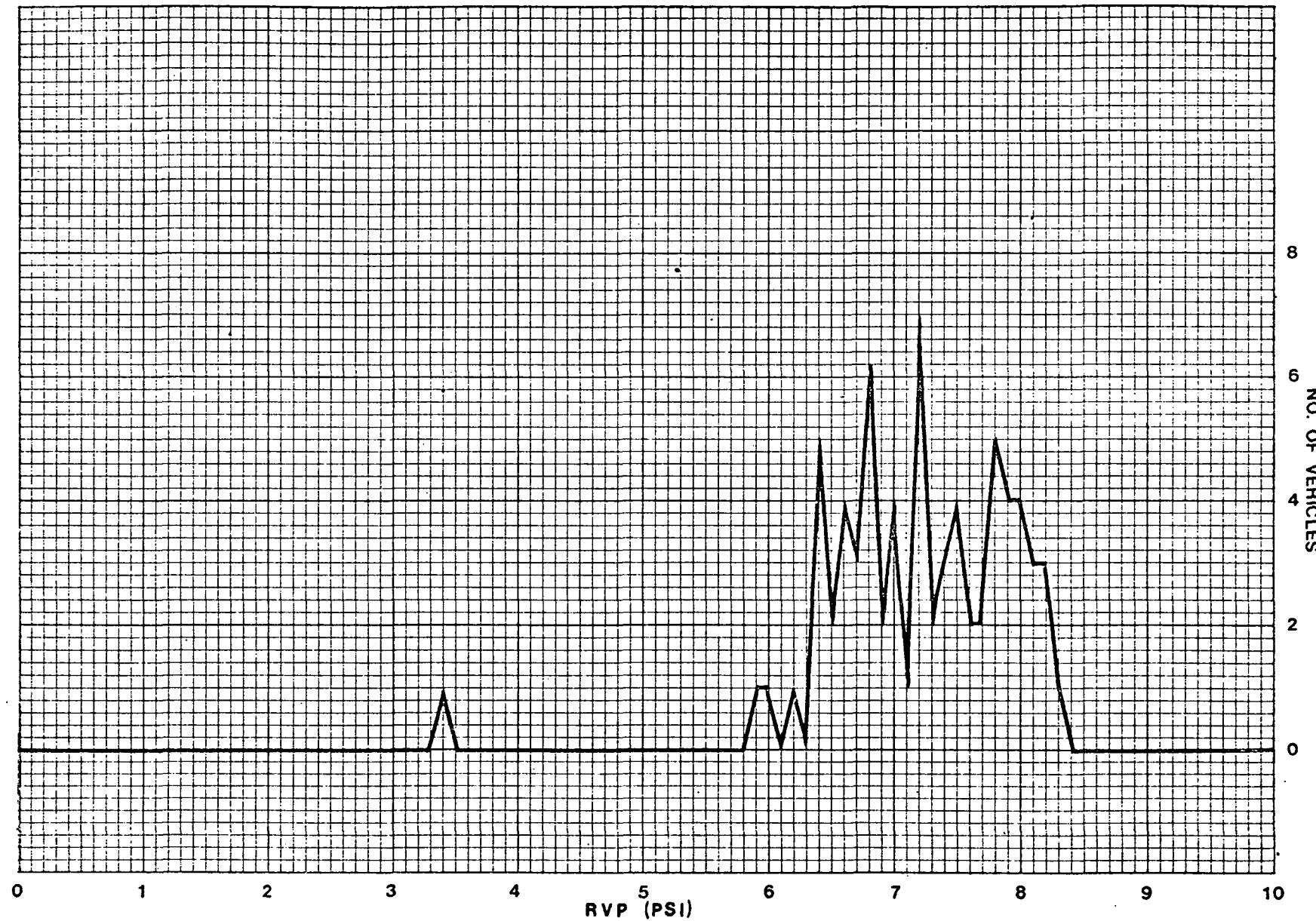
A frequency plot of Reid Vapor Pressures for samples from vehicle tanks is shown in Figure 18. (The main RVP of fuel sampled from vehicle tanks is about 7.2 psi). The data is listed in Table 1 as abstracted from Appendix C, pages C1 - C4. The Chevron "Regular" gasoline had an average RVP of 8.2 psi.

Distillations were performed on samples of underground storage tank contents as per ASTM method D86-67. The results of the distillations are included in Appendix C, pages C5 - C10.

Dissolved oxygen and dissolved nitrogen determinations were made by gas chromatography as per ASTM method D2504-67. These results are listed in Table 2 as abstracted from Appendix C, page C11.

All analyses were performed by the CHARLES MARTIN INSPECTORS OF PETROLEUM, INC., Richmond, California.

FIGURE 18 RVP FREQUENCY PLOT



<u>Date</u>	<u>Pump No.</u>	<u>RVP</u>	<u>License No.</u>
8/5	A-02	7.8	Cal. 548FCF
8/5	A-06	6.8	Cal. 37063V
8/5	B-01	6.6	Cal. 363GCN
8/5	B-06	8.0	Nev. BF4028
8/6	A-08	6.2	Cal. 349FJU
8/6	A-11	6.8	Cal. XQK086
8/6	A-31	6.6	Cal. 278JBQ
8/6	B-07	8.0	Cal. VJN624
8/6	B-08	6.7	Cal. AVA614
8/6	B-13	6.7	Cal. 298FXP
8/6	B-15	7.9	Cal. 63899M
8/7	A-02	8.2	Cal. 095BGW
8/7	A-06	7.5	Cal. 30877B
8/7	A-11	7.8	Cal. 998FQG
8/7	A-19	7.0	Cal. 999KTP
8/7	A-21	6.4	Cal. 820DNT
8/7	A-26	7.3	Cal. UMJ865
8/7	A-31	8.1	Cal. 254JWC
8/7	B-01	7.2	Cal. 145EEZ
8/7	B-06	7.8	Cal. 35003B
8/7	B-11	6.6	Cal. 409FQD
8/7	B-17	5.9	Cal. VJW011
8/7	B-23	7.9	Cal. ASH864
8/7	B-28	6.9	Cal. 771JVG
8/8	A-06	6.8	Cal. 559404
8/8	A-12	3.4	Cal. 293FDW
8/8	A-18	7.4	Cal. P28843
8/8	A-24	7.2	Cal. 438AAJ
8/8	A-29	6.4	Cal. 381JAY
8/8	A-34	6.0	Cal. 710DAJ

TABLE 1 RVP ANALYSIS RESULTS

<u>Date</u>	<u>Pump No.</u>	<u>RVP</u>	<u>License No.</u>
8/12	A-17	6.6	Cal. MKR322
8/12	A-19	7.2	Gov. G1170212
8/12	A-28	7.1	Cal. VYZ927
8/12	A-33	7.9	Cal. 654JVG
8/12	B-17	6.8	Cal. 158JWY
8/12	B-22	8.3	Cal. 774GEI
8/12	B-26	8.1	Cal. U91369
8/12	B-30	6.5	Cal. 63951M
8/12	B-32	7.0	Cal. 199ARF
8/13	A-05	7.2	Cal. 009KEY
8/13	A-10	7.0	Cal. 904HLE
8/13	A-13	7.0	Cal. WPT476
8/13	A-14	7.2	Cal. 688HBZ
8/13	A-20	7.9	Mex. VWVAN
8/13	A-26	6.4	Cal. YLZ244
8/13	B-06	7.2	Cal. 342JWC
8/13	B-12	8.0	Cal. 280LBM
8/13	B-16	8.1	Cal. 253KUA
8/13	B-21	7.7	Cal. 033DXV
8/13	B-26	6.7	Cal. WA6KNX
8/14	A-05	7.4	Cal. 366HBZ
8/14	A-10	7.7	Col. LX8060
8/14	A-15	7.2	Cal. WDH856
8/14	A-20	6.4	Cal. YAM267
8/14	B-02	7.8	Cal. XQK313
8/14	B-06	7.8	Cal. 624GKH
8/14	B-10	7.4	Cal. 589EEV
8/14	B-20	6.5	Cal. 06089U
8/14	B-22	8.2	Cal. WMK565

TABLE 1 (CON'T)

<u>Date</u>	<u>Pump No.</u>	<u>RVP</u>	<u>License No.</u>
8/15	A-06	6.8	Cal. 544CL1
8/15	A-11	8.2	Cal. 15521N
8/15	A-16	7.5	Cal. B71060
8/15	A-21	6.9	Cal. 193HCJ
8/15	A-26	7.6	Cal. 357FMV
8/15	A-31	7.5	Cal. IV24
8/15	B-05	7.3	Cal. 703DXP
8/15	B-10	7.6	Cal. 021FXO
8/15	B-15	7.5	Cal. YLZ244
8/15	B-20	6.4	Cal. 936EFZ
8/15	B-27	6.8	Cal. 257JBQ
8/16	B-20	8.0	Cal. STARR1
8/8	Low Lead	7.8	
8/9	Low Lead	7.9	
8/9	Low Lead	8.5	
8/13	Low Lead	8.4	
8/14	Low Lead	7.9	
8/15	Low Lead	8.3	
8/15	Low Lead	8.3	
8/16	Low Lead	8.4	

TABLE 1 (CON'T)

<u>Date</u>	<u>Dissolved Oxygen (PPM)</u>	<u>Dissolved Nitrogen (PPM)</u>
8/8/74	< 10	9
8/9/74	< 10	10
8/13/74	< 10	10
8/14/74	< 10	10
8/15/74	< 10	8
8/15/74	< 10	9
8/16/74	< 10	9

TABLE 2 DISSOLVED OXYGEN AND NITROGEN RESULTS (CHEVRON LOW LEAD)

III. PROCESS DESCRIPTION AND OPERATION

A. Station Description

The STANDARD retail station at Chiles Road, Davis, California has three covered pump islands as illustrated in Drawing 1. There are six dispensers for supreme and low lead grades of gasoline and three dispensers for unleaded. The station is equipped such that one island can be operated independently of the other two islands, receiving product from a set of auxiliary storage tanks while the other two islands receive product from the main storage tanks. The vapor return piping for each product grade is independent and each underground tank is vented to the atmosphere through a separate two-inch pipe riser. The piping layout is shown in Drawing 2.

Each underground tank is equipped with a connection for vapor recovery during bulk deliveries.

For vapor collection during automobile fueling, each dispenser is equipped with either an OPW-7VN or an EMCO-WHEATON vapor recovery nozzle. The OPW nozzle uses a bellows (boot) arrangement for flexibility in mating at the vehicle fill-pipe. To prevent vapor losses while the dispenser is not in use, a mechanical check valve is used. The design is such that when the dispenser is not in use, the annular opening in the face of the rubber boot will seat against a collar on the liquid spout, when the nozzle spout is forced into a vehicle fillpipe, the boot is forced back from the collar and the vapor return path is opened. The EMCO-WHEATON nozzle is similar to the OPW except that it does not have a mechanical check valve. Instead it has a flapper check valve which opens when a pressure differential is developed.

B. Process Operation

During the test period, two regular grade dispensers were isolated from the rest of the station and equipped with vapor recovery nozzles. The pump attendants during the testing were the station assistant manager who was assisted by regular station employees. The attendants followed their routine practices except when instructed otherwise during baseline tests. If the automobile being fueled were to be considered as a potential baseline, the pump attendant was instructed to hold the dispensing nozzle in such a way so as to provide intimate contact between the automobile fill pipe and the vapor return bellows (force fit). On all other automobiles the nozzle was inserted to the "latched" position and was left unattended while the attendant performed his ancillary duties, or hand-held when nozzle configuration or the amount of fuel to be dispensed made it impractical to latch the nozzle. It was noticed that the performance of some of these duties, such as windshield cleaning, caused the automobile to rock which in turn caused intermittent gaps at the fill pipe/bellows interface.

Usually the dispenser was set at the middle notch with a rate of approximately five (5) gallons per minute. However, other dispensing rates were sometimes used.

During the periods that testing was performed, the total gasoline sales at the station were as follows:

<u>Date</u>	<u>Regular</u>				<u>Total</u>	
	<u>Total</u>	<u>Pumps</u>	<u>Tested</u>	<u>Unleaded</u>		
8/5	1259.7	428.5		15.6	362.2	1637.5
8/6	1251.1	749.4		12.5	563.5	1827.1
8/7	1181.5	678.7		11.3	596.7	1789.5
EMCO-WHEATON/ OPW	<u>3692.3</u>	<u>1856.6</u>		<u>39.4</u>	<u>1522.4</u>	<u>5254.1</u>
8/8	821.5	372.9		14.7	420.4	1256.5
EMCO/WHEATON/ NOPV						
8/9	862.2	284.3		19.8	647.0	1529.0
8/12	1174.9	1008.3		92.1	619.4	1886.4
8/13	1075.8	589.3		50.9	637.7	1764.4
8/14	<u>1198.2</u>	<u>527.5</u>		<u>37.3</u>	<u>615.4</u>	<u>1850.9</u>
OPW/NOPV	4311.1	2409.4		200.1	2519.5	7030.7
8/15	1334.0	670.7		19.7	642.9	1996.6
8/16	<u>686.2</u>	<u>515.0</u>		<u>49.1</u>	<u>534.7</u>	<u>1270.0</u>
OPW/PV	2020.2	1185.7		68.8	1177.6	3266.6
TOTAL	10845.1	5824.6		323.0	5639.9	16808.0

The ambient temperature at this location varied from the low to mid 60's in the early mornings, rising to the mid to upper 90's by middle afternoon, and then cooling to the lower 80's around sundown. Testing was scheduled as follows in order to obtain data during each temperature condition.

<u>Date</u>	<u>Test Time</u>
8/5	10:30 am - 5:00 pm
8/6	7:00 am - 3:00 pm
8/7	12:00 n - 8:00 pm
8/8	7:00 am - 3:00 pm
8/9	7:00 am - 1:00 pm
8/12	9:00 am - 4:00 pm

<u>Date</u>	<u>Test Time</u>
8/13	1:00 am - 3:00 pm
8/14	11:00 am - 7:00 pm
8/15	10:00 am - 6:00 pm
8/16	7:00 am - 12:00 n

The weather conditions were generally the same during the ten days of testing.

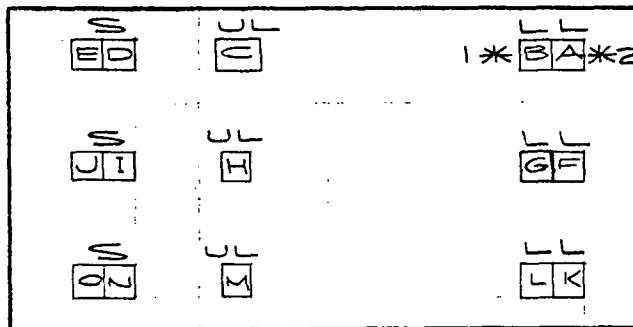
CHILES ROAD

**FILLER CAPS
UNDERGROUND TANKS**

- LL
 - SS
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*
UNDERGROUND
TANK VENTS

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COVERED
PUMP ISLAND

FILLER CAPS
UNDERGROUND TANKS

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STATION

INTERSTATE 50

BETZ ENVIRONMENTAL ENGINEERS, Inc.
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FOR ENVIRONMENTAL
PROTECTION AGENCY

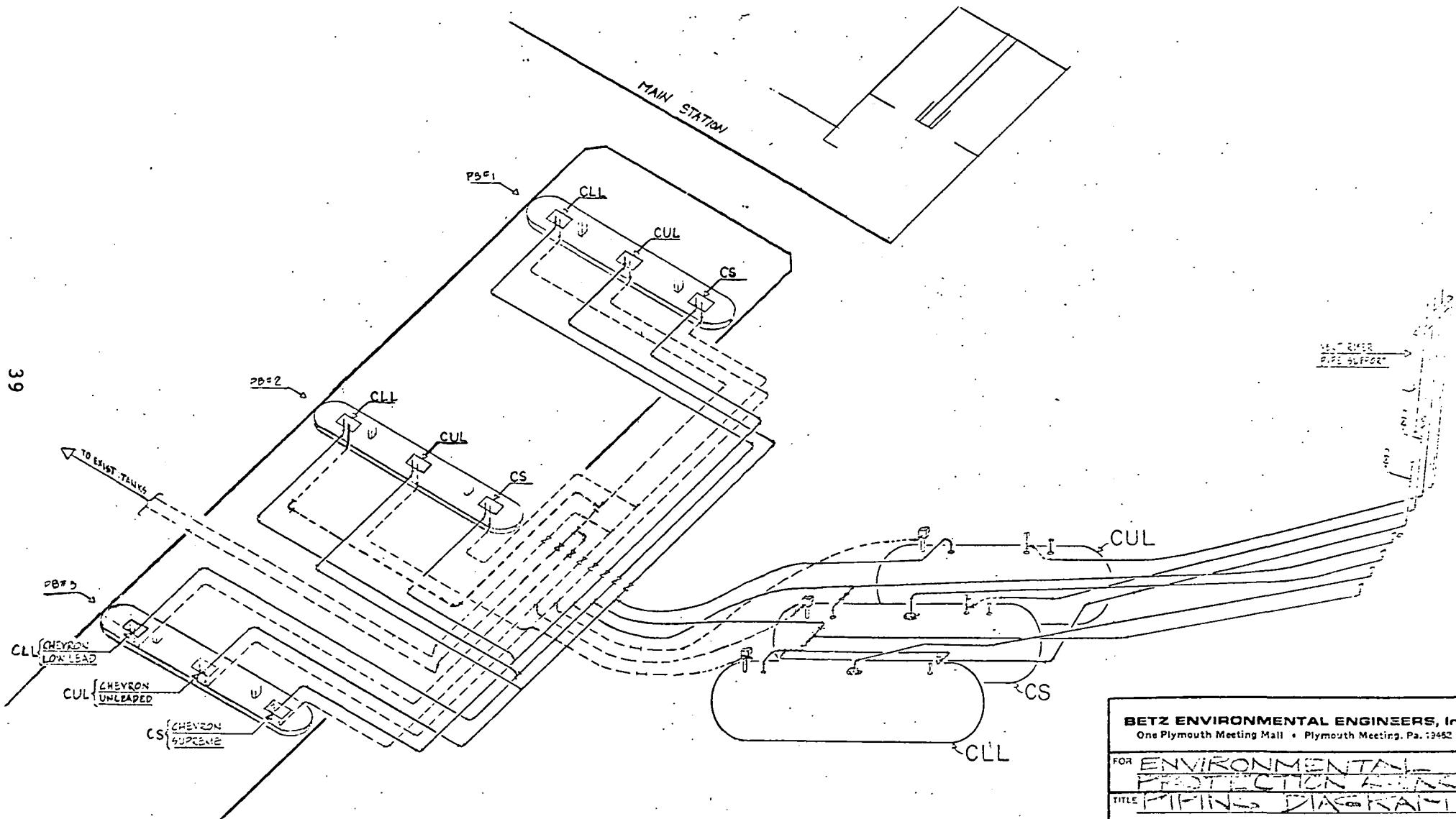
STANDARD SECTION PLAN VIEW

DRAWN BY W.B.B. DATE 12-10-31

APPROVED BY 12-10-74
DRAW NO.
SCALE 16-73-01

~~SEARCHED~~ **NONE** **00-4659-A-01**

39



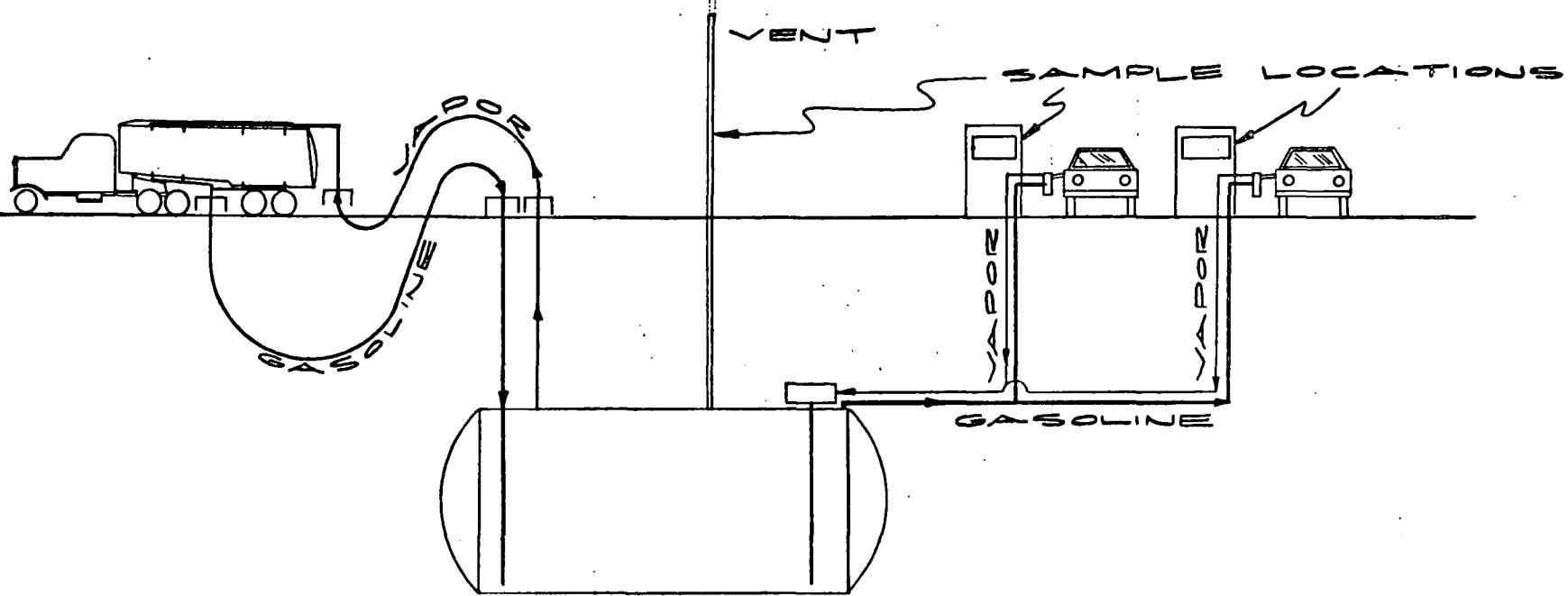
BETZ ENVIRONMENTAL ENGINEERS, Inc.
One Plymouth Meeting Mall • Plymouth Meeting, Pa. 19462

FOR ENVIRONMENTAL PROTECTION AGENCY
TITLE PIPING DIAGRAM

DRAWN BY	W.B.E.	DATE	12-10-74
APPROVED BY		DRAW NO.	00-1659-01-02
SCALE	NONE		

IV. SAMPLING LOCATIONS

Sampling locations are indicated in Drawing No. 3. Sampling locations were at the two regular grade gasoline dispensers which were isolated from the remainder of the station operations and at the atmospheric vent of the underground regular grade storage tank.



BETZ ENVIRONMENTAL ENGINEERS, Inc.	
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FOR	ENVIRONMENTAL PROTECTION AGENCY
TITLE	SAMPLING LOCATIONS DIRECT DISPLACEMENT SYSTEM
DRAWN BY	W.B.E.S.
APPROVED BY	
SCALE	NONE
DATE	12-10-74
DRAW NO	00-4659-01-03

V. SAMPLING PROCEDURES

A. General

RADIAN CORPORATION was responsible for customer relations. Once a customer consented to the test, the car would be directed to one of the two testing locations. The testing procedures followed were essentially identical to those used in earlier EPA testing in the San Diego area (EMB Report No. 75-GAS-1, Gasoline Transfer Vapor Recovery Systems, San Diego County, California, November 1974, by TRW, Inc. under EPA contract No. 68-02-0235).

The procedures are summarized below:

1. Record name of station, date, pump number, license number, make of automobile, model and year for every car sampled. Record also whether the automobile was recently driven in local traffic or on highways and the approximate number of miles driven prior to entering the station.
2. Measure and record the vehicle tank liquid temperature prior to filling.
3. Record the initial dry gas meter reading in the vapor return line.
4. Obtain liquid samples for R.V.P. analysis from every fifth automobile tested.
5. Monitor and record during the vehicle filling the hydrocarbon concentration in the vapor return line. Also monitor around fillneck with the explosimeter and record reading.
6. Monitor and record the returned vapor temperature and the dispensed gasoline temperature.

7. Measure and record the time required for dispensing of gasoline -- starting when the nozzle is turned on and ending when the nozzle automatically shuts off. Record any event of spillage or spitback.
8. Record the total number of gallons dispensed for each automobile.
9. Monitor and record the pressure in the vehicle tank after filling for every other automobile, if possible.
10. After filling the automobile, record the final dry gas meter reading in the vapor return line.

If the automobile were to be considered as a potential baseline automobile, as determined by RADIAN CORPORATION, additional testing was performed. The philosophy of "baseline" is those automobiles for which 100% of the potential vapors are returned. To be considered as baseline, a vehicle must have no leaks in its fuel system and must have had a tight fill pipe/nozzle interface. To obtain a leak free fuel system, any known vents were plugged prior to fueling. To obtain a tight fill pipe/nozzle interface, the nozzle was force fit. If an explosimeter check revealed no leakage around the fill pipe/nozzle interface, the vehicle was directed to another area where a leak check would be performed to determine any leakage in the automobile's fuel system. The leack check procedure is outlined as follows (see Drawing No. 6):

1. Connect flow valve to nitrogen tank so that flow can be controlled by manipulation of valve. Mount on mounting board.
2. Attach 12" piece of Tygon tubing to outlet of valve and the other end to one leg of "T".
3. Mount 12" glass tube on the mounting board with clamp and attach top of glass tube to "T" with small piece of Tygon tubing.

4. Use 2' piece of Tygon tubing to connect remaining leg of "T" to the inlet of the Rotameter. Mount meter on board.
5. With remaining Tygon hose, connect outlet of flow meter and the rubber seal for the vehicle fillneck connection. Mount the flow meter in a vertical position.
6. Fill liquid holding tank to at least 6" depth with water.
7. Place glass tube open end beneath the surface of the water in the holding tank and measure the "H". (See Drawing 6). For the test make one run with the H at 2" or whatever the maximum H was when determining vehicle pressure tank conditions. Mount tube with clamp on board.
8. Plug known fuel system vents.
9. Place rubber seal over open fillneck and hold firmly to avoid leaks at the seal.
10. Allow nitrogen to flow by opening the valve until bubbles appear at the open end of the tube submerged in the holding tank.
11. After 30 seconds, record flow rate from flow rate meter.
12. If no flow at meter, vehicle considered "baseline".
13. If flow, vehicle considered "attempted baseline."

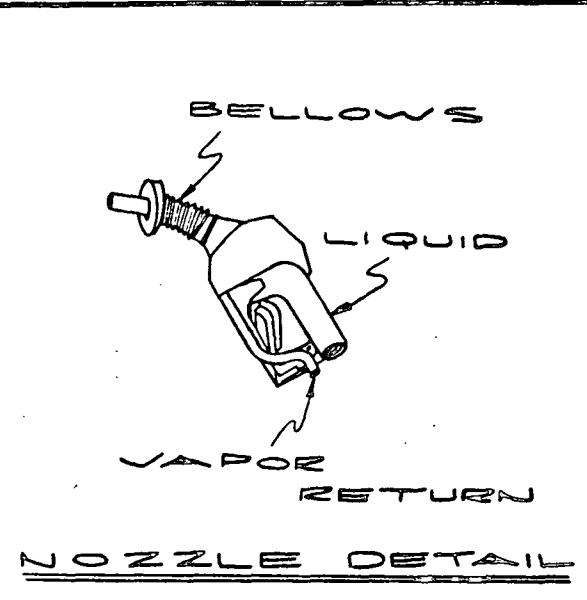
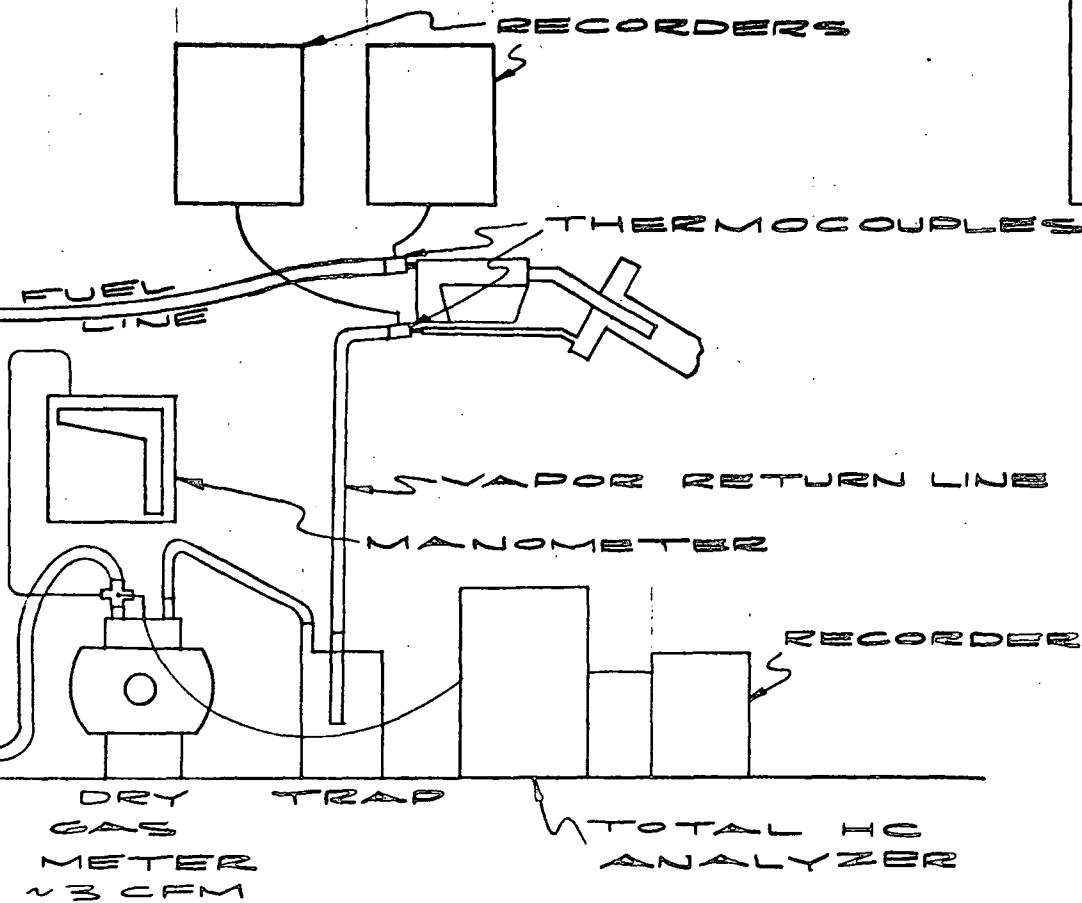
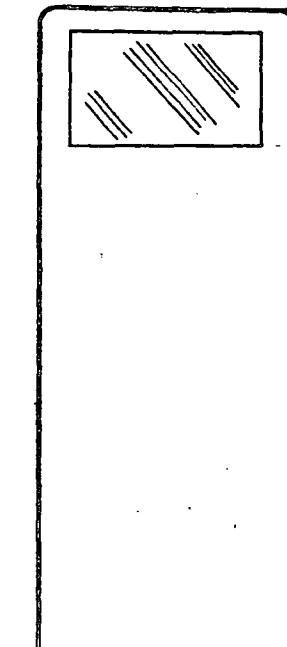
If a leak was found around the fill pipe/nozzle interface, no leak check would be performed and the automobile would be considered as "attempted baseline". Attempted baseline vehicles were not used in any calculations.

The testing equipment for the gasoline dispensers is shown in Drawing No. 4. Nozzles used in the testing were manufactured by the DOVER CORPORATION, OPW DIVISION

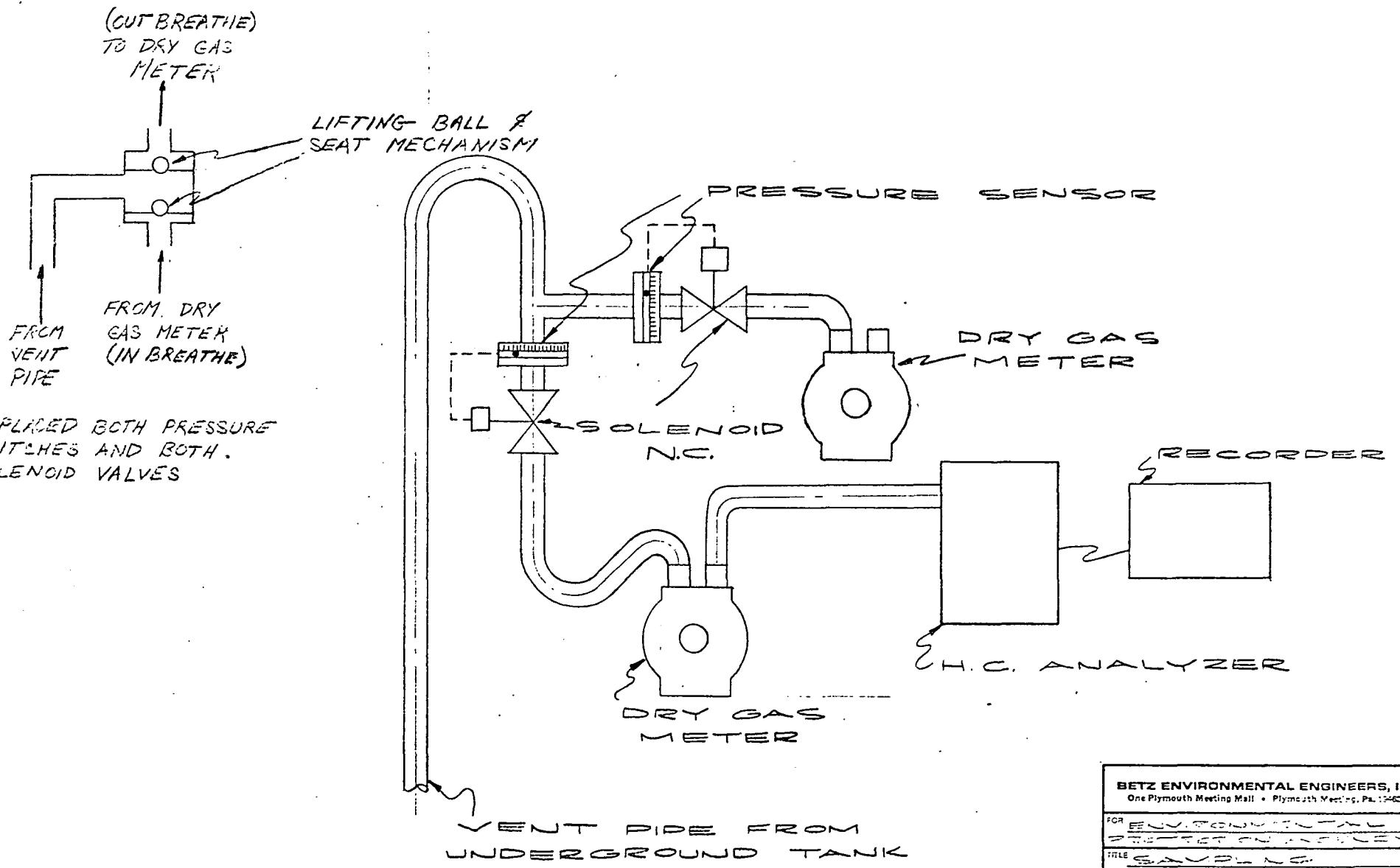
and by EMCO-WHEATON.

The underground tank vent testing equipment is indicated in Drawing No. 5. The vent was modified to allow unrestricted inbreathing by a pressure switch set for -0.15 in. H₂O which controlled a normally closed solenoid valve which opened to the ambient atmosphere. Alternatively, a pressure switch set for +0.15 in. H₂O controlled a normally closed solenoid valve which vented through the sampling train. This modification is the "no pressure/vacuum valve" condition referred to as "NOPV". It was in place from August 5, 1974, to August 14, 1974.

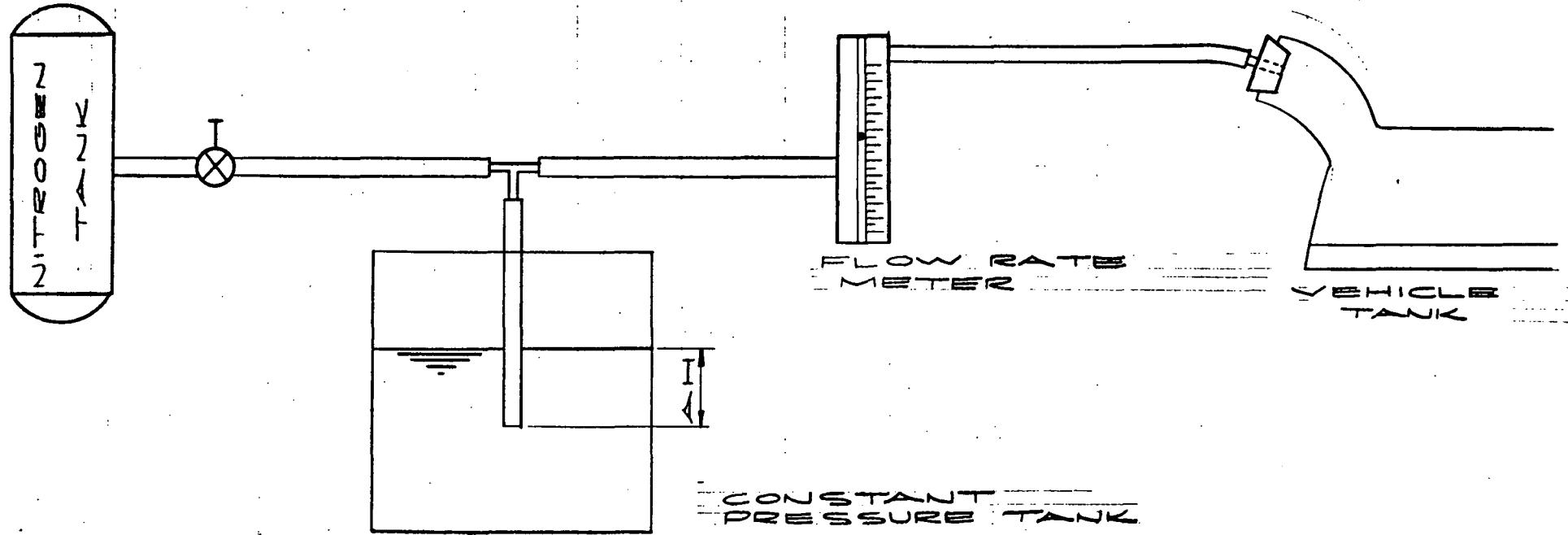
The above modification was replaced on August 15 with a pressure/vacuum valve assembly supplied by STANDARD OIL COMPANY. This valve was set to inbreath at -4.0 inches H₂O and outbreak at +1.0 inch H₂O. The remainder of the sampling system was unchanged.



DCEZ ENVIRONMENTAL ENGINEERING, INC.	
One Plymouth Meeting Mall • Plymouth Meeting, Pa. 19462	
FOR ENVIRONMENTAL PROTECTION AGENCY	
TITLE SAMPLING SCHEMATIC CS(PUMP)	
DRAWN BY W. B. B.	DATE 12-10-74
APPROVED BY	DRAWN NO
SCALE NONE	CO-4657-C1-C4



BETZ ENVIRONMENTAL ENGINEERS, Inc. One Plymouth Meeting Mall • Plymouth Meeting, Pa. 19462	
FOR ENVIRONMENTAL PROTECTION AGENCEY	
FILE SAMPLE C (VENT)	
DRAWN BY W.B. ES.	DATE 12-10-74
APPROVED BY	DRAWN TO
SCALE NONE	00-4659-01-05



BETZ ENVIRONMENTAL ENGINEERS, Inc.	
One Plymouth Meeting Mall • Plymouth Meeting, Pa. 19462	
FOR ENVIRONMENTAL PROTECTION AGENCY	
TITLE BASELINE CHECK APPARATUS	
DRAWN BY	DATE
W.B.B.	12-10-79
APPROVED BY	DRAW. NO.
SCALE NONE	CC-4659-01-06

B. Instrumentation Problems

While the instrumentation was not complex, there were some problems. Most of these difficulties can easily be avoided in the future with simple precautions, while some are not easily solved. The parameters measured were pressure, temperature, volume, and, indirectly, mass of hydrocarbons.

1. Pressure - Two pressures were of interest; one, the system pressure, was obtained at the outlet of the dry gas meter, (it was recorded for every automobile) and the other, the automobile tank pressure, was recorded for baseline automobiles only and was usually obtained at the vehicle carbon cannister inlet.

A possible alternative for determining the system pressure, would be through the use of a pressure transducer because the manometer, being located at the gasoline pumps, was subject to jarring, thereby causing a loss of level. The rubber connecting tubing was also easily pinched or pulled off. It might even be better if the pressure were obtained at the underground tank vent. This would give a much closer measurement of system pressure because the negative influences of dry gas meter, sample pump, and mechanical problems would be eliminated.

Since the automobile tank pressure was obtained only for baseline automobiles, it was subject to the fluctuations of a hand held nozzle. Depending on the time expended in pumping the gasoline, the rate of pumping, the constancy of the rate of pumping, the firmness of the forced fit,

and the relative temperatures of the dispensed gasoline and the vehicle tank, a steady pressure state may not have been reached. Usually the maximum pressure was recorded. If a real time analysis of this pressure were desired, a pressure transducer with recorder should be substituted.

2. Temperature - Four temperatures were of interest: underground tank, vehicle tank, dispensed gasoline, and returned vapor. The underground tank and vehicle tank temperatures were obtained with a digital pyrometer of high accuracy and repeatability. The STANDARD Station also recorded the underground tank temperatures with a permanently installed sensor. It was noticed that the temperatures recorded by STANDARD did not agree with the digital pyrometer readings. Both systems were checked and found to be in perfect working order. It was concluded that temperature stratification apparently existed in the underground tank. Since the temperature difference of vehicle tank versus underground tank is not presently used in the calculations, this stratification is not a significant problem.

Late in the program the digital pyrometer became inoperative, and underground tank temperatures were obtained from the STANDARD station's recorder. STANDARD also supplied a potentiometer and thermocouple for use in obtaining vehicle tank temperatures. It was subsequently determined that the potentiometer was not calibrated for that type of thermocouple.

Mr. J.A. English of STANDARD provided a thermocouple/potentiometer calibration curve which was used to correct the appropriate data. The calibration curve is contained in Appendix A, page 27.

The inputs for the dispensed gasoline and returned vapor recording pyrometers were provided by resistance bulbs located at the gasoline dispensing nozzle. The sensing elements extended about three (3) inches above the nozzle and were quite prone to bending during normal gasoline dispensing operations. Additionally, the connecting wires were constantly under strain and in some instances were broken, even though every effort was made to keep the strain off the wires and probes. There were times when the recording pyrometers gave obviously erroneous readings. The suspected cause of these bad readings was the above mentioned strain. It is possible, although unknown, that this strain could have caused less obvious erroneous readings. It is proposed that these temperatures be sampled at other points, specifically that the returned vapor temperature be sampled at the dry gas meter and that the dispensed gasoline temperature be sampled at the base of the pump. It is felt that there are two distinct advantages to this change. Firstly, it will eliminate equipment abuse thereby insuring more accurate readings and preventing down time. Secondly, by taking temperature readings physically closer to the volume measurement points, a better temperature/volume correlation is possible.

The disadvantage is that these temperatures can no longer be considered as nozzle temperatures. However, it is doubtful that there is a significant temperature gradient in the hose lines but rather that a steady zero gradient condition would be quickly reached.

3. Volume - No problems were encountered with the dry gas meter per se. However, there were two (2) times when the dry gas meter was observed running backwards (tests 8/5, A-20 and 8/9, A-4). Various theories for this anomaly exist, but to B.E.E.'s knowledge, no solution has been proposed. It is unknown how often this phenomenon occurred undetected. There were also times when the dry gas meter in the EMCOWHEATON nozzle system was observed to be moving at times when the EMCOWHEATON nozzle system was not being used. This suggests that the EMCOWHEATON nozzle permitted inbreathing through the nozzle. It is unknown how often this phenomenon occurred or what effect it would have on the testing results.
4. Mass of Hydrocarbons - The mass of hydrocarbons in the vapor return line and vent was to be determined from the percentage of hydrocarbons on a volume basis. This percentage was measured with a Beckman Model 400 Hydrocarbon analyzer, using the flame ionization principal. To eliminate the need for a complicated dilution system (required because of the expected high concentrations, 50-75% by volume, of hydrocarbons), a longer sample capillary was installed in series with the existing

capillary prior to instrument use. The length of this column was recommended by BECKMAN INSTRUMENTS, INC., to be approximately twenty (20) feet with the theory being that by increasing the length of the capillary and by decreasing the sample pressure, a smaller sample will be delivered to the flame ionization detector (FID) thus allowing samples of very high concentrations to be determined without flame saturation. Normally, the BECKMAN 400 Unit as shipped can be used to determine concentrations only as high as 0-4% by volume before flame saturation occurs.

Propane was chosen as the calibration gas because its molecular weight is close to that of gasoline. The propane calibration gas was obtained in cylinder sizes comparable to those of methane. Unfortunately, the quantity of propane in the cylinders was insufficient due to the fact that propane liquifies at about 100 psi. The compressed gas supplier could not deliver sufficient quantities of propane quickly enough and methane, which was more easily supplied, was substituted as the calibration gas.

Both speed and magnitude of analyzer response are affected by the type of hydrocarbon in the sample. Magnitude of the analyzer response to an atom of carbon depends on the chemical environment of this atom in the molecule. The characteristic response of a given type of atom may be expressed approximately by a value designated as the "effective carbon number". The effective carbon number of a particular type of carbon

atom is defined as the ratio of the instrument response caused by an atom of that type and the instrument response caused by an aliphatic carbon atom. To determine the exact effective carbon number of propane it is necessary to perform a calibration of methane versus propane. Because of supply problems, it was decided to perform this calibration in our laboratory.

When this calibration was attempted, completely erroneous data was obtained. The data indicated that the instruments were operating in a saturated condition, that is, an increase in sample concentration did not cause an increase in analyzer response. However, there was no immediate explanation of why saturation was encountered. A thorough overhaul by BECKMAN INSTRUMENTS, INC. revealed that the polarizing electrodes had corroded. With no electric field guiding the ions to the collector, the ions migrated at random, thereby giving the analyzer an almost flat response.

The primary reason that this condition was not discovered during the sampling program was the fact that only a single gas was used for calibration. A secondary reason was unfamiliarity with the use of the longer capillary and lower sample pressures. It is recommended that calibrations be performed with two (2) widely separated concentrations of calibration gases.

TEST RESULTS

APPENDIX A

STATION- STAND(EMCO-WHEATON/DPW)

DATE- 8/ 5/74

AVE. UNDERGROUND TANK TEMP- 77.0 F

PUMP	TIME	LIC. NO.	MAKE	MODEL	TYPE OF DRIVING	DISTANCE TRAVELED	LK CRK	RVP	EXPLOS.	NOZZLE FIT	SPIKEBACK
A-01	12:55PM	CAL.-04427U	FORD	1974 COURIER PU	HIGHWAY	75.MI.	NO-NBL	0.0	20.0	GOOD	NO
A-02	1:14PM	CAL.-548FCF	VW	1964 VAN	LOCAL	0.MI.	NO-ATB	7.8	100.0	FORCE	NO
A-03	1:36PM	GOVT-G1150491	AM	MATADOR	LOCAL	0.MI.	NO-NBL	0.0	60.0	GOOD	NO
A-04	1:45PM	CAL.-504EFZ	FORD TORINO	72 WAGON	HIGHWAY	200.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-05	1:42PM	CAL.-774EZ0	DODGE	71 CHARGER	HIGHWAY	100.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-06	2:04PM	CAL.-37063V	FORD COURIER	1972 TRUCK	HIGHWAY	100.MI.	NO-ATB	6.8	100.0	FORCE	NO
A-07	2:40PM	CAL.-SLY506	FORD	66 MUSTANG	HIGHWAY	50.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-08	3:50PM	CAL.-326JWD	PONTIAC	74 WAGON	LOCAL	10.MI.	PS-BSL	0.0	0.0	FORCE	NO
A-09	2:58PM	CAL.-477KUL	MERCEDES	1974	HIGHWAY	30.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-10	3:12PM	CAL.-587JAW	GMC	1973 VAN	LOCAL	2.MI.	NO-ATB	0.0	100.0	FORCE	NO
A-11	3:26PM	CAL.-RLH603	CHEVY	1966	LOCAL	1.MI.	NO-NBL	0.0	60.0	GOOD	NO
A-12	3:35PM	CAL.-119CGM	CHEVY	1971 MALIBU	LOCAL	4.MI.	NO-ATB	0.0	30.0	FORCE	NO
A-13	3:43PM	CAL.-0959GM	FORD	1970 TORINO SW	LOCAL	0.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-14	0:00AM	KAN.-5-129	PLYMOUTH	1964 BARRACUDA	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-15	0:00AM	CAL.-RLL577	PLYMOUTH	1966 VALIANT	HIGHWAY	74.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-16	4:10PM	CAL.-K31960	DODGE	1973	HIGHWAY	50.MI.	NO-ATB	0.0	40.0	FORCE	NO
A-17	0:00AM	CAL.-546FHY	VW	1963	LOCAL	2.MI.	NO-NBL	0.0	100.0	POOR	NO
A-18	0:00AM	CAL.-YKF0R3	FORD	1967	HIGHWAY	120.MI.	NO-ATB	0.0	80.0	FORCE	NO
A-19	4:30PM	CAL.-XQK720	69VW	SQUAREBACK	LOCAL	1.MI.	NO-NBL	0.0	100.0	POOR	NO
A-20	4:55PM	CAL.-6JD786	VW	1972	LOCAL	2.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-01	1:00PM	CAL.-363GCN	1974 CHEV.	IMPALA	LOCAL	0.MI.	NO-NBL	0.6	0.0	GOOD	NO
B-02	0:00AM	CAL.-999KTP	1974 FORD	PINTU	LOCAL	0.MI.	PS-ATE	0.0	0.0	FORCE	NO
B-03	1:45PM	CAL.-617HKS	1973 MERCURY	MONTEGO WAGON	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-04	1:50PM	CAL.-199ARF	1970 FORD	TURINO	LOCAL	0.MI.	NO-ATB	0.0	10.0	FORCE	NO
B-05	2:10PM	CAL.-963BVJ	CHEVY	1971	HIGHWAY	30.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-06	2:15PM	NEV.-BF4029	CHEVY	1965 TRUCK	HIGHWAY	200.MI.	NO-NBL	8.0	100.0	POOR	NO
B-07	2:30PM	CAL.-DELTA-1	CAUILLAC	1973	HIGHWAY	300.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-08	2:45PM	CAL.-9058VW	1970 TOYOTA	COROLLA DELUXE	HIGHWAY	80.MI.	NO-ATB	0.0	100.0	FORCE	YES
B-09	3:05PM	CAL.-601KUL	CHEV.	1974 VEGA	LOCAL	5.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-10	3:15PM	CAL.-60350M	CHEVY.	1973 TRUCK	HIGHWAY	35.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-11	3:40PM	CAL.-528JYP	DODGE	1974 DUSTER	HIGHWAY	100.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-12	3:50PM	CAL.-087FHT	BUICK	1972 SKYLARK	LOCAL	1.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-13	0:00AM	CAL.-H93979	CHEVY	1961 TRUCK	LOCAL	3.MI.	NO-NBL	0.0	20.0	GOOD	NO
B-14	4:05PM	CAL.-397ALL	VW	1970	HIGHWAY	60.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-15	0:00AM	CAL.-659EDM	CHEVY	1972 VEGA	LOCAL	3.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-16	4:30PM	CAL.-056HXH	OLDSMOBILE	1973 TORONADO	HIGHWAY	90.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-17	4:45PM	CAL.-052FQV	DODGE	1972 COLT	LOCAL	2.MI.	NO-NBL	0.0	0.0	FORCE	NO
B-18	5:00PM	CAL.-250EDQ	DODGE	1972 DART	HIGHWAY	15.MI.	NO-ATB	0.0	100.0	FORCE	NO

STATION- STAND(EMCO-WHEATON/OPW)

DATE- 8/ 5/74

AVE. UNDERGROUND TANK TEMP- 77.2 F

PUMP	TIME	VEHICLE TANK TEMP (DEG. F)	VEHICLE TANK PRESS (IN. H2O)	GAS (GALS)	DISP. (MIN.)	DISP. (DEG F)	RET VAPOR (DEG F)	INITIAL VOLUME (FT3)	FINAL VOLUME (FT3)	HYDCRSN CNC.	RET LINE PRESS (IN H2O)
A-31	12:55	87.0	0.0	9.1	2.7	83.0	84.0	236.536	237.582	68.2%	-0.260
A-32	1:14	95.0	0.0	6.7	0.0	85.0	84.0	237.607	238.460	67.0%	0.100
A-33	1:36	55.0	0.0	5.5	1.6	84.0	84.0	238.472	239.288	57.0%	0.230
A-34	1:45	69.0	0.0	12.3	2.9	84.0	84.0	239.123	240.483	69.0%	0.020
A-35	1:42	106.0	0.0	14.8	3.4	85.0	83.0	240.433	241.487	69.0%	-0.260
A-36	2:04	95.0	0.0	9.1	2.6	83.0	85.0	241.487	242.168	69.0%	-0.120
A-37	2:43	102.0	0.0	12.3	2.9	85.0	87.0	242.173	243.165	65.0%	-0.260
A-38	3:03	104.0	1.4	19.4	2.0	83.0	87.0	243.166	245.169	67.5%	-0.260
A-39	2:53	107.0	0.0	12.9	3.0	83.0	87.0	245.487	246.483	69.5%	-0.100
A-40	3:12	94.0	2.2	17.6	4.2	85.0	94.0	246.672	248.587	67.2%	0.100
A-41	3:26	91.0	0.4	12.0	2.0	85.0	90.0	248.628	249.927	67.0%	0.120
A-42	3:39	103.0	0.3	15.1	3.5	85.0	92.0	249.927	251.353	66.5%	-0.225
A-43	3:43	92.0	0.0	10.3	2.5	85.0	93.0	251.354	252.663	67.5%	-0.100
A-44	4:00	94.0	0.0	14.2	3.5	92.0	95.0	252.671	254.393	68.0%	0.040
A-45	4:03	96.0	0.0	7.3	1.7	85.0	92.0	254.398	255.042	68.0%	0.062
A-46	4:10	115.0	-0.2	15.8	3.6	84.0	93.0	255.043	255.922	71.0%	-0.250
A-47	4:19	92.0	0.0	8.3	2.9	85.0	92.0	255.922	256.177	71.0%	0.270
A-48	4:23	107.0	0.0	12.3	2.8	86.0	93.0	256.795	258.084	69.5%	-0.300
A-49	4:30	94.0	0.0	8.5	1.5	86.0	93.0	256.177	256.794	68.5%	0.050
A-50	4:55	90.0	0.0	8.0	2.0	85.0	93.0	258.998	258.860	68.6%	-0.250
B-01	4:40	84.0	0.0	12.0	1.9	84.0	93.0	0.189	1.275	0.0%	0.222
B-02	4:20	9.0	0.0	5.0	1.0	84.0	93.0	1.281	1.865	95.5%	0.282
B-03	4:45	84.0	0.0	7.2	1.1	84.0	92.0	1.856	2.713	78.8%	-0.262
B-04	4:50	98.0	-0.1	11.0	2.1	86.0	92.0	2.731	3.427	64.0%	-0.142
B-05	2:10	102.0	0.0	10.4	2.0	86.0	94.0	3.429	4.302	57.0%	0.122
B-06	2:16	76.0	0.0	11.7	2.0	91.0	102.0	4.304	5.780	65.0%	0.020
B-07	2:30	103.0	0.0	23.2	3.0	78.0	97.0	5.781	7.404	63.5%	-0.280
B-08	2:45	94.0	0.0	7.7	1.3	103.0	94.0	7.415	7.458	61.0%	-0.263
B-09	3:05	100.0	0.0	10.2	1.4	85.0	99.0	7.482	7.847	45.0%	-0.243
B-10	3:15	94.0	0.0	15.0	2.7	87.0	102.0	7.851	9.628	51.5%	-0.120
B-11	3:40	127.0	0.0	4.6	0.9	90.0	100.0	9.840	12.152	63.0%	-0.160
B-12	3:50	105.0	0.2	7.8	1.5	90.0	103.0	12.157	12.835	72.0%	-0.142
B-13	4:00	87.0	0.0	12.5	2.2	95.0	105.0	13.845	12.450	59.5%	-0.120
B-14	4:05	83.0	0.0	8.4	1.6	82.0	90.0	12.469	13.530	65.5%	-0.263
B-15	4:10	101.0	0.0	7.1	1.3	82.0	91.0	13.538	14.242	91.5%	-0.223
B-16	4:30	119.0	0.0	18.6	3.5	85.0	95.0	14.302	15.005	92.0%	-0.200
B-17	4:45	9.0	0.0	10.1	1.9	83.0	93.0	15.015	15.095	87.2%	-0.223
B-18	5:00	96.0	2.0	11.7	2.3	88.0	93.0	16.109	17.260	34.0%	-0.040

STATION- STAND(EMCO-WHEATON/OPW)

DATE- 8/6/74

AVE. UNDERGROUND TANK TEMP- 77.5 F

PUMP	TIME	LIC. NO.	MAKE	MODEL	TYPE OF DRIVING	DISTANCE TRAVELED	UK CHK	RVP	EXPLUS.	NUZZLE FIT	SPLITBACK
A-01	7:24AM	GOVI-G1149367	FORD	1971 CUSTOM	LOCAL	0.MI.	NO-NBL	0.0	100.0	GOOD	
A-02	7:25AM	CAL.-XGM-133	FORD	1968 FALCON	LOCAL	1.MI.	NO-ATB	0.0	100.0	FORCE	YES
A-03	7:46AM	CAL.-E813363	PLYMOUTH	1970	LOCAL	4.MI.	PS-BSL	0.0	0.0	FORCE	NO
A-04	7:55AM	CAL.-UML569	RAMBLER	1967	LOCAL	2.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-05	8:05AM	CAL.-KXX194	DODGE	1965	LOCAL	2.MI.	NO-NBL	0.0	25.0	GOOD	NO
A-06	8:15AM	CAL.-914HGV	VW	1970	LOCAL	2.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-07	8:22AM	CAL.-153BOT	FORD	1970 MAVERICK	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-08	8:29AM	CAL.-349FJU	FORD	1972 TORINO	HIGHWAY	9.MI.	NO-ATB	0.2	20.0	FORCE	NO
A-09	8:45AM	CAL.-C3254K	FORD	1970 CUSTOM PU	HIGHWAY	10.MI.	NO-NBL	0.0	80.0	GOOD	NO
A-10	9:05AM	CAL.-A33R03	FORD	1969 TRUCK	LOCAL	3.MI.	NO-NBL	0.0	100.0	POOR	NO
A-11	9:29AM	CAL.-XOK086	CHEV.	1968	LOCAL	2.MI.	NO-NBL	6.8	10.0	GOOD	NO
A-12	9:35AM	CAL.-T-10304	I.H.	1966 PICKUP	HIGHWAY	4.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-13	10:10AM	CAL.-748FDF	BUICK	1972 LE SABRE	LOCAL	2.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-14	10:40AM	CAL.-787HKG	FORD	1973 LTD	HIGHWAY	150.MI.	NO-ATB	0.0	100.0	FORCE	
A-15	10:43AM	CAL.-48427T	1974 GMC	SUPER CUSTOM	HIGHWAY	150.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-16	10:53AM	CAL.-062EEZ	MERCURY	1972 MONTEGO	LOCAL	6.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-17	11:05AM	CAL.-613EEQ	FORD	1971 LTD	LOCAL	10.MI.	NO-ATB	0.0	100.0	FORCE	
A-18	11:45AM	CAL.-XG863R	PLYMOUTH	1970 SW	HIGHWAY	75.MI.	NO-NBL	0.0	40.0	GOOD	NO
A-19	12:00PM	CAL.-WN8819	VW	1968	LOCAL	3.MI.	NO-NBL	0.0	45.0	GOOD	NO
A-20	12:19PM	CAL.-504EFZ	FORD	1972 TORINO	HIGHWAY	12.MI.	NO-ATB	0.0	100.0	FORCE	NO
A-21	12:27PM	CAL.-66439N	FORD	1973 S. VAN	HIGHWAY	30.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-22	12:45PM	CAL.-178KVA	1974 CHEVY	MALIBU S W	LOCAL	5.MI.	PS-BSL	0.0	0.0	FORCE	NO
A-23	12:50PM	NASH-0NA591	CHEV.	1969 CAMERO	HIGHWAY	60.MI.	PS-BSL	0.0	0.0	FORCE	NO
A-24	1:00PM	CAL.-082-JAY	1973 FORD	COUNTRY SQUIRE	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-25	1:24PM	CAL.-06752N	CHEVY	1973 TRUCK	LOCAL	8.MI.	NO-NBL	0.0	100.0	POOR	NO
A-26	1:40PM	CAL.-690ARL	VW	1971	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	
A-27	2:00PM	CAL.-966CHQ	MG	1971	LOCAL	0.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-28	2:05PM	CAL.-ILDEW	FORD	1973 WAGON	LOCAL	1.MI.	NO-ATB	0.0	100.0	FORCE	NO
A-29	2:12PM	CAL.-69-435P	GMC	1973 TRUCK	LOCAL	4.MI.	PS-BSL	0.0	0.0	FORCE	NO
A-30	2:20PM	GOVY-G1149367	FORD	1971 CUSTOM	LOCAL	0.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-31	2:40PM	CAL.-278-JBQ	DODGE	1974 DART	HIGHWAY	60.MI.	PS-BSL	6.6	0.0	FORCE	NO
A-32	3:00PM	CAL.-BK4369	FORD	1962 FAIRLANE	HIGHWAY	80.MI.	PS-BSL	0.0	0.0	FORCE	NO
A-33	3:00PM	CAL.-WUZ340	1968 FORD	COUNTRY SEDAN	HIGHWAY	125.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-01	7:30AM	CAL.-04-199-U	DODGE	1974 TRUCK 200	LOCAL	2.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-02	7:40AM	CAL.-226-AOG	VW	1970 BUG	LOCAL	2.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-03	0:00AM	CAL.-ZLU549	TOYOTA	1969	HIGHWAY	25.MI.	NO-NBL	0.0	20.0	GOOD	NO
B-04	7:55AM	CAL.-033FDF	CHRYSLER	1971 IMPERIAL	HIGHWAY	30.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-05	0:00AM	CAL.-VYZ927	VALIANT	1968	LOCAL	20.MI.	FL-ATB	0.0	0.0	FORCE	NO
B-06	8:20AM	CAL.-444DHX	PONTIAC	1971 FIREBIRD	LOCAL	15.MI.	NO-ATB	0.0	100.0	FORCE	NO
B-07	8:25AM	CAL.-VJN624	OPEL	1967 WAGON	LOCAL	6.MI.	NO-NBL	8.0	100.0	GOOD	
B-08	8:35AM	CAL.-AVA614	PLYMOUTH	1964 BELVEDERE	LOCAL	2.MI.	NO-NBL	6.7	100.0	GOOD	NO
B-09	8:55AM	CAL.-VJC039	JEEP	1965 WAGONEER	HIGHWAY	25.MI.	NO-NBL	0.0	100.0	POOR	NO
B-10	9:10AM	CAL.-705GES	MERCURY	1973 WAGON	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-11	9:20AM	CAL.-719HCE	CHEVY	1973 MALIBU	LOCAL	2.MI.	NO-ATB	0.0	100.0	FORCE	NO
B-12	9:30AM	CAL.-291FDD	CHEVY	1972 NOVA	LOCAL	1.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-13	9:55AM	CAL.-298-FXP	BUICK	1973 SKYLARK	HIGHWAY	150.MI.	NO-ATB	6.7	100.0	FORCE	NO
B-14	10:05AM	CAL.-773JTF	1973 CADILLAC	SEDAM DE VILLE	HIGHWAY	75.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-15	10:25AM	CAL.-63899M	DODGE	73 1/2 TON PU	LOCAL	1.MI.	NO-NBL	7.9	100.0	GOOD	NO
B-16	10:40AM	CAL.-33539-S	FORD	73 COURIER	HIGHWAY	15.MI.	NO-NBL	0.0	100.0	GOOD	
B-17	10:50AM	CAL.-029 JAY	DODGE	1973 DART	LOCAL	1.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-18	11:15AM	CAL.-VPD488	FORD	1964 CUSTOM	LOCAL	3.MI.	NO-NBL	0.0	100.0	GOOD	NO

STATION- STAND(EMCO-WHEATON/OPW)

DATE- 8/ 6/74

AVE. UNDERGROUND TANK TEMP- 77.5 F

PUMP	TIME	LIC. NO.	MAKE	MODEL	TYPE OF DRIVING	DISTANCE	LK CHA	RVP	EXPLOS.	NOZZLE FIT	SPITBACK
B-19	11:50AM	CAL.-722FQU	1972 DODGE	CRESTWOOD SW	LOCAL	10.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-20	12:00PM	CAL.-WHT816	CHEV.	1968 IMPALA	HIGHWAY	80.MI.	NO-NBL	0.0	100.0	GOOD	YES
B-21	12:10PM	NEV.-W26-300	LINCOLN	MARK II	HIGHWAY	144.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-22	12:20PM	CAL.-935-DXJ	CHEV.	1971 VEGA	LOCAL	5.MI.	NO-ATB	0.0	100.0	FORCE	NO
B-23	12:40PM	CAL.-728EDT	FORD	1972 LTD	LOCAL	1.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-24	12:45PM	CAL.-825953	PLYMOUTH	1973 VALIANT		76.MI.	NO-ATB	0.0	0.0	FORCE	NO
B-25	1:05PM	CAL.-654AFC	VW	1971	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-26	1:15PM	CAL.-1EMP	DODGE	1974 COLT	HIGHWAY	200.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-27	1:25PM	CAL.-55174L	FORD	1972 RANCHERO	HIGHWAY	125.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-28	1:40PM	CAL.-9958GV	CHRYSLER	1970	HIGHWAY	2.MI.	NO-ATB	0.0	10.0	FORCE	NO
B-29	2:05PM	CAL.-422LFH	PLYMOUTH	1974 DUSTER	LOCAL	4.MI.	NO-ATB	0.0	20.0	FORCE	NO
B-30	2:10PM	CAL.-K91521	INTERNATIONAL	1961 TRUCK	LOCAL	3.MI.	NO-NBL	0.0	15.0	GOOD	NO
B-31	2:30PM	CAL.-SNW426	FORD	1965 FAIRLANE	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-32	2:30PM	CAL.-693 CHO	DAISUN 510	1971	HIGHWAY	75.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-33	2:50PM	CAL.-720GDC	VOLVO 164-E	1972	LOCAL	3.MI.	NO-NBL	0.0	100.0	POOR	NO
B-34	3:00PM	DEL.-PC40862	CHEV.	BEL AIRE 1966	LOCAL	60.MI.	NO-NBL	0.0	55.0	GOOD	NO

STATION- STAND(EMCO-WHEATON/QPW)

DATE- 8/ 6/74

AVE. UNDERGROUND TANK TEMP- 77.5 F

PUMP	TIME	VEHICLE TANK TEMP (DEG. F)	VEHICLE TANK PRESS (IN. H2O)	GAS DISP (GALS)	DISP TIME (MIN.)	DISP TEMP (DEG F)	RET VAPOR TEMP (DEG F)	INITIAL VOLUME (FT3)	FINAL VOLUME (FT3)	HYDCRBN CONC. (IN H2O)	RET LINE PRESS (IN H2O)
A-21	7:24	68.0	0.0	5.4	0.6	65.0	67.0	258.854	259.595	65.0%	0.100
A-22	7:25	75.0	0.0	10.4	2.4	78.0	73.0	259.597	260.663	65.0%	0.102
A-23	7:46	78.0	0.0	12.2	2.8	81.0	77.0	260.742	262.348	62.0%	0.100
A-24	7:55	72.0	0.0	13.5	3.1	83.0	72.0	262.348	263.783	62.5%	0.100
A-25	8:05	76.0	0.0	21.9	5.3	83.0	81.0	263.790	266.528	62.5%	0.100
A-26	8:15	74.0	0.0	5.6	1.3	82.0	82.0	266.540	267.325	59.0%	0.325
A-27	8:22	69.0	0.0	12.0	2.8	82.0	82.0	267.325	268.747	59.0%	-0.022
A-28	8:29	84.0	7.5	19.9	4.6	83.0	80.0	268.748	271.478	59.0%	0.205
A-29	8:45	76.0	0.0	16.7	3.9	82.0	80.0	271.481	273.784	59.0%	0.120
A-10	9:05	76.0	0.0	14.3	3.4	83.0	80.0	273.794	275.415	58.5%	0.100
A-11	9:29	73.0	0.0	8.9	2.1	83.0	82.0	275.857	276.948	57.5%	0.120
A-12	9:35	70.0	0.0	10.0	2.3	83.0	82.0	276.974	277.603	57.0%	0.200
A-13	10:10	83.0	0.0	18.4	4.3	83.0	80.0	277.615	279.914	56.5%	0.227
A-14	10:40	91.0	0.1	6.7	1.6	83.0	83.0	279.915	281.163	55.5%	0.300
A-15	12:43	70.0	0.0	14.2	3.3	83.0	83.0	281.164	281.340	57.0%	-2.123
A-16	12:53	92.0	0.0	11.0	2.6	83.0	84.0	281.040	282.173	56.5%	-0.253
A-17	11:05	83.0	0.4	12.3	2.9	83.0	84.0	282.172	283.440	56.0%	-0.050
A-18	11:45	92.0	0.0	11.9	2.8	85.0	86.0	283.340	284.172	55.5%	-0.122
A-19	12:00	67.0	0.0	8.9	2.1	85.0	86.0	284.172	285.286	55.0%	0.100
A-20	12:19	94.0	0.0	7.2	1.7	85.0	87.0	285.298	285.299	54.0%	-0.120
A-21	12:27	80.0	0.0	17.6	4.1	85.0	87.0	285.300	286.728	55.0%	-0.100
A-22	12:45	98.0	0.1	12.4	2.9	84.0	88.0	286.730	288.045	55.5%	-0.100
A-23	12:53	122.0	0.0	12.8	3.0	84.0	90.0	288.048	288.529	56.0%	-0.100
A-24	1:00	82.0	0.0	13.3	2.3	83.0	89.0	288.529	289.859	56.0%	-0.222
A-25	1:24	105.0	0.0	10.0	2.2	84.0	90.0	289.860	289.990	53.0%	-0.200
A-26	1:40	96.0	0.4	9.0	2.1	85.0	93.0	289.993	290.915	54.0%	-0.150
A-27	2:00	97.0	0.0	5.4	1.2	87.0	97.0	290.915	291.473	54.0%	-0.200
A-28	2:05	95.0	0.2	14.3	3.4	86.0	96.0	291.474	292.975	54.0%	-0.300
A-29	2:12	112.0	0.2	17.3	4.9	85.0	96.0	292.978	294.665	54.5%	-0.350
A-30	2:22	95.0	0.3	8.3	2.0	87.0	97.0	294.740	295.619	55.0%	-0.400
A-31	2:40	111.0	0.3	10.1	2.4	87.0	100.0	295.581	296.615	56.0%	-0.150
A-32	3:00	103.0	0.7	12.3	2.8	88.0	101.0	296.615	297.227	55.0%	-0.150
A-33	3:30	97.0	0.6	9.0	1.9	86.0	96.0	297.227	297.735	55.0%	-0.050
B-21	7:38	82.0	0.0	19.1	3.6	74.0	71.0	17.287	17.774	55.5%	-0.163
B-22	7:40	78.0	0.0	5.4	1.4	77.0	75.0	17.761	18.654	70.0%	-0.140
B-23	7:50	92.0	0.0	7.5	1.3	82.0	77.0	18.655	19.511	72.0%	-0.200
B-24	7:55	82.0	0.0	16.6	3.1	82.0	77.0	19.512	21.321	70.5%	-0.140
B-25	8:40	75.0	0.0	8.3	1.6	82.0	77.0	21.327	22.407	67.0%	-0.140
B-26	8:40	122.0	0.5	5.4	1.0	83.0	81.0	22.454	22.983	68.0%	-0.180
B-27	8:25	93.0	0.0	5.4	1.0	87.0	81.0	23.017	23.286	67.0%	-0.200
B-28	8:35	72.0	0.0	9.3	1.6	82.0	78.0	23.286	24.418	68.0%	-0.160
B-29	8:55	92.0	0.0	11.2	2.8	81.0	77.0	24.451	24.537	73.5%	-0.160
B-30	9:10	78.0	0.0	5.0	0.9	77.0	77.0	24.568	25.220	66.0%	-0.100
B-31	9:20	88.0	2.0	12.7	1.2	78.0	77.0	25.223	25.250	73.0%	-0.322
B-32	9:30	63.0	2.5	10.9	2.0	78.0	73.0	25.259	26.732	66.0%	0.250
B-33	9:55	121.0	3.1	7.0	1.1	76.0	74.0	26.765	26.775	66.5%	0.020
B-34	10:25	96.0	1.3	6.5	1.2	81.0	80.0	26.792	27.276	50.5%	0.020
B-35	10:25	73.0	0.0	14.3	2.1	82.0	81.0	27.136	29.313	52.0%	0.240
B-36	10:40	86.0	2.2	9.1	1.6	80.0	82.0	29.043	29.937	62.5%	0.030
B-37	10:50	80.0	2.1	11.6	2.3	82.0	82.0	29.969	31.574	72.5%	0.132
B-38	11:15	82.0	0.0	15.5	2.3	82.0	83.0	31.594	32.959	62.5%	0.090

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5

STATION= STAND(ENCO-WHEATON/DPW)

DATE= 8/ 6/74

AVE. UNDERGROUND TANK TEMP= 77.5 F

PUMP	TIME	VEHICLE TANK TEMP (DEG. F)	VEHICLE TANK PRESS (IN. H2O)	GAS DISP (GALS)	DISP TIME (MIN.)	DISP TEMP (DEG F)	RET VAPOR TEMP (DEG F)	INITIAL VOLUME (FT3)	FINAL VOLUME (FT3)	HYDRENE CONC. (IN H2O)	RET LINE PRESS
B-19	11:50	89.3	0.0	18.1	2.2	85.0	107.0	32,998	34,090	65.2%	-0.220
B-20	12:00	96.0	0.0	7.2	1.4	85.0	85.0	34,113	34,355	45.0%	0.390
B-21	12:10	111.0	0.0	20.1	3.8	86.0	85.0	34,361	35,462	63.0%	0.150
B-22	12:20	101.0	0.0	7.7	1.5	85.0	86.0	35,476	36,218	63.2%	-0.260
B-23	12:40	96.0	0.0	7.3	1.4	87.0	86.0	36,246	36,941	67.0%	0.310
B-24	12:45	93.0	0.0	10.8	2.1	86.0	86.0	36,956	37,661	76.2%	0.230
B-25	1:05	96.0	0.0	7.0	1.2	88.0	85.0	37,754	38,361	79.0%	0.180
B-25	1:15	109.0	0.2	8.2	1.6	88.0	87.0	38,775	38,933	74.0%	0.212
B-27	1:25	107.0	0.0	9.0	1.2	85.0	85.0	38,948	39,572	76.0%	0.282
B-28	1:40	96.0	3.0	10.0	1.9	88.0	87.0	39,675	42,965	76.5%	0.260
B-29	2:05	97.0	3.1	14.0	2.3	86.0	92.0	40,965	42,742	77.0%	0.180
B-30	2:10	95.0	0.0	11.0	2.2	88.0	89.0	42,742	43,627	82.0%	0.120
B-31	2:30	98.0	0.0	11.3	2.0	85.0	92.0	43,639	44,222	67.0%	-0.150
B-32	2:32	101.0	0.0	8.9	1.8	88.0	92.0	44,232	44,401	67.5%	-0.010
B-33	2:50	99.0	0.0	14.1	2.7	92.0	96.0	44,425	44,825	72.0%	-0.230
B-34	3:00	101.0	0.0	9.0	1.7	92.0	97.0	44,757	45,772	49.0%	0.050

STATION- STAND (EMCO-WHEATON/OPW)

DATE- 8/7/74

AVE. UNDERGROUND TANK TEMP- 79.5 F

PUMP	TIME	LIC. NO.	MAKE	MODEL	TYPE OF DRIVING	DISTANCE TRAVELED	LR CRK	RESULT	RVP	EXPLOS.	NOZZLE	FIT	SPITBACK
A-01	12:08PM	CAL.-845ECC	FORD	1972 LTD	LOCAL	1.MI.	NO-ATB	0.0	100.0	FORCE	NO		
A-02	12:20PM	CAL.-095RGW	FORD	1970 TORINO	LOCAL	1.MI.	PS-BSL	8.2	0.0	FORCE	NO		
A-03	12:30PM	CAL.-334EDG	FORD	1972 TORINO	LOCAL	15.MI.	NO-NBL	0.0	0.0	GOOD	NO		
A-04	12:37PM	CAL.-833JVT	VW	1969	HIGHWAY	30.MI.	NO-NBL	0.0	100.0	GOOD	NO		
A-05	12:45PM	CAL.-870RVU	VW	1971	HIGHWAY	13.MI.	NO-NBL	0.0	0.0	GOOD	NO		
A-06	1:08PM	CAL.-30877B	FORD	1968 TRUCK	LOCAL	5.MI.	NO-NBL	7.5	100.0	POOR	NO		
A-07	1:25PM	CAL.-5826GC	CHEV.	1970 CHEVELLE	LOCAL	1.MI.	NO-ATB	0.0	20.0	FORCE	NO		
A-08	1:40PM	CAL.-DL610	BUICK	1974 CENTURY	HIGHWAY	150.MI.	PS-ATB	0.0	0.0	FORCE	NO		
A-09	2:00PM	CAL.-TOR-073	VW	1963 WAGON	LOCAL	2.MI.	NO-NBL	0.0	100.0	POOR			
A-10	2:10PM	CAL.-YLZ244	RAMBLER	1969	LOCAL	16.MI.	NO-NBL	0.0	100.0	POOR			
A-11	2:30PM	CAL.-998FQG	FORD	1973 GALAXIE	HIGHWAY	3.MI.	NO-NBL	7.8	10.0	GOOD			
A-12	2:45PM	CAL.-844JWE	1972 FORD	GRAND TORINO SW	HIGHWAY	30.MI.	NO-ATB	0.0	100.0	FORCE	NO		
A-13	3:00PM	CAL.-551EMI	1972 FORD	COUNTRY SQUIRE	HIGHWAY	30.MI.	NO-NBL	0.0	10.0	GOOD	NO		
A-14	3:10PM	CAL.-482JAY	1973 FORD	COUNTRY SQUIRE	LOCAL	3.MI.	NO-NBL	0.0	100.0	GOOD			
A-15	3:20PM	CAL.-594511	AMERICAN MOTORS	1972 HORNET	LOCAL	0.MI.	NO-NBL	0.0	100.0	GOOD			
A-16	3:45PM	CAL.-575BVA	1970 OLDSMOBILE	CUTLASS WAGON	LOCAL	2.MI.	NO-NBL	0.0	100.0	POOR			
A-17	4:00PM	CAL.-64289P	FORD	1974 RANCHERO	LOCAL	9.MI.	NO-ATB	0.0	100.0	FORCE			
A-18	4:15PM	CAL.-AVE109	FORD	1966 FURY	LOCAL	100.MI.	NO-NBL	0.0	55.0	GOOD			
A-19	4:32PM	CAL.-999KTP	1974 FORD	PINTO WAGON	LOCAL	8.MI.	NO-ATB	7.0	20.0	FORCE	NO		
A-20	4:45PM	CAL.-8DTJUN	1973	CORONA WAGON	HIGHWAY	230.MI.	NO-NBL	0.0	100.0	GOOD			
A-21	5:00PM	CAL.-820DNT	CHEV.	1971 MALIBU	HIGHWAY	70.MI.	PS-BSL	6.4	0.0	FORCE			
A-22	5:20PM	CAL.-8QV394	FORD	1958 COMET	LOCAL	1.MI.	NO-NBL	0.0	60.0	POOR	NO		
A-23	5:27PM	CAL.-699JB8	FORD	1973 PINTO	LOCAL	0.MI.	NO-NBL	0.0	55.0	GOOD	NO		
A-24	5:45PM	CAL.-XUT1466	VW	1969 WAGON	HIGHWAY	90.MI.	NO-NBL	0.0	100.0	GOOD			
A-25	6:00PM	CAL.-202KUS	OLDSMOBILE	1967 CUTLASS	HIGHWAY	22.MI.	NO-NBL	0.0	100.0	POOR			
A-26	6:05PM	CAL.-UMJ265	CHEV.	1967 MALIBU	HIGHWAY	17.MI.	NO-NBL	7.3	100.0	GOOD			
A-27	6:13PM	CAL.-34986S	TOYOTA	1971 PICK UP	LOCAL	25.MI.	NO-NBL	0.0	100.0	GOOD	NO		
A-28	6:20PM	CAL.-NASS581	FORD	1964 FALCON	LOCAL	3.MI.	NO-NBL	0.0	100.0	POOR			
A-29	7:47AM	CAL.-HDW037	FORD	1955 FORDOMATIC	HIGHWAY	10.MI.	NO-NBL	0.0	100.0	POOR	NO		
A-30	7:47AM	CAL.-WHD569	FORD	1968 MUSTANG	LOCAL	3.MI.	NO-NBL	0.0	100.0	GOOD	NO		
A-31	7:00AM	CAL.-254-JWC	TOYOTA	1972 CELICA	LOCAL	5.MI.	NO-NBL	8.1	20.0	GOOD	NO		
B-01	12:10PM	CAL.-145EEZ	CHEV.	1972 NOVA	LOCAL	2.MI.	PS-SSL	7.2	0.0	FORCE	NO		
B-02	12:40PM	CAL.-CVC614	MERCURY	1971 COUGAR	HIGHWAY	100.MI.	NO-NBL	0.0	0.0	GOOD	NO		
B-03	12:45PM	CAL.-PLG037	1956 LINCOLN	CONTINENTAL	LOCAL	3.MI.	PL-ATB	0.0	0.0	FORCE	NO		
B-04	0:00AM	CAL.-TCS114	VW	1966 BUG	HIGHWAY	70.MI.	NO-NBL	0.0	100.0	POOR	NO		
B-05	1:25PM	CAL.-697GOS	THUNDERBIRD	1973	HIGHWAY	2.MI.	NO-NBL	0.0	0.0	GOOD			
B-06	1:45PM	CAL.-35003B	FORD	1967 PICK UP	LOCAL	30.MI.	NO-NBL	7.8	100.0	GOOD	NO		
B-07	2:15PM	CAL.-YUB-234	AUSTIN AMERICAN	1969	HIGHWAY	5.MI.	NO-NBL	0.0	20.0	GOOD	NO		
B-08	2:15PM	CAL.-CY24 DEAL.	POYCHE 911	1974	LOCAL	3.MI.	NO-NBL	0.0	100.0	POOR	NO		
B-09	2:10PM	CAL.-20593K	CHEV.	1974 PICKUP	HIGHWAY	23.MI.	NO-NBL	0.0	100.0	POOR	YES		
B-10	2:55PM	CAL.-765AXC	FORD	1970 VAN	LOCAL	3.MI.	NO-NBL	0.0	100.0	POOR	YES		
B-11	2:55PM	CAL.-409FGD	FORD	1973 PINTO	HIGHWAY	75.MI.	PS-BSL	6.6	0.0	FORCE			
B-12	3:00PM	CAL.-826JAW	DODGE	1973 DART	LOCAL	15.MI.	NO-NBL	0.0	100.0	GOOD	NO		
B-13	3:25PM	CAL.-617HKS	MERCURY	1973 MONTEGO	LOCAL	0.MI.	NO-NBL	0.0	35.0	GOOD	NO		
B-16	3:25PM	CAL.-JIMC04	FPRD	1973 RANCHERO	HIGHWAY	90.MI.	PS-BSL	0.0	0.0	FORCE	NO		
B-17	3:55PM	CAL.-VJ4011	1962 CHEV.	BELAIRE WAGON	HIGHWAY	30.MI.	NO-NBL	5.9	100.0	GOOD			
B-18	4:05PM	CAL.-719HCE	CHEV.	1973 CHEVELLE	HIGHWAY	18.MI.	NO-NBL	0.0	100.0	POOR	NO		
B-19	4:30PM	CAL.-905-FMT	CHEV.	1973 VEGA	LOCAL	4.MI.	NO-ATB	0.0	100.0	FORCE	NO		
B-20	4:40PM	CAL.-317BG4	PONTIAC	1970 FIREBIRD	HIGHWAY	17.MI.	PS-BSL	0.0	0.0	FORCE	NO		
B-21	5:00PM	CAL.-66-392-8	FORD	1963 FALCON	HIGHWAY	21.MI.	NO-NBL	0.0	20.0	GOOD	NO		
B-22	5:10PM	CAL.-844-JAM	MERCURY	1973 CAPRI	HIGHWAY	15.MI.	NO-NBL	0.0	0.0	GOOD	NO		

STATION- STAND(EMCO-WHEATON/OPW)

DATE- 8/ 7/74

AVE. UNDERGROUND TANK TEMP- 79.5 F

PUMP	TIME	LIC. NO.	MAKE	MODEL	TYPE OF DRIVING	DISTANCE TRAVELED	DK CHK NO-NBL	RVP	EXPLOS.	NUZZLE FIT	SPIKEBACK
B-23	5:40PM	CAL.-ASH964	RAMBLEP	1964 AMERICAN	HIGHWAY	45.MI.	NO-ATB	7.9	100.0	POOR	YES
B-24	6:00PM	CAL.-165GDD	1972 CADILLAC	COUPE DE VILLE	LOCAL	1.MI.	NO-NBL	0.0	100.0	FORCE	NO
B-25	6:00PM	CAL.-122AXU	VW	1970	LOCAL	10.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-26	6:20PM	CAL.-MZX-709	RAMBLER	1963 AMERICAN	HIGHWAY	55.MI.	NO-NBL	0.0	100.0	POOR	NO
B-27	6:30PM	CAL.-MZZ-837	1963 VW	KARMANGIA		5.MI.	NO-NBL	0.0	100.0	POOR	NO
B-28	6:50PM	CAL.-771JVG	CHEV. WAGON	1972 CONCOURSE	HIGHWAY	220.MI.	PS-BSL	6.9	0.0	FORCE	NO
B-29	6:55PM	CAL.-SNE-064	AMBASSADOR	1966 WAGON	HIGHWAY	1.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-30	7:00AM	CAL.-657BGD	CHEV.	1969 CAMARO	LOCAL	3.MI.	NO-NBL	0.0	60.0	GOOD	NO
B-31	7:07AM	CAL.-63951-M	DODGE	1973 VAN	LOCAL	3.MI.	NO-NBL	0.0	0.0	GOOD	NO

STATION- STAND(EMCO-WHEATON/GPW)

DATE- 8/7/74

AVE. UNDERGROUND TANK TEMP= 79.5 F

PUMP	TIME	VEHICLE (DEG. F)	VEHICLE TANK TEMP (IN. H2O)	GAS (GALS)	DISP TIME (MIN.)	DISP TEMP (DEG F)	RET VAPOR TEMP (DEG F)	INITIAL VOLUME (FT3)	FINAL VOLUME (FT3)	HYDCRBN CONC. (IN. H2O)	RET LINE PRESS (IN. H2O)
A-31	12:13	84.3	0.0	17.4	4.1	85.0	85.0	297,737	299,872	80.0%	-2.150
A-32	12:20	79.3	2.1	7.4	2.8	86.0	85.0	299,873	300,820	75.0%	3.120
A-33	12:30	55.3	0.0	16.2	3.8	86.0	86.0	302,820	302,847	75.0%	2.150
A-34	12:37	94.0	0.0	9.1	2.1	85.0	85.0	322,848	303,973	74.0%	2.150
A-35	12:45	88.0	0.0	10.3	2.4	86.0	88.0	323,987	305,347	72.5%	-2.200
A-36	1:18	79.0	0.0	13.3	3.1	85.0	88.0	305,352	305,970	78.0%	3.130
A-37	1:25	85.0	2.6	12.8	3.0	86.0	87.0	325,982	328,559	73.0%	0.100
A-38	1:44	84.0	-0.2	11.5	2.7	89.0	90.0	328,605	329,291	74.0%	-2.200
A-39	2:12	85.0	0.0	7.7	2.7	89.0	83.0	329,293	309,295	73.0%	-2.200
A-40	2:19	124.3	0.0	5.3	1.3	88.0	95.0	329,298	309,356	73.0%	-2.200
A-41	2:36	124.0	0.0	19.8	4.7	88.0	95.0	329,740	311,008	72.0%	-3.230
A-42	2:45	99.0	0.4	11.8	3.0	88.0	97.0	311,860	313,137	74.0%	-3.200
A-43	3:10	129.0	0.0	9.1	3.1	88.0	95.0	313,480	314,165	66.0%	-2.200
A-44	3:19	126.0	0.0	15.8	3.7	88.0	95.0	314,167	315,234	67.0%	-0.200
A-45	3:28	96.0	0.0	11.2	1.2	87.0	93.0	315,233	316,236	65.5%	-0.500
A-46	3:45	84.0	0.0	13.2	2.1	88.0	97.0	316,044	316,250	66.0%	-0.200
A-47	4:10	96.0	0.0	10.8	1.2	87.0	95.0	316,053	317,122	66.5%	-0.200
A-48	4:15	109.0	0.0	19.4	4.5	87.0	95.0	317,737	318,493	65.2%	-2.200
A-49	4:32	101.0	0.0	6.8	0.8	87.0	97.0	318,493	319,035	64.5%	-2.100
A-50	4:45	95.0	0.0	8.8	2.1	87.0	93.0	319,047	319,915	67.0%	0.100
A-51	5:00	122.0	0.0	16.5	1.8	86.0	90.0	319,918	320,983	66.0%	-0.300
A-52	5:20	86.0	0.0	15.5	1.7	85.0	92.0	320,985	322,732	66.0%	-2.200
A-53	5:27	88.0	0.0	5.4	1.3	87.0	88.0	322,732	323,288	63.5%	-2.200
A-54	5:45	84.0	0.0	7.5	2.8	87.0	88.0	323,294	324,126	64.5%	-2.200
A-55	6:00	94.0	0.0	4.3	1.0	85.0	86.0	324,110	324,543	65.0%	-0.200
A-56	6:15	92.0	0.0	12.5	1.4	87.0	88.0	324,544	325,357	67.0%	-0.050
A-57	6:13	89.0	0.0	11.6	1.3	87.0	88.0	325,358	326,788	62.2%	0.200
A-58	6:28	93.0	0.0	5.4	1.4	85.0	87.0	326,793	327,232	62.5%	-2.200
A-59	7:47	86.0	0.0	5.4	0.6	85.0	87.0	327,233	327,235	62.5%	-2.200
A-60	7:47	86.0	0.0	5.4	1.3	85.0	85.0	327,234	327,797	51.0%	-0.200
A-61	7:50	82.0	0.0	5.4	1.1	84.0	85.0	328,173	328,690	61.0%	2.100
B-31	12:13	98.0	2.4	6.2	1.0	77.0	77.0	45,778	46,434	71.0%	-2.200
B-32	12:40	115.0	0.0	16.3	2.3	81.0	82.0	46,436	47,354	75.0%	-0.200
B-33	12:45	86.0	0.0	12.0	2.1	82.0	82.0	47,354	49,633	77.0%	-0.120
B-34	3:00	81.0	0.0	6.0	1.2	82.0	82.0	49,040	49,292	76.0%	0.240
B-35	1:25	113.0	0.0	13.4	1.3	83.0	83.0	49,304	49,846	75.5%	-2.200
B-36	1:45	86.0	0.0	13.2	2.4	85.0	85.0	49,873	51,387	77.5%	-3.160
B-37	2:15	83.0	0.0	5.6	1.3	87.0	87.0	52,242	52,575	78.5%	-3.160
B-38	2:15	94.0	0.0	14.2	2.6	84.0	86.0	52,575	52,694	53.5%	-0.240
B-39	2:40	82.0	0.3	14.3	4.0	85.0	92.0	52,730	53,149	74.5%	-0.220
B-40	2:55	93.0	0.0	16.1	1.7	85.0	86.0	53,167	53,885	73.0%	-0.220
B-41	2:55	98.0	0.1	9.5	2.0	85.0	87.0	53,910	54,672	73.0%	-0.180
B-42	3:00	103.0	5.2	4.5	0.9	86.0	86.0	54,675	55,067	81.2%	-0.140
B-43	3:25	98.0	2.2	5.4	1.0	84.0	87.0	55,102	55,643	79.5%	-0.080
B-44	3:25	107.0	-0.2	17.2	3.2	84.0	86.0	55,654	55,771	81.5%	-0.160
B-45	3:55	121.0	0.0	14.1	1.6	84.0	85.0	56,825	57,760	78.5%	-0.220
B-46	4:00	125.0	0.0	18.3	3.3	86.0	82.0	57,787	57,874	78.0%	-0.120
B-47	4:30	102.0	0.4	4.6	0.8	85.0	85.0	57,930	58,336	83.0%	-0.180
B-48	4:40	111.0	2.0	10.7	2.1	85.0	86.0	58,350	59,310	82.0%	-0.220
B-49	5:30	103.0	0.0	8.5	1.5	84.0	82.0	59,349	60,152	52.0%	-0.280
B-50	5:10	103.0	2.0	10.4	2.1	82.0	87.0	60,159	61,148	79.0%	-2.010

A 9

STATION- STAND(EMCO-WHEATON/PPW)

DATE- 8/ 7/74

AVE. UNDERGROUND TANK TEMP- 79.5 F

PUMP	TIME	VEHICLE (DEG. F)	VEHICLE (IN. H ₂ O)	GAS DISP (GALS)	DISP TIME (MIN.)	DISP TEMP (DEG F)	RET VAPOR TEMP (DEG F)	INITIAL VOLUME (FT ³)	FINAL VOLUME (FT ³)	HYDCRBN CONC. (IN H ₂ O)	RET LINE PRESS
B-23	5:48	96.3	2.5	5.6	1.4	81.0	83.0	61.222	61.405	77.0%	-8.152
B-24	6:02	89.3	0.2	24.0	4.1	82.0	83.0	61.943	64.316	79.5%	-3.122
B-25	6:10	64.3	0.0	9.2	2.9	78.0	83.0	64.065	65.019	79.0%	-2.350
B-26	6:20	93.2	2.0	9.1	1.2	77.0	80.0	65.071	65.568	77.5%	-3.143
B-27	6:30	96.3	0.0	9.3	1.2	75.0	77.0	65.724	66.112	55.0%	-3.342
B-28	6:50	83.2	5.0	15.2	1.5	75.0	79.0	66.129	68.403	52.0%	3.360
B-29	6:55	64.3	0.0	14.1	2.5	76.0	78.0	68.412	68.599	77.0%	-2.222
B-30	7:00	94.3	0.0	5.4	1.1	75.0	77.0	68.624	69.163	76.0%	-3.193
B-31	7:07	65.0	0.0	18.6	2.6	75.0	78.0	69.166	71.542	78.5%	-2.240

STATION- STAND(EMCO-WHEATON/NOPV)

DATE- 8/ 6/74

AVE. UNDERGROUND TANK TEMP- 77.0 F

PUMP	TIME	LIC. NO.	MAKE	MODEL	TYPE OF DRIVING	DISTANCE TRAVELED	LK CHK	RVP	EXPLOS.	NUZZLE	FIT	SPLITBACK
A-01	11:22AM	CAL.-248FDG	1972 CHEV.	MONTE CARLO	HIGHWAY	15.MI.	NO-NBL	0.0	0.0	GOOD	NO	
A-02	11:29AM	CAL.-363GCN	1974 CHEV.	IMPALA	LOCAL	1.MI.	PS-BBL	0.0	0.0	GOOD	NO	
A-03	11:35AM	CAL.-640CGX	JAVELIN	1971	LOCAL	3.MI.	NO-NBL	0.0	0.0	GOOD	NO	
A-04	11:39AM	CAL.-VGY404	1968 PLYMOUTH	SATELLITE	HIGHWAY	5.MI.	NO-NBL	0.0	100.0	GOOD	NO	
A-05	11:45AM	CAL.-719GQA	1973 FORD	WAGON	HIGHWAY	100.MI.	NO-NBL	0.0	100.0	GOOD	NO	
A-06	11:40AM	CAL.-559-404	1974 AMERICAN	BROUGHAM WAGON		0.MI.	NO-ATB	6.0	100.0	FORCE	NO	
A-07	11:50AM	CAL.-517HKS	1973 MERCURY	MONTEGO WAGON	HIGHWAY	6.MI.	NO-NBL	0.0	0.0	GOOD	NO	
A-08	12:00PM	CAL.-63928-K	1970 FORD	1/2 TON P U	LOCAL	1.MI.	NO-ATB	0.0	55.0	FORCE	NO	
A-09	12:30PM	CAL.-753GQE	1971 CHEV.	NOVA	HIGHWAY	120.MI.	NO-NBL	0.0	100.0	POOR	NO	
A-10	12:35PM	CAL.-690-JAN	1973 CHEV.	MALIBU WAGON	LOCAL	1.MI.	NO-ATB	0.0	100.0	FORCE	NO	
A-12	12:40PM	CAL.-293-FDW	1972 DATSUN	1200	HIGHWAY	22.MI.	NO-ATB	3.4	100.0	FORCE	NO	
A-13	12:45PM	CAL.-SMG-250	VW	1955	LOCAL	4.MI.	NO-NBL	0.0	100.0	POOR	NO	
A-14	12:45PM	CAL.-P-60661	1964 FORD	1/2 TON PICKUP	LOCAL	3.MI.	NO-ATB	0.0	100.0	FORCE	NO	
A-15	12:50PM	CAL.-591B4Z	1967 FORD	MUSTANG	LOCAL	2.MI.	NO-NBL	0.0	100.0	GOOD	NO	
A-16	1:00PM	CAL.-XKN-816	VW	1969	LOCAL	2.MI.	NO-ATB	0.0	20.0	FORCE	NO	
A-17	1:05PM	CAL.-513-FDF	1972 PINTO	WAGON	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	NO	
A-18	1:15PM	CAL.-P-28843	1964 CHEVY	3/4 TON PICKUP	HIGHWAY	20.MI.	NO-ATB	7.4	100.0	FORCE	NO	
A-19	1:30PM	CAL.-791FQR	1972 DATSUN	2402	LOCAL	0.MI.	NO-NBL	0.0	100.0	POOR	NO	
A-20	1:30PM	CAL.-989KWG	1974 AUDI	FOX	LOCAL	4.MI.	NO-ATB	0.0	40.0	FORCE	YES	
A-21	1:35PM	CAL.-441KIU	1974 HONDA	CIVIC	LOCAL	2.MI.	NO-NBL	0.0	100.0	GOOD	NO	
A-22	2:00PM	CAL.-864DEL	1971 FORD	CAPRI	LOCAL	20.MI.	NO-NBL	0.0	60.0	GOOD	NO	
A-23	2:14PM	CAL.-670JAS	1973 CHEV.	NOVA	HIGHWAY	3.MI.	NO-NBL	0.0	100.0	GOOD	NO	
A-24	2:30PM	CAL.-439AAJ	1970 CHEV.	IMPALA	HIGHWAY	70.MI.	NO-ATB	7.2	100.0	FORCE	NO	
A-25	2:35PM	CAL.-0503300	1974 DATSUN	EZ10	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	NO	
A-26	2:40PM	CAL.-827ATC	1961 MERCURY	COMET	LOCAL	1.MI.	NO-ATB	0.0	100.0	FORCE	NO	
A-27	2:50PM	CAL.-EMB-888	1964 PLYMOUTH	VALIANY	LOCAL	3.MI.	NO-NBL	0.0	100.0	GOOD	NO	
A-28	2:55PM	CAL.-571060	1955 FORD	1/2 TON PICKUP	LOCAL	4.MI.	NO-ATB	0.0	100.0	FORCE	NO	
A-29	3:05PM	CAL.-381-JAY	1973 CHEV.	MALIBU	HIGHWAY	70.MI.	NO-NBL	0.4	20.0	GOOD	NO	
A-30	3:25PM	CAL.-714KUS	1948 PLYMOUTH	COUPE	LOCAL	0.MI.	NO-NBL	0.0	60.0	GOOD	NO	
A-31	3:30PM	CAL.-AMX-293	1963 RAMBLER	CLASSIC	LOCAL	4.MI.	NO-NBL	0.0	100.0	POOR	NO	
A-32	3:35PM	CAL.-183-BXJ	1971 TOYOTA	1900	LOCAL	1.MI.	NO-NBL	0.0	25.0	GOOD	NO	
A-33	3:35PM	CAL.-31759-F	1970 FORD	1/2 TON	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	NO	
A-34	3:40PM	CAL.-710DAJ	1971 CHEV.	NOVA	LOCAL	3.MI.	NO-ATB	6.0	100.0	FORCE	NO	
A-35	3:52PM	CAL.-133-JBK	1973 DATSUN	1200	LOCAL	10.MI.	NO-NBL	0.0	100.0	GOOD	NO	
B-01	12:10PM	CAL.-052-CWT	1971 TOYOTA	CORULLA	HIGHWAY	65.MI.	NO-NBL	0.0	100.0	POOR	NO	
B-02	12:15PM	CAL.-595746	1972 AMC	HORNET	LOCAL	1.MI.	NO-NBL	0.0	100.0			
B-03	2:10PM	CAL.-69650V	FORD	TRUCK		0.MI.	NO-NBL	0.0	0.0			

A II

STATION - STAND(EMCO-WHEATON/MOPV)

DATE - 8/ 8/74

AVE. UNDERGROUND TANK TEMP- 77.0 F

PUMP	TIME	VEHICLE TANK TEMP (DEG. F)	VEHICLE TANK PRESS (IN. H2O)	GAS DISP (GALS)	DISP TIME (MIN.)	DISP TEMP (DEG F)	RET VAPOR TEMP (DEG F)	INITIAL VOLUME (FT3)	FINAL VOLUME (FT3)	HYDCRSN CONC.	RET LINE PRESS (IN H2O)
A-01	11:22	80.0	0.0	16.8	2.9	82.0	74.0	328.847	330.844	72.2%	-0.200
A-02	11:29	80.0	0.0	14.3	3.2	86.0	80.0	332.855	332.923	72.0%	-0.200
A-03	11:35	84.0	0.0	13.2	4.0	87.0	82.0	332.943	334.779	71.0%	-0.200
A-04	11:39	83.0	0.0	5.4	1.3	85.0	83.0	334.786	335.295	72.0%	-0.200
A-05	11:45	97.0	0.0	9.2	1.3	85.0	80.0	335.295	335.738	71.5%	-0.200
A-06	11:48	85.0	1.5	15.3	1.7	85.0	80.0	335.738	337.548	71.0%	-0.200
A-07	11:53	80.0	0.0	17.4	3.1	85.0	80.0	337.548	339.789	70.0%	-0.200
A-08	12:08	82.0	2.0	13.8	1.5	84.0	80.0	339.792	341.558	70.5%	0.310
A-09	12:30	113.0	0.0	6.5	1.5	84.0	78.0	341.556	341.852	69.0%	-0.200
A-10	12:35	76.0	1.0	8.4	0.9	84.0	78.0	341.867	342.500	69.0%	-0.200
A-12	12:40	82.0	0.0	3.3	2.8	85.0	0.0	342.983	343.322	69.0%	-0.200
A-13	12:45	80.0	0.0	7.4	1.8	85.0	82.0	343.348	343.415	70.0%	-0.220
A-14	12:45	77.0	0.0	14.1	1.6	85.0	80.0	343.428	345.286	70.0%	-0.220
A-15	12:53	85.0	0.0	4.3	1.1	85.0	82.0	345.290	345.298	70.0%	-0.220
A-16	1:03	85.0	0.0	8.2	1.9	85.0	83.0	345.300	346.417	72.0%	-0.200
A-17	1:05	84.0	0.0	6.5	1.5	85.0	83.0	346.415	347.043	67.0%	-0.200
A-18	1:15	80.0	0.0	12.0	2.8	85.0	83.0	347.044	348.040	69.0%	-0.200
A-19	1:30	94.0	0.0	5.4	1.3	85.0	83.0	348.040	348.043	69.5%	-0.320
A-20	1:32	89.0	0.0	10.3	1.8	85.0	83.0	348.043	349.245	70.0%	-0.300
A-21	1:35	91.0	0.0	6.3	1.5	85.0	84.0	349.248	349.785	72.0%	-0.300
A-22	2:03	97.0	0.0	6.5	1.5	88.0	92.0	349.623	350.445	72.0%	-0.320
A-23	2:14	92.0	0.0	13.8	3.2	92.0	93.0	350.478	351.730	71.2%	-0.400
A-24	2:30	97.0	0.1	8.8	1.4	88.0	92.0	351.733	352.298	72.0%	-0.100
A-25	2:35	92.0	0.0	7.3	1.7	90.0	92.0	352.300	353.048	71.0%	-0.050
A-26	2:42	91.0	0.0	7.3	2.2	88.0	88.0	353.249	353.729	72.0%	-0.100
A-27	2:53	91.0	0.0	12.8	2.9	88.0	88.0	353.734	355.003	72.5%	-0.150
A-28	2:55	93.0	0.0	10.5	1.2	88.0	88.0	355.223	356.162	71.0%	-0.200
A-29	3:05	93.0	0.0	17.7	4.1	92.0	94.0	356.161	356.171	72.0%	-0.070
A-31	3:25	98.0	0.0	5.4	0.7	90.0	97.0	356.171	356.939	72.0%	-0.350
A-31	3:32	94.0	0.0	9.1	2.2	95.0	95.0	356.929	356.924	72.0%	-0.370
A-32	3:35	95.0	0.0	6.4	1.3	98.0	0.0	356.924	357.389	73.0%	-0.120
A-33	3:35	91.0	0.0	13.1	3.1	93.0	94.0	357.393	358.857	75.0%	-0.090
A-34	3:43	96.0	0.4	13.1	2.9	91.0	92.0	358.861	362.448	74.0%	-0.280
A-35	3:52	102.0	0.0	8.8	1.0	91.0	92.0	362.466	361.289	75.5%	-0.190
B-31	12:18	83.0	0.0	4.0	0.0	0.0	0.0	71.566	8.000	0.0%	0.000
B-32	12:18	83.0	0.0	0.0	0.0	2.0	0.0	71.636	8.000	0.0%	0.000
B-33	2:10	83.0	0.0	0.0	0.0	0.0	0.0	72.947	72.950	0.0%	0.000

A 12

STATION- STAND(OPOV/NOPV)

DATE- 8/ 9/74

AVE. UNDERGROUND TANK TEMP- 74.5 F

PUMP	TIME	LIC. NO.	MAKE	MODEL	TYPE OF	DISTANCE	LK CHK		NOZZLE
					DRIVING	TRAVELED	RESULT	KvP	FIT
A-01	10:05AM	CAL.-HEYDUK	1972 BUICK	RIVIERA	LOCAL	1.MI.	PS-BSL	0.0	GOOD
A-02	10:10AM	CAL.-448EFK	1972 JEEP	COMMANDO	LOCAL	3.MI.	NO-NBL	0.0	GOOD
A-03	10:25AM	CAL.-566JAI	1973 PLYMOUTH	DUSTER	HIGHWAY	21.MI.	PS-BSL	0.0	GOOD
A-04	10:30AM	CAL.-J97627	1961 FORD	3/4 TON	HIGHWAY	80.MI.	NO-NBL	0.0	GOOD
A-05	11:10AM	ARIZ-SMG698	1973 VW	THING	HIGHWAY	100.MI.	NO-ATB	0.0	GOOD
A-06	11:20AM	CAL.-651801	1970 OLDSMOBILE	DELTA 88	HIGHWAY	60.MI.	NO-NBL	0.0	GOOD
A-07	11:30AM	CAL.-167JWZ	1974 JEEP	CHEROKEE	LOCAL	1.MI.	NO-NBL	0.0	GOOD
A-08	11:45AM	CAL.-017FGW	1972 PONTIAC	LE MANS	HIGHWAY	40.MI.	NO-NBL	0.0	GOOD
A-09	11:55AM	CAL.-STARPI	1972 FORD	WAGON	LOCAL	0.MI.	NO-ATB	0.0	GOOD
A-10	12:15PM	CAL.-ZGX-293	1967 CHEV.	IMPALA WAGON	HIGHWAY	0.MI.	NO-NBL	0.0	GOOD
A-11	12:20PM	CAL.-NAS-581	1964 FORD	FALCON	LOCAL	3.MI.	PS-BSL	0.0	GOOD
B-01	9:50AM	CAL.-230EFJ	1971 FORD	FAIRLANE	LOCAL	10.MI.	NO-NBL	0.0	GOOD
B-02	10:10AM	CAL.-250-DAI	1965 CHEV.	SUPER SPORT	LOCAL	2.MI.	NO-ATB	0.0	GOOD
B-03	10:28AM	CAL.-670EDY	1972 CHEV.	VEGA	LOCAL	4.MI.	NO-ATB	0.0	GOOD
B-04	0:00AM	CAL.-CTX950	1962 FORD	VAN	HIGHWAY	50.MI.	NO-NBL	0.0	GOOD
B-05	11:05AM	CAL.-MZT168	1963 CHEV.	NOVA	HIGHWAY	12.MI.	FL-ATB	0.0	GOOD
B-06	11:10AM	CAL.-NSA-418	1965 CHEV.	MALIBU	LOCAL	6.MI.	NO-NBL	0.0	GOOD
B-07	11:20AM	CAL.-EDY626	1963 MERCURY	WAGUN	LOCAL	2.MI.	NO-ATB	0.0	GOOD
B-08	11:25AM	CAL.-256CCG	1974 FORD	PINTO	LOCAL	3.MI.	NO-ATB	0.0	GOOD
B-09	11:35AM	CAL.-598EGA	1970 FORD	LTD	HIGHWAY	60.MI.	NO-NBL	0.0	GOOD
B-10	11:40AM	CAL.-106HBZ	1973 VW	VAN	LOCAL	15.MI.	NO-ATB	0.0	GOOD
B-11	11:55AM	CAL.-911CKR	1971 CHEV.	IMPALA	LOCAL	8.MI.	NO-NBL	0.0	GOOD
B-12	12:12PM	CAL.-35003-B	1963 FORD	1/2 TON	LOCAL	8.MI.	PS-BSL	0.0	GOOD
B-13	12:20PM	CAL.-690-ARL	1971 VW		LOCAL	1.MI.	PS-ATB	0.0	GOOD
B-14	12:25PM	IND.-96T-937	1972 FORD	GRAND TORINO	HIGHWAY	80.MI.	PS-BSL	0.0	GOOD

A
13

STATION - STAND (OPW/NOPV)

DATE - 8/ 9/74

AVE. UNDERGROUND TANK TEMP - 74.5 F

PU#	TIME	VEHICLE TANK TEMP (DEG. F)	VEHICLE TANK PRESS (IN. H2O)	GAS DISP (GALS)	DISP TIME (MIN.)	DISP TEMP (DEG F)	RET VAPOR TEMP (DEG F)	INITIAL VOLUME (FT3)	FINAL VOLUME (FT3)	HYDCRSN COLC.	RET LINE PRESS (IN H2O)
A-31	10:05	63.0	2.7	19.4	2.1	85.0	67.0	364,918	367,752	68.5%	-0.252
A-32	10:10	60.0	0.0	14.0	2.5	82.0	74.0	367,752	369,581	65.2%	-0.203
A-33	10:25	66.0	1.3	8.0	1.6	81.0	75.0	369,581	372,531	67.6%	-0.122
A-34	10:30	60.0	0.0	8.0	0.0	80.0	80.0	3,028	3,028	2.0%	-0.702
A-35	11:10	80.0	3.0	5.4	0.7	82.0	75.0	371,275	371,959	0.3%	-0.153
A-36	11:23	72.0	0.0	9.1	1.6	85.0	81.0	371,959	372,165	68.5%	-0.252
A-37	11:30	60.0	0.0	15.4	2.8	85.0	82.0	372,165	373,955	67.5%	-0.333
A-38	11:45	115.0	0.0	13.6	2.4	84.0	82.0	373,979	374,969	65.0%	-0.050
A-39	11:55	86.0	5.0	16.1	2.2	83.0	82.0	374,974	377,025	64.8%	-0.150
A-40	12:10	66.0	0.0	14.5	2.6	84.0	79.0	377,225	377,688	66.0%	-0.252
A-41	12:20	83.0	0.0	6.4	0.8	84.0	82.0	377,688	378,284	64.5%	-0.352
B-31	9:50	72.0	0.0	15.3	2.3	82.0	81.0	74,116	75,137	95.0%	-0.222
B-32	10:10	83.0	0.0	11.7	2.2	82.0	87.0	76,137	77,448	97.5%	-0.283
B-33	10:20	88.0	0.0	10.0	1.9	82.0	87.0	77,454	78,772	96.0%	-0.110
B-34	10:30	83.0	0.0	6.0	1.8	78.0	85.0	78,793	79,694	110.0%	-0.040
B-35	11:05	94.0	0.0	12.4	2.4	79.0	87.0	78,793	79,912	110.0%	-0.123
B-36	11:10	91.0	0.0	6.4	1.1	81.0	89.0	79,912	82,356	109.0%	-4.000
B-37	11:20	86.0	0.0	12.0	2.2	83.0	89.0	82,382	81,758	111.0%	-0.120
B-38	11:25	84.0	0.0	8.3	1.3	96.0	85.0	81,758	82,564	111.0%	-0.080
B-39	11:35	117.0	0.0	17.1	3.2	91.0	77.0	82,565	83,728	111.0%	-2.298
B-40	11:40	89.0	0.0	7.4	1.4	88.0	83.0	83,728	84,329	111.0%	-0.273
B-41	11:55	94.0	0.0	19.3	3.5	89.0	83.0	84,348	85,681	111.0%	5.280
B-42	12:10	92.0	0.0	10.5	1.7	89.0	85.0	86,685	87,727	129.5%	0.050
B-43	12:20	84.0	0.0	4.6	1.5	91.0	85.0	87,732	88,347	110.0%	-0.150
B-44	12:25	108.0	0.3	8.9	1.6	76.0	90.0	88,347	88,953	111.0%	4.200

A
14

STATION= STAND(OPW/NOPV)

DATE= 8/12/74

AVE.. UNDERGROUND TANK TEMP= 79.5 F

PUMP	TIME	LIC. NO.	MAKE	MODEL	TYPE OF DRIVING	DISTANCE TRAVELED	LK CHR	RVP	EXPLOS.	NOZZLE FIT	SPITBACK
A-01	9:17AM	CAL-268-HKK	1973 OLDSMOBILE	VISTA WAGON	HIGHWAY	80.MI.	NO-NBL	0.0	100.0	GOOD	
A-02	9:27AM	CAL-AMY-705	1962 CHEV.	NOVA	LOCAL	5.MI.	NO-NBL	0.0	100.0	GOOD	
A-03	9:40AM	CAL-ZWW525	1969 VW	VAN	LOCAL	5.MI.	NO-NBL	0.0	100.0	POOR	NO
A-04	9:45AM	CAL-46577T	1974 FORD	SUPER CAB	HIGHWAY	70.MI.	NO-ATB	0.0	100.0	FORCE	YES
A-05	9:55AM	CAL-528DM8	1971 FORD	TORINO	HIGHWAY	87.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-06	10:02AM	CAL-550-FDW	1972 BUICK	ESTATE WAGON	LOCAL	3.MI.	NO-ATB	0.0	100.0	FORCE	NO
A-07	10:08AM	CAL-AUE-429	1962 FORD	COMET	LOCAL	14.MI.	NO-NBL	0.0	20.0	GOOD	
A-08	10:15AM	CAL-033-FDF	1972 CHRYSLER	IMPERIAL	LOCAL	4.MI.	FL-ATB	0.0	0.0	FORCE	
A-09	10:25AM	CAL-930GTY	1972 OLDSMOBILE	CLASS	HIGHWAY	80.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-10	10:38AM	CAL-965JVC	1972 TOYOTA	COROLLA	LOCAL	1.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-11	10:45AM	CAL-873-COG	VW	1971	LOCAL	1.MI.	NO-ATB	0.0	100.0	FORCE	NO
A-12	10:53AM	CAL-617HKS	1973 MONTEGO	WAGON	LOCAL	8.MI.	PS-BSL	0.0	0.0	FORCE	
A-13	11:00AM	CAL-MMA583	VW	1963	LOCAL	0.MI.	FL-ATB	0.0	100.0	FORCE	
A-14	11:04AM	CAL-751-KVZ	MATADOR	1974	LOCAL	0.MI.	PS-ATB	0.0	0.0	FORCE	NO
A-15	11:05AM	N.DK-62-206	1971 VW	WAGON	HIGHWAY	80.MI.	NO-NBL	0.0	100.0	POOR	NO
A-16	11:14AM	CAL-NDB2	1974 CHEV.	IMPALA	LOCAL	15.MI.	NO-ATB	0.0	100.0	FORCE	NO
A-17	11:20AM	CAL-MKR-322	1965 FORD	FAIRLANE	HIGHWAY	80.MI.	NO-NBL	6.6	0.0	GOOD	NO
A-18	11:40AM	CAL-41-354K	1972 JEEP	WAGON	HIGHWAY	30.MI.	NO-ATB	0.0	100.0	FORCE	
A-19	11:48AM	GOVI-G11-70212	1973 PLYMOUTH	FURY	HIGHWAY	13.MI.	PS-BSL	7.2	0.0	FORCE	NO
A-20	12:20PM	CAL-636FCB	1972 FORD	PINTO	HIGHWAY	80.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-21	12:25PM	CAL-P-58930	1964 FORD	3/4 TON	LOCAL	25.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-22	0:00AM	CAL-581-JWY	1971 FORD	PINTO	HIGHWAY	80.MI.	NO-NBL	0.0	60.0	GOOD	
A-23	12:43PM	CAL-095EGW	1972 FORD	WAGON	LOCAL	0.MI.	NO-NBL	0.0	20.0	GOOD	NO
A-24	1:40PM	CAL-434ACD	VW	1969	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	
A-25	1:10PM	CAL-854JBV	1973 CHEV.	NOVA	LOCAL	8.MI.	PS-ESL	0.0	0.0	FORCE	NO
A-26	12:15PM	CAL-712-FXZ	CAPRI	1972	LOCAL	5.MI.	NO-NBL	0.0	100.0	GOOD	
A-27	2:10PM	CAL-932JWM	DODGE	1973 SPORTMAN	LOCAL	1.MI.	NO-NBL	0.0	100.0	POOR	NO
A-28	2:22PM	CAL-VY2927	VALIANA	1970	LOCAL	0.MI.	NO-NBL	7.1	0.0	GOOD	
A-29	2:33PM	CAL-SNW26	1965 FORD	FAIRLANE	HIGHWAY	12.MI.	NO-ATB	0.0	20.0	FORCE	NO
A-30	2:40PM	CAL-Q63106	1967 FORD	1/2 TON	LOCAL	3.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-31	3:00PM	CAL-69-043V	1970 TOYOTA	PICK UP	LOCAL	2.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-32	3:12PM	CAL-E831318	1973 DODGE	POLERA	HIGHWAY	15.MI.	FL-ATB	0.0	0.0	FORCE	NO
A-33	3:25PM	CAL-654JVG	1974 CHEV	VEGA	HIGHWAY	40.MI.	NO-NBL	7.9	100.0	POOR	NO
A-34	3:30PM	CAL-119CGM	1971 CHEV	MALIBU	LOCAL	4.MI.	FL-ATB	0.0	0.0	FORCE	NO
A-35	3:45PM	CAL-16-DEW	1973 FORD	LTD WAGON	LOCAL	10.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-36	3:54PM	CAL-CRUCK	1970 FORD	3/4 TON CAMPER	LOCAL	1.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-37	12:01PM	CAL-510JTH	1973 PONTIAC	VENTURA	HIGHWAY	60.MI.	FL-ATB	0.0	0.0	FORCE	NO
A-38	12:10PM	CAL-E803228	1968 CHEV.	CHEVELLE	HIGHWAY	50.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-01	9:20AM	CAL-5.6-EFU	1972 LINCOLN	CONTINENTAL	LOCAL	1.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-02	9:30AM	CAL-062-EEZ	1972 MERCURY	MONTEGO	LOCAL	0.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-03	9:35AM	CAL-M-53567	1962 CHEV	1/2 TON TRUCK	HIGHWAY	80.MI.	NO-ATB	0.0	100.0	FORCE	NO
B-04	9:50AM	CAL-861-JHQ	1973 OPEL	NANTA	LOCAL	80.MI.	NO-NBL	0.0	100.0	POOR	NO
B-05	9:50AM	CAL-634-AAL	1969 OLDSMOBILE	VISTA CRUISER	LOCAL	4.MI.	NO-ATB	0.0	0.0	FORCE	NO
B-06	10:00AM	CAL-UWN903	1967 VW	VAN	LOCAL	2.MI.	NO-NBL	0.0	100.0	GOOD	
B-07	10:05AM	CAL-531DXV	1969 VW	KARMANGHIA	HIGHWAY	70.MI.	NO-ATB	0.0	100.0	FORCE	NO
B-08	10:12AM	CAL-523JAV	MATADOR	1974	LOCAL	3.MI.	NO-NBL	0.0	100.0	POOR	NO
B-09	10:25AM	CAL-P-20941	1963 FORD	3/4 TON PICKUP	HIGHWAY	152.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-10	10:25AM	ARIZ-RGS-868	1960 FORD	COUNTRY SEDAN	LOCAL	3.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-11	10:45AM	CAL-582-BGC	1970 CHEV	CHEVELLE	LOCAL	1.MI.	FL-ATB	0.0	0.0	FORCE	NO
B-12	11:05AM	CAL-022-FQP	1972 MERCURY	CAPRI	LOCAL	2.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-13	11:15AM	CAL-V59-114	1967 FORD	RANCHERO	HIGHWAY	18.MI.	FL-ATB	0.0	0.0	FORCE	NO

A 15

STATION- STAND(OPW/NOPV)

DATE- 8/12/74

AVE. UNDERGROUND TANK TEMP- 79.5 F

PUMP	TIME	LIC. NO.	MAKE	MODEL	TYPE OF DRIVING	DISTANCE TRAVELED	LK CHK	RVP	EXPLOS.	NOZZLE	FIT	SPIE BACK
B-14	11:30AM	CAL -RLM-603	1966 CHEV	SUPER SPORT	LOCAL	0.MI.	NO-NBL	0.0	100.0	GOOD	NO	
B-15	11:45AM	CAL -894GEJ	JAVELIN	1973	LOCAL	2.MI.	FL-ATB	0.0	0.0	FORCE	NO	
B-16	11:50AM	CAL -C40390	1962 CHEV	1/2 TON	LOCAL	2.MI.	NO-NBL	0.0	100.0	GOOD	NO	
B-17	12:05PM	CAL -158JWV	1974 DODGE	WAGON	HIGHWAY	10.MI.	FL-ATB	6.8	25.0	FORCE		
B-18	12:10PM	CAL -ZDF-380	1969 CHEV	CAPRICE	LOCAL	4.MI.	NU-NBL	0.0	100.0	POOR	NO	
B-19	12:20PM	CAL -512FDW	1972 DODGE	DART	LOCAL	2.MI.	PS-BSL	0.0	0.0	FORCE	NO	
B-20	12:30PM	CAL -NA5581	1962 FORD	FALCON	LOCAL	3.MI.	NO-NBL	0.0	100.0	POOR	NO	
B-21	12:40PM	CAL -967-JWC	1974 OLDSMOBILE	OMEGA	HIGHWAY	40.MI.	FL-ATB	0.0	0.0	FORCE	NO	
B-22	12:50PM	CAL -774GEI	1973 FORD	GRAN. WAGON	HIGHWAY	20.MI.	NO-NBL	6.3	100.0	GOOD	NO	
B-23	12:55PM	CAL -MMR-934	1962 CHEV	WAGON	LOCAL	10.MI.	PS-BSL	0.0	0.0	FORCE	NO	
B-24	1:05PM	CAL -145EEZ	1972 CHEV	NOVA	LOCAL	3.MI.	NO-NBL	0.0	0.0	GOOD	NO	
B-25	1:12PM	CAL -E823054	1972 AMBASSADOR	WAGON	LOCAL	3.MI.	NO-ATB	0.0	100.0	FORCE	NO	
B-26	2:00PM	CAL -U91 349	FORD	350	LOCAL	20.MI.	NO-NBL	8.1	100.0	GOOD	NO	
B-27	2:10PM	CAL -072JAW	1974 MERCURY	COUGAR	HIGHWAY	5.MI.	FL-ATB	0.0	0.0	FORCE		
B-28	2:32PM	CAL -135-EWD	1972 MERCEDES	250	HIGHWAY	40.MI.	NO-NBL	0.0	0.0	GOOD	NO	
B-29	2:50PM	CAL -67422K	1972 CHEV	EL CAMINO	LOCAL	2.MI.	PS-BSL	0.0	0.0	FORCE	NO	
B-30	2:54PM	CAL -63951-M	1973 DODGE	VAN	HIGHWAY	80.MI.	NO-NBL	6.5	0.0	GOOD		
B-31	3:15PM	CAL -109FMJ	1972 MERCURY	COUGAR	HIGHWAY	35.MI.	PS-BSL	0.0	0.0	FORCE	NO	
B-32	3:30PM	CAL -199ARF	1970 FORD	TORINO	LOCAL	1.MI.	NO-NBL	7.0	10.0	GOOD	NO	
B-33	3:40PM	CAL -WQW143	BUICK	1968	HIGHWAY	21.MI.	NO-ATB	0.0	80.0	FORCE	NO	
B-34	3:50PM	N.J.-KPD-240	1966 CHEV	IMPALA	LOCAL	3.MI.	NO-NBL	0.0	100.0	GOOD	NO	
B-35	3:55PM	CAL -63899-M	1973 DODGE	1/2 TON	HIGHWAY	70.MI.	PS-BSL	0.0	0.0	FORCE	NO	

STATION- STAND(OPTN/NCPY)

DATE- 8/12/74

AVE. UNDERGROUND TANK TEMP- 79.5 F

PUMP	TIME	VEHICLE TANK TEMP (DEG. F)	VEHICLE TANK PRESS (IN. H2O)	GAS DISP (GALS)	DISP TIME (MIN.)	DISP TEMP (DEG F)	RET VAPOR (DEG F)	INITIAL VOLUME (FT3)	FINAL VOLUME (FT3)	HYDROCARB CONC. (IV-%O)	RET LINE PRESS (IV-%O)
A-31	9:17	69.0	0.0	12.4	2.2	76.0	75.0	378,868	379,536	67.5%	-2,422
A-32	9:27	86.0	0.0	13.1	2.2	74.0	75.0	379,837	381,298	62.2%	-5,202
A-23	9:40	81.0	0.0	13.9	2.5	75.0	74.0	381,300	382,125	60.2%	-2,822
A-24	9:45	81.0	0.0	15.3	2.7	75.0	74.0	382,126	383,843	56.0%	-3,352
A-25	9:55	103.0	0.0	9.2	1.5	77.0	75.0	383,843	384,754	56.0%	2,250
A-26	10:02	81.0	1.2	18.3	2.2	76.0	75.0	384,754	385,725	56.0%	-3,182
A-27	10:08	84.0	0.0	12.7	1.7	75.0	76.0	386,725	387,960	55.2%	-2,152
A-28	10:15	84.0	0.0	21.0	2.6	75.0	76.0	387,960	390,756	54.0%	-2,352
A-29	10:25	92.0	0.0	7.5	1.2	77.0	77.0	392,756	391,503	53.2%	-2,352
A-10	10:35	74.0	0.0	5.9	1.1	74.0	75.0	391,503	392,315	52.5%	2,250
A-11	10:45	78.0	0.0	8.7	1.5	74.0	76.0	392,317	393,442	62.5%	-0,182
A-12	10:53	92.0	1.7	5.4	1.0	75.0	78.0	393,443	394,323	51.5%	-0,252
A-13	11:00	74.0	0.0	5.4	0.7	75.0	78.0	394,323	394,372	51.5%	-0,252
A-14	11:08	72.0	1.7	5.9	1.1	73.0	76.0	394,472	395,268	51.0%	-0,252
A-15	11:15	61.0	0.0	9.6	1.8	75.0	78.0	395,268	395,580	51.5%	-0,222
A-16	11:14	86.0	0.0	20.1	3.3	74.0	79.0	395,590	395,628	51.2%	-0,220
A-17	11:20	92.0	0.0	8.1	1.4	95.0	80.0	395,629	395,456	51.2%	-0,200
A-18	11:40	82.0	0.0	14.3	2.5	76.0	79.0	396,463	397,659	50.5%	-0,202
A-19	11:48	86.0	0.1	15.3	2.7	76.0	80.0	399,590	401,473	50.0%	-2,202
A-20	12:00	92.0	0.0	2.9	0.5	75.0	82.0	403,282	403,582	48.0%	3,302
A-21	12:25	82.0	0.0	13.7	2.3	75.0	80.0	403,583	424,313	49.0%	3,352
A-22	9:18	97.0	0.0	10.6	1.9	76.0	80.0	404,813	425,695	49.0%	-2,282
A-23	12:43	85.0	0.0	5.4	0.9	76.0	80.0	425,897	406,812	48.0%	3,182
A-24	11:43	89.0	0.0	5.4	1.4	76.0	80.0	426,813	426,961	48.0%	-0,250
A-25	11:10	97.0	1.0	16.3	2.9	77.0	80.0	426,970	408,983	75.0%	-0,220
A-26	12:15	94.0	0.0	9.2	1.6	75.0	65.0	408,984	413,092	75.0%	-0,350
A-27	2:10	85.0	0.0	16.4	2.9	77.0	85.0	413,793	413,795	73.5%	-0,302
A-28	2:22	92.0	0.0	12.8	2.4	79.0	87.0	413,810	415,472	74.0%	-2,620
A-29	2:33	92.0	0.0	11.2	0.0	79.0	87.0	415,472	415,110	74.0%	-0,252
A-30	2:42	88.0	0.0	19.7	4.8	79.0	85.0	416,110	417,916	74.5%	-0,620
A-31	3:00	94.0	0.0	5.3	1.9	80.0	87.0	419,533	420,115	72.0%	-2,672
A-32	3:12	112.0	-0.2	14.7	2.7	80.0	87.0	422,115	421,519	76.0%	-0,622
A-33	3:25	109.0	0.0	7.4	1.7	80.0	89.0	421,532	421,944	75.0%	-0,520
A-34	3:38	104.0	0.3	13.3	2.5	81.0	86.0	421,943	423,260	75.0%	-2,400
A-35	3:45	93.0	0.0	14.1	2.5	83.0	87.0	423,283	424,660	73.5%	-0,632
A-36	3:54	124.0	0.0	5.4	1.0	83.0	87.0	424,662	425,473	74.0%	-2,422
A-37	12:41	113.0	0.2	13.8	2.4	77.0	83.0	421,472	432,345	51.0%	-0,222
A-38	12:18	94.0	0.0	14.6	2.5	76.0	80.0	402,348	403,281	50.0%	-0,250
B-31	9:20	77.0	1.0	17.9	2.6	76.0	68.0	92,920	95,615	62.5%	3,240
B-32	9:30	79.0	0.0	16.3	2.8	74.0	70.0	95,614	97,855	62.0%	0,212
B-33	9:35	73.0	0.0	9.6	1.8	75.0	72.0	97,856	99,271	55.0%	0,232
B-34	9:54	89.0	0.0	6.8	0.8	76.0	72.0	99,272	99,531	61.5%	-0,282
B-35	9:53	73.0	0.0	15.2	2.8	77.0	72.0	99,540	101,782	63.0%	0,510
B-36	10:03	84.0	0.0	8.6	1.5	76.0	70.0	101,786	102,260	63.0%	-2,360
B-37	10:05	79.0	0.0	5.4	1.0	75.0	71.0	102,261	102,822	63.0%	0,230
B-38	10:12	82.0	0.0	19.2	3.4	75.0	71.0	102,822	105,184	62.0%	0,292
B-39	10:25	86.0	0.1	15.2	2.9	77.0	72.0	105,184	126,778	63.0%	0,300
B-40	10:25	81.0	0.0	6.3	1.3	74.0	70.0	106,716	107,038	2.0%	0,332
B-11	10:45	75.0	0.0	8.3	1.6	74.0	71.0	107,038	108,077	56.5%	0,230
B-12	11:05	85.0	0.0	9.5	1.8	75.0	71.0	108,177	109,347	61.5%	0,362
B-13	11:15	79.0	0.0	12.0	2.3	74.0	70.0	109,050	110,632	63.0%	0,150

STATION- STAND(OPM/NOPV)

DATE- 8/12/74

AVE. UNDERGROUND TANK TEMP= 79.5 F

PUMP	TIME	VEHICLE TANK TEMP (DEG. F)	VEHICLE TANK PRESS (IN. H ₂ O)	GAS (GALS)	DISP (MIN.)	DISP (DEG F)	RET VAPOR (DEG F)	INITIAL VOLUME (FT ³)	FINAL VOLUME (FT ³)	HYDCRBN CONC.	RET LINE PRESS (IN H ₂ O)
8-14	11:30	81.0	0.0	14.9	1.8	75.0	72.0	112.632	112.115	62.5%	0.280
8-15	11:45	84.0	1.0	14.3	2.7	77.0	72.0	112.109	113.963	62.8%	0.230
8-16	11:50	81.0	0.0	13.0	2.2	76.0	72.0	113.964	115.261	62.5%	0.290
8-17	12:05	89.0	0.2	17.7	3.3	77.0	73.0	115.062	117.362	61.0%	0.280
8-18	12:10	84.0	0.0	18.7	2.8	76.0	73.0	117.366	118.327	62.0%	-0.200
8-19	12:20	85.0	0.9	12.2	2.4	75.0	73.0	118.328	120.189	61.0%	0.260
8-20	12:30	66.0	0.0	5.4	1.4	75.0	73.0	120.190	120.690	62.0%	0.710
8-21	12:40	97.0	2.4	5.4	1.0	76.0	74.0	120.690	131.102	63.0%	0.140
8-22	12:50	85.0	0.0	8.4	1.1	77.0	74.0	121.124	122.121	64.0%	0.180
8-23	12:55	89.0	0.0	14.7	2.7	78.0	76.0	123.352	125.180	61.5%	0.070
8-24	1:05	98.0	0.0	12.2	2.2	76.0	74.0	125.180	126.527	58.0%	0.220
8-25	1:12	9.0	0.0	13.3	2.1	77.0	75.0	126.526	127.783	59.0%	0.110
8-26	2:00	65.0	0.0	8.0	1.6	76.0	75.0	130.353	130.995	63.5%	-0.160
8-27	2:10	124.0	0.3	22.8	4.3	77.0	79.0	131.012	133.142	63.0%	-0.220
8-28	2:32	125.0	0.0	9.3	2.0	79.0	80.0	133.143	134.024	62.0%	-0.060
8-29	2:50	96.0	2.5	16.7	2.7	80.0	81.0	134.043	136.030	64.5%	0.060
8-30	2:54	94.0	0.0	12.5	2.3	79.0	80.0	136.034	137.310	63.0%	-0.010
8-31	3:15	108.0	0.0	14.5	1.8	81.0	80.0	137.310	138.567	64.5%	-0.220
8-32	3:30	97.0	0.0	12.2	2.2	82.0	84.0	138.570	140.090	64.0%	0.120
8-33	3:40	121.0	0.0	15.6	2.8	82.0	80.0	140.093	141.419	64.0%	-0.160
8-34	3:50	107.0	0.0	16.4	2.7	82.0	79.0	141.425	142.851	52.0%	0.110
8-35	3:55	88.0	2.2	14.6	2.1	81.0	79.0	142.854	144.785	63.0%	0.290

STATION- STAND(OPW/NOPV)

DATE- 8/13/74

AVE. UNDERGROUND TANK TEMP- 80.5 F

PUMP	TIME	LIC. NO.	MAKE	MODEL	TYPE OF	DISTANCE	DK CHK		NOZZLE	FIT	SPLITBACK
A-01	8:25AM	CAL -N1N847	1965 FORD	MUSTANG	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-02	8:47AM	CAL -842FSU	PINTO	1973	HIGHWAY	60.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-03	8:55AM	CAL -201-MBE	DUSTER	1973	LOCAL	3.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-04	9:00AM	CAL -209KTG	MATADOR	1974	LOCAL	1.MI.	NO-ATB	0.0	0.0	FORCE	
A-05	9:10AM	CAL -009KEY	1973 VW	BUS	HIGHWAY	80.MI.	NO-NBL	7.2	100.0	POOR	NO
A-06	9:20AM	CAL -0RR519	1964 DODGE	DART	HIGHWAY	4.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-07	9:30AM	CAL -978HAO	1973 CHEV	CAPRICE	HIGHWAY	70.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-08	9:45AM	CAL -SNX940	VW	1961	LOCAL	2.MI.	NO-NBL	0.0	0.0	GOOD	
A-09	9:55AM	CAL -03274M	1971 GMC	SPRINT	LOCAL	15.MI.	NO-NBL	0.0	0.0	GOOD	YES
A-10	10:07AM	CAL -904HLE	1973 PINTO	WAGON	HIGHWAY	125.MI.	PS-BSL	7.0	0.0	FORCE	NO
A-11	10:25AM	CAL -617HKS	1974 MONTEGO	WAGON	LOCAL	0.MI.	NO-NBL	0.0	100.0	GOOD	
A-12	10:30AM	CAL -736JAV	1966 FORD	LTD	LOCAL	1.MI.	NO-ATB	0.0	100.0	FORCE	NO
A-13	11:00AM	CAL -WPI476	MONTEPEY	1968	LOCAL	1.MI.	NO-NBL	7.0	100.0	GOOD	NO
A-14	11:10AM	CAL -688HZ	1973 FORD	PINTO	LOCAL	3.MI.	PS-BSL	7.2	0.0	FORCE	NO
A-15	11:35AM	CAL -907GDS	1972 CHEV	VEGA	HIGHWAY	200.MI.	NO-NBL	0.0	0.0	FORCE	
A-16	12:10PM	CAL -468FQG	1972 FORD	PINTO	LOCAL	2.MI.	FL-ATB	0.0	0.0	FORCE	NO
A-17	1:05PM	CAL -732CWP	1971 PLYMOUTH	FURY	LOCAL	3.MI.	NO-NBL	0.0	60.0	POOR	
A-18	1:12PM	CAL -66439N	1973 FORD	VAN	LOCAL	1.MI.	NO-NBL	0.0	100.0	POOR	YES
A-19	1:20PM	CAL -106MBZ	1973 VW	VAN	HIGHWAY	40.MI.	NO-NBL	0.0	100.0	POOR	
A-20	1:27PM	MEX -	1973 VW	VAN	LOCAL	0.MI.	NO-NBL	7.9	100.0	POOR	NO
A-21	1:38PM	CAL -095BGW	1970 FORD	TORINO WAGON	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-22	1:45PM	CAL -201AFQ	1969 VW	WAGON	LOCAL	3.MI.	FL-ATB	0.0	0.0	FORCE	NO
A-23	2:05PM	CAL -640 KCO	1974 FORD	PINTO	HIGHWAY	23.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-24	2:31PM	CAL -636FCB	1972 FORD	PINTO	HIGHWAY	100.MI.	NO-NBL	0.0	0.0	GOOD	
A-25	2:43PM	CAL -63277M	1973 CHEV	CUSTOM TM	LOCAL	1.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-26	2:50PM	CAL -YLZ244	RAMBLER	1969	HIGHWAY	20.MI.	NO-ATB	6.4	100.0	GOOD	
B-01	8:00AM	CAL -60350M	1973 CHEV	3/4 TON	LOCAL	1.MI.	NO-NBL	0.0	0.0	FORCE	NO
B-02	8:12AM	CAL -57103A	1968 DODGE	VAN	LOCAL	3.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-03	8:18AM	CAL -NAT 648	PEUGEOT	1961	LOCAL	1.MI.	NO-NBL	0.0	100.0	POOR	YES
B-04	8:35AM	CAL -225AOG	VW	1970	LOCAL	1.MI.	NO-ATB	0.0	100.0	FORCE	NO
B-05	0:00AM	CAL -6848VY	1971 CHEV	NOVA	LOCAL	1.MI.	NO-NBL	0.0	100.0	POOR	NO
B-06	8:56AM	CAL -342JWC	1974 FORD	GRAN TORINO	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	
B-07	9:07AM	CAL -062EEZ	1972 FORD	MUNTEGO	HIGHWAY	10.MI.	PS-BSL	7.2	0.0	FORCE	NO
B-08	9:30AM	CAL -937JBV	LA SABRE	1974	HIGHWAY	15.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-09	9:37AM	CAL -E5H 793	1966 DODGE	DART	LOCAL	2.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-10	9:50AM	CAL -498 JWO	1974 VW	VAN	LOCAL	1.MI.	NO-ATB	0.0	100.0	GOOD	NO
B-11	10:00AM	CAL -32028G	1970 DODGE	1 1/2 TON TRUCK	HIGHWAY	60.MI.	NO-NBL	0.0	100.0	FORCE	NO
B-12	10:13AM	CAL -280LBM	1974 CHEV	MALIBU	HIGHWAY	100.MI.	PS-BSL	8.0	0.0	FORCE	NO
B-13	10:45AM	CAL -280 LCQ	CAMPER COMMANDR	1974	HIGHWAY	100.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-14	11:30AM	CAL -973CGK	1973 FORD	COMET	LOCAL	3.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-15	11:45AM	CAL -027SEY	1972 PONIAC	SUNNEVILLE	LOCAL	1.MI.	NO-NBL	0.0	60.0	POOR	NO
B-16	12:00PM	CAL -253 KUA	1974 FORD	PINTO	LOCAL	4.MI.	PS-BSL	8.1	0.0	FORCE	
B-17	12:10PM	CAL -33539 S	1973 FORD	COURIER	LOCAL	10.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-18	12:20PM	CAL -334EDG	1972 FORD	TURNO WAGON	LOCAL	2.MI.	NO-NBL	0.0	100.0	GOOD	
B-19	1:00PM	CAL -626JEG	1974 CHEV	BLAZER	HIGHWAY	200.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-20	1:25PM	CAL -NEG508	1965 DODGE	POLERA	HIGHWAY	21.MI.	FL-ATB	0.0	0.0	FORCE	NO
B-21	1:35PM	CAL -033DXV	VW	1968	HIGHWAY	2.MI.	NO-NBL	7.7	100.0	GOOD	NO
B-22	1:45PM	CAL -357FMU	FIREBIRD	1973	LOCAL	2.MI.	NO-ATB	0.0	80.0	FORCE	NO
B-23	2:00PM	CAL -04117U	1972 FORD	COURIER	LOCAL	3.MI.	NO-NBL	0.0	100.0	GOOD	
B-24	2:15PM	CAL -422LGH	1974 PLYMOUTH	DUSTER	LOCAL	4.MI.	FL-ATB	0.0	0.0	FORCE	NO
B-25	2:30PM	CAL -498ARR	1970 PLYMOUTH	SATELLITE	LOCAL	4.MI.	NO-NBL	0.0	100.0	GOOD	
B-26	3:40PM	CAL -W66KNX	1973 CHEV	VEGA WAGON	LOCAL	2.MI.	PS-BSL	6.7	0.0	FORCE	NO
B-27	2:50PM	CAL -025 JAW	1974 FORD	LTD	HIGHWAY	200.MI.	NO-NBL	0.0	100.0	GOOD	NO

STATION# STAND(OHW/NOPV)

DATE- 8/13/74

AVE. UNDERGROUND TANK TEMP- 80.5 F

PUMP	TIME	VEHICLE TANK TEMP (DEG. F)	VEHICLE TANK PRESS (IN. H2O)	GAS DISP (GALS)	DISP TIME (MIN.)	DISP TEMP (DEG F)	RET VAPOR (DEG F)	INITIAL VOLUME (FT3)	FINAL VOLUME (FT3)	HYDCRBN CONC.	RET LINE PRESS (IN H2O)
A-31	8:25	67.0	0.0	16.0	2.8	75.0	69.0	425.493	427.318	69.0%	-0.352
A-32	8:47	82.0	0.0	8.4	1.8	79.0	65.0	427.316	428.172	67.0%	-0.322
A-33	8:55	72.0	0.0	12.6	2.0	80.0	68.0	428.195	432.221	66.0%	-0.213
A-34	9:08	73.0	0.0	5.4	2.0	79.0	64.0	433.221	431.036	63.5%	-0.313
A-35	9:10	79.0	0.0	6.8	1.6	79.0	64.0	431.036	431.420	63.5%	-0.322
A-36	9:20	77.0	0.0	11.9	1.3	80.0	70.0	431.421	432.830	63.5%	-0.250
A-37	9:30	92.0	0.0	13.9	2.4	79.0	68.0	432.835	434.349	62.5%	-0.352
A-38	9:45	75.0	0.0	7.4	1.3	79.0	66.0	434.349	435.315	61.0%	-0.350
A-39	9:55	84.0	0.0	12.2	2.1	80.0	68.0	435.315	436.859	74.0%	-0.320
A-40	10:07	85.0	0.0	7.7	1.7	79.0	68.0	436.863	437.715	63.5%	-0.220
A-41	10:25	78.0	0.0	5.4	2.6	78.0	67.0	437.715	438.577	72.0%	-0.322
A-42	10:38	77.0	0.0	5.4	1.0	80.0	69.0	438.582	439.285	72.0%	-0.250
A-43	11:00	75.0	0.0	10.2	1.6	80.0	68.0	439.285	440.367	71.5%	-0.250
A-44	11:12	75.0	0.0	7.2	1.3	80.0	70.0	442.367	441.205	71.0%	-0.352
A-45	11:35	69.0	0.0	8.6	1.5	80.0	70.0	441.205	442.282	71.2%	-0.052
A-46	12:10	66.0	1.4	8.4	1.3	80.0	71.0	442.104	443.150	72.5%	-0.100
A-47	1:05	85.0	0.0	9.0	2.2	83.0	75.0	443.152	443.725	69.0%	-0.303
A-48	1:12	93.0	0.0	14.7	2.8	83.0	76.0	443.726	444.728	70.0%	-0.100
A-49	1:20	92.0	0.0	5.4	1.0	80.0	76.0	444.728	444.978	69.0%	-0.222
A-50	1:27	94.0	0.0	10.1	2.5	83.0	76.0	444.977	445.300	69.0%	-0.122
A-51	1:36	89.0	0.0	12.0	2.1	83.0	77.0	445.323	446.940	69.0%	-0.353
A-52	1:45	93.0	0.0	7.6	1.4	80.0	83.0	446.940	447.538	69.0%	-0.373
A-53	2:05	94.0	0.0	8.7	1.6	83.0	82.0	447.553	448.704	68.5%	-0.202
A-54	2:31	111.0	0.0	5.4	1.5	85.0	85.0	448.713	449.023	70.0%	-0.623
A-55	2:43	69.0	0.0	8.3	4.6	83.0	80.0	249.023	251.742	69.0%	-0.403
A-56	2:58	123.0	0.0	7.6	1.3	82.0	80.0	451.742	452.106	69.0%	-0.782
B-31	8:14	73.0	0.0	12.7	2.3	76.0	63.0	144.739	146.531	71.0%	-0.730
B-32	8:12	78.0	0.0	14.8	2.8	73.0	66.0	146.532	148.438	71.0%	-0.253
B-33	8:13	64.0	0.0	11.9	1.4	0.0	63.0	148.438	149.105	0.0%	-0.163
B-34	8:35	64.0	0.0	8.6	1.6	70.0	67.0	149.107	150.155	0.0%	-0.103
B-35	8:39	69.0	0.0	11.9	2.1	70.0	67.0	150.163	150.595	73.0%	-0.150
B-36	8:56	77.0	0.5	16.1	2.3	75.0	75.0	150.595	152.589	0.0%	-0.052
B-37	9:07	84.0	0.0	12.0	1.2	73.0	75.0	152.597	154.226	73.2%	0.052
B-38	9:30	75.0	2.6	18.6	1.7	75.0	72.0	154.241	156.137	74.5%	0.333
B-39	9:37	74.0	2.0	12.7	2.2	73.0	73.0	156.138	157.068	75.0%	0.143
B-40	9:52	74.0	0.0	7.1	3.9	74.0	72.0	157.070	157.252	74.0%	-0.103
B-41	10:40	77.0	0.0	14.1	2.6	76.0	72.0	157.253	158.308	73.5%	0.130
B-42	10:13	81.0	0.2	12.2	2.2	77.0	75.0	158.310	159.775	76.0%	0.230
B-43	10:45	84.0	0.0	43.3	6.6	76.0	77.0	159.788	164.751	76.0%	0.250
B-44	11:30	89.0	0.0	9.8	1.9	76.0	77.0	164.854	165.958	75.0%	0.113
B-45	11:45	79.0	0.0	18.4	3.4	77.0	77.0	165.960	167.348	74.0%	-0.070
B-46	12:00	65.0	1.2	5.4	1.1	76.0	77.0	167.352	168.092	74.0%	0.232
B-47	12:10	86.0	0.0	9.8	1.9	78.0	77.0	168.094	169.277	75.0%	0.162
B-48	12:20	81.0	0.0	17.0	2.1	84.0	79.0	169.285	171.339	76.0%	0.250
B-49	1:00	85.0	0.0	16.0	2.8	83.0	82.0	171.342	172.963	76.5%	0.123
B-50	1:25	105.0	0.0	9.1	1.5	94.0	81.0	172.975	173.754	76.5%	-0.080
B-51	1:35	82.0	0.0	4.7	2.9	95.0	81.0	173.758	174.232	77.0%	0.140
B-52	1:45	97.0	0.4	9.1	14.5	96.0	80.0	174.234	175.159	76.0%	0.150
B-53	2:00	88.0	0.0	8.3	1.6	94.0	81.0	175.163	175.965	74.0%	0.162
B-54	2:15	92.0	0.6	7.9	1.5	86.0	82.0	175.970	177.217	76.0%	0.162
B-55	2:30	8.0	0.0	8.3	1.5	91.0	82.0	177.019	178.827	76.0%	0.162
B-56	3:40	100.0	0.1	6.6	1.1	92.0	83.0	178.233	178.628	77.5%	0.150
B-57	2:50	93.0	0.0	10.5	2.1	84.0	86.0	178.628	179.686	77.5%	0.130

STATION- STAND(OPW/NOPV)

DATE- 8/14/74

AVE. UNDERGROUND TANK TEMP- 80.5 F

PUMP	TIME	LIC. NO.	MAKE	MODEL	TYPE OF DRIVING	DISTANCE TRAVELED	LK CHR	RVP	EXPLCS.	NUZZLE	FIT	SPLITBACK
A-01	1:05PM	CAL -317ARM	1965 PLYMOUYN	VELVEDERE	LOCAL	2.MI.	NO-NBL	0.0	45.0	POOR	NU	
A-02	1:10PM	CAL -201LCD	1974 BUICK	CENTURY	HIGHWAY	80.MI.	PS-BSL	0.0	0.0	FORCE	NO	
A-03	1:22PM	CAL -617HKS	1973 MERCURY	MONTEGO	LOCAL	0.MI.	NO-NBL	0.0	0.0	GOOD	NO	
A-04	1:30PM	CAL -699J88	1972 FORD	PINTO	LOCAL	0.MI.	NO-NBL	0.0	100.0	POOR	NO	
A-05	1:35PM	CAL -366HBZ	1973 DATSUN	1200	HIGHWAY	50.MI.	NO-NBL	7.4	100.0	GOOD	NO	
A-06	1:40PM	UTAH-JHE168	1972 PONTIAC	GRAND PRIX	HIGHWAY	300.MI.	PS-BSL	0.0	0.0	FORCE	NO	
A-07	2:05PM	FLA -19245	1972 FORD	FIREBIRD	HIGHWAY	100.MI.	NO-NBL	0.0	10.0	GOOD	NO	
A-08	2:43PM	CAL -999KTP	1974 FORD	PINTO	LOCAL	10.MI.	PS-BSL	0.0	0.0	FORCE	NO	
A-09	2:40PM	CAL -4U562	1974 DATSUN	WAGON 610	HIGHWAY	100.MI.	NO-NBL	0.0	100.0	POOR	NO	
A-10	3:05PM	COLO-LXR080	FORD SEDAN 1973	COUNTRY WAGON	LOCAL	4.MI.	PS-BSL	7.7	0.0	FORCE	NO	
A-11	3:20PM	CAL -056HX4	1973 OLDS	TURONADO	HIGHWAY	20.MI.	NO-NBL	0.0	0.0	GOOD	NO	
A-12	3:30PM	CAL -V58520	1966 CHEVY	1/2 TON	LOCAL	25.MI.	NO-NBL	0.0	100.0	GOOD	NO	
A-13	4:12PM	CAL -9054BX	1973 OLDS	CUTLASS	LOCAL	9.MI.	NO-NBL	0.0	100.0	GOOD	NO	
A-14	4:25PM	CAL -467DVO	1968 VW		LOCAL	1.MI.	FL-ATB	0.0	0.0	FORCE	NO	
A-15	4:30PM	CAL -NDH856	1968 DODGE	CORONET	LOCAL	15.MI.	NO-NBL	7.2	0.0	GOOD	NO	
A-16	4:34PM	CAL -0424011	1973 FORD	COURIER	LOCAL	2.MI.	PS-BSL	0.0	0.0	FORCE	NO	
A-17	4:50PM	CAL -WDW449	1969 DODGE	DART	HIGHWAY	6.MI.	NO-NBL	0.0	0.0	GOOD	NO	
A-18	5:00PM	CAL -YLA423	1969 PLYMOUTH	VALIANT	LOCAL	4.MI.	NO-NBL	0.0	0.0	GOOD	NO	
A-19	5:10PM	CAL -015CDV	1960 PLYMOUTH	VALIANT	LOCAL	3.MI.	NO-NBL	0.0	100.0	POOR	NO	
A-20	5:20PM	CAL -YAM267	AUSTEN HEALEY	1968 SPRITE	LOCAL	5.MI.	NO-NBL	6.4	65.0	GOOD	NO	
A-21	5:24PM	CAL -462CMC	1971 VW		LOCAL	4.MI.	NO-NBL	0.0	0.0	GOOD	NO	
A-22	5:30PM	CAL -122AXU	1970 VW		LOCAL	5.MI.	NO-NBL	0.0	100.0	GOOD	NO	
A-23	6:05PM	CAL -181HKM	1973 MERCURY	COUGAR	HIGHWAY	20.MI.	NO-NBL	0.0	100.0	GOOD	NO	
A-24	6:15PM	ORE -HGD198	1973 CADILLAC	FLEETWOOD	LOCAL	0.MI.	PS-BSL	0.0	0.0	FORCE	NO	
B-01	12:50PM	CAL -309518	1968 CHEVY	1/2 TON	LOCAL	40.MI.	NO-NBL	0.0	100.0	GOOD	NO	
B-02	12:55PM	CAL -XQK313	1968 VW		LOCAL	16.MI.	NO-ATB	7.8	100.0	FORCE	NO	
B-03	1:05PM	CAL -994JWC	1968 VW		LOCAL	5.MI.	NO-NBL	0.0	100.0	GOOD	NO	
B-04	1:06PM	CAL -323HBE	1970 PLYMOUTH	BARRACUDA	HIGHWAY	90.MI.	NO-ATB	0.0	100.0	FORCE	NO	
B-05	1:37PM	CAL -109FEZ	1971 VW	BUG	LOCAL	5.MI.	NO-NBL	0.0	100.0	POOR	NO	
B-06	1:30PM	CAL -624GKH	1973 FORD	MAVERICK	HIGHWAY	20.MI.	PS-BSL	7.8	0.0	FORCE	NO	
B-07	1:35PM	CAL -056KNX	1973 CHEVY	VEGA	HIGHWAY	60.MI.	NO-NBL	0.0	100.0	POOR	YES	
B-08	0:00AM	CAL -WWV283	1968 VW	BUG	LOCAL	2.MI.	FL-ATB	0.0	0.0	FORCE		
B-09	1:50PM	CAL -SPM507	1966 MERCURY		LOCAL	6.MI.	NO-NBL	0.0	20.0	GOOD		
B-10	1:55PM	CAL -539EEV	1972 IH	SCOUT	LOCAL	3.MI.	FL-ATB	7.4	0.0	FORCE		
B-11	2:45PM	CAL -268JWD	1974 FORD	PINTO WAGON	LOCAL	2.MI.	NO-NBL	0.0	0.0	GOOD	NO	
B-12	3:49PM	CAL -H66635	1960 CHEVY	1/2 TON	HIGHWAY	20.MI.	NO-ATB	0.0	20.0	FORCE	NO	
B-13	3:25PM	CAL -UFM940	1967 VW		HIGHWAY	130.MI.	NO-NBL	0.0	60.0	POOR	NO	
B-14	3:40PM	CAL -617HKS	1973 MERCURY	MONTEGO	LOCAL	1.MI.	PS-BSL	0.0	0.0	FORCE	NO	
B-15	0:00AM	CAL -975H84	1973 DATSUN	240Z	HIGHWAY	24.MI.	NO-NBL	0.0	100.0	POOR	NO	
B-16	4:30PM	CAL -POM911	1961 PLYMOUTH	VALIANT	LOCAL	2.MI.	NO-ATB	0.0	100.0	FORCE	NO	
B-17	4:40PM	CAL -K42691	1950 FORD	1/2 TON TRUCK	LOCAL	2.MI.	NO-NBL	0.0	100.0	POOR	NO	
B-18	4:45PM	CAL -MRF237	1961 CHEVY		LOCAL	2.MI.	NO-NBL	0.0	100.0	GOOD	NO	
B-19	4:55PM	CAL -VML569	1967 AMERICAN	RAMBLER	HIGHWAY	20.MI.	NO-NBL	0.0	100.0	POOR	NO	
B-20	5:00PM	CAL -06089U	1973 CHEVY	TROCK	HIGHWAY	50.MI.	NO-ATB	6.5	100.0	FORCE	NO	
B-21	5:10PM	CAL -39031G	1970 GMC	1300 1/2 TON	HIGHWAY	3.MI.	NO-NBL	0.0	100.0	GOOD	NO	
B-22	5:25PM	CAL -WMK565	1968 PLYMOUTH	FURY	HIGHWAY	25.MI.	NO-ATB	8.2	100.0	FORCE	NO	
B-23	3:35PM	CAL -448EFK	1972 JEEP		LOCAL	5.MI.	NO-NBL	0.0	0.0	GOOD	NO	
B-24	5:45PM	CAL -N64762	1964 GMC	1/2 TON TRUCK	LOCAL	1.MI.	NO-ATB	0.0	100.0	FORCE	NO	
B-25	5:55PM	CAL -K86655	1961 CHEVY	APACHE	LOCAL	0.MI.	NO-NBL	0.0	100.0	GOOD	NO	
B-26	6:10PM	CAL -309GES	1973 FORD	PINTO WAGON	LOCAL	5.MI.	PS-BSL	0.0	0.0	FORCE	NO	
B-27	6:30PM	CAL -201GTU	1973 FORD	LTD	HIGHWAY	90.MI.	NO-NBL	0.0	0.0	GOOD	NO	
B-28	6:35PM	CAL -EDG067	1957 CHEVY	SEDAN	LOCAL	0.MI.	NO-ATB	0.0	100.0	FORCE	NO	

A
21

STATION- STAND(OPOV/HOPV)

DATE- 8/14/74

AVE. UNDERGROUND TANK TEMP- 80.5 F

PUMP	TIME	VEHICLE TANK TEMP (DEG. F)	VEHICLE TANK PRESS (IN. H2O)	GAS CISP (GALS)	DISP TIME (MIN.)	DISP TEMP (DEG F)	RET VAPOR TEMP (DEG F)	INITIAL VOLUME (FT3)	FINAL VOLUME (FT3)	HYDCRBN CONC.	RET LINE PRESS (IN H2O)
A-31	1:05	100.0	0.0	9.4	1.8	75.0	83.0	452.198	452.437	74.2%	-0.250
A-22	1:10	113.0	0.9	6.4	1.1	83.0	84.0	452.439	452.744	76.0%	-0.250
A-23	1:22	93.0	0.2	5.4	0.7	83.0	84.0	452.746	453.728	73.0%	0.100
A-34	1:30	92.0	0.0	5.4	1.2	83.0	84.0	453.728	454.237	73.2%	-0.350
A-25	1:35	103.0	0.0	5.4	1.2	83.0	84.0	454.237	454.605	72.5%	-0.250
A-36	1:40	107.0	-0.1	20.5	3.9	84.0	88.0	454.805	455.640	75.5%	-0.100
A-27	2:05	130.0	0.0	11.9	2.1	84.0	92.0	454.840	456.872	73.4%	-0.400
A-35	2:43	103.0	0.4	5.4	1.1	85.0	97.0	456.102	456.565	80.2%	0.350
A-29	2:48	104.0	0.0	6.4	1.7	83.0	95.0	456.600	457.100	78.0%	0.250
A-18	3:25	105.0	0.4	8.8	1.6	85.0	97.0	457.120	458.150	79.0%	0.100
A-11	3:29	134.0	0.2	11.8	2.1	83.0	97.0	458.155	458.428	79.0%	0.100
A-10	3:39	95.0	0.0	6.2	0.9	83.0	95.0	458.432	459.248	77.0%	0.250
A-13	4:12	112.0	0.0	16.7	3.0	83.0	98.0	459.282	462.352	79.2%	0.250
A-14	4:25	121.0	0.0	8.3	2.4	83.0	97.0	462.357	461.512	79.0%	0.200
A-15	4:32	107.0	0.0	4.8	0.9	83.0	98.0	461.543	461.973	78.0%	0.300
A-16	4:38	103.0	0.0	8.6	1.7	84.0	96.0	461.974	463.324	78.0%	0.250
A-17	4:50	121.0	0.0	9.6	1.8	84.0	97.0	463.032	464.188	77.0%	0.050
A-18	5:00	124.0	0.0	15.7	3.0	84.0	97.0	464.211	465.870	78.0%	0.005
A-19	5:10	120.0	0.0	10.7	2.1	84.0	98.0	465.870	466.015	76.2%	-0.100
A-20	5:20	111.0	0.0	6.1	1.1	84.0	98.0	466.036	466.612	75.0%	-0.250
A-21	5:24	96.0	0.0	5.4	1.1	84.0	96.0	466.612	467.411	75.0%	0.250
A-22	5:30	98.0	0.0	8.6	1.6	85.0	95.0	467.415	468.460	76.2%	0.350
A-23	6:05	9.0	0.0	15.0	2.8	84.0	98.0	468.475	469.386	77.0%	0.250
A-24	6:15	100.0	0.0	21.9	4.1	84.0	94.0	469.320	471.600	77.0%	0.200
B-34	12:54	94.0	0.0	12.0	2.3	76.0	77.0	179.917	181.119	76.5%	-0.250
B-32	12:55	92.0	0.0	5.1	1.0	77.0	78.0	181.127	181.686	0.0%	-0.250
B-33	1:05	92.0	0.0	5.4	0.7	77.0	60.0	181.687	182.217	76.5%	-0.030
B-34	1:06	112.0	0.0	13.1	1.6	77.0	79.0	182.218	183.458	76.0%	-0.300
B-35	1:37	96.0	0.0	7.6	1.3	79.0	81.0	183.473	184.226	78.0%	-0.100
B-36	1:38	104.0	1.0	4.1	0.8	79.0	80.0	184.215	184.617	77.0%	-0.100
B-37	1:39	114.0	0.1	4.5	0.7	80.0	80.0	184.617	184.670	77.5%	0.250
B-38	2:00	94.0	0.0	7.1	1.3	79.0	81.0	184.673	185.589	77.5%	0.240
B-39	2:00	102.0	0.0	6.3	1.3	79.0	82.0	185.595	186.392	78.0%	-0.140
B-40	2:05	97.0	2.1	14.7	2.8	80.0	81.0	186.395	188.152	79.0%	-0.220
B-41	2:45	123.0	0.0	8.2	1.6	83.0	90.0	188.153	189.128	77.5%	-0.140
B-42	3:49	101.0	0.0	5.4	1.0	87.0	95.0	189.138	189.831	77.5%	-0.050
B-13	3:50	123.0	0.0	5.9	1.1	87.0	90.0	189.832	190.592	79.0%	-0.250
B-14	3:54	127.0	0.2	5.4	1.1	85.0	87.0	190.596	191.163	81.5%	0.250
B-15	4:20	127.0	0.0	9.6	2.2	83.0	87.0	191.169	191.922	81.0%	-0.190
B-16	4:33	127.0	0.0	11.8	2.3	87.0	86.0	191.941	192.223	83.0%	-0.110
B-17	4:40	128.0	0.0	17.9	4.1	87.0	86.0	192.023	193.556	81.5%	-0.090
B-18	4:45	0.0	0.0	14.5	2.6	84.0	85.0	193.557	195.038	80.0%	0.220
B-19	4:55	101.0	0.0	11.8	2.2	84.0	87.0	195.048	195.138	81.0%	-0.110
B-20	5:00	127.0	0.0	7.8	1.8	87.0	86.0	195.151	195.158	81.5%	0.010
B-21	5:10	103.0	0.0	12.3	2.3	87.0	87.0	195.167	196.243	81.0%	0.360
B-22	5:26	94.0	0.0	15.0	1.4	84.0	87.0	196.261	197.735	81.0%	0.130
B-23	3:35	104.0	0.0	13.6	2.7	85.0	87.0	197.737	199.331	82.0%	0.270
B-24	5:45	98.0	0.0	8.3	1.6	85.0	88.0	199.429	200.164	81.0%	0.350
B-25	5:55	100.0	0.0	7.3	1.3	85.0	87.0	200.183	200.757	82.0%	0.080
B-26	6:10	105.0	0.0	7.0	1.4	85.0	87.0	200.837	201.382	82.0%	-0.140
B-27	6:30	106.0	0.0	18.6	3.6	84.0	86.0	201.385	202.629	81.5%	0.250
S-2*	6:35	94.0	2.4	5.4	0.9	82.0	84.0	202.612	203.018	81.5%	0.150

STATION- STAND(OPW/PV)

DATE- 8/15/74

AVE. UNDERGROUND TANK TEMP- 82.0 F

PUMP	TIME	LIC. NO.	MAKE	MODEL	TYPE OF DRIVING	DISTANCE TRAVELED	LR CHK RESULT	RVP	EXPLOS.	NOZZLE FIT	SPIBACK
A-01	10:35AM	CAL -863EFK	1972 FORD	GRAN TORINO	LOCAL	1.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-02	10:45AM	CAL -853JTZ	MERCEDES	1973	LOCAL	8.MI.	NO-NBL	0.0	10.0	POOR	NO
A-03	11:05AM	CAL -E803228	1968 CHEV	CHEVELLE	HIGHWAY	43.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-04	11:15AM	CAL -693JAH	1974 DATSUN	8210	LOCAL	3.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-05	11:25AM	CAL -145JZF	DELTA 88	1973	HIGHWAY	114.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-06	11:33AM	CAL -544CL1	1971 CHEV	VEGA	HIGHWAY	110.MI.	PS-BSL	0.8	0.0	FORCE	NO
A-07	11:42AM	CAL -106H8Z	1973 VW	VAN	HIGHWAY	45.MI.	NO-NBL	0.0	100.0	POOR	NO
A-08	11:50AM	CAL -513JAY	1973 CHEV	IMPALA WAGON	HIGHWAY	50.MI.	PS-BSL	0.0	0.0	FORCE	NO
A-09	12:00PM	CAL -368FRI	DELTA 88	1972	HIGHWAY	75.MI.	NO-NBL	0.0	100.0	POOR	NO
A-10	12:15PM	CAL -518FDO	1972 FORD	PINTO	LOCAL	2.MI.	FL-ATB	0.0	0.0	FORCE	NO
A-11	12:25PM	CAL -15521N	1973 FORD	1/2 TON	LOCAL	3.MI.	NO-NBL	8.2	0.0	GOOD	NO
A-12	12:20PM	CAL -XZP598	MORRIS COOPER	1960	LOCAL	0.MI.	NO-NBL	0.0	100.0	POOR	NO
A-13	12:52PM	CAL -ZUY008	VW	1968	LOCAL	6.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-14	12:59PM	CAL -254LBF	1974 FORD	MAVERICK	LOCAL	1.MI.	PS-BSL	0.0	0.0	FORCE	NO
A-15	2:13PM	ARIZ-STJ-314	1974 VW	BUS	HIGHWAY	70.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-16	2:20PM	CAL -871060	1955 FORD	1/2 TON TRUCK	LOCAL	3.MI.	NO-NBL	7.5	5.0	GOOD	NO
A-17	2:24PM	CAL -7654XC	1970 FORD	VAN	HIGHWAY	3.MI.	NO-NBL	0.0	100.0	POOR	YES
A-18	2:36PM	CAL -RLH603	1966 CHEV	IMPALA	HIGHWAY	10.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-19	2:43PM	CAL -095BGW	1970 CHEV	TORINO	LOCAL	0.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-20	2:47PM	CAL -294FSZ	1972 CHEV	VEGA	HIGHWAY	20.MI.	PS-BSL	0.0	0.0	FORCE	NO
A-21	3:05PM	CAL -193HCJ	1973 FIAT	128	HIGHWAY	40.MI.	NO-NBL	6.9	0.0	GOOD	NO
A-22	3:26PM	CAL -MNC554	1965 DODGE	DART	LOCAL	3.MI.	NO-NBL	0.0	100.0	POOR	NO
A-23	3:35PM	CAL -E551741	POLARA	1970	HIGHWAY	50.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-24	3:45PM	CAL -474FQV	1968 BUICK	LA SABRE	LOCAL	1.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-25	4:03PM	CAL -1400783	1974 FORD	PINTO WAGON	HIGHWAY	170.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-26	4:15PM	CAL -357FMV	1973 PONTIAC	TRANS AM	HIGHWAY	2.MI.	NO-NBL	7.6	100.0	POOR	NO
A-27	4:23PM	CAL -239LCD	1974 CHEV	NOVA	LOCAL	3.MI.	NO-NBL	0.0	0.0	GOOD	NO
A-28	4:35PM	CAL -371GES	DATSON	1972	HIGHWAY	20.MI.	PS-ESL	0.0	0.0	FORCE	NO
A-29	4:50PM	CAL -X0K720	VW	1969	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-30	4:50PM	CAL -179KVA	1974 CHEV	MALIBU WAGON	HIGHWAY	130.MI.	PS-ESL	0.0	0.0	FORCE	NO
A-31	5:10PM	CAL -IV24 DEAL.	1974 AUDI	100LS	LOCAL	3.MI.	NO-NBL	7.5	100.0	GOOD	NO
A-32	5:15PM	CAL -037-JWG	1974 PORCHE	914	LOCAL	10.MI.	NO-NBL	0.0	100.0	POOR	NO
A-33	6:18PM	CAL -040AXD	VW	1969	LOCAL	3.MI.	NO-NBL	0.0	100.0	GOOD	NO
A-34	5:25PM	CAL -SCE030	1966 FORD	MUSTANG	HIGHWAY	35.MI.	NO-NBL	0.0	45.0	GOOD	NO
B-01	10:38AM	CAL -172DKT	1972 CHEV	VEGA WAGON	LOCAL	2.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-02	11:05AM	CAL -122DXQ	1968 FIAT	124	LOCAL	20.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-03	11:12AM	CAL -96328H	1971 CHEV	3/4 TON TRUCK	LOCAL	35.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-04	11:15AM	CAL -E15841	1962 FORD	CUSTOM PICKUP	HIGHWAY	3.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-05	11:30AM	CAL -703DXP	1971 DODGE	DART	HIGHWAY	100.MI.	NO-NBL	7.3	0.0	GOOD	NO
B-06	11:40AM	CAL -934HCM	1973 CHEV	IMPALA WAGON	HIGHWAY	100.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-07	11:55AM	CAL -62155K	1972 FORD	350 TRUCK	LOCAL	5.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-08	12:17PM	CAL -326HCT	CHALLENGER	1973	HIGHWAY	50.MI.	NO-ATB	0.0	50.0	FORCE	NO
B-09	0:00AM	CAL -NASS581	1964 FORD	FALCON	LOCAL	3.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-10	12:40PM	CAL -021FXO	VENTURA	1972	HIGHWAY	200.MI.	FL-ATB	7.6	0.0	FORCE	NO
B-11	12:45PM	CAL -145EEZ	1972 CHEV	NOVA	LOCAL	1.MI.	NO-NBL	0.0	100.0	POOR	NO
B-12	2:00PM	CAL -569EEY	1972 BUICK	SKYLARK	HIGHWAY	75.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-13	2:10PM	CAL -6015850	1969 VW	BUG	HIGHWAY	15.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-14	2:21PM	CAL -50254F	1970 FORD	3/4 TON TRUCK	HIGHWAY	3.MI.	NO-ATB	0.0	100.0	FORCE	NO
B-15	2:30PM	CAL -YLZ244	1969 RAMBLER	2 DR.	HIGHWAY	20.MI.	NO-NBL	7.5	100.0	GOOD	NO
B-16	2:55PM	CAL -062EEZ	MONTEGO	1972	LOCAL	1.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-17	3:15PM	CAL -814GUV	1971 FORD	LTD	HIGHWAY	70.MI.	NO-NBL	0.0	0.0	GOOD	NO

STATION- STAND(OPEL/PV)

DATE- 8/15/74

AVE. UNDERGROUND TANK TEMP- 62.0 F

PUMP	TIME	LIC. NO.	MAKE	MODEL	TYPE OF DRIVING	DISTANCE TRAVELED	LK CHK	RVP	EXPLOS.	NOZZLE
B-18	3:43PM	CAL -969EFK	1972 CHEV	NOVA	LOCAL	3.MI.	PS-BSL	0.0	0.0	FIT
B-19	3:50PM	CAL -69435D	1973 GMC	3/4 TON TRUCK	LOCAL	4.MI.	NO-NBL	0.0	0.0	FORCE
B-20	4:07PM	CAL -936EFZ	MATADOR	1972	LOCAL	3.MI.	PS-BSL	6.4	0.0	GOOD
B-21	4:15PM	CAL -04117U	1972 FORD	COURIER	LOCAL	25.MI.	NO-NBL	0.0	100.0	GOOD
B-22	4:30PM	CAL -166JVU	1967 BUICK	LA SABRE	LOCAL	3.MI.	NO-ATB	0.0	100.0	FORCE
B-23	4:40PM	CAL -T77570	1963 DODGE	VAN	LOCAL	50.MI.	NO-NBL	0.0	0.0	GOOD
B-24	4:50PM	KAN -CQ9129	BARRACUDA	1964	HIGHWAY	15.MI.	NO-ATB	0.0	100.0	FORCE
B-25	4:55PM	CAL -685FQM	1972 DODGE	VAN	HIGHWAY	80.MI.	NO-NBL	0.0	100.0	POOR
B-26	5:05PM	CAL -619JVU	CAPRI	1974	HIGHWAY	50.MI.	NO-ATB	0.0	10.0	FORCE
B-27	5:13PM	CAL -257JBQ	LE MANS	1973	LOCAL	3.MI.	NO-NBL	6.8	0.0	GOOD
B-28	5:15PM	CAL -2FV266	1969 VW	SQUAREBACK	LOCAL	1.MI.	FL-ATB	0.0	0.0	FORCE
B-29	5:25PM	CAL -08346W	1973 DATSUN	PICKUP	LOCAL	3.MI.	NO-NBL	0.0	100.0	GOOD

STATION - STAND(OHW/PV)

DATE - 8/15/74

AVE. UNDERGROUND TANK TEMP - 82.0 F

PUMP	TIME	VEHICLE TANK TEMP (DEG. F)	VEHICLE TANK PRESS (IN. H2O)	GAS DISP (GALS)	DISP TIME (MIN.)	DISP TEMP (DEG F)	RET VAPOR TEMP (DEG F)	INITIAL VOLUME (FT3)	FINAL VOLUME (FT3)	HYDCRBN CONC. (IN H2O)	RET LINE PRESS (IN H2O)
A-21	10:35	74.0	0.0	14.9	2.5	83.0	75.0	473.225	474.618	72.0%	-3.302
A-22	10:45	84.0	0.0	15.2	3.7	89.0	78.0	474.618	475.961	72.5%	-2.400
A-23	11:25	85.0	0.0	15.2	2.6	85.0	84.0	475.965	477.344	67.5%	-2.522
A-24	11:15	73.0	0.0	8.5	1.3	82.0	81.0	477.348	478.430	66.0%	-2.400
A-25	11:25	81.0	0.0	6.3	1.1	83.0	80.0	478.413	478.422	64.0%	-2.500
A-26	11:33	86.0	0.0	7.4	1.9	82.0	80.0	478.427	479.134	65.5%	-2.532
A-27	11:42	76.0	0.0	8.1	1.4	82.0	80.0	479.134	479.157	63.5%	-2.143
A-28	11:51	86.0	-0.1	18.4	3.4	82.0	83.0	479.159	481.104	63.0%	-2.320
A-29	12:00	94.0	0.0	11.2	2.7	82.0	84.0	481.105	481.562	78.2%	-2.520
A-10	12:15	82.0	0.0	5.4	0.9	83.0	82.0	481.562	482.133	76.0%	-2.500
A-11	12:25	81.0	0.0	17.1	2.3	83.0	82.0	482.134	484.170	75.0%	-2.922
A-12	12:29	97.0	0.0	6.1	1.5	83.0	84.0	484.170	484.613	72.5%	-2.100
A-13	12:52	76.0	0.0	6.9	1.4	83.0	82.0	484.614	485.022	71.0%	-1.222
A-14	12:59	84.0	-0.2	13.4	2.5	83.0	83.0	485.032	487.132	71.0%	-2.822
A-15	2:13	3.0	0.0	7.6	1.5	84.0	92.0	487.158	487.523	81.0%	-2.323
A-16	2:29	84.0	0.0	9.1	1.6	85.0	92.0	487.534	488.454	79.0%	-2.423
A-17	2:24	82.0	0.0	20.0	2.7	85.0	91.0	488.684	490.354	78.0%	-1.800
A-18	2:36	96.0	0.0	5.4	1.0	85.0	90.0	490.358	498.868	78.5%	-3.400
A-19	2:43	69.0	0.0	4.7	1.3	85.0	90.0	498.868	491.460	77.0%	-2.250
A-20	2:47	98.0	-0.2	5.3	1.0	85.0	93.0	491.465	492.282	78.0%	-2.322
A-21	3:05	93.0	0.0	6.5	1.2	86.0	92.0	492.293	492.784	78.0%	-2.750
A-22	3:26	56.0	0.0	14.2	2.5	85.0	93.0	492.885	493.558	78.0%	-2.323
A-23	3:35	126.0	0.0	15.6	2.9	85.0	92.0	493.558	495.213	79.0%	-2.053
A-24	3:45	129.0	0.0	16.7	2.8	85.0	92.0	495.222	496.557	79.0%	-3.400
A-25	4:43	124.0	0.0	9.5	2.7	85.0	95.0	496.556	497.238	77.0%	-2.253
A-26	4:15	105.0	0.0	5.4	1.2	85.0	93.0	497.238	497.726	81.0%	-3.233
A-27	4:23	24.0	0.0	12.5	2.2	85.0	92.0	497.727	499.168	82.0%	-3.256
A-28	4:35	92.0	0.0	7.3	1.3	85.0	90.0	499.168	499.910	82.5%	-2.150
A-29	4:53	92.0	0.0	9.4	1.7	85.0	90.0	499.910	500.920	79.5%	-0.253
A-30	4:59	128.0	0.0	11.6	2.2	85.0	93.0	520.982	501.878	61.5%	-0.233
A-31	5:10	83.0	0.0	9.3	1.7	85.0	91.0	501.880	522.932	79.0%	-0.253
A-32	5:15	98.0	0.0	11.8	2.2	85.0	92.0	522.932	522.932	78.0%	-2.520
A-33	5:18	88.0	0.0	5.4	1.0	85.0	89.0	522.932	503.615	79.0%	-0.253
A-34	5:25	151.0	0.0	5.4	0.8	85.0	90.0	523.615	503.843	76.0%	-3.123
B-31	11:38	81.0	0.0	8.2	2.3	77.0	78.0	283.029	284.211	78.0%	-3.223
B-32	11:45	9.0	0.0	9.1	2.1	80.0	72.0	284.015	285.029	77.5%	-3.223
B-33	11:12	67.0	0.0	15.8	3.5	80.0	74.0	285.033	287.165	80.0%	-3.760
B-34	11:15	69.0	0.0	10.7	1.8	79.0	74.0	287.165	288.637	78.0%	-3.123
B-35	11:30	79.0	0.0	14.0	2.7	80.0	75.0	288.635	210.385	79.0%	-2.233
B-36	11:48	69.0	0.0	17.2	1.0	82.0	76.0	210.085	212.536	2.0%	-0.133
B-37	11:55	72.0	0.0	11.2	2.1	83.0	78.0	212.546	213.828	79.5%	-3.790
B-38	12:17	85.0	0.0	15.2	3.0	82.0	79.0	213.852	215.593	78.0%	-3.280
B-39	12:18	75.0	0.0	5.4	1.0	83.0	80.0	215.594	216.221	76.5%	-3.220
B-40	12:48	105.0	-0.2	11.1	2.1	82.0	84.0	215.224	217.316	79.0%	-0.240
B-41	12:45	73.0	0.0	6.4	1.2	82.0	88.0	217.029	217.135	77.0%	-3.33
B-42	2:20	102.0	-0.2	7.7	1.4	75.0	82.0	217.761	218.337	79.5%	-3.460
B-43	2:10	61.0	0.0	6.0	1.1	79.0	80.0	218.350	218.950	79.0%	-2.162
B-44	2:21	88.0	0.0	16.0	1.9	83.0	78.0	218.955	219.025	79.0%	-2.022
B-45	2:33	96.0	0.0	6.6	1.5	83.0	78.0	219.078	219.967	77.5%	-2.230
B-46	2:55	86.0	0.4	13.6	2.5	81.0	85.0	219.975	221.615	79.0%	-2.340
B-47	3:15	101.0	0.0	18.6	3.4	82.0	85.0	221.616	223.079	79.0%	-3.622

STATION - STAND(OHN/PV)

DATE - 8/15/74

AVE. UNDERGROUND TANK TEMP - 62.0 F

PUMP	TIME	VEHICLE TANK TEMP (DEG. F)	VEHICLE TANK PRESS (IN. H ₂ O)	GAS DISP (GALS)	DISP TIME (MIN.)	DISP TEMP (DEG F)	RET VAPOR (DEG F)	INITIAL VOLUME (FT ³)	FINAL VOLUME (FT ³)	HYDROBEN CONC. (IN H ₂ O)	RET LIV PRESS
B-18	3:43	94.0	0.6	9.1	1.5	80.0	85.0	223.120	224.150	79.0%	-0.020
B-19	3:59	100.0	0.0	15.7	3.0	81.0	85.0	224.161	226.290	79.5%	-0.020
B-20	4:07	100.0	0.4	11.4	1.5	81.0	86.0	226.138	227.371	77.5%	-0.010
B-21	4:15	93.0	0.0	7.4	1.3	80.0	85.0	227.373	228.120	78.0%	-0.120
B-22	4:30	96.0	0.0	11.8	2.0	80.0	85.0	228.121	229.323	78.0%	-0.180
B-23	4:40	96.0	0.0	19.9	3.9	80.0	85.0	229.325	231.590	78.5%	-0.240
B-24	4:50	94.0	0.0	12.7	2.5	80.0	85.0	231.590	232.446	78.5%	-0.160
B-25	4:55	0.0	0.0	12.7	2.3	80.0	85.0	232.450	233.984	77.5%	-0.160
B-26	5:05	0.0	0.0	6.1	1.2	80.0	84.0	233.983	234.705	78.0%	-0.080
B-27	5:13	100.0	0.0	9.6	1.6	80.0	84.0	234.705	235.700	78.0%	-0.010
B-28	5:15	93.0	0.0	5.4	1.0	80.0	85.0	235.735	236.318	77.0%	-0.210
B-29	5:25	93.0	0.0	5.4	0.9	80.0	85.0	236.320	236.986	77.0%	-0.320

STATION- STAND(OPW/PV)

DATE- 8/16/74

AVE. UNDERGROUND TANK TEMP= 62.0 F

PUMP	TIME	LIC. NO.	MAKE	MODEL	TYPE OF	DISTANCE	LK CHR		NOZZLE	FIT	SPLITBACK
B-01	8:55AM	CAL -617HKS	1973 MONTEGO	WAGUN	HIGHWAY	25.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-02	9:00AM	CAL -YMN570	BISCAYNE	1963	LOCAL	1.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-03	9:05AM	CAL -389-GET	DELTA 98	1973	LOCAL	6.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-04	9:22AM	CAL -XQV720	VW	1969	LOCAL	1.MI.	NO-NBL	0.0	100.0	POOR	NO
B-05	9:30AM	CAL -933JBV	MONTE CARLO	1974	LOCAL	1.MI.	NO-ATB	0.0	30.0	FORCE	NO
B-06	9:35AM	CAL -E834102	1974 HORNET	SEDAN	HIGHWAY	70.MI.	NO-NBL	0.0	0.0	GOOD	NO
B-07	9:36AM	CAL -502JVT	STINGRAY	1974	LOCAL	1.MI.	NO-NBL	0.0	100.0	POOR	NU
B-08	9:45AM	CAL -572GES	VW	1968	LOCAL	1.MI.	NO-NBL	0.0	15.0	GOOD	
B-09	9:50AM	CAL -RWY685	1966 FORD	LTD	HIGHWAY	35.MI.	PS-BSL	0.0	0.0	FORCE	NO
B-10	9:42AM	CAL -297HIP	1968 CHEV	BEL AIRE	LOCAL	5.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-11	9:55AM	CAL -539FQQ	1971 CHEV	VEGA	LOCAL	7.MI.	NO-ATB	0.0	100.0	FORCE	NO
B-12	10:02AM	CAL -371JV8	CHALLENGER	1974	LOCAL	40.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-13	10:09AM	CAL -643AAL	1969 OLDSMOBILE	VISTA CRUISER	LOCAL	5.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-14	10:14AM	CAL -170KCR	FORD	1974	HIGHWAY	50.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-15	10:16AM	CAL -YUH234	AUSTIN AMERICAN	1969	LOCAL	5.MI.	NO-NBL	0.0	100.0	POOR	
B-16	10:25AM	CAL -2302FJ	1972 FORD	CUSYOM	LOCAL	5.MI.	NO-NBL	0.0	65.0	GOOD	NO
B-17	10:30AM	CAL -871KCD	1974 DODGE	DART	HIGHWAY	70.MI.	NO-NBL	0.0	10.0	GOOD	NO
B-18	10:32AM	CAL -37912R	1963 FORD	1/2 TON TRUCK	HIGHWAY	70.MI.	NO-NBL	0.0	100.0	POOR	NO
B-19	10:42AM	CAL -933JBV	MONTE CARLO	1974	HIGHWAY	35.MI.	NO-ATB	0.0	100.0	FORCE	NO
B-20	10:46AM	CAL -STAPR 1	1973 FORD	COUNTRY SQUIRE	LOCAL	12.MI.	NO-NBL	8.0	100.0	GOOD	NO
B-21	10:55AM	CAL -P18774	1964 DODGE	1 TON TRUCK	LOCAL	2.MI.	NO-ATB	0.0	100.0	FORCE	NO
B-22	11:05AM	CAL -698AAL	MUNTEREY	1963	LOCAL	5.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-23	11:10AM	CAL -56546J	1956 GMC	1/2 TON TRUCK	LOCAL	1.MI.	FL-ATB	0.0	0.0	FORCE	NO
B-24	11:20AM	CAL -684BVY	1971 CHEV	NOVA	LOCAL	1.MI.	NO-NBL	0.0	100.0	GOOD	NO
B-25	11:25AM	CAL -221CGL	OPEL	1971	LOCAL	6.MI.	NO-ATB	0.0	100.0	FORCE	NU
B-26	11:30AM	CAL -402JIC	1972 CHEV	IMPALA	LOCAL	1.MI.	NO-NBL	0.0	0.0	GOOD	NO

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OF

OFF

OFF AT 15:59 15-APR-75
 SPU'S USED = 499
 CONNECT TIME = 00:12

STATION 1 - STAND(OPE/PV)

DATE - 8/16/74

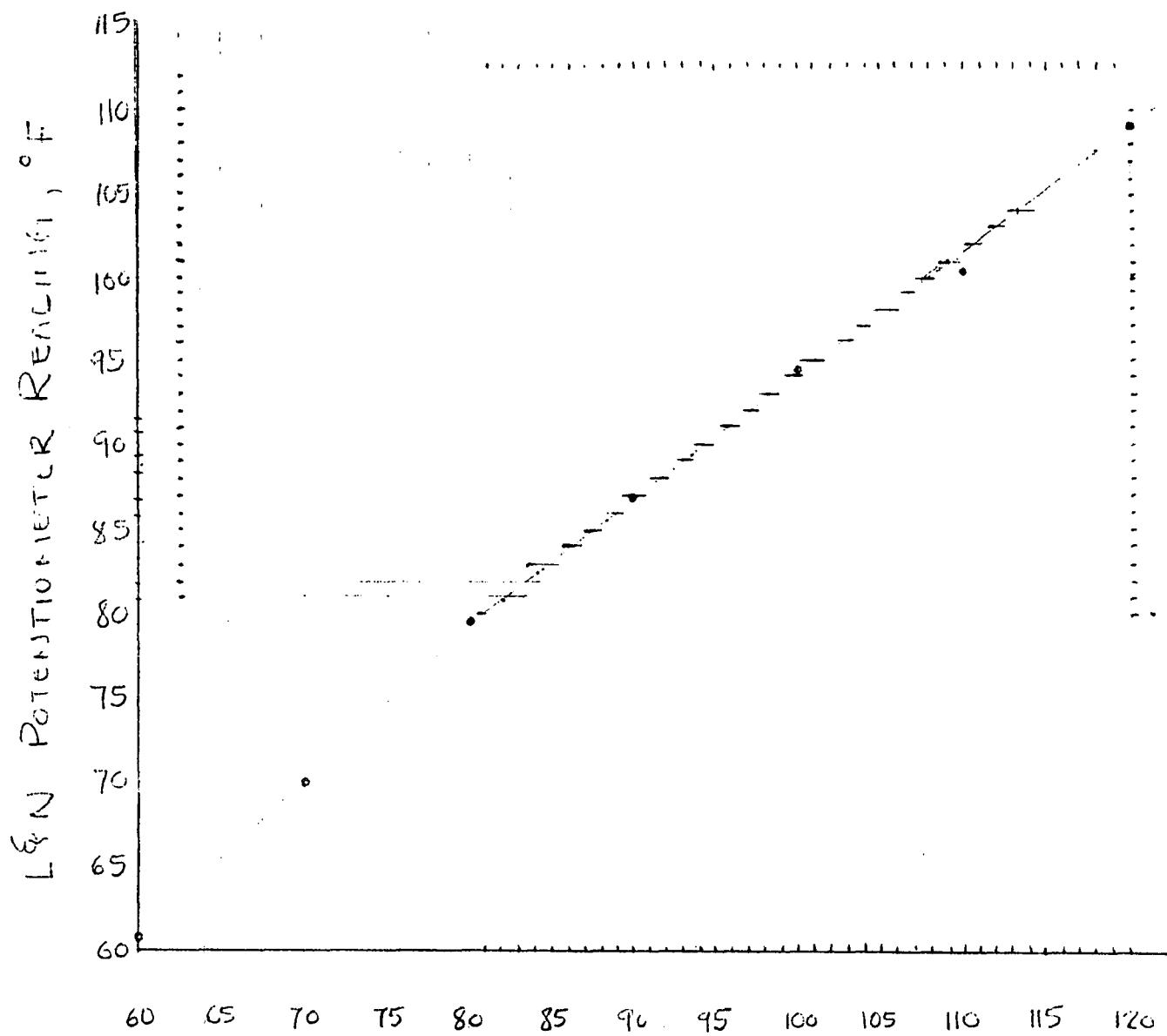
AVE. UNDERGROUND TANK TEMP - 82.0 F

PU#	TIME	VEHICLE TANK TEMP (DEG. F)	VEHICLE TANK PRESS (IN. H2O)	GAS DISP (GALS)	DISP TIME (MIN.)	DISP TEMP (DEG F)	RET VAPOR TEMP (DEG F)	INITIAL VOLUME (FT3)	FINAL VOLUME (FT3)	HYDROGEN CONC. (IN H2O)	RET LINE PRESS
B-11	8:55	68.0	0.0	5.4	1.0	70.0	65.0	237.092	237.922	72.0%	-0.100
B-12	9:00	58.0	0.0	5.4	0.9	70.0	65.0	237.923	238.757	74.0%	-0.260
B-13	9:15	68.0	1.0	13.7	2.2	75.0	73.0	238.757	240.500	77.0%	-0.120
B-14	9:22	68.0	0.0	8.0	1.5	77.0	74.0	240.500	241.552	76.0%	-0.060
B-15	9:30	64.0	2.0	5.4	1.0	77.0	73.0	241.555	242.396	76.0%	-0.080
B-16	9:35	72.0	0.0	12.0	2.2	77.0	75.0	242.398	243.778	77.0%	-0.060
B-17	9:36	63.0	0.0	12.8	2.4	78.0	73.0	243.780	244.925	76.0%	-0.080
B-18	9:45	58.0	0.0	5.4	1.3	78.0	75.0	244.943	245.818	76.0%	-0.060
B-19	9:50	76.0	0.0	5.4	0.9	78.0	76.0	245.820	246.592	75.0%	-0.080
B-20	9:42	58.0	0.0	17.0	2.1	78.0	75.0	246.593	246.569	76.0%	-0.060
B-21	9:55	63.0	0.0	8.5	1.5	78.0	77.0	248.569	249.442	76.0%	-0.040
B-22	10:02	61.0	0.0	5.4	0.7	78.0	76.0	249.443	250.326	74.0%	-0.050
B-23	10:09	61.0	0.0	12.4	1.4	78.0	76.0	250.328	251.963	76.0%	-0.040
B-24	10:14	72.0	0.0	17.0	3.4	78.0	77.0	251.964	254.010	77.0%	-0.040
B-25	10:16	68.0	0.0	5.4	0.8	79.0	75.0	254.010	254.158	74.5%	-0.250
B-26	10:25	62.0	0.0	8.2	1.0	79.0	77.0	254.172	255.452	75.0%	-0.060
B-27	10:30	81.0	0.0	9.2	1.3	80.0	77.0	255.452	256.428	75.0%	-0.240
B-28	10:32	64.0	0.0	17.0	3.8	80.0	78.0	256.429	258.975	75.0%	-0.020
B-29	10:42	62.0	1.5	6.1	0.6	80.0	77.0	258.975	259.708	74.0%	-0.050
B-30	10:46	69.0	0.0	11.6	1.4	80.0	78.0	259.709	261.273	74.0%	-0.040
B-31	10:55	61.0	0.0	9.1	1.1	79.0	78.0	261.104	262.405	73.5%	0.430
B-32	11:05	71.0	0.0	13.4	1.7	78.0	78.0	262.405	263.826	74.5%	0.330
B-33	11:10	68.0	0.0	5.4	1.0	78.0	79.0	263.829	264.889	73.0%	0.210
B-34	11:20	65.0	0.0	9.9	1.9	78.0	79.0	264.885	266.036	75.0%	0.250
B-35	11:25	65.0	0.0	7.6	1.4	79.0	80.0	266.036	266.675	76.0%	-0.140
B-36	11:30	72.0	0.0	23.5	3.8	81.0	80.0	266.728	269.791	77.0%	-0.060

A 28
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Thermocouple / Pot Box Calibration

(Copper-Constantan T.C./Iron-Constantan Pot Box)



J.A. English
5/26/74

CALCULATED DATA

APPENDIX B

STATION# STAND(EMCO-WHEATON/DPW) DATE= 8/ 5/74
AVE UNDGRD TANK TEMP= 77.0 F BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ RATIO	DISP RATE (C/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP+VEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
A#08	3:50PM	2.023	0.780	9.864	27,000	21,000	
B#12	3:50PM	0.578	0.650	5.258	28,000	15,000	
B#16	4:30PM	0.705	0.284	5.314	42,000	34,000	

STATION- STAND(EMCO-WHEATON/CPW) DATE 8/ 6/74
 AVE UNDGRO TANK TEMP= 77.5 F BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISPVEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
A#03	7:46AM	1.606	0.985	4.281	0.500	-3.000	
A#22	12:45PM	1.315	0.793	4.251	20.500	14.000	
A#23	12:50PM	0.481	0.281	4.315	44.500	38.000	
A#29	2:12PM	1.687	0.730	3.543	34.500	27.000	
A#31	2:40PM	0.934	0.692	4.151	33.500	24.000	
A#32	3:00PM	0.612	0.372	4.341	25.500	15.000	
B#12	9:30AM	1.473	1.011	5.405	2.500	2.000	
B#14	10:05AM	0.284	0.327	5.652	20.500	17.000	
B#17	10:50AM	1.605	1.035	5.118	2.500	-2.000	
B#23	12:40PM	0.693	0.710	5.407	18.500	9.000	
B#26	1:15PM	0.158	0.144	5.179	31.500	21.000	

STATION= STAND(EMCO-WHEATON/DPW) DATE= 8/ 7/74
AVE UNDGRD TANK TEMP= 79.5 F BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
A=02	12:20PM	0.947	0.957	2.659	-0.500	-7.000	
A=21	5:00PM	1.065	0.483	9.340	22.500	16.000	
B=01	12:10PM	0.656	0.792	6.200	10.500	13.000	
B=11	2:55PM	0.762	0.600	4.750	18.500	13.000	
B=16	3:25PM	1.117	0.486	5.320	27.500	23.000	
B=20	4:40PM	0.960	0.671	5.136	31.500	26.000	
B=20	6:50PM	2.274	1.119	10.247	3.500	8.000	

STATION= STAND(EMCO-WHEATON/VOPV) DATE= 8/ 8/74
AVE UNDGND TANK TEMP= 77.0 F BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLCTY (VOL)
A#02	11:29AM	2,068	1,082	4,446	3,000	~6,000	

STATION= STAND(OPW/NOPV)
AVE UNDGRD TANK TEMP= 74.5 F

DATE= 8/ 9/74
BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
A=01	10:05AM	2.834	1.093	9.238	8.500	-2.000	
A=03	10:25AM	0.950	0.806	5.550	11.500	5.000	
A=11	12:20PM	0.596	0.697	7.680	13.500	4.000	
B=12	12:12PM	1.122	0.799	6.000	17.500	3.000	
B=14	12:25PM	0.606	0.509	5.562	33.500	32.000	

STATION= STAND(OPW/NOPV)
AVE UNDGRD TANK TEMP= 79.5 F

DATE= 8/12/74
BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH. TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
A=12	10:53AM	0.880	1.219	5.586	12.500	17.000	
A=19	11:48AM	1.875	0.917	5.774	6.500	10.000	
A=25	11:10PM	2.013	0.924	5.621	17.500	20.000	
B=01	9:20AM	2.695	1.126	6.974	2.500	1.000	
B=09	10:25AM	1.594	0.785	5.182	6.500	9.000	
B=19	12:20PM	1.861	1.141	5.119	5.500	10.000	
B=23	12:35PM	1.828	0.930	5.378	9.500	11.000	
B=29	2:50PM	1.987	0.890	6.224	16.500	16.000	
B=31	3:15PM	1.257	0.649	7.982	28.500	27.000	
B=35	3:55PM	1.931	0.989	7.365	8.500	7.000	

STATION= STAND(OPW/NOPV)
AVE UNDGRD TANK TEMP= 80.5 F

DATE= 8/13/74
BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
A=10	10:07AM	0.855	0.831	4.400	4,500	6,300	
A=14	11:10AM	0.838	0.871	5.468	-5,500	-5,000	
B=06	9:56AM	1.994	0.927	7.000	-3,500	2,000	
B=08	9:30AM	2.096	0.843	10.731	-5,500	0,000	
B=12	10:13AM	1.465	0.898	5.463	0,500	4,000	
B=14	11:30AM	1.104	0.843	5.297	8,500	13,000	
B=16	12:00PM	0.740	1.025	4.836	4,500	9,000	
B=26	3:40PM	0.795	0.901	6.292	19,500	8,000	

STATION= STAND(OPW/NOPV)
AVE UNDGRD TANK TEMP= 80.5 F

DATE= 3/14/74
BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLECTN (VOL)
A=02	1:10PM	0.305	0.357	6.000	32.500	30.000	
A=06	1:40PM	1.035	0.378	5.302	26.500	23.000	
A=08	2:43PM	0.463	0.641	5.062	22.500	18.000	
A=10	3:05PM	1.050	0.893	5.558	24.500	20.000	
A=16	4:38PM	1.050	0.913	5.109	22.500	19.000	
A=24	6:15PM	2.300	0.786	5.320	19.500	16.000	
B=06	1:30PM	0.402	0.734	5.020	23.500	25.000	
B=14	3:40PM	0.567	0.706	4.985	26.500	22.000	
B=26	6:10PM	0.545	0.582	5.185	24.500	20.000	

STATION - STAND(OPW/PV)
AVE UNDGRD TANK TEMP = 82.0 F

DATE = 8/15/74
BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP+VEH TANK TMP (DEG F)	EFF OF COLLCT'N (VOL)
A=06	11:33AM	0.707	0.715	3.964	4.000	4.000	
A=08	11:50AM	1.945	0.791	5.385	4.000	4.000	
A=14	12:59PM	2.100	1.172	5.360	2.000	1.000	
A=20	2:47PM	0.615	0.868	5.390	16.000	13.000	
A=28	4:35PM	0.742	0.760	5.475	10.000	7.000	
A=30	4:50PM	0.896	0.578	5.313	26.000	23.000	
B=06	11:40AM	2.451	1.066	17.200	-13.000	-13.000	
B=12	2:00PM	0.556	0.540	5.372	18.000	25.000	
B=16	2:55PM	1.640	0.902	5.604	4.000	5.000	
B=18	3:43PM	1.050	0.863	6.205	12.000	14.000	
B=20	4:07PM	1.263	0.829	7.435	18.000	19.000	

STATION= STAND(OPW/PV)
AVE UNDGRD TANK TEMP= 82.0 F

DATE= 8/16/74
BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
B-01	8:55AM	0.830	1.150	5.400	-22.000	-10.000	
B-03	9:05AM	1.743	0.952	6.134	-14.000	-7.000	
B-09	9:50AM	0.772	1.070	5.891	-6.000	-2.000	

STATION - STAND(EMCO-WHEATON/JPH) DATE - 8/ 5/74
 AVE UNDGND TANK TEMP - 77.0 F NON-BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP+VEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
A=01	12:55PM	1.046	0.860	3.309	10.000	4.000	100.468
A=03	1:36PM	0.616	0.838	3.511	18.000	11.000	113.665
A=04	1:45PM	1.380	0.839	4.241	12.000	5.000	100.047
A=05	1:42PM	1.004	0.507	4.311	29.000	21.000	89.431
A=07	2:40PM	0.992	0.603	4.266	25.000	17.000	94.964
A=09	2:58PM	0.996	0.578	4.324	30.000	24.000	111.814
A=11	3:26PM	1.319	0.822	4.286	14.000	6.000	100.038
A=13	3:43PM	1.309	0.951	4.176	15.000	7.000	118.104
A=14	0:00AM	1.722	0.920	4.000	17.000	2.000	103.408
A=15	0:00AM	0.644	0.660	4.380	19.000	11.000	89.531
A=17	0:00AM	0.255	0.230	9.055	15.000	7.000	28.551
A=19	4:30PM	0.617	0.543	5.604	17.000	8.000	68.910
A=20	4:55PM	-0.138	-0.129	3.934	13.000	5.000	515.382
B=01	1:30PM	1.085	0.677	6.261	7.000	0.000	73.290
B=03	1:45PM	0.857	0.890	6.750	7.000	0.000	96.393
B=05	2:10PM	0.893	0.642	5.244	25.000	16.000	98.475
B=06	2:15PM	1.476	0.944	5.754	-1.000	-15.000	80.097
B=07	2:30PM	1.623	0.528	6.026	26.000	25.000	105.663
B=09	3:05PM	0.365	0.268	7.286	23.000	12.000	37.172
B=10	3:15PM	1.957	0.976	5.556	17.000	7.000	121.244
B=11	3:40PM	0.312	0.507	5.018	30.000	17.000	79.864
B=13	0:00AM	1.605	0.961	5.597	10.000	-8.000	90.662
B=14	4:05PM	1.061	0.945	5.250	11.000	6.000	114.958
B=15	4:30AM	0.704	0.742	5.325	24.000	19.000	123.341
B=17	4:45PM	1.080	0.800	5.363	*****	*****	

*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C

STATION = STAND(EMCO-WHEATON/DPW) DATE = 8/ 6/74
 AVE UNDGRD TANK TEMP = 77.5 F NON-BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ RATIO	DISP RATE (O/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
Ae01	7:24AM	0.731	1.013	9.000	-9.500	3.000	116.021
Ae04	7:55AM	1.435	0.795	4.309	-5.500	-11.000	71.614
Ae05	8:05AM	2.718	0.928	4.119	-1.500	-7.000	89.058
Ae06	8:15AM	0.765	1.022	4.308	-7.500	-12.000	90.650
Ae07	8:22AM	1.442	0.899	4.286	11.500	7.000	111.672
Ae09	8:45AM	2.303	1.032	4.246	-1.500	-6.000	100.594
Ae10	9:05AM	1.621	0.848	4.227	-1.500	-7.000	81.342
Ae11	9:29AM	1.091	0.917	4.341	-4.500	-10.000	83.869
Ae12	9:35AM	0.629	0.471	4.286	*****	*****	
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
Ae13	10:10AM	2.299	0.935	4.263	5.500	0.000	101.185
Ae15	12:43AM	0.876	0.462	4.239	*****	*****	
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
Ae16	10:53AM	1.133	0.771	4.258	14.500	9.000	99.931
Ae18	11:45AM	0.832	0.523	4.225	14.500	7.000	64.974
Ae19	12:00PM	1.114	0.936	4.272	9.500	2.000	105.231
Ae21	12:27PM	1.428	0.607	4.310	*****	*****	
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
Ae24	1:00PM	1.330	0.748	5.825	2.500	-3.000	76.754
Ae25	1:24PM	0.130	0.097	4.444	27.500	21.000	17.138
Ae26	1:40PM	0.925	0.769	4.286	18.500	11.000	104.306
Ae27	2:00PM	0.558	0.773	4.378	19.500	10.000	102.510
Ae30	2:20PM	0.879	0.792	4.220	17.500	8.000	100.536
Ae33	3:00PM	0.508	0.422	4.865	19.500	11.000	57.284
Bn01	7:30AM	0.487	0.191	5.257	4.500	8.000	24.205
Bn02	7:40AM	0.873	1.209	3.904	0.500	1.000	133.373
Bn03	9:00AM	0.856	0.854	5.625	14.500	10.000	113.225
Bn04	7:55AM	1.807	0.815	5.443	4.500	0.000	88.252
Bn07	8:25AM	0.269	0.373	5.226	12.500	3.000	42.694
Bn08	8:35AM	1.132	0.911	5.753	-5.500	-10.000	83.278
Bn09	8:55AM	0.086	0.057	4.000	14.500	11.000	7.793
Bn10	9:10AM	0.652	0.976	5.556	0.500	1.000	107.578
Bn15	10:25AM	1.874	0.980	6.810	-7.500	-12.000	86.962
Bn16	10:40AM	0.894	0.735	5.571	8.500	6.000	89.413
Bn18	11:15AM	1.365	0.659	6.643	4.500	0.000	71.318
Bn19	11:50AM	1.092	0.451	8.354	11.500	4.000	52.733
Bn20	12:00PM	0.242	0.251	5.268	18.500	11.000	34.111
Bn21	12:10PM	1.101	0.410	5.289	33.500	25.000	82.020
Bn25	1:05PM	0.607	0.649	5.915	18.500	8.000	82.320
Bn27	1:25PM	0.624	0.519	7.297	29.500	22.000	94.219
Bn30	2:10PM	0.885	0.692	4.889	17.500	7.000	74.767
Bn31	2:30PM	0.583	0.386	5.603	20.500	13.000	54.887
Bn32	2:30PM	0.169	0.142	5.338	23.500	13.000	20.201
Bn33	2:50PM	0.420	0.223	5.127	21.500	7.000	27.682
Bn34	3:00PM	1.015	0.844	5.143	23.500	11.000	114.455

STATION: STAND(EMCO-WHEATON/DPW) DATE: 9/ 7/74
 AVE UNDGRD TANK TEMP: 79.5 F NON-BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLECT'N (VOL)
A#03	12:30PM	2.027	0.936	4.282	5.500	-1.000	99.502
A#04	12:37PM	1.125	0.925	4.266	14.500	9.000	119.943
A#05	12:45PM	1.360	0.988	4.292	8.500	2.000	111.007
A#06	1:08PM	1.618	0.931	4.262	-0.500	-6.000	90.788
A#09	2:00PM	0.002	0.002	2.870	5.500	-4.000	0.196
A#10	2:10PM	0.058	0.082	4.240	24.500	16.000	12.550
A#11	2:30PM	2.068	0.781	4.243	24.500	16.000	119.782
A#13	3:00PM	0.685	0.563	2.920	29.500	21.000	99.235
A#14	3:10PM	1.067	0.505	4.232	26.500	18.000	81.699
A#15	3:20PM	0.803	0.536	9.333	16.500	9.000	69.560
A#16	3:45PM	0.002	0.001	6.236	4.500	-4.000	0.114
A#18	4:15PM	0.756	0.292	4.311	29.500	22.000	52.956
A#20	4:45PM	0.868	0.738	4.224	15.500	8.000	93.638
A#22	5:20PM	1.747	0.843	9.394	6.500	1.000	92.984
A#23	5:27PM	0.556	0.770	4.208	8.500	1.000	84.943
A#24	5:45PM	0.814	0.812	2.711	4.500	-3.000	83.304
A#25	6:00PM	0.433	0.753	4.448	14.500	9.000	97.697
A#26	6:05PM	0.813	0.487	9.259	12.500	5.000	57.998
A#27	6:13PM	1.430	0.922	9.158	9.500	2.000	163.640
A#28	6:20PM	0.439	0.608	3.951	10.500	5.000	72.494
A#29	7:47AM	0.002	0.003	0.757	6.500	1.000	0.305
A#30	7:47AM	0.563	0.780	4.320	6.500	1.000	86.012
A#31	7:00AM	0.507	0.702	4.909	2.500	-2.000	73.340
B#02	12:40PM	0.916	0.420	6.986	35.500	34.000	121.186
B#04	0:00AM	0.252	0.314	5.217	1.500	-1.000	33.400
B#05	1:25PM	0.542	0.303	10.177	33.500	30.000	72.953
B#06	1:45PM	1.514	0.850	5.577	6.500	1.000	94.623
B#07	2:15PM	0.333	0.445	4.253	3.500	-4.000	44.860
B#08	2:15PM	0.119	0.064	5.316	14.500	10.000	8.432
B#09	2:40PM	0.419	0.219	3.875	*****	*****	
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
B#10	2:55PM	0.718	0.334	9.564	10.500	5.000	39.768
B#12	3:00PM	0.392	0.652	5.094	20.500	14.000	94.964
B#13	3:25PM	0.541	0.749	5.586	18.500	14.000	109.216
B#17	3:55PM	0.935	0.496	9.000	21.500	17.000	78.381
B#18	4:05PM	0.087	0.036	5.490	25.500	19.000	5.914
B#21	5:00PM	0.803	0.707	5.667	23.500	19.000	117.514
B#22	5:10PM	0.989	0.711	5.073	23.500	21.000	125.365
B#23	5:40PM	0.203	0.271	4.098	16.500	15.000	40.520
B#25	6:00PM	0.954	0.776	10.222	4.500	6.000	94.377
B#26	6:20PM	0.597	0.491	7.383	10.500	13.000	69.793
B#27	6:30PM	0.408	0.328	7.859	10.500	15.000	49.038
B#29	6:55PM	0.187	0.099	5.716	4.500	8.000	12.590
B#30	7:00AM	0.559	0.774	4.836	14.500	19.000	128.769
B#31	7:07AM	2.376	0.956	7.294	0.500	5.000	113.910

STATION= STAND(EMCO-WHEATON/VOPV) DATE= 8/ 8/74
 AVE UNDGRD TANK TEMP= 77.0 F NON-BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
A=01	11:22AM	1.997	0.889	5.793	3.000	-2.000	0.000
A=03	11:35AM	1.836	1.041	3.328	7.000	-3.000	0.000
A=04	11:39AM	0.507	0.702	4.208	6.000	-2.000	0.000
A=05	11:45AM	0.443	0.360	8.762	20.000	12.000	0.000
A=07	11:50AM	2.241	0.964	5.705	3.000	-5.000	0.000
A=09	12:30PM	0.294	0.338	4.286	36.000	29.000	0.000
A=13	12:45PM	0.067	0.068	4.189	3.000	-5.000	0.000
A=15	12:50PM	0.008	0.014	3.969	8.000	0.000	0.000
A=17	1:05PM	0.628	0.723	4.239	4.000	-4.000	0.000
A=19	1:30PM	0.003	0.004	4.263	17.000	9.000	0.000
A=21	1:35PM	0.737	0.875	4.247	14.000	6.000	0.000
A=22	2:00PM	0.842	0.969	4.286	20.000	9.000	0.000
A=23	2:14PM	1.252	0.679	4.246	15.000	2.000	0.000
A=25	2:35PM	0.748	0.767	4.380	13.000	0.000	0.000
A=27	2:50PM	1.269	0.742	4.439	14.000	3.000	0.000
A=29	3:05PM	0.010	0.004	4.282	16.000	1.000	0.000
A=30	3:25PM	0.738	1.022	7.535	21.000	8.000	0.000
A=31	3:30PM	0.015	0.012	4.233	17.000	-1.000	0.000
A=32	3:35PM	0.465	0.544	4.923	18.000	5.000	0.000
A=33	3:35PM	1.464	0.830	4.226	14.000	-2.000	0.000
A=35	3:52PM	0.821	0.698	9.263	25.000	11.000	0.000
B=01	12:10PM	-71.566	-133.846	*****	*****	*****	*****
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
B=02	12:15PM	-71.636	*****	*****	*****	*****	*****
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
B=03	2:10PM	0.003	*****	*****	*****	*****	*****
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							

STATION= STAND(OPW/NOPV)
AVE UNDGRD TANK TEMP= 74.5 F

DATE= 8/ 9/74
NON-BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLECTI (VOL)
A=02	10:10AM	1.829	0.977	5.563	*****	*****	*****
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
A=04	10:30AM	0.200	*****	*****	*****	*****	*****
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
A=06	11:20AM	0.206	0.169	5.629	*****	*****	*****
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
A=07	11:30AM	1.790	0.870	5.366	*****	*****	*****
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
A=08	11:45AM	0.990	0.545	5.551	40.500	31.000	88.395
A=10	12:15PM	0.683	0.352	5.649	11.500	2.000	36.804
B=01	9:50AM	2.021	0.988	6.652	-2.500	-10.000	89.939
B=04	0:00AM	-0.099	-0.123	3.273	8.500	5.000	-13.386
B=06	11:10AM	0.444	0.519	6.000	16.500	10.000	60.119
B=09	11:35AM	1.163	0.509	5.372	42.500	26.000	75.385
B=11	11:55AM	2.253	0.873	5.462	19.500	5.000	94.704

STATION = STANDOPW/NOPV
AVE UNDG'D TANK TEMP = 79.5 F

DATE = 8/12/74
NON-BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ RATIO	DISP RATE (G/IN)	UNDG'VEH TANK TMP (DEG F)	DISP'VEH TANK TMP (DEG F)	EFF OF COLLECT' (VOL)
A-001	9:17AM	0.968	0.584	5.552	9.500	13.000	70.535
A-002	9:27AM	1.461	0.834	5.910	6.500	12.000	99.356
A-003	9:40AM	0.825	0.444	5.560	1.500	6.000	48.773
A-005	9:55AM	0.911	0.741	6.133	20.500	23.000	104.300
A-007	10:08AM	1.235	0.863	6.420	4.500	9.000	98.676
A-009	10:25AM	0.747	0.745	6.081	12.500	15.000	92.627
A-10	10:38AM	0.812	1.030	5.364	5.500	0.000	104.953
A-15	11:05AM	0.312	0.243	5.434	1.500	6.000	26.707
A-17	11:20AM	0.827	0.764	6.000	12.500	13.000	75.154
A-20	12:20PM	0.309	0.774	5.273	12.500	17.000	99.106
A-21	12:25PM	1.230	0.708	5.735	2.500	7.000	78.769
A-22	0:00AM	1.082	0.764	5.483	17.500	21.000	104.067
A-23	12:43PM	0.915	1.268	5.786	5.500	9.000	144.862
A-24	1:40PM	0.148	0.205	4.000	9.500	13.000	24.764
A-26	12:15PM	1.108	0.901	5.691	14.500	19.000	116.967
A-27	2:10PM	0.002	0.001	5.721	6.500	9.000	0.104
A-28	2:22PM	1.672	0.977	5.371	12.500	13.000	118.025
A-30	2:40PM	1.006	0.686	4.104	8.500	9.000	78.375
A-31	3:00PM	0.582	0.821	2.765	14.500	14.000	100.650
A-33	3:25PM	0.412	0.417	4.485	29.500	29.000	65.119
A-35	3:45PM	1.377	0.731	5.716	18.500	15.000	90.822
A-36	3:54PM	0.811	1.124	5.226	24.500	21.000	153.115
A-38	12:10PM	0.933	0.478	5.340	14.500	18.000	62.159
B-02	9:30AM	2.241	1.029	5.753	~0.500	5.000	111.537
B-04	9:50AM	0.259	0.285	8.160	9.500	13.000	34.414
B-06	10:00AM	0.474	0.412	5.670	4.500	8.000	46.495
B-08	10:12AM	2.362	0.930	5.507	2.500	7.000	103.496
B-10	10:25AM	0.322	0.382	4.974	1.500	7.000	42.551
B-12	11:05AM	0.870	0.685	5.278	5.500	10.000	79.360
B-14	11:30AM	1.483	0.745	8.278	1.500	6.000	81.790
B-16	11:50AM	1.097	0.631	5.778	1.500	5.000	68.458
B-18	12:10PM	0.961	0.384	6.719	4.500	8.000	43.352
B-20	12:30PM	0.509	0.693	3.951	6.500	11.000	81.348
B-22	12:50PM	0.997	0.888	7.636	5.500	8.000	100.124
B-24	1:05PM	1.347	0.826	5.545	18.500	22.000	114.399
B-26	2:00PM	0.642	0.600	5.106	5.500	9.000	68.607
B-28	2:32PM	0.881	0.709	4.650	25.500	26.000	105.002
B-30	2:54PM	1.289	0.766	5.357	14.500	15.000	95.231
B-32	3:30PM	1.529	0.932	5.545	17.500	15.000	115.867
B-34	3:50PM	1.426	0.650	6.074	27.500	25.000	94.726

STATION= STAND(OPW/NOPV)
AVE UNDGRD TANK TEMP= 80.5 F

DATE= 8/13/74
NON-BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
A-01	8:25AM	1.825	0.853	5.614	~13.500	~8.000	79.364
A-02	8:47AM	0.854	0.761	4.755	1.500	3.000	80.425
A-03	8:55AM	2.036	1.209	5.727	~8.500	~8.000	112.431
A-05	9:10AM	0.384	0.422	4.584	~1.500	0.000	43.064
A-06	9:20AM	1.609	0.886	9.273	~3.500	~3.000	87.156
A-07	9:30AM	1.514	0.815	5.792	11.500	13.000	98.415
A-08	9:45AM	0.966	0.977	5.550	~5.500	~4.000	94.989
A-09	9:55AM	1.544	0.947	5.764	3.500	4.000	101.376
A-11	10:25AM	0.862	1.194	8.526	~2.500	0.000	121.732
A-13	11:00AM	1.082	0.794	5.615	~5.500	~5.000	76.315
A-15	11:35AM	0.876	0.762	5.609	8.500	9.000	87.003
A-17	1:05PM	0.573	0.476	4.186	4.500	2.000	49.745
A-18	1:12PM	1.002	0.510	5.313	9.500	7.000	56.747
A-19	1:20PM	0.250	0.346	5.226	9.500	10.000	40.119
A-20	1:27PM	0.323	0.239	5.544	13.500	11.000	28.026
A-21	1:38PM	1.640	1.022	5.806	8.500	9.000	116.839
A-23	2:05PM	1.151	0.990	5.553	13.500	11.000	116.232
A-24	2:31PM	0.310	0.429	3.600	30.500	25.000	63.631
A-25	2:43PM	2.719	2.451	1.811	8.500	6.000	269.199
B-01	8:00AM	1.742	1.026	5.443	~7.500	~3.000	100.966
B-02	9:12AM	1.906	0.963	5.193	~10.500	~3.000	94.796
B-03	9:18AM	0.667	0.419	8.215	*****	*****	
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT DATA							
B-05	9:00AM	0.632	0.272	5.667	~11.500	~1.000	27.356
B-07	9:07AM	1.429	0.891	10.286	3.500	11.000	104.622
B-09	9:37AM	0.930	0.548	5.729	~6.500	1.000	56.521
B-11	10:00AM	1.055	0.560	5.458	~3.500	1.000	57.752
B-13	10:45AM	4.963	0.857	6.528	3.500	8.000	96.689
B-15	11:45AM	1.388	0.564	5.385	~1.500	2.000	58.940
B-17	12:10PM	0.983	0.750	5.069	5.500	8.000	84.616
B-18	12:20PM	2.254	0.992	7.969	0.500	~3.000	97.597
B-19	1:00PM	1.621	0.758	5.614	5.500	3.000	80.145
B-21	1:35PM	0.474	0.734	5.321	1.500	~13.000	66.529
B-23	2:00PM	0.802	0.723	5.242	7.500	~6.000	68.737
B-25	2:30PM	1.008	0.909	5.659	*****	*****	
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT DATA							
B-27	2:50PM	1.058	0.754	5.000	17.500	14.000	92.356

STATION= STAND(OPW/NOPV)
AVE UNDGND TANK TEMP= 80.5 F

DATE= 8/14/74
NON-BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ RATE	DISP (O/MIN)	UNDGVEH TANK TMP (DEG F)	DISPVEH TANK TMP (DEG F)	EFF OF COLLCT'N (VOL)
A=01	1:05PM	0.329	0.262	5.321	19.500	25.000	36.129
A=03	1:22PM	0.980	1.358	7.714	12.500	10.000	157.268
A=04	1:30PM	0.509	0.705	5.311	11.500	9.000	86.584
A=05	1:35PM	0.568	0.787	4.629	22.500	20.000	105.544
A=07	2:05PM	1.232	0.775	5.622	49.500	46.000	176.230
A=09	2:40PM	0.500	0.584	3.802	23.500	21.000	79.649
A=11	3:20PM	0.273	0.173	5.531	53.500	51.000	45.472
A=12	3:30PM	0.816	0.985	7.219	14.500	12.000	117.251
A=13	4:12PM	1.070	0.479	5.598	31.500	29.000	74.940
A=15	4:30PM	0.430	0.670	5.333	26.500	24.000	95.949
A=17	4:50PM	1.156	0.901	5.236	20.500	17.000	115.362
A=18	5:00PM	1.659	0.791	5.322	23.500	20.000	106.029
A=19	5:10PM	0.145	0.101	5.220	19.500	16.000	12.790
A=20	5:20PM	0.576	0.706	5.545	30.500	27.000	106.522
A=21	5:24PM	0.799	1.107	4.765	15.500	12.000	131.817
A=22	5:30PM	1.045	0.909	5.375	17.500	13.000	109.791
A=23	6:05PM	0.911	0.454	5.357	*****	*****	
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
B=01	12:50PM	1.202	0.749	5.143	13.500	18.000	97.431
B=03	1:05PM	0.530	0.734	7.714	11.500	15.000	91.276
B=05	1:37PM	0.736	0.724	5.700	15.500	17.000	92.778
B=07	1:35PM	0.053	0.088	6.279	33.500	34.000	15.172
B=09	1:50PM	0.797	0.946	4.974	19.500	21.000	128.976
B=11	2:45PM	0.975	0.890	5.234	22.500	20.000	119.308
B=13	3:25PM	0.760	0.964	5.284	22.500	16.000	121.574
B=15	3:00AM	0.753	0.587	4.431	26.500	24.000	84.011
B=17	4:40PM	1.533	0.641	4.366	19.500	13.000	77.382
B=18	4:45PM	1.481	0.764	5.577	*****	*****	
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
B=19	4:55PM	0.090	0.057	5.446	20.500	17.000	7.307
B=21	5:10PM	1.076	0.654	5.387	19.500	13.000	79.042
B=23	3:35PM	1.594	0.877	5.132	23.500	19.000	115.777
B=25	5:55PM	0.574	0.588	5.544	19.500	15.000	73.125
B=27	6:30PM	1.224	0.492	5.215	24.500	21.000	67.090

STATION= STAND(OPW/PV)
AVE UNDG'D TANK TEMP= 82.0 F

DATE= 8/15/74
NON-BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP+VEH TANK TMP (DEG F)	EFF OF COLLECTI (VOL)
A=01	10:35AM	1.393	0.699	5.960	-8.000	-6.000	67.760
A=02	10:45AM	1.343	0.661	4.145	2.000	4.000	73.381
A=03	11:05AM	1.379	0.679	5.846	3.000	0.000	71.194
A=04	11:15AM	1.052	0.926	6.711	-9.000	-9.000	86.402
A=05	11:25AM	0.009	0.011	5.642	-1.000	1.000	1.137
A=07	11:42AM	0.023	0.021	5.651	-6.000	-6.000	2.058
A=09	12:00PM	0.457	0.305	4.148	12.000	12.000	38.366
A=11	12:25PM	2.036	0.891	7.277	-1.000	-2.000	90.926
A=12	12:20PM	0.443	0.543	4.159	8.000	7.000	63.076
A=13	12:52PM	0.408	0.442	4.929	-6.000	-7.000	42.318
A=15	2:13PM	0.365	0.359	5.182	*****	*****	
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
A=16	2:20PM	0.920	0.756	5.571	2.000	-1.000	78.256
A=17	2:24PM	1.670	0.625	7.317	0.000	-3.000	62.923
A=18	2:36PM	0.510	0.707	5.492	14.000	11.000	87.360
A=19	2:43PM	0.592	0.942	3.525	6.000	3.000	103.106
A=21	3:05PM	0.691	0.795	5.270	11.000	7.000	92.333
A=22	3:26PM	0.673	0.355	5.718	4.000	1.000	37.712
A=23	3:35PM	1.655	0.794	5.379	18.000	15.000	104.954
A=24	3:45PM	1.335	0.598	5.660	18.000	15.000	79.084
A=25	4:03PM	0.682	0.537	3.519	22.000	19.000	76.327
A=26	4:15PM	0.488	0.676	6.696	23.000	20.000	97.911
A=27	4:23PM	1.441	0.862	5.725	12.000	9.000	103.277
A=29	4:50PM	1.010	0.804	5.697	10.000	7.000	93.322
A=31	5:10PM	1.052	0.846	5.417	6.000	3.000	92.596
A=32	5:15PM	0.003	0.000	5.244	8.000	5.000	0.000
A=33	6:10PM	0.683	0.946	5.986	6.000	3.000	103.536
A=34	5:25PM	0.228	0.316	6.612	19.000	16.000	42.508
B=01	10:38AM	0.982	0.896	4.100	-1.000	4.000	99.460
P=02	11:05AM	1.014	0.834	4.550	*****	*****	
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
B=03	11:12AM	2.132	1.009	4.514	-15.000	-13.000	89.797
B=04	11:15AM	1.442	1.008	5.836	-13.000	-10.000	92.943
B=05	11:30AM	1.450	0.775	5.217	-3.000	-1.000	80.170
B=07	11:55AM	1.282	0.856	5.463	-10.000	-11.000	77.996
B=09	0:00AM	0.627	0.869	5.226	-6.000	-7.000	83.097
B=11	12:45PM	0.076	0.089	5.565	-4.000	-4.000	8.832
B=13	2:10PM	0.600	0.748	5.373	-1.000	2.000	80.698
B=15	2:30PM	0.897	0.780	5.548	14.000	16.000	105.010
B=17	3:15PM	1.463	0.588	5.417	19.000	21.000	86.872
B=19	3:50PM	1.929	0.919	5.263	18.000	19.000	130.632
B=21	4:15PM	0.747	0.755	5.766	11.000	13.000	96.511
B=23	4:40PM	2.265	0.851	5.147	14.000	16.000	114.592
P=25	4:55PM	1.534	0.904	5.482	*****	*****	
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
B=27	5:13PM	0.995	0.775	5.878	18.000	20.000	112.294
B=29	5:25PM	0.666	0.923	6.000	11.000	13.000	117.914

STATION= STAND(OPW/PV)
AVE UNDGRD TANK TEMP= 82.0 F

DATE= 8/16/74
NON-BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLCT' (VOL)
B-02	9:00AM	0.834	1.155	6.000	-24,000	-12,000	103.994
B-04	9:22AM	1.052	0.984	5.217	-22,000	-17,000	83.600
B-06	9:35AM	1.380	0.860	5.538	-10,000	-5,000	84.425
B-07	9:36AM	1.145	0.669	5.408	-19,000	-15,000	58.168
B-08	9:45AM	0.875	1.212	5.684	-24,000	-20,000	99.675
B-10	9:42AM	1.976	0.870	8.293	-24,000	-20,000	71.500
B-12	10:02AM	0.885	1.226	7.535	-21,000	-17,000	104.191
B-13	10:09AM	1.635	0.986	8.753	-21,000	-17,000	83.826
B-14	10:14AM	2.046	0.855	5.317	-10,000	-6,000	82.844
B-15	10:16AM	0.158	0.219	6.612	-14,000	-11,700	19.937
B-16	10:25AM	1.280	1.168	8.483	-20,000	-17,000	99.238
B-17	10:30AM	0.976	0.794	6.987	-1,000	1,000	84.413
B-18	10:32AM	2.545	1.120	4.513	-18,000	-16,000	96.287
B-20	10:46AM	1.364	0.880	8.593	-13,000	-11,000	80.124
B-22	11:05AM	1.423	0.794	7.960	-11,000	-7,000	76.000
B-24	11:20AM	1.151	0.870	5.121	-17,000	-13,000	77.370
B-26	11:30AM	3.083	0.981	6.157	-10,000	-9,000	91.587

STATION= STAND(EMCO-WHEATON/OPW) DATE= 8/ 5/74
 AVE UNDGRD TANK TEMP= 77.0 F ATMPID BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
A=02	1:14PM	0.853	0.952	*****	18.000	10.000	
A=06	2:04PM	0.681	0.560	4.588	18.000	12.000	
A=10	3:12PM	1.915	0.814	4.224	17.000	9.000	
A=12	3:35PM	1.426	0.706	4.314	26.000	18.000	
A=16	4:10PM	0.879	0.416	4.369	38.000	31.000	
A=18	0:00AM	1.289	0.784	4.393	30.000	21.000	
B=02	0:00AM	0.584	0.874	5.263	~68.000	~75.000	
B=04	1:50PM	0.676	0.460	5.280	21.000	12.000	
B=08	2:45PM	0.043	0.042	5.848	17.000	~9.000	
B=18	5:00PM	1.171	0.749	5.162	19.000	8.000	

STATION= STAND(EMCO-WHEATON/CPW) DATE= 8/ 6/74
 AVE UNDGRD TANK TEMP= 77.5 F ATMPID BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT3)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
A=02	7:25AM	1.066	0.767	4.364	-2,500	-3,000	
A=03	8:29AM	2.730	1.026	4.310	6,500	1,000	
A=14	10:40AM	0.248	0.277	4.102	13,500	8,000	
A=17	11:05AM	1.268	0.771	4.266	5,500	0,000	
A=20	12:19PM	0.001	0.001	4.194	16,500	9,000	
A=28	2:05PM	1.501	0.785	4.227	20,500	12,000	
B=05	8:00AM	1.080	0.973	5.298	0,500	-4,000	
B=06	8:20AM	0.529	0.733	5.492	22,500	17,000	
B=11	9:20AM	0.027	0.016	10.438	10,500	10,000	
B=13	9:55AM	0.010	0.011	6.176	23,500	25,000	
B=22	12:20PM	0.742	0.721	5.133	23,500	16,000	
B=24	12:45PM	0.705	0.488	5.062	20,500	12,000	
B=28	1:40PM	1.290	0.965	5.405	18,500	8,000	
B=29	2:05PM	1.777	0.950	6.885	19,500	11,000	

STATION= STAND(EMCO-WHEATON/DPW) DATE= 8/ 7/74
AVE UNDGRD TANK TEMP= 79.5 F ATMPID BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP+VEH TANK TMP (DEG F)	EFF OF COLLECT' (VOL)
A#01	12:08PM	2,135	0.918	4.227	4,500	-1.000	
A#07	1:25PM	1,577	0.922	4.291	5,500	-1.000	
A#08	1:40PM	0.486	0.316	4.259	*****	*****	
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
A#12	2:45PM	1,247	0.791	3.955	19,500	11.000	
A#17	4:00PM	1,069	0.740	0.757	16,500	9.000	
A#19	4:32PM	0.542	0.596	8.870	21,500	14.000	
B#03	12:45PM	1,679	1.047	5.760	6,500	4.000	
B#19	4:30PM	0.406	0.660	5.872	22,500	17.000	
B#24	6:00PM	2,075	0.647	5.830	9,500	9.000	

STATION= STAND(EMCO-WHEATON/VOPV) DATE= 8/ 8/74
 AVE UNDGRD TANK TEMP= 77.0 F ATMPID BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP+VEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
A#06	11:40AM	1.810	0.885	9.273	8,000	0,000	
A#08	12:00PM	1.766	0.957	9.517	5,000	-2,000	
A#10	12:35PM	0.933	0.831	9.164	1,000	-6,000	
A#12	12:40PM	0.339	0.768	4.304	5,000	-3,000	
A#14	12:45PM	1.858	0.986	8.905	0,000	-8,000	
A#16	1:00PM	1.117	1.019	4.432	8,000	0,000	
A#18	1:15PM	0.996	0.621	4.235	11,000	3,000	
A#20	1:30PM	1.002	0.750	5.556	11,000	3,000	
A#24	2:30PM	0.565	0.480	6.286	20,000	9,000	
A#26	2:40PM	0.680	0.697	3.318	14,000	3,000	
A#28	2:55PM	1.159	0.826	9.130	16,000	5,000	
A#34	3:40PM	1.587	0.906	4.517	21,000	7,000	

STATION - STAND (DPW/NOPV)
 AVE UNDGRD TANK TEMP = 74.5 F DATE = 9/ 9/74
 ATMPID BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
A-05	11:10AM	0.684	0.948	7.364	5.500	-2.000	
A-09	11:55AM	2.031	0.944	7.209	11.500	3.000	
B-02	10:10AM	1.311	0.838	5.400	8.500	1.000	
B-03	10:28AM	1.318	0.986	5.172	13.500	6.000	
B-05	11:05AM	1.119	0.675	5.239	19.500	15.000	
B-07	11:20AM	1.376	0.858	5.373	11.500	3.000	
B-08	11:25AM	0.806	0.726	7.905	9.500	-12.000	
B-10	11:40AM	0.601	0.608	5.163	14.500	1.000	
B-13	12:20PM	0.615	1.000	2.968	9.500	-6.000	

STATION- STAND(OPW/NOPV)
AVE UNDGRD TANK TEMP- 79.5 F

DATE- 8/12/74
ATMPID BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (O/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP+VEH TANK TMP (DEG F)	EFF OF COLCTN (VOL)
A#04	9:45AM	1.717	0.840	5.632	1.500	5.000	
A#06	10:02AM	1.971	0.806	8.446	1.500	5.000	
A#08	10:15AM	2.796	0.996	7.975	4.500	9.000	
A#11	10:45AM	1.125	0.967	6.000	-1.500	4.000	
A#13	11:00AM	0.049	0.068	7.535	-5.500	-1.000	
A#14	11:00AM	0.796	1.099	5.446	-7.500	-3.000	
A#16	11:14AM	0.038	0.014	6.030	6.500	12.000	
A#18	11:40AM	1.196	0.626	5.797	2.500	6.000	
A#29	2:33PM	0.638	0.426	*****	12.500	13.000	
A#32	3:12PM	1.404	0.715	5.478	32.500	32.000	
A#34	3:30PM	1.337	0.752	5.205	24.500	23.000	
A#37	12:01PM	0.876	0.475	5.633	33.500	36.000	
B#03	9:35AM	1.415	1.103	5.236	-6.500	-2.000	
B#05	9:50AM	2.242	1.103	5.333	-1.500	1.000	
B#07	10:05AM	0.561	0.777	5.143	-0.500	4.000	
B#11	10:45AM	1.039	0.936	5.298	-4.500	1.000	
B#13	11:15AM	1.580	0.985	5.294	-0.500	5.000	
B#15	11:45AM	1.854	0.970	5.264	4.500	7.000	
B#17	12:05PM	2.300	0.972	5.391	9.500	12.000	
B#21	12:40PM	10.412	14.424	5.226	17.500	21.000	
B#25	1:12PM	1.255	0.706	6.333	*****	*****	
B#27	2:10PM	2.130	0.699	5.344	24.500	27.000	
B#33	3:40PM	1.329	0.637	5.605	21.500	19.000	

*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C

STATION - STAND(OHW/NOPV)
AVE UNDGRD TANK TEMP = 80.5 F

DATE = 8/13/74
ATMPID BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLECTY (VOL)
A=04	9:00AM	0.815	1.129	2.700	*****	*****	
*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C							
A=12	10:30AM	0.705	0.977	5.400	-3.500	-3.000	
A=16	12:10PM	1.046	0.932	6.632	5.500	6.000	
A=22	1:45PM	0.598	0.589	5.302	9.500	10.000	
A=26	2:50PM	0.364	0.358	5.772	22.500	21.000	
B=04	3:35AM	1.048	0.912	5.432	-16.500	-6.000	
B=10	9:50AM	0.182	0.192	8.038	-6.500	0.000	
B=20	1:25PM	0.776	0.638	6.000	24.500	11.000	
B=22	1:45PM	0.925	0.760	0.628	16.500	1.000	
B=24	2:15PM	1.047	0.991	5.386	11.500	6.000	

STATION - STAND(OEW/NOPV)
 AVE UNDGND. TANK TEMP = 80.5 F DATE = 8/14/74
 ATMPD BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLECT' (VOL)
A-14	4:25PM	1.153	1.039	9.434	20.500	18.000	
B-02	12:55PM	0.559	0.820	5.276	9.500	13.000	
B-04	1:06PM	1.240	0.708	0.362	31.500	35.000	
B-08	0:00AM	0.916	0.965	5.462	13.500	15.000	
B-10	1:55PM	1.757	0.894	9.158	16.500	17.000	
B-12	3:49PM	0.693	0.960	5.226	20.500	14.000	
B-16	4:30PM	0.082	0.052	9.130	26.500	20.000	
B-20	5:00PM	0.007	0.007	4.374	26.500	20.000	
B-22	5:25PM	1.474	0.735	10.714	13.500	10.000	
B-24	5:45PM	0.755	0.680	5.298	17.500	13.000	
B-28	6:35PM	0.406	0.562	5.786	13.500	12.000	

STATION= STAND(DPH/PV)
AVE UNDGRD TANK TEMP= 82.0 F DATE= 8/15/74
ATMPID BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP-VEH TANK TMP (DEG F)	EFF OF COLLCT'N (VOL)
A=10	12:15PM	0.371	0.791	6.231	0.000	~1.000	
B=08	12:17PM	1.743	0.858	3.011	3.000	3.000	
B=10	12:40PM	0.792	0.534	5.415	23.000	23.000	
B=14	2:21PM	0.070	0.033	8.421	6.000	8.000	
B=22	4:30PM	1.202	0.762	5.900	16.000	18.000	
B=24	4:50PM	0.856	0.504	5.080	12.000	14.000	
B=26	5:05PM	0.722	0.885	5.155	*****	*****	
B=28	5:15PM	0.583	0.808	5.400	11.000	13.000	

*** THE PREVIOUS AUTOMOBILE WAS NOT USED IN THE CALCULATIONS DUE TO INSUFFICIENT C

STATION - STAND(DPW/PV)
AVE UNDGRD TANK TEMP = 82.0 F

DATE = 8/16/74
ATMPID BASELINE

PUMP	TIME	RET VAPOR VOLUME (FT ³)	VAP/LIQ RATIO	DISP RATE (G/MIN)	UNDG-VEH TANK TMP (DEG F)	DISP+VEH TANK TMP (DEG F)	EFF OF COLLCTN (VOL)
B-05	9:30AM	0.841	1.165	5.226	-18.000	-13.000	
B-11	9:55AM	0.873	0.768	5.604	-19.000	-15.000	
B-19	10:42AM	0.733	0.899	5.892	-20.000	-18.000	
B-21	10:55AM	1.301	1.070	8.400	-21.000	-18.000	
B-23	11:10AM	1.060	1.468	5.400	-14.000	-10.000	
B-25	11:25AM	0.639	0.629	5.429	-14.000	-11.000	

Sample Calculations

I. Nomenclature

v_r = net returned vapor volume, ft³
 v_f = final meter reading in vapor return hose, ft³
 v_i = initial meter reading in vapor return hose, ft³
 L_d = dispensed liquid volume, gallons
 V/L = vapor volume to liquid volume ratio, ft³/ft³
 t = fill time, min.
 R_d = gasoline dispensing rate, gal/min
 T_v = vehicle tank liquid temperature, °F
 T_u = underground tank temperature, °F
 T_d = dispensed liquid temperature, °F
 T_r = returned vapor temperature, °F

II. Calculations

A. For each vehicle used in testing, calculate:

1. Volume of returned vapors:

$$v_r = v_f - v_i$$

2. Volume to liquid ratio

$$V/L = \frac{v_r}{L_d} \times 7.481$$

3. Dispensing rate

$$R_d = \frac{L_d}{t}$$

4. Vehicle tank liquid - dispensed liquid temperature difference

$$\Delta T_{vd} = T_v - T_d$$

- B. For vehicles qualifying as baseline tests; determine:
the potential emission baseline correlation

$$(V/L)_{pot} = a + b \Delta T_{vd}$$

where

$(V/L)_{pot}$ = potential volume returned to liquid dispensed ratio
a, b = correlation constants.

Numerical least squares techniques are used with ΔT_{vd} as the independent variable and $(V/L)_{pot}$ as the dependent variable.

- C. For each non-baseline vehicle calculate: (Delete all baseline and attempted baseline tests from further calculations)

1. V_r , actual vapors returned (from A.1)
2. ΔT_{vd} , vehicle tank liquid temperature - dispensed liquid temp. difference (from A.4)
3. V_{pot} , potential volume returned, based on baseline correlation:

$$V_{pot} = (a + b \Delta T_{vd}) \frac{L_d}{7.481}$$

- D. Average recovery factors and efficiencies

1. Average Potential Emission Factor

$$\overline{(V/L)}_{pot} = \frac{\sum_{i=1}^n V_{pot_i}}{\sum_{i=1}^n L_{d_i}}$$

where i = number of normally filled vehicles in data set

2. Average Recovery Factor

$$(\overline{V/L})_r = \frac{\sum_{i=1}^n V_{r_i}}{\sum_{i=1}^n L_{d_i}}$$

3. Average actual emission factor at the vehicle

$$(\overline{V/L})_e = (\overline{V/L})_{pot} - (\overline{V/L})_r$$

4. Average Volumetric Recovery Efficiency

$$E_v = \frac{(\overline{V/L})_r}{(\overline{V/L})_{pot}} \quad (100\%)$$

LABORATORY REPORT

APPENDIX C

HOUSTON LABORATORY
1215 DUMBLE STREET

CORPUS CHRISTI LABORATORY
2618 WEST BROADWAY

SAN PEDRO LABORATORY
825 MIRAFLORES AVE.

ELIZABETH, N. J. LABORATORY
BAYWAY TERMINAL BUILDING

NEW ORLEANS LABORATORY
8139 OLEANDER STREET

CHICAGO LABORATORY
ARGO, ILLINOIS

JAMES J. MULLIN • APPROVED AND
LICENSED BY NEW YORK PRODUCE EXCHANGE

RICHMOND, CALIFORNIA

AUGUST 27, 1974

TO BETTE ENVIRONMENTAL ENGR., INC. SAMPLE SUBMITTED BY
1 PLYMOUTH MEETING MALL
PLYMOUTH MEETING, PA 19462
ATTN: P. R. CHARRINGTON
SENIOR PROJECT ENGR.

REPORT OF LABORATORY ANALYSIS PAGE 1 OF 4

SAMPLE IDENTIFICATION:

GASOLINE
VAPOR PRESSURE, HIID @ 100°F., F.S.I.

CA 820 DHT	6.4
CA VMJ 865	7.3
CA 042 DGZ	6.7
CA 27629 N	7.2
CA UBW 517	4.3
DKL 015	7.8
CA 690 JTC	8.0
CA 386 ERW	8.0
CA ABX 947	8.0
CA 980 BTX	7.3
CA 411 CPL	7.4
CA 703 LBI	7.9
137 FSM	7.2
CA 38852S	7.8
CA 57294L	7.3
CA BZU 648	7.1
CA 09483V	7.4
420 LBJ	7.0
VCW 618	7.8
377 LDG	7.6
CA 030014	8.1
CA 63099M	7.9
CA VJN 624	8.0
CA 00877 B	7.5
UNDERGROUND LOW LEAD 8/8/74	7.8
UNDERGROUND TANK AFTER DROP 8/9/74	7.9
CA 438 AAJ	7.2
CA 081 JAY	6.4
NV BP 4028	8.0
CA AVA 614	6.7
CA 293 FDW	3.4
CA P 23 843	7.4
CA 710 DAJ	6.0
CA 143 EEZ	7.2
CA 998 FQG	7.8

BY CR Williams
DEPUTY INSPECTOR OF PETROLEUM
APPROVED BY NEW YORK PRODUCE EXCHANGE

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825 MIRAFLORES AVE.

Chas. MARTIN
148-10823
of Petroleum Inc.

ELIZABETH, N. J., LABORATORY
BAYWAY TERMINAL BUILDING

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AUGUST 27, 1974

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PLYMOUTH MEETING, PA 19462
ATTN: P. R. CHARRINGTON
SENIOR PROJECT ENGR.

REPORT OF LABORATORY ANALYSIS PAGE 2 OF 4

SAMPLE IDENTIFICATION:

GASOLINE
VAPOR PRESSURE, REED @ 100°F., P.S.I.

CA 254 JWC	8.1
CA 941 GIS 7/31/74	7.2
CA XPU 480 7/31/74	8.0
CA 960 KDV 7/31/74	7.9
353 EZC	7.4
CA ZPH 472	7.5
CA 378 JEQ	6.6
CA 363 GCN	6.6
CA XQK 086	6.8
CA 773 JVG	6.9
CA 093 BCW	8.2
EXXON UNDERGROUND REGULAR GAS 8/1/74 2000	8.7
EXXON HAYWARD REGULAR GAS	8.7
CA 35003 B	7.8
CA 548 FCF	7.8
CA ASH 364	7.9
CA 37063 V	6.8
CA 409 FQD	6.6
CA TJV 011	5.9
CA 349 FJV	6.2
CA 298 FXP	6.7
CA 999 KJD	7.0
CA D 553404	6.8
CA VAL 970	7.5
CA MKS 050 7/31/74	7.3
CA 972 BWL	8.1
CA 55675 H	9.0
CA VJL 292 7/31/74	6.5
CA C 71170	7.2
CA 999 K7P A-3	7.9
CA 077 CVO	6.9
CA 287 JAR	7.9
CA 193 BOF 7/31/74	8.4
CA 140 FIW	8.2
NY 223 YYJ	7.8
CA HOB 171 7/31/74	7.9

BY *DR. Williams*
DEPUTY INSPECTOR OF PETROLEUM
APPROVED BY NEW YORK PRODUCE EXCHANGE

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PLYMOUTH MEETING, PA 19462
ATTN: P. R. CHARRINGTON
SENIOR PROJECT ENGR.

REPORT OF LABORATORY ANALYSIS PAGE 3 OF 4

SAMPLE IDENTIFICATION:

GASOLINE

VAPOR PRESSURE, RIED @ 100°F., P.S.I.

CA AGH 326	8.0
CA SDT 582	7.8
CA 181 CMC 7/31/74	7.9
CA 393 GTA	7.5
CA WDK 111	8.1
CA VXE 295	7.5
139 ARF	7.0
CA 544 CLT	6.8
CA 936 EPZ	6.4
CA 193 HCJ	6.9
CA 06089 U	6.5
CA WDH 856	7.2
CA MKR 322	6.6
CA 158 JWF	6.8
CA 53951 M	6.5
U.S. GOVERNMENT G1170212	7.2
CA VY2 927	7.1
CA 904 HLE	7.0
CA YLZ 244	7.5
CA 342 JVC	7.2
CA XAM 267	6.4
CA 7746 EI	8.3
CA YQK 313	7.8
CA 009 KEY	7.2
CA 654 JVG	7.9
CA WMK 565	8.2
021 FXO	7.6
CA VA 6 KNX	6.7
257 JHQ	6.8
CA 688 HBZ	7.2
CA WPT 476	7.0
033 DKV	7.7
624 GKH	7.8
CO LX 3060	7.7
CA IV 24	7.5
CA STARR 1	8.0
CA 366 HBZ	7.6

BY CR Williams
DEPUTY INSPECTOR OF PETROLEUM
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AUGUST 27, 1974

TO BETZ ENVIRONMENTAL ENGR., INC.
1 PLYMOUTH MEETING MALL
PLYMOUTH MEETING, PA 19462
ATTN: P. R. CHARRINGTON
SENIOR PROJECT ENGR.

REPORT OF LABORATORY ANALYSIS PAGE 4 OF 4

SAMPLE IDENTIFICATION:

GASOLINE

VAPOR PRESSURE, RING O' FIRE, P.S.I.

CA 253 KUA	8.3
CA 589 BEU	7.6
CA U 71 060	7.5
CA 703 BXF	7.3
WLZ 244	6.4
MEXICO VW VAN	7.9
CA U91369	8.1
CA 357 FMU	7.6
CA 15521 N	6.2
CA 280 LBH	8.0

BY Chas Martin
DEPUTY INSPECTOR OF PETROLEUM
APPROVED BY NEW YORK PRODUCE EXCHANGE

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PLYMOUTH MEETING, PA 19462
ATTN: P. R. CHARRINGTON
SENIOR PROJECT ENGR.

REPORT OF LABORATORY ANALYSIS

SAMPLE IDENTIFICATION:

GASOLINE
UNDERGROUND REGULAR TANK 1/3 FILL
8/9/74

VAPOR PRESSURE, REED @ 100°F., PSI

8.5

DISTILLATION:

INITIAL BOILING POINT, °F.	100
5% RECOVERED, °F.	120
10% RECOVERED, °F.	131
50% RECOVERED, °F.	210
90% RECOVERED, °F.	340
95% RECOVERED, °F.	384
END POINT, °F.	406
RECOVERED, VOLUME, %	97
RESIDUE, VOLUME, %	1.5
LOSS, VOLUME, %	1.5

BY *CR Mullin*
DEPUTY INSPECTOR OF PETROLEUM
APPROVED BY NEW YORK PRODUCE EXCHANGE

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ATTN: P. R. CHARRINGTON
SENIOR PROJECT ENGR.

REPORT OF LABORATORY ANALYSIS

SAMPLE IDENTIFICATION:

GASOLINE
UNDERGROUND TANK
8/13/74

VAPOR PRESSURE, RIED @ 100°F., PSI

8.4

DISTILLATION:

INITIAL BOILING POINT, °F.	100
5% RECOVERED, °F.	120
10% RECOVERED, °F.	132
50% RECOVERED, °F.	202
90% RECOVERED, °F.	324
95% RECOVERED, °F.	356
END POINT, °F.	404 DECOMPOSITION
RECOVERED, VOLUME, %	98.0
RESIDUE, VOLUME, %	1.5
LOSS, VOLUME, %	0.5

BY *CR Williams*
DEPUTY INSPECTOR OF PETROLEUM
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PLYMOUTH MEETING, PA 19462
ATTN: P. R. CHARRINGTON
SENIOR PROJECT ENGR.

REPORT OF LABORATORY ANALYSIS

SAMPLE IDENTIFICATION:

GASOLINE
UNDERGROUND TANK 8/14/74

VAPOR PRESSURE, RIRD @ 100°F., PSI

7.9

DISTILLATION:

INITIAL BOILING POINT, °F.	104
5% RECOVERED, °F.	122
10% RECOVERED, °F.	133
50% RECOVERED, °F.	202
90% RECOVERED, °F.	326
95% RECOVERED, °F.	357
END POINT, °F.	416
RECOVERED, VOLUME, %	98.0
RESIDUE, VOLUME, %	1.5
LOSS, VOLUME, %	0.5

BY CR Williams
DEPUTY INSPECTOR OF PETROLEUM
APPROVED BY NEW YORK PRODUCE EXCHANGE

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AUGUST 27, 1974

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ARGO, ILLINOIS

REPORT OF LABORATORY ANALYSIS

SAMPLE IDENTIFICATION:

GASOLINE
UNDERGROUND TANK B¹ DROE
8/15/74

VAPOR PRESSURE, RIED @ 100°F., PSI

8.3

DISTILLATION:

INITIAL BOILING POINT, °F.	100
5% RECOVERED, °F.	122
10% RECOVERED, °F.	133
50% RECOVERED, °F.	218
90% RECOVERED, °F.	354
95% RECOVERED, °F.	374
END POINT, °F.	406
RECOVERED VOLUME, %	96.5
RESIDUE, VOLUME, %	2.0
LOSS, VOLUME, %	1.5

BY C.R. Williams
DEPUTY INSPECTOR OF PETROLEUM
APPROVED BY NEW YORK PRODUCE EXCHANGE

HOUSTON LABORATORY
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CORPUS CHRISTI LABORATORY
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AUGUST 27, 1974

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CHICAGO LABORATORY
ARGO, ILLINOIS

TO BETZ ENVIRONMENTAL ENGR., INC. XXXXXXXXXXXXXXXX
1 PLYMOUTH MEETING MALL
PLYMOUTH MEETING, PA 19462
ATTN: P. R. CHARMINGTON
SENIOR PROJECT ENGR.

REPORT OF LABORATORY ANALYSIS

SAMPLE IDENTIFICATION:

GASOLINE
UNDERGROUND TANK AFTER LEAK
8/15/74

VAPOR PRESSURE, RIED @ 100°F., PSI

8.3

DISTILLATION:

INITIAL BOILING POINT, °F.	100
5% RECOVERED, °F.	120
10% RECOVERED, °F.	130
50% RECOVERED, °F.	216
90% RECOVERED, °F.	328
95% RECOVERED, °F.	358
END POINT, °F.	406 DECOMPOSING
RECOVERED, VOLUME, %	98.0
RESIDUE, VOLUME, %	2.0
LOSS, VOLUME, %	0.0

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Chas. MARTIN

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RICHMOND, CALIFORNIA

AUGUST 27, 1974

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1 PLYMOUTH MEETING MALL
PLYMOUTH MEETING, PA 19462
ATTN: P. R. CHARRINGTON
SENIOR PROJECT ENGR.

REPORT OF LABORATORY ANALYSIS

SAMPLE IDENTIFICATION:

GASOLINE
UNDERGROUND TANK 8/16/74

VAPOR PRESSURE, RIED @ 100°F., PSI

8.4

DISTILLATION:

INITIAL BOILING POINT, °F.	96
5% RECOVERED, °F.	118
10% RECOVERED, °F.	131
50% RECOVERED, °F.	212
90% RECOVERED, °F.	326
95% RECOVERED, °F.	357
END POINT, °F.	413
RECOVERED, VOLUME, %	98.0
RESIDUE, VOLUME, %	1.5
LOSS, VOLUME, %	0.5

BY *CR Williams*
DEPUTY INSPECTOR OF PETROLEUM
APPROVED BY NEW YORK PRODUCE EXCHANGE

DENA TEXAS LABORATORY
131 NORTH TATAR STREET

CORPUS CHRISTI LABORATORY
2610 WEST BROADWAY

SAN PEDRO LABORATORY
825 MIRAFLORES AVE.

Chas. MARTIN

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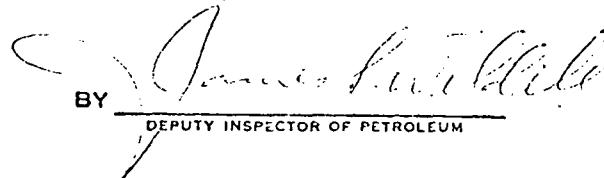
JAMES J. MULLIN - PRESIDENT
INDEPENDENT LICENCED INSPECTION COMPANY
MEMBERS OF ASTM & API

San Pedro, California - September 10, 1974

TO BETZ ENVIRONMENTAL ENGINEERS, INC. SAMPLE SUBMITTED BY Betz Environmental Engineers
1 Plymouth Meeting Mall
Plymouth Meeting, Pennsylvania 19462

REPORT OF LABORATORY ANALYSIS

<u>LAB #</u>		<u>DISSOLVED OXYGEN PPM</u>	<u>NITROGEN PPM</u>
1048	Underground tank before drop 8/8/74	<10	9
1049	Underground tank after drop 8/9/74	<10	10
1050	Exxon Hayward - 8/2/74, 12:30 PM	<10	58
1051	Exxon Regular underground tank 8/1/74, 8:00 PM	<10	57
1052	Undergound tank 7/31/74, 4:05 PM	<10	58
1079A	Underground tank 8/14/74	<10	10
1079B	Underground tank 8/16/74	<10	9
1079C	Underground tank after drop 8/15/74	<10	9
1079D	Underground tank 8/13/74	<10	10
1079E	Underground tank before drop 8/15/74	<10	8

BY 
DEPUTY INSPECTOR OF PETROLEUM

DAILY LOG SHEETS

APPENDIX D

SERVICE STATION DAILY DATA SHEET

STATION NAME STANDARDDATE 8/5/74LOCATION DAVIS, CALIF.

UNDERGROUND TANK TEMPERATURE READINGS

PUMP METER READINGS		
	Initial Vol.	Final Vol.
Time	<u>1030</u>	<u>1700</u>
Pump No.		

Tank No.	Initial	Final
<u>Low Lead</u>	<u>76</u> °F	<u>78</u> °F
<u>SUPREME</u>	<u>76</u> °F	<u>76</u> °F
<u>UNLEADED</u>	<u>79</u> °F	<u>73</u> °F

Time 1030 1715

UNDERGROUND TANK VOLUME READINGS

	Initial	Final
A	<u>26981.2</u>	<u>27215.1</u>
B	<u>39532.1</u>	<u>39126.7</u>
D	<u>24501.2</u>	<u>24501.2</u>
E	<u>18484.7</u>	<u>18498.3</u>
F	<u>94382.1</u>	<u>94516.9</u>
G	<u>80237.9</u>	<u>80524.5</u>
H	<u>12320.2</u>	<u>12323.7</u>
I	<u>20086.1</u>	<u>20187.6</u>
J	<u>79808.1</u>	<u>79960.5</u>
K	<u>24340.9</u>	<u>24447.6</u>
L	<u>98341.6</u>	<u>98607.3</u>
M	<u>13432.0</u>	<u>13444.1</u>
N	<u>31702.4</u>	<u>31802.7</u>
O	<u>93676.1</u>	<u>93784.6</u>

Tank No.	Initial	Final
<u>Low Lead</u>	<u>3800</u> Gal.	<u>3450</u> Gal.
<u>SUPREME</u>	<u>2800</u> Gal.	<u>2800</u> Gal.
<u>UNLEADED</u>	<u>700</u> Gal.	<u>700</u> Gal.

Time 1030 1715

VENT OUTLET VOLUME READINGS

Vent No.	Initial	Final
<u>IN</u>	<u>0.001</u> ft ³	<u>10.050</u> ft ³
<u>OUT</u>	<u>226.710</u> ft ³	<u>226.710</u> ft ³

Time 1230

VENT OUTLET HC READINGS

Vent No.	Initial	Final	Average
<u>IN</u>	— %	— %	— %
<u>OUT</u>	— %	— %	— %

Time 1230 1720

NOTES

38 CARS TESTEDMissed reading on pump C

SERVICE STATION DAILY DATA SHEET

STATION NAME Chevron DATE 8/6/74
 LOCATION DAVIS, CALIF.

UNDERGROUND TANK TEMPERATURE READINGS

PUMP METER READINGS		Tank No.	Initial	Final
Time	Pump No.	Low Lead	76 °F	79 °F
		Supreme	77 °F	81 °F
		UNLEADED	77 °F	79 °F
		Time	0620	1515

A	27215.1	27608.1
B	39726.7	40083.1
C	02203.2	02215.1
D	24501.2	24501.2
E	18498.3	18498.3
F	94564.2	94680.0
G	80649.5	80870.1
H	12323.7	12323.7
I	20253.4	20542.7
J	79499.0	80502.0
K	24562.3	24621.0
L	98668.0	98734.6
M	13444.1	13444.1
N	31885.2	31932.2
O	93818.4	93837.3

UNDERGROUND TANK VOLUME READINGS

Tank No.	Initial	Final
Low Lead	3400	2680
Supreme	2800 Gal.	2800 Gal.
Unleaded	700 Gal.	680 Gal.
	Gal.	Gal.
	Gal.	Gal.
	Gal.	Gal.
Time	0625	1515

VENT OUTLET VOLUME READINGS

Vent No.	Initial	Final
IN	10.050 ft³	39.686 ft³
OUT	296.710 ft³	326.710 ft³
	ft³	ft³

Time _____

VENT OUTLET HC READINGS

Vent No.	Initial	Final	Average
OUT	0 %	0 %	0 %
	%	%	%
	%	%	%
Time	0645	1515	

NOTES
67 CARS

SERVICE STATION DAILY DATA SHEET

STATION NAME STANDARD DATE 8/7/74
LOCATION DAVIS, CALIF

UNDERGROUND TANK TEMPERATURE READINGS

<u>Tank No.</u>	<u>Initial</u>	<u>Final</u>
<u>Low Lead</u>	<u>79</u> °F	<u>80</u> °F
<u>Supreme</u>	<u>79</u> °F	<u>78</u> °F
<u>Unleaded</u>	<u>79</u> °F	<u>80</u> °F
Time	11:30	19:00

UNDERGROUND TANK VOLUME READINGS

<u>Tank No.</u>	<u>Initial</u>	<u>Final</u>
<u>Low Lead</u>	<u>2700</u> Gal.	<u>2500</u> Gal.
<u>Supreme</u>	<u>286c</u> Gal.	<u>286c</u> Gal.
<u>UNLeaded</u>	<u>580</u> Gal.	<u>575</u> Gal.
		Gal.
Time	<u>113c</u>	<u>1900</u>

VENT OUTLET VOLUME READINGS

<u>Vent No.</u>	<u>Initial</u>	<u>Final</u>
<u>IN</u>	<u>37.686</u> ft ³	<u> </u> ft ³
<u>OUT</u>	<u>226.710</u> ft ³	<u>226.710</u> ft ³

VENT OUTLET HC READINGS

<u>Vent No.</u>	<u>Initial</u>	<u>Final</u>	<u>Average</u>
<u>IN</u>	— %	— %	— %
<u>Out</u>	θ %	θ %	θ %
	%	%	%
Time	113c	190c	

NOTES

60 CARS

SERVICE STATION DAILY DATA SHEET

STATION NAME STANDARD DATE 8/3/14
LOCATION DAVIS, CALIF

UNDERGROUND TANK TEMPERATURE READINGS

<u>Tank No.</u>	<u>Initial</u>	<u>Final</u>
<u>Unleaded</u>	<u>75</u> °F	<u>79</u> °F
<u>Supreme</u>	<u>75</u> °F	<u>78</u> °F
<u>Low Lead</u>	<u>78</u> °F	<u>78</u> °F
Time	<u>1105</u>	<u>1600</u>

UNDERGROUND TANK VOLUME READINGS

<u>Tank No.</u>	<u>Initial</u>	<u>Final</u>
<u>Unleaded</u>	<u>575</u> Gal.	<u>575</u> Gal.
<u>Supreme</u>	<u>2900</u> Gal.	<u>2875</u> Gal.
<u>Low Lead</u>	<u>1940</u> Gal.	<u>1525</u> Gal.
	Gal.	Gal.
<u>Time</u>	<u>1/15</u>	<u>1/15</u>

VENT OUTLET VOLUME READINGS

<u>Vent No.</u>	<u>Initial</u>	<u>Final</u>
<u>In</u>	<u>54.086</u> ft ³	<u>57.663</u> ft ³
<u>Out</u>	<u>226.710</u> ft ³	<u>226.710</u> ft ³
	ft ³	ft ³

VENT OUTLET HC READINGS

<u>Vent No.</u>	<u>Initial</u>	<u>Final</u>	<u>Average</u>
<u>In</u>	— %	— %	— %
<u>Out</u>	8 %	8 %	8 %
	%	%	%
Time	0630	1605	

PLUS 3 SPECIAL TESTS

SERVICE STATION DAILY DATA SHEET

STATION NAME STANDARD

DATE 8/9/74

LOCATION DAVIS, CALIF

PUMP METER READINGS

	<u>Initial Vol.</u>	<u>Final Vol.</u>
Time	0°cc	13cc

Pump No.	Time	81	7508
A	28284.5		28410.6
B	40458.1		40611.3
C	02215.6		02215.6
D	24501.2		24501.2
E	18498.3		18498.3
F	95335.3		95404.1
G	82014.2		82270.3
H	12425.7		12445.5
I	21438.9		21689.3
J	80789.2		80884.8
K	25173.9		25293.0
L	99915.5		00049.4
M	13487.6		13487.6
N	32749.5		33922.2
O	91409.4		91409.4

UNDERGROUND TANK TEMPERATURE READINGS

<u>Tank No.</u>	<u>Initial</u>	<u>Final</u>
<u>Low Lead</u>	<u>72</u> °F	<u>77</u> °F
<u>Supreme</u>	<u>75</u> °F	<u>79</u> °F
<u>Unleaded</u>	<u>76</u> °F	<u>80</u> °F
Time	0700	1300

UNDERGROUND TANK VOLUME READINGS

<u>Tank No.</u>	<u>Initial</u>	<u>Final</u>
<u>Low Lead</u>	<u>1550</u> Gal.	<u>5650</u> Gal.
<u>Supreme</u>	<u>2400</u> Gal.	<u>2100</u> Gal.
<u>Unleaded</u>	<u>520</u> Gal.	<u>500</u> Gal.
		Gal.
Time	0100	1300

VENT OUTLET VOLUME READINGS

<u>Vent No.</u>	<u>Initial</u>	<u>Final</u>
<u>IN</u>	<u>59.636</u> ft ³	<u>102.835</u> ft ³
<u>CUT</u>	<u>226.710</u> ft ³	<u>227.753</u> ft ³
	ft ³	ft ³

VENT OUTLET HC READINGS

<u>Vent No.</u>	<u>Initial</u>	<u>Final</u>	<u>Average</u>
<u>IN</u>	— %	— %	— %
<u>OUT</u>	θ %	θ %	θ %
	%	%	%
Time	01oc	13oc	

NOTES

4350 gal. low lead dropped

BECKMAN 400 LEFT RUNNING

25 CARS = 8 BASELINE

SERVICE STATION DAILY DATA SHEET

STATION NAME STANDARD

DATE 8/12/74

LOCATION Davis, Calif.

UNDERGROUND TANK TEMPERATURE READINGS

<u>Tank No.</u>	<u>Initial</u>	<u>Final</u>
<u>Low Lead</u>	<u>79</u> °F	<u>80</u> °F
<u>Supreme</u>	<u>82</u> °F	<u>82</u> °F
<u>Unleaded</u>	<u> </u> °F	<u> </u> °F
Time	<u>0900</u>	<u>1600</u>

UNDERGROUND TANK VOLUME READINGS

<u>Tank No.</u>	<u>Initial</u>	<u>Final</u>
<u>Low Lead</u>	<u>8615</u> Gal.	<u>8150</u> Gal.
<u>Supreme</u>	<u>4100</u> Gal.	<u>4250</u> Gal.
<u>Unleaded</u>	<u>1050</u> Gal.	<u>1000</u> Gal.
Time		<u>1600</u>

VENT OUTLET VOLUME READINGS

<u>Vent No.</u>	<u>Initial</u>	<u>Final</u>
<u>In</u>	<u>missed</u> ft ³	<u>149.600</u> ft ³
<u>Out</u>	<u>228.440</u> ft ³	<u>231.364</u> ft ³
	ft ³	ft ³

<u>Time</u>	<u>0%_{CO}</u>	<u>1600</u>
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VENT OUTLET HC READINGS

<u>Vent No.</u>	<u>Initial</u>	<u>Final</u>	<u>Average</u>
<u>IN</u>	— %	— %	— %
<u>Out</u>	θ %	θ %	θ %
	%	%	%
Time			

NOTES

Keys for underground tanks
were not available when
testing was ready to begin

TANK VOLUME READINGS TAKEN AT 1115

In volume @ 1140^d 13c. 214

73 CARS

SERVICE STATION DAILY DATA SHEET

STATION NAME STANDARDDATE 8/13/74LOCATION DAVIS, CALIF

UNDERGROUND TANK TEMPERATURE READINGS

Tank No.	Initial	Final
Low Lead	80 °F	81 °F
Supreme	82 °F	84 °F
Unleaded	°F	°F
Time	<u>0630</u>	<u>1500</u>

PUMP METER READINGS

	Initial Vol.	Final Vol.
Time	<u>0630</u>	<u>1500</u>

Pump No.

A	<u>28954.2</u>	<u>29262.1</u>
B	<u>41135.7</u>	<u>41477.1</u>
C	<u>02215.7</u>	<u>62215.7</u>
D	<u>24501.2</u>	<u>24501.2</u>
E	<u>18498.3</u>	<u>18498.3</u>
F	<u>96098.7</u>	<u>96186.2</u>
G	<u>83470.7</u>	<u>83672.7</u>
H	<u>12717.3</u>	<u>12738.8</u>
I	<u>22935.1</u>	<u>23179.0</u>
J	<u>81929.4</u>	<u>82046.4</u>
K	<u>26296.8</u>	<u>26404.5</u>
L	<u>01603.4</u>	<u>01771.0</u>
M	<u>13629.7</u>	<u>13659.1</u>
N	<u>34695.0</u>	<u>34910.0</u>
O	<u>94318.7</u>	<u>94320.5</u>

UNDERGROUND TANK VOLUME READINGS

Tank No.	Initial	Final
Low Lead	8425 Gal.	7550 Gal.
Supreme	3700 Gal.	2850 Gal.
Unleaded	950 Gal.	860 Gal.
Time	<u>0630</u>	<u>1500</u>

VENT OUTLET VOLUME READINGS

Vent No.	Initial	Final
IN	147.600 ft ³	146.154 ft ³
OUT	231.364 ft ³	231.941 ft ³
	ft ³	ft ³
Time	<u>0630</u>	<u>1500</u>

VENT OUTLET HC READINGS

Vent No.	Initial	Final	Average
IN	- %	- %	- %
OUT	θ %	θ %	θ %
	%	%	%
Time	<u>0630</u>	<u>1500</u>	

NOTES

53 CARS TESTED

SERVICE STATION DAILY DATA SHEET

STATION NAME STANDARD DATE 8/14/74
LOCATION DARIS CALIF.

UNDERGROUND TANK TEMPERATURE READINGS

<u>Tank No.</u>	<u>Initial</u>	<u>Final</u>
<u>Low Lead</u>	<u>80</u> °F	<u>81</u> °F
<u>Supreme</u>	<u>85</u> °F	<u>85</u> °F
<u>Unleaded</u>	<u> </u> °F	<u> </u> °F
Time	<u>1100</u>	<u>1900</u>

PUMP METER READINGS

	<u>Initial Vol.</u>	<u>Final Vol.</u>
Time	1100	1900

UNDERGROUND TANK VOLUME READINGS

<u>Tank No.</u>	<u>Initial</u>	<u>Final</u>
<u>Low Lead</u>	<u>7650</u> Gal.	<u>6900</u> Gal.
<u>Supreme</u>	<u>1900</u> Gal.	<u>1050</u> Gal.
<u>Unleaded</u>	<u>850</u> Gal.	<u>850</u> Gal.
Time	1/60	1/90

VENT OUTLET VOLUME READINGS

<u>Vent No.</u>	<u>Initial</u>	<u>Final</u>
<u>IN</u>	<u>146.154</u> ft ³	<u>160.363</u> ft ³
<u>OUT</u>	<u>231.941</u> ft ³	<u>232.413</u> ft ³

VENT OUTLET HC READINGS

<u>Vent No.</u>	<u>Initial</u>	<u>Final</u>	<u>Average</u>
<u>IN</u>	— %	— %	— %
<u>OUT</u>	θ %	θ %	θ %
	%	%	%
Time	1/00		1/00

NOTES

52 CARS TESTED

SERVICE STATION DAILY DATA SHEET

STATION NAME STANDARDDATE 8/15/74LOCATION DAVIS, CALIF

UNDERGROUND TANK TEMPERATURE READINGS

PUMP METER READINGS		Tank No.	Initial	Final
Time	Pump No.	Low Lead	80 °F	84 °F
		Supreme	86 °F	83 °F
		Unleaded	°F	°F
		Time	1000	1800

UNDERGROUND TANK VOLUME READINGS

Tank No.	Initial	Final
Low Lead	6900 Gal.	8300 Gal.
Supreme	7200 Gal.	7150 Gal.
Unleaded	8400 Gal.	7990 Gal.
	Gal.	Gal.
Time	1000	1800

VENT OUTLET VOLUME READINGS

Vent No.	Initial	Final
IN	160.363 ft³	161.505 ft³
OUT	232.063 ft³	232.063 ft³
	ft³	ft³
Time	1000	1800

VENT OUTLET HC READINGS

Vent No.	Initial	Final	Average
IN	— %	— %	— %
OUT	θ %	θ %	θ %
	%	%	%
Time	1000	1800	

NOTES

GASOLINE DROPS @ 1310 ~ 2070 gal.63 CARS

SERVICE STATION DAILY DATA SHEET

STATION NAME STANDARDDATE 8/16/74LOCATION DAVIS, CALIF.

UNDERGROUND TANK TEMPERATURE READINGS

PUMP METER READINGS

	<u>Initial Vol.</u>	<u>Final Vol.</u>
Time	<u>0600</u>	<u>1200</u>

Tank No.	Initial	Final
<u>Low Lead</u>	<u>82</u> °F	<u>82</u> °F
<u>Supreme</u>	<u>83</u> °F	<u>82</u> °F
<u>Unleaded</u>	<u>—</u> °F	<u>—</u> °F

Time 0600 1200

UNDERGROUND TANK VOLUME READINGS

	<u>Initial</u>	<u>Final</u>
A	<u>29802.6</u>	<u>30032.2</u>
B	<u>42074.8</u>	<u>42360.2</u>
C	<u>02215.6</u>	<u>02215.6</u>
D	<u>24501.1</u>	<u>24501.1</u>
E	<u>18498.3</u>	<u>18498.3</u>
F	<u>96729.9</u>	<u>96761.2</u>
G	<u>84794.2</u>	<u>84830.5</u>
H	<u>12783.0</u>	<u>12815.9</u>
I	<u>24053.4</u>	<u>24270.5</u>
J	<u>82567.7</u>	<u>82688.3</u>
K	<u>26963.2</u>	<u>27000.8</u>
L	<u>02937.6</u>	<u>03003.6</u>
M	<u>13724.1</u>	<u>13740.3</u>
N	<u>36057.3</u>	<u>36251.3</u>
O	<u>94345.6</u>	<u>94345.6</u>

Tank No.	Initial	Final
<u>Low Lead</u>	<u>8250</u> Gal.	<u>7700</u> Gal.
<u>Supreme</u>	<u>7350</u> Gal.	<u>7300</u> Gal.
<u>Unleaded</u>	<u>800</u> Gal.	<u>725</u> Gal.

Time 0600 1200

VENT OUTLET VOLUME READINGS

Vent No.	Initial	Final
<u>IN</u>	<u>161.505</u> ft ³	<u>161.515</u> ft ³
<u>OUT</u>	<u>232.063</u> ft ³	<u>232.063</u> ft ³

Time 0600 1200

VENT OUTLET HC READINGS

Vent No.	Initial	Final	Average
<u>IN</u>	<u>—</u> %	<u>—</u> %	<u>—</u> %
<u>OUT</u>	<u>θ</u> %	<u>θ</u> %	<u>θ</u> %

Time 0600 1200

NOTES

26 CARS

PROJECT PARTICIPANTS

APPENDIX E

The following individuals were present during all or part of the testing:

B.E.E.

P.R. Charrington - Senior Project Engineer
F.J. Boinski - Assistant Project Engineer
J.H. Geiger - Asistant Project Engineer
R. Smith - Assistant Project Engineer
G.W. Bainton - Engineering Technician
R. Lamb - Engineering Technician
W. Schultz - Engineering Technician

E.P.A.

W.E. Kelley - FTS, EMB (Task Project Officer)
P.R. Westlin - RSS, EMB
R. Vong - FTS, EMB

RADIAN CORPORATION

J.C. Dickerman - Associate Engineer
C.E. Burklin - Associate Engineer

STANDARD OIL

J.A. English - Senior Research Engineer
J. Presten - Engineer Retail Facilities
P.E. Geisler, Jr. - Station Manager

OPW

R.L. Murray - Mgr. Product Development

EMCO-WHEATON

Mr. Fenton
Mr. Moore