FILE COPY

M E M O R A N D U M

October 30, 1996

TO: DIVISION OF RECORDS AND REPORTING

FROM: DIVISION OF LEGAL SERVICES (CROSBY)

RE: DOCKET NO. ~~961190~~ 951190-SU - APPLICATION FOR CERTIFICATE TO PROVIDE WASTEWATER SERVICE IN PASCO COUNTY BY SKY ACRES ENTERPRISES D/B/A TERRACE PARK VENTURES

Attached is a letter dated October 29, 1996, from Mr. Paul Hoffer transmitting a* system map, DEP permit application, and corrected warranty deed. By copy of this memo, I am sending the system map to Pat Brady. **PLEASE PLACE THE LETTER, DEP PERMIT APPLICATION AND CORRECTED WARRANTY DEED IN THE ABOVE-REFERENCED DOCKET FILE.**

In addition, the application originally filed in this docket requested the exemption of Sky Acres Enterprises. However, the correct name of the applicant is Sky Acres Enterprises d/b/a Terrace Park Ventures. **THEREFORE, PLEASE CHANGE THE NAME ON THE DOCKET FILE TO READ AS SHOWN IN THE RE: OF THIS MEMORANDUM.**

Thanks.

alc

Attachments

cc: Division of Water and Wastewater (Tomlinson, Brady)

* map forwarded to WAW/Brady 11/21/96

14

ACK
AFA
APP
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OTH

1 - cover memo only

DOCUMENT NUMBER-DATE
11667 OCT 31 96
FPSC-RECORDS/REPORTING

Sky Acres Enterprises D.B.A. Terrace Park Venture

700 Grand Avenue
Wausau, WI 54403

October 29, 1996

Director, Divisions of Records and Reporting
Florida Public Service Commission
Attn: Alice Crosby
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

RE: Docket No. 951190-SU, Application for certificate to provide wastewater service in Pasco County by Sky Acres Enterprises DBA Terrace Park Ventures

Dear Alice Crosby:

The following is enclosed

1 **The System Map**

2 **DEP Permit Application.** H20 utility services sent me a copy of this application to be forwarded to you. it was filled with the DEP around the 1 of October. The permit has not yet been received.

3 **Corrected Warranty Deed,** transferring the assets into Sky Acres Enterprises DBA Terrace Park Ventures. I have Next day aired this to Ron with a prepaid return envelope for him to seed to me after he records the deed. I will immediately send a copy of the recorded deed to you.

If there should be anything else that is needed or questions you need me to answer please feel free to call me (715) 848-6089

Sincerely

Paul Hoffer

Paul Hoffer

DEP Permit Application

CAPACITY ANALYSIS REPORT

(Abbreviated)

for

TERRACE PARK MOBILE HOME PARK
WASTEWATER TREATMENT PLANT

FDEP Identification # 4051P10012
Current FDEP Permit #DO51-185781
Current FDEP Permit Expires 10/1/95

PASCO COUNTY

By

ds & n inc., consulting engineers
longwood, florida

for

TERRACE PARK VENTURE
Terrace Park Mobile Home Park
Zephyrhills, Florida

CAPACITY ANALYSIS REPORT

(Abbreviated)

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TERRACE PARK MOBILE HOME PARK
WASTEWATER TREATMENT PLANT

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PASCO COUNTY

By

ds & n inc., consulting engineers
longwood, florida

for

TERRACE PARK VENTURE
Terrace Park Mobile Home Park
Zephyrhills, Florida

CERTIFICATIONS

Permittee:

Name: Terrace Park Venture
Address: P.O. Box 1566
Lutz, Florida 33549
Contact Person: Mr. Ron Hoffer
Partner
Phone Number: Pager (813) 268-6186

Statement By Permittee Regarding Awareness of the Information in This Report:
The above named permittee is fully aware of the information contained in this report.

Mr. Ron Hoffer
September 19, 1996

Statement By Permittee Regarding Collection System:
The collection system serving the plant described in this report receives only domestic wastewater.

Mr. Ron Hoffer
September 19, 1996

Statement By Permittee Regarding Service Area:
There are no plans at this time to expand the service area.

Mr. Ron Hoffer
September 19, 1996

Professional Engineer Preparing this Report:

Name: G. Jeffery Hines, P.E.
Firm Name: ds & n inc., consulting engineers
Address: 111 West Magnolia Avenue, Suite 107
Longwood, Florida 32750-4169
Phone: (407) 332-1632

Statement By Professional Engineer:
The information contained in this report is true and correct to the best of my knowledge, the report was prepared in accordance with sound engineering principles, and I have discussed the recommendations and schedules with the permittee or the permittee's delegated representative.

G. Jeffery Hines, P.E.
FL Reg # 36812
September 19, 1996

TABLE OF CONTENTS

CHAPTER 1 - INTRODUCTION

A. Description of Plant and Process

The wastewater treatment plant serving this facility is a modular steel plant utilizing the extended aeration process for treatment. The plant was originally permitted as a 50,000 gpd contact stabilization plant, but we can find no evidence that it was ever actually plumbed or operated this way. The plant consists of a two aeration tanks, a single clarifier, a chlorine contact tank and an aerobic digester. Because historical flow rates are consistently less than 27,500 gpd, we see no reason to operate this facility in the contact stabilization mode. The facility serves the approximately 500 residents of the 256 unit mobile home park, which has year round residents with very little or no seasonal variation. (See Map of Service Area). There are currently no plans to expand the mobile home park facility, so the facility, with the modifications proposed herein, and with proper maintenance, should be capable of continuing to treat and dispose of the domestic wastewater generated by the service area.

The plant obtains its flow through a gravity main which discharges into a wet well located at the base of the plant. Flow is then discharged directly into the first of two aeration chambers with a total detention time of over 20 hours at design ADF. This long detention time helps assure adequate treatment despite the highly variable flow rates associated with this type of small service area. There is currently a problem with hydraulic overload at the plant, which we have determined is caused by the high pumping rates delivered by the influent pump station, as well as improperly piped and adjusted return eductors.

This situation will be alleviated by the proposed flow splitter system and eductor modifications that will be installed as part of the planned construction.

Each of the dual large aeration chambers is operating as a complete mix flow regime, and flow passes from these tanks and into the hopper clarifier through submerged piping. The clarifier has two sludge eductors, and flow progresses across the hopper and past a skimmer on its way to the effluent weir

After entering the effluent weir trough, a chemical feed pump injects a sodium hypochlorite solution into the flow stream just prior to the drop into the baffled chlorine contact tank. Flow then progresses through the chlorine contact tank, where it discharges across a V-notch weir to underground PVC piping to the polishing/percolation pond. Because of the high hydraulic loads imposed on the plant by the dosing pumps (greater than 12 times the ADF rate), the chlorine contact time is not adequate to meet FDEP requirements. We are therefore proposing the addition of a splitter box that will lower hydraulic loads on the plant to approximately diurnal flow rates (4.0 or lower). This will provide more than adequate chlorine contact time at peak flow rates, and will improve settling by substantially reducing weir overflow rates.

The effluent disposal system consists of a single evaporation/percolation pond that is functioning as intended. There is some vegetation growing in the bottom of the pond, and current FDEP regulations require that this vegetation be routinely removed. The vegetation that is now in the pond bottom has apparently not affected the pond's ability to dispose of the required volume of water, and may actually be improving the quality of the groundwater leaving the site, but until current FDEP rules change the ponds should be routinely cleaned of all vegetation covering the bottoms

Since the permitted capacity of the facility is being reduced from 50,000 gpd to 27,500 gpd, and since the pond system has never caused any operational problems, we have not analyzed this system in detail because we have no reason to conclude that the original design will not work as intended.

This plant has had some problems with effluent quality, solids loss, and general equipment and plant maintenance over the past several years. Recently, however, the Owner has changed contract operators and plant maintenance, operation and effluent quality have improved dramatically.

We have analyzed this facility extensively, and have recommended the addition of a flow splitter box and the conversion of the facility from a contact stabilization plant to an extended aeration mode of operation. Since the plant has never been actually set up and plumbed to run in true contact stabilization mode, the plant is now already running in extended aeration mode. Even without the proposed splitter box, the operator has been able to obtain excellent quality effluent and meet all permit requirements for effluent quality. The planned splitter box will make this easier to accomplish under even the most adverse flow conditions.

We feel that with the proposed improvements and modifications, a competent operator will be able to operate this facility within its permitted parameters during the life of the permit.

B. Flow Diagram

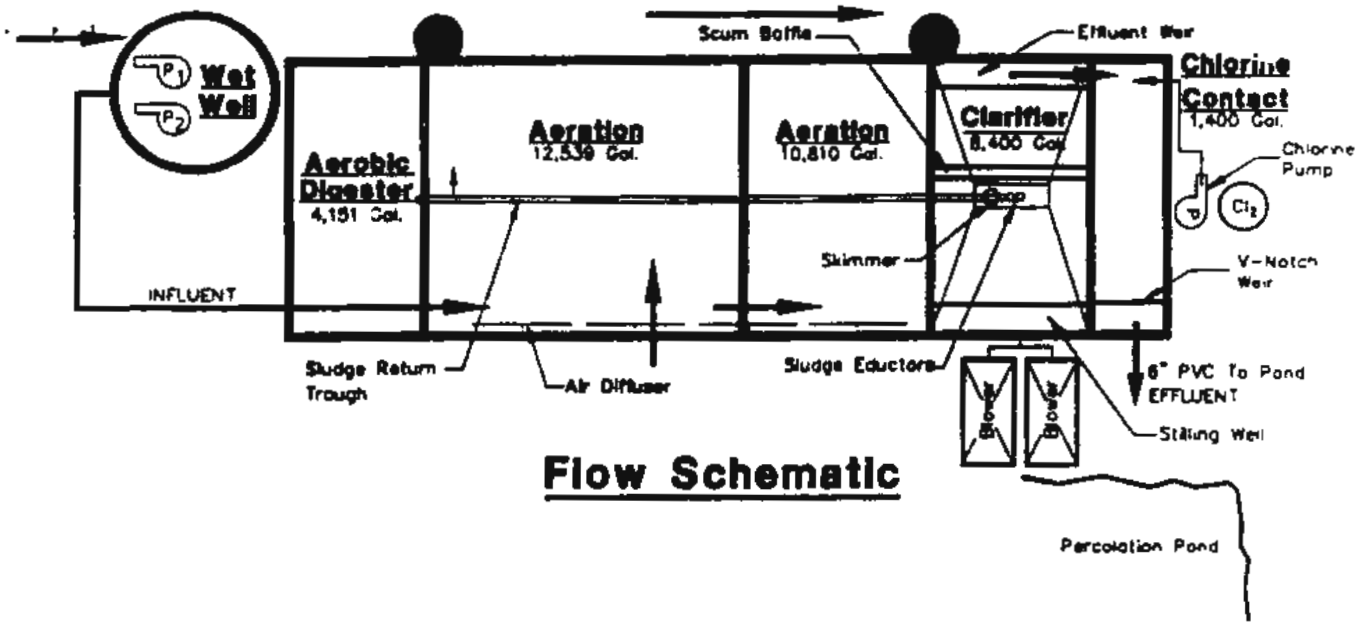
See Flow Diagram of Theoretical Conditions at ADF on next page.

C. Tabulation of Treatment Units

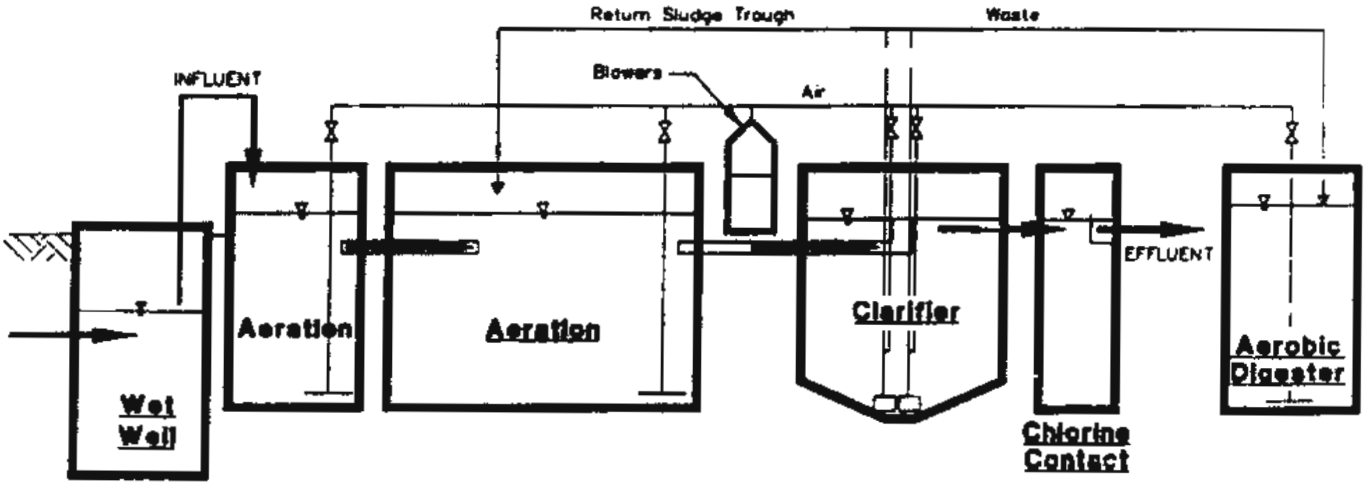
See Tabulation of Treatment Units on second and third following pages.

D. Service Area Map

See Service Area Map on fourth following page.



Flow Schematic



Hydraulic Profile

TERRACE PARK MOBILE HOME PARK

0.0275 MGD WASTEWATER TREATMENT PLANT

PROPOSED MODIFIED CONDITION AT ADF
EXTENDED AERATION PROCESS

DESIGN MEMO

PROJECT : Terrace Park Wastewater Plant Repermitting

P.N. : 9607

BY : G. Jeffery Hines, P.E. FileName: R:\9607\DUNITST.XLS

DATE : September 18, 1996

SUBJECT : Tabulation of Treatment Units

NOTE: All detention times are calculated at ADF rate.

Design Flow Rate:

Average Daily Flow Rate	0.0275	mgd

Elevations:

Top of Plant Walkway	102.00	ft	Assumed
Bottom of Plant Walkway	101.80	ft	
Bottom of Clarifiers	90.50	ft	
Bottom of Aeration Tank	90.50	ft	
Bottom of Chlorine Contact, Digester	90.50	ft	

AERATION ZONES

ITEM NO.	ITEM DESCRIPTION	Length (ft)	Width (ft)	Bottom Elevation (ft)	Water Elevation (ft)	Total Depth (to Top of Deck) (ft)	Design Water Depth (ft)	Volume (gal)	Freeboard (ft)	Detention Time (hrs)
1	Diffused Aeration Zone #1	14.50	12.17	90.50	100.00	11.50	9.50	12,540	2.00	10.94
2	Diffused Aeration Zone #2	12.50	12.17	90.50	100.00	11.30	9.50	10,810	2.00	9.43

SETTLING

ITEM NO.	ITEM DESCRIPTION	Top Area (sf)	Bottom Area (sf)	Bottom Elevation (ft)	Water Elevation (ft)	Total Depth (to Top of Deck) (ft)	Design Water Depth (ft)	Volume (gal)	Freeboard (ft)	Detention Time (hrs)
2	Clarifier - Pyramid Shape	145.80	4	90.50	100.00	11.50	9.50	8,387	2.00	7.32

Note See clarifier mass balance calculations for a detailed analysis of settling facilities

CHLORINE CONTACT

ITEM NO.	ITEM DESCRIPTION	Length (ft)	Width (ft)	Bottom Elevation (ft)	Water Elevation (ft)	Total Depth (to Top of Deck) (ft)	Design Water Depth (ft)	Volume (gal)	Freeboard (ft)	Detention Time (min)
3	Chlorine Contact Chamber	8.00	2.50	90.50	100.00	11.50	9.50	1,421	2.00	74.42

AEROBIC SLUDGE DIGESTER

ITEM NO	ITEM DESCRIPTION	Length (ft)	Width (ft)	Bottom Elevation (ft)	Water Elevation (ft)	Total Depth (to Top of Deck) (ft)	Design Water Depth (ft)	Volume (gal)	Freeboard (ft)	Loading Rate (cf/pc)
4	Aerobic Digester	4.80	12.17	90.50	100.00	11.50	9.50	4,151	2.00	2.02

ds & n inc., consulting engineers

MEMO : Continued
PROJECT : Terrace Park Wastewater Plant Repermitting
P.N. : 9607
PAGE : Two

DOSING PUMP STATION

Pump Number	Manufacturer	Model #	Motor HP	Type	Pump Speed	Avg. Pumping Rate (gpm)	Date of Last Calibration
#1	Unknown	Unknown	3	Submersible	1750	243	7/26/96
#2	Unknown	Unknown	3	Submersible	1750	242	7/26/96

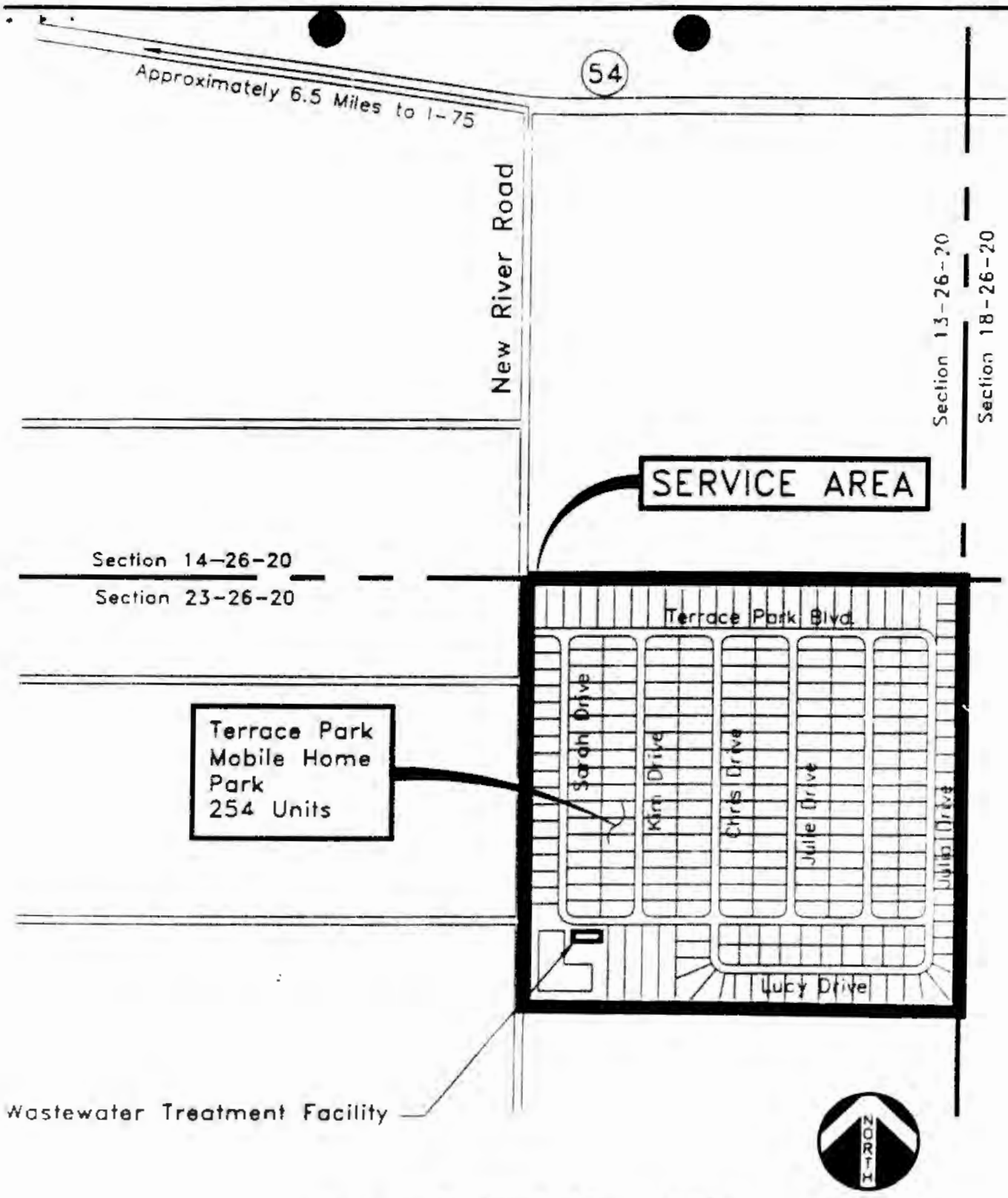
BLOWERS

Blower Number	Manufacturer	Model #	Motor HP	Motor Speed (rpm)	Blower Speed (rpm)	Pressure (psi)	Air Delivery Rate (scfm)
#1	Sutorbilt	5M	7.5	1765	775	4.5	120
#2	Sutorbilt	5M	7.5	1765	775	4.5	120

Note Blower output is estimated because blower is running so slow it is off the manufacturer's performance curve

PERCOLATION/POLISHING POND

Pond Number	Avg. Length (ft)	Avg. Width (ft)	Area at Application Surface (sf)	Loading Rate (gal/sf/day)	Loading Rate (in/day)
#1	110	131.5	11,670	2.4	3.78



MAP OF SERVICE AREA

Terrace Park Mobile Home Park
Wastewater Treatment Plant

200' 0' 200 400'

GRAPHIC

ds & n inc., consulting engineers

CHAPTER 2 - EXISTING CONDITIONS

A. Permitted Capacities

The plant and effluent disposal facility is currently permitted at 50,000 gallons per day, or 0.050 mgd. The service area has not changed, and our the flow records that we have obtained show that this facility has never received more than 25,000 gpd, monthly average flow. The plant is now permitted as a contact stabilization facility, which is much more difficult to run reliably than an extended aeration facility. This facility has over 20,000 gallons of aeration tankage, so operation under the extended aeration mode for flows up to 27,500 gpd is quite feasible. The clarifier and chlorine contact chamber was sized for a 50,000 gpd flow rate, so they are more than adequate. For these reasons, we are proposing the repermitting of this facility as a 27,500 gpd, extended aeration facility. This will provide for highly reliable operation at the flow rates expected over the life of the permit.

B. Discussion of Methods of Flow Measurement

The method of flow measurement for this plant has been the recording of the elapsed time meters on the pump station feeding flow to the plant. This station receives no extraneous flows, and the pump station has been calibrated by the Certified Operator within the past year. In fact, this calibration is what alerted us to the fact that the plant was being hydraulically overloaded. Since the pumps are capable of pumping almost 10 times the peak flow rate of the park, they should never run together, so the addition of run times for each pump, multiplied by the average pumping rate per pumping cycle, should give quite an accurate result. We have reason to believe that the pump station had not been properly calibrated before last year, so the flow results that are more than one year old are probably suspect.

C. Graph of Flow Rates for Past Year

See Graph of Flow Rates - Last 12 Months on next page.

D. Graph of Flow Rates - Last 5 Years

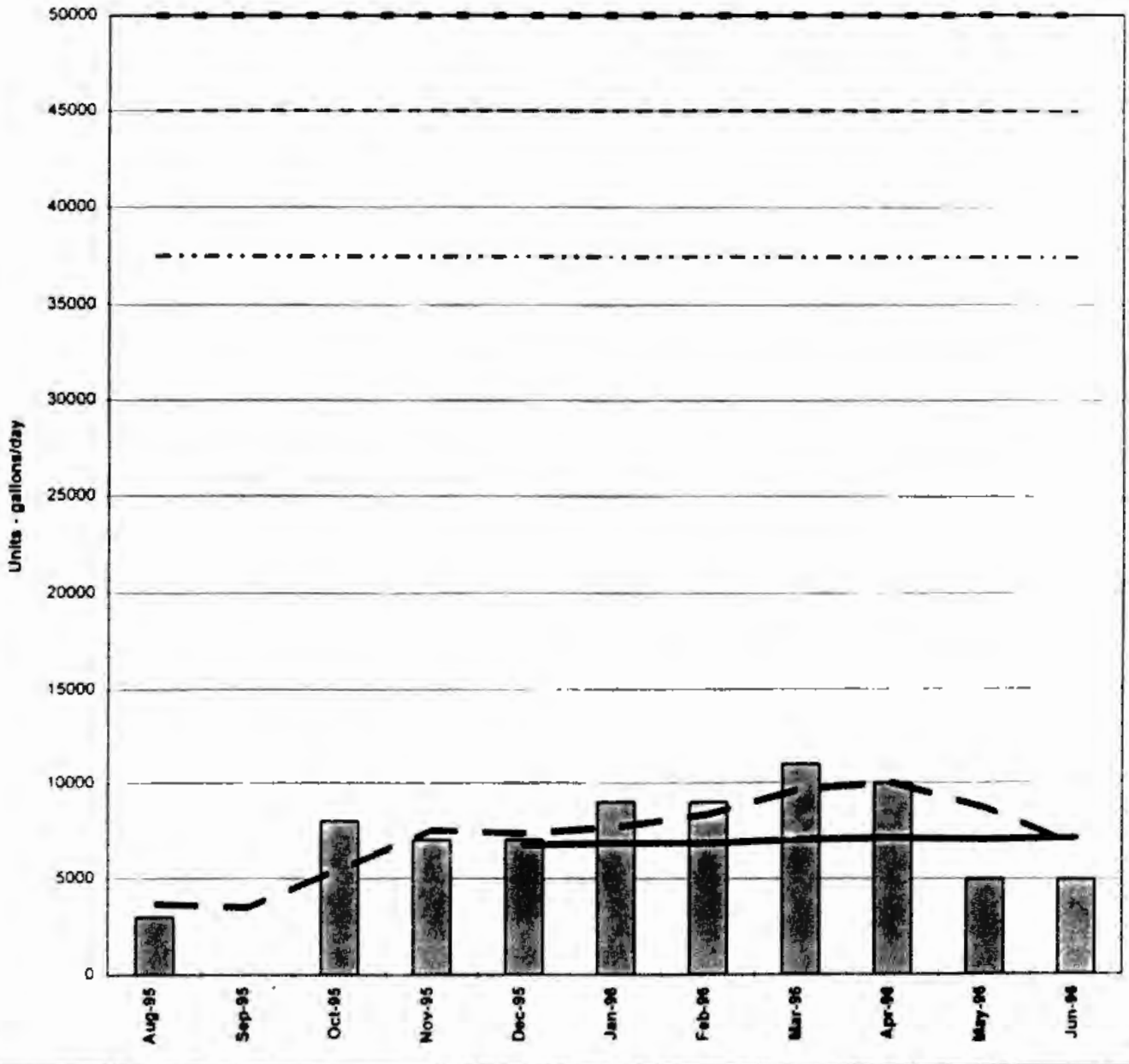
Neither the Owner nor the local FDEP has any flow records for this facility that go back more than 12 months. Because of the stable size of the service area, and the fact that no significant change has taken place within the past five years, there is no compelling reason to obtain and plot older records for this facility. In addition, the flow measurement methods for flows recorded more then one year ago are probably suspect and would provide no real insight into this facility's flow history. We have, therefore, not prepared a graph of flow rates for the past 5 years.

E. Graph of Major Permit Parameters for Last 12 Months

See Graph of Major Permit Parameters for Last 12 Months on second following page.

PLOT OF AVERAGE DAILY PLANT FLOW - LAST 12 MONTHS

TERRACE PARK MOBILE HOME PARK WASTEWATER TREATMENT PLANT



LEGEND

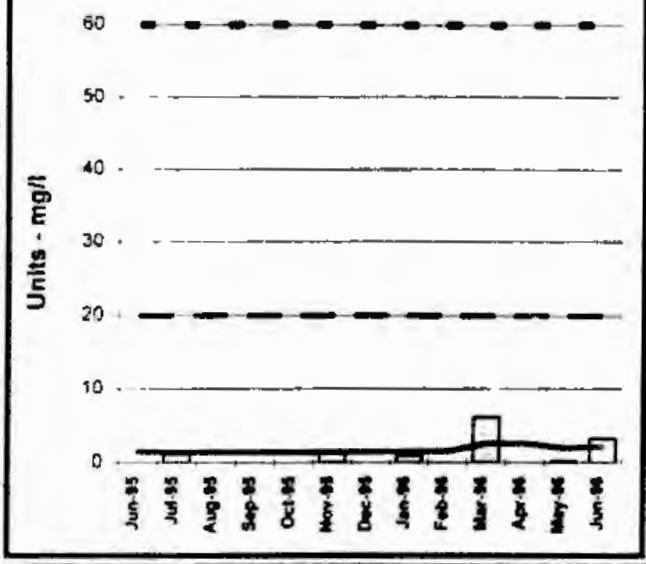
- Permit Limit
- 90% of Permit Limit
- 75% of Permit Limit
- Actual Data - Monthly ADF
- 3 Month Moving Average (This value is calculated using only the months with data)
- 12 Month Moving Average (This value is calculated using the last 12 months data, excluding the months without data)

ds & n inc., consulting engineers

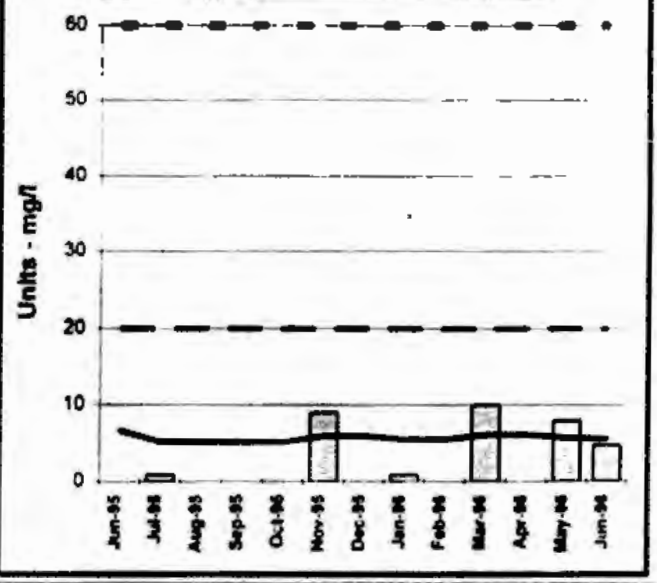
PLOT OF MAJOR PERMIT PARAMETERS FOR THE LAST 12 MONTHS

Terrace Park Mobile Home Park Wastewater Treatment Plant

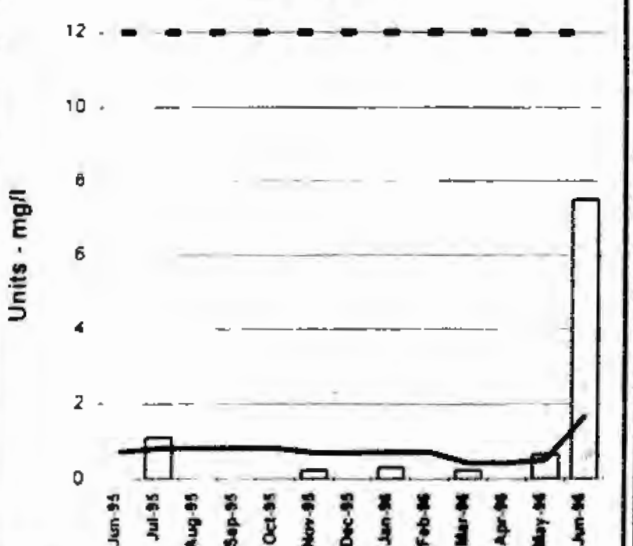
5 Day CBOD



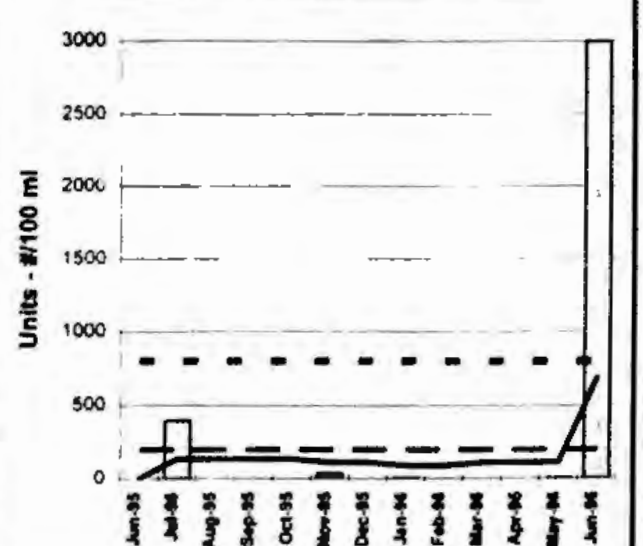
Total Suspended Solids (TSS)



NITRATE



FECAL COLIFORM BACTERIA



LEGEND

- Permit Limit - One Time Maximum
- Permit Limit - 12 Month Average
- Actual Data - Monthly
- One Year Moving Average (This value is calculated using the last 12 months data, excluding months without data.)

OPERATION AND MAINTENANCE PERFORMANCE REPORT

for

TERRACE PARK MOBILE HOME PARK
WASTEWATER TREATMENT PLANT

FDEP Identification # 4051P10012
Current FDEP Permit #DO51-185781
Current FDEP Permit Expires 10/1/95

Date of Report: September 19, 1996
Date of Field Final Evaluation: September 15, 1996

PASCO COUNTY
ZEPHYRHILLS, FLORIDA

By

ds & n inc., consulting engineers
longwood, Florida

for

TERRACE PARK VENTURE
Terrace Park Mobile Home Park
Zephyrhills, Florida

OPERATION AND MAINTENANCE PERFORMANCE REPORT

for

TERRACE PARK MOBILE HOME PARK
WASTEWATER TREATMENT PLANT

FDEP Identification # 4051P10012
Current FDEP Permit #DO51-185781
Current FDEP Permit Expires 10/1/95

Date of Report: September 19, 1996
Date of Field Final Evaluation: September 16, 1996

PASCO COUNTY
ZEPHYRHILLS, FLORIDA

By

ds & n inc., consulting engineers
longwood, Florida

for

TERRACE PARK VENTURE
Terrace Park Mobile Home Park
Zephyrhills, Florida

CERTIFICATIONS

Permittee:

Name: Mr. Ron Hoffer
Address: P.O. Box 1566
Lutz, Florida 33549
Contact Person: Mr. Ron Hoffer
Partner
Phone Number: (813) 268-6186 Pager

Statement By Permittee Regarding Awareness of the Information in This Report:
The above named permittee has reviewed and is fully aware of the recommendations and schedules contained in this report.

Mr. Ron Hoffer
September 20, 1996

Certified Operator:

Name: H_2O Utility Services, Inc.
Address: 1518 U.S. Hwy. 19, Suite C
Holiday, Florida 34691
Contact Person: Mike Burch
Certified Operator
Phone Number: (813) 938-6463

Statement By Operator Regarding Awareness of the Information in This Report:
The above named operator has reviewed and is fully aware of the recommendations and schedules contained in this report.

Mike Burch
September 20, 1996

TABLE OF CONTENTS

CERTIFICATIONS - (Continued)

Professional Engineer Preparing this Report:

Name: G. Jeffery Hines, P.E.
Firm Name: ds & n inc., consulting engineers
Address: 111 West Magnolia Avenue, Suite 107
Longwood, Florida 32750-4169
Phone: (407) 332-1632

Statement By Professional Engineer:

The information contained in this report is true and correct to the best of my knowledge, the report was prepared in accordance with sound engineering principles, and I have discussed the recommendations and schedules with the permittee or the permittee's delegated representative and the lead operator and I agree that if the recommended schedules for corrective action are met, the facilities, when properly operated and maintained, will comply with all applicable statutes of the State of Florida and rules of the Department.

G. Jeffery Hines, P.E.
FL Reg # 35812
September 20, 1996

CHAPTER 1 - INTRODUCTION

1. Permitted Capacities and Time Frames

According to the permit DO51-185781, the permitted capacity of the plant and the effluent disposal system is 0.050 mgd. FAC Chapter 62-600.400(3), requires that the permit specify the time period over which the flow rate is to be averaged. This was not done, but a review of the original design documents for this facility indicate that the standard annual average ADF was used in the design of the facility. Thus, a 12 month moving average daily flow rate should be used in determining flow compliance for this facility. This parameter should also be included in the new permit for this facility.

2. Reclaimed Water or Effluent Limitations

According to the permit DO51-185781, the effluent limits are as follows:

BOD_5	20 mg/l	annual average
	30 mg/l	monthly average
	45 mg/l	weekly average
	60 mg/l	any one sample

Total Suspended Solids - TSS	20 mg/l	annual average
	30 mg/l	monthly average
	45 mg/l	weekly average
	60 mg/l	any one sample

Fecal Coliform Bacteria	200 #/100ml	annual average
	200 #/100ml	monthly average
	800 #/100ml	any one sample

Nitrate	12 mg/l	any one sample

pH	6 - 8.5 std. units

3. Description of the Facilities

The wastewater treatment plant serving this facility is a modular steel plant utilizing the extended aeration process for treatment. The plant was originally permitted as a 50,000 gpd contact stabilization plant, but we can find no evidence that it was ever actually plumbed or operated this way The plant consists of a two aeration tanks, a single clarifier, a chlorine contact tank and an aerobic digester Because historical flow rates are consistently less than 27,500 gpd, we see no reason to

3. **Description of the Facilities - continued**

operate this facility in the contact stabilization mode. The facility serves the approximately 500 residents of the 256 unit mobile home park, which has year round residents with very little or no seasonal variation. (See Map of Service Area). There are currently no plans to expand the mobile home park facility, so the facility, with the modifications proposed herein, and with proper maintenance, should be capable of continuing to treat and dispose of the domestic wastewater generated by the service area.

The plant obtains its flow through a gravity main which discharges into a wet well located at the base of the plant. Flow is then discharged directly into the first of two aeration chambers with a total detention time of over 20 hours at design ADF. This long detention time helps assure adequate treatment despite the highly variable flow rates associated with this type of small service area. There is currently a problem with hydraulic overload at the plant, which we have determined is ceused by the high pumping rates delivered by the influent pump station, as well as improperly piped and adjusted return eductors.

This situation will be alleviated by the proposed flow splitter system and eductor modifications that will be installed as part of the planned construction.

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The effluent disposal system consists of a single evaporation/percolation pond that is functioning as intended. There is some vegetation growing in the bottom of the pond, and current FDEP regulations require that this vegetation be routinely removed. The vegetation that is now in the pond bottom has apparently not affected

the pond's ability to dispose of the required volume of water, and may actually be improving the quality of the groundwater leaving the site, but until current FDEP rules change, the ponds should be routinely cleaned of all vegetation covering the bottoms.

4. Date Facility Placed in Service

There is no record of the actual date the facility was placed in service, but the first permit we can find is dated 1985 so we estimate that the facility was placed on line in 1985.

5. Dates of Modifications (within the past five years)

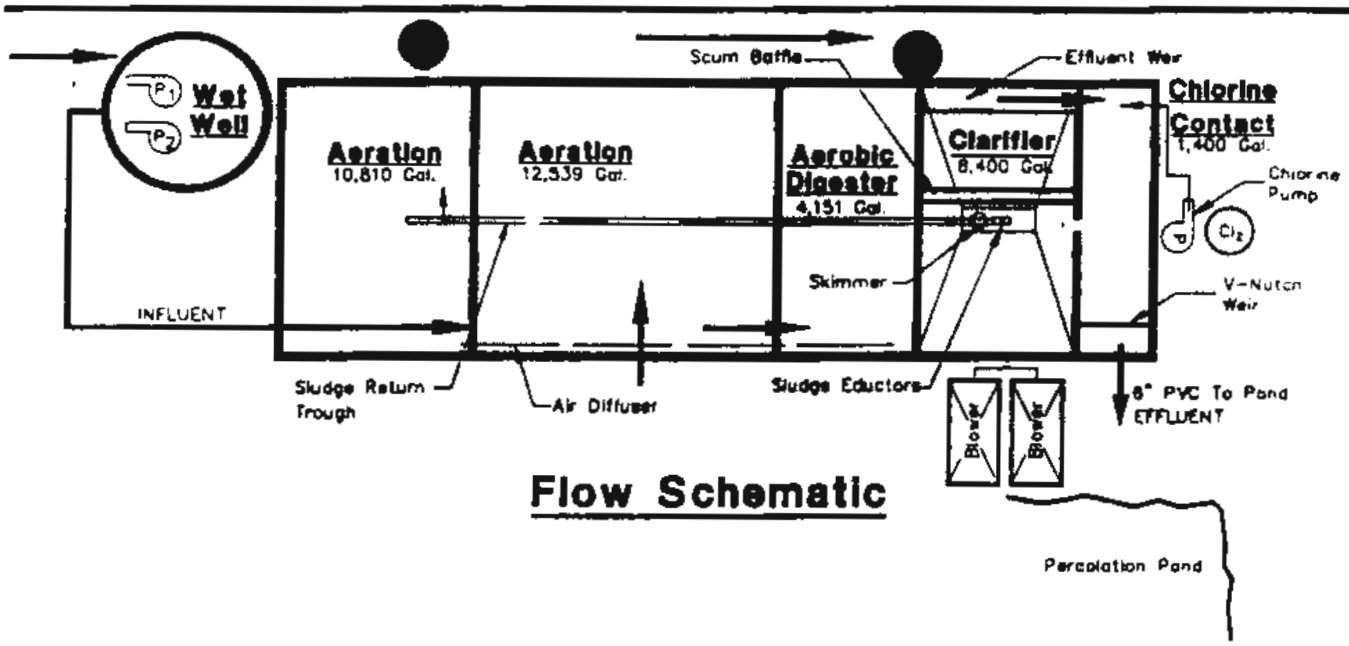
There have been no significant modifications of this facility within the past five years.

6. Recommended Corrective Actions either included in a Consent Order or made to the Facility by the Department within the last five years.

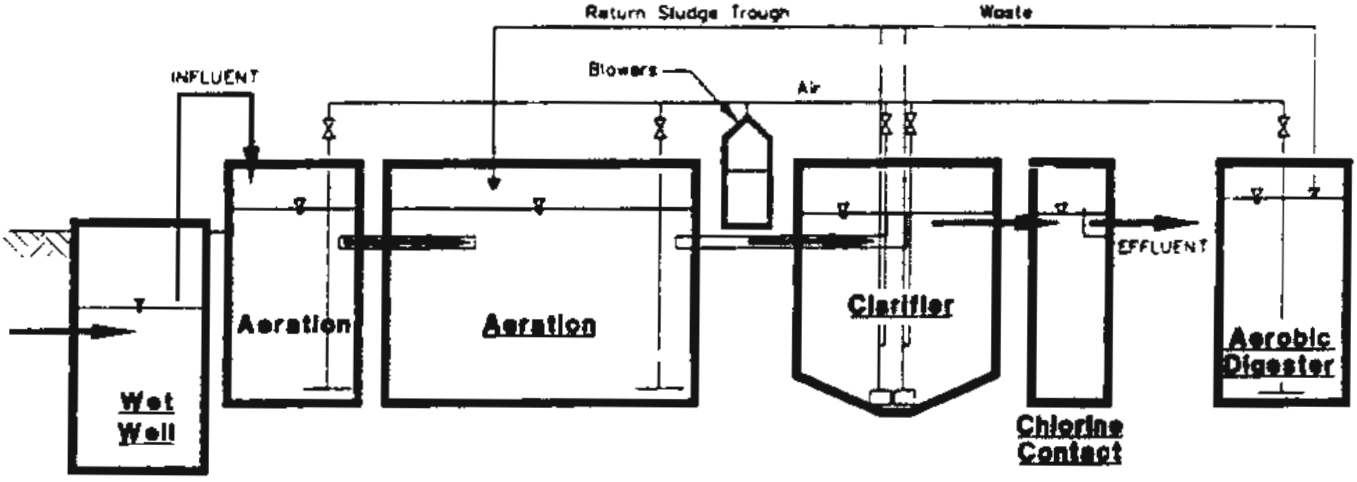
The Department has made no corrective actions nor placed this facility under consent order within the past five years.

7. Flow Diagrams

See next two pages for flow diagrams of the existing facility at ADF - Theoretical. Note that elsewhere in this application, modifications to this existing flow schematic are proposed.



Flow Schematic



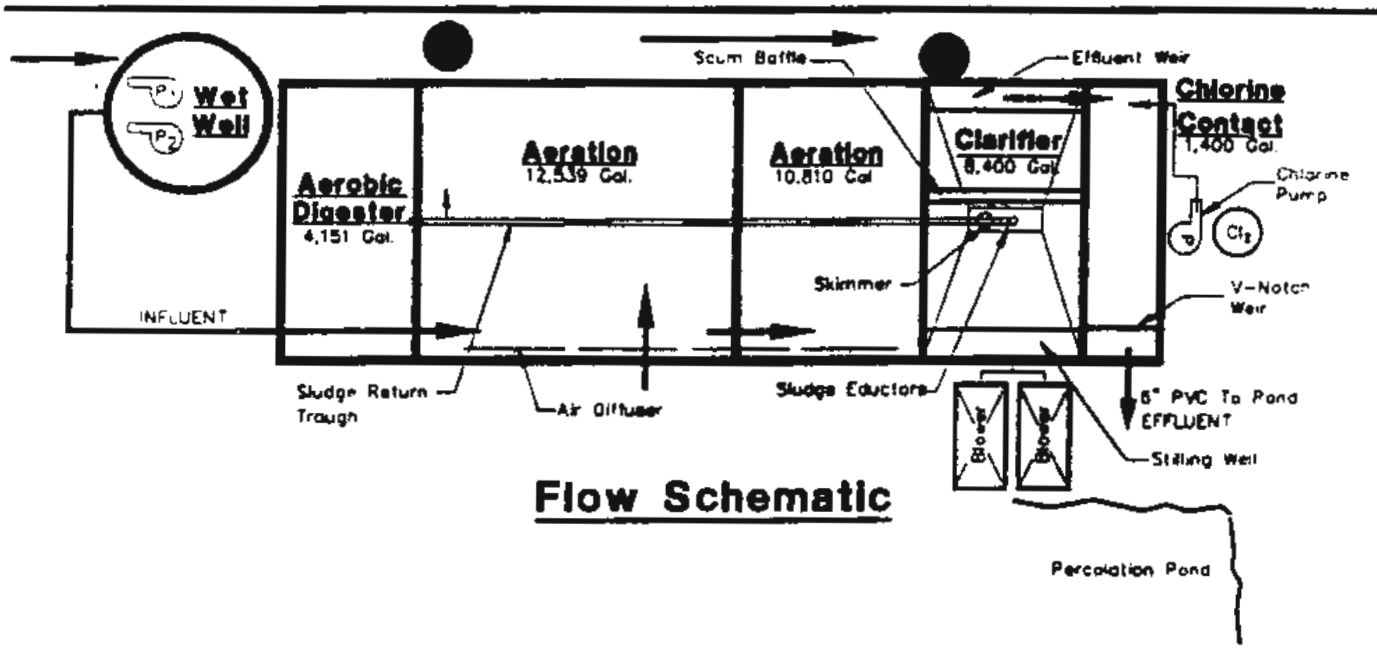
Hydraulic Profile

TERRACE PARK MOBILE HOME PARK

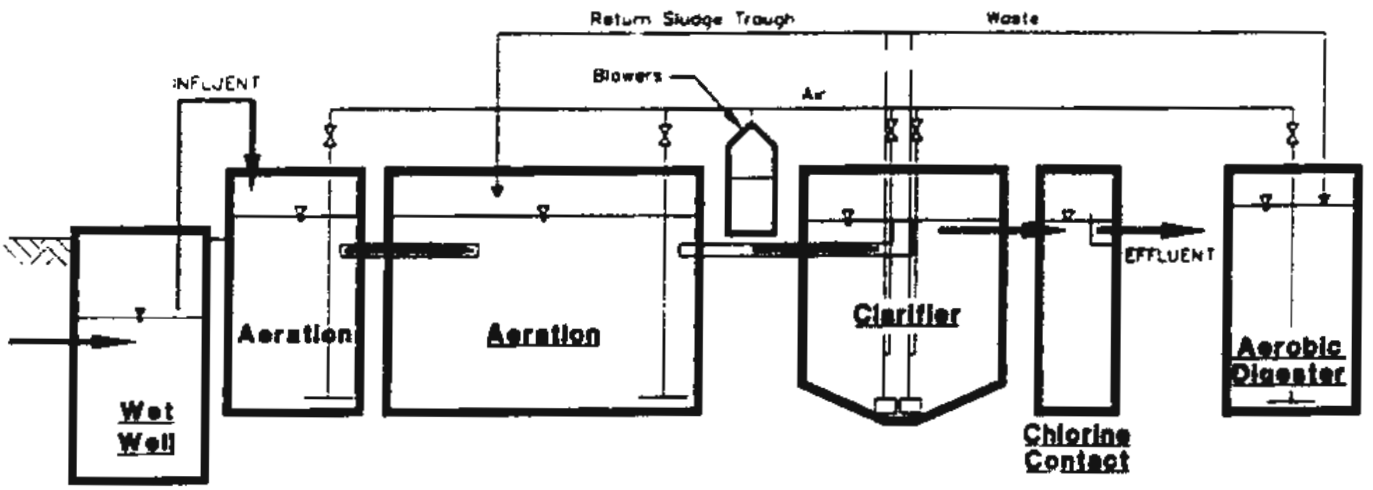
0.0275 MGD WASTEWATER TREATMENT PLANT

EXISTING CONDITION AT ADF

EXTENDED AERATION PROCESS



Flow Schematic



Hydraulic Profile

TERRACE PARK MOBILE HOME PARK

0.0275 MGD WASTEWATER TREATMENT PLANT

PROPOSED MODIFIED CONDITION AT ADF

EXTENDED AERATION PROCESS

ds & n inc., consulting engineers

flowscnm p

OPERATION AND MAINTENANCE PERFORMANCE REPORT

Reference: FAC 62-600.735

Facility Name: Terrace Park Wastewater Plant
FDEP Permit Number: DO51-185781
FDER ID Number: 4051P10012

SPECIFIC COMPONENT EVALUATION

Plant Components	General Condition	Overall Effectiveness	Ability to Continue to Operate Properly	Immediate Maintenance Needs	Comments
Influent Pump Station	Good	Adequate	Adequate	None	None
Aeration Chamber	Good	Adequate	Adequate	None	None
Aeration Piping	Good	Adequate	Adequate	None	None
Blowers	Good	Adequate	Adequate	None	None
Electrical	Good	Adequate	Adequate	None	None
Clarifier	Good	Adequate	Adequate	None	None
Skimmers	Good	Adequate	Adequate	None	None
Flow Through Piping	Good	Adequate	Adequate	None	None
Digester	Good	Adequate	Adequate	None	None
Access Control	Good	Adequate	Adequate	None	None

Plant Components	General Condition	Overall Effectiveness	Ability to Continue to Operate Properly	Immediate Maintenance Needs	Comments
Chlorine Contact	Good	Adequate	Adequate	None	None
Chemical Pump	Good	Adequate	Adequate	None	None
Chemical Storage	Good	Adequate	Adequate	None	None
Grounds	Good	Adequate	Adequate	None	None
Pumps	Good	Adequate	Adequate	None	None
Perc Pond	Good	Adequate	Adequate	None	None
Records/Permits	Good	Adequate	Adequate		None

OVERALL PERFORMANCE EVALUATION

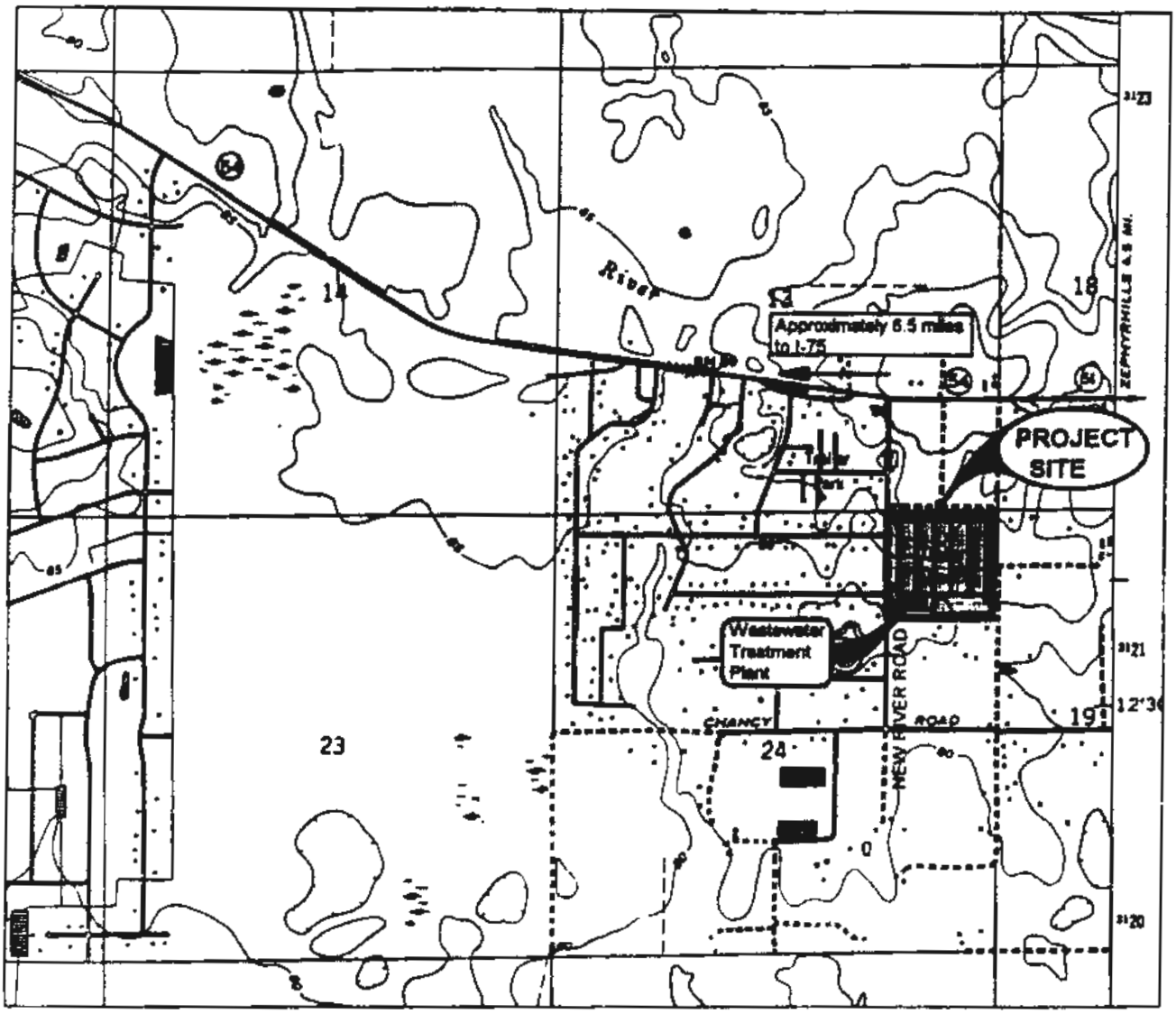
Evaluation of the capability of the treatment, reuse and disposal facility to function as intended during the 5 year period following the date on this report.

This facility, as constructed and as currently operated, should be capable of functioning as intended during the 5 year period following the date of this report. The general condition of the grounds are good.

APPENDIX

TERRACE PARK MOBILE HOME PARK
WASTEWATER TREATMENT PLANT

USGS QUAD SHEET MAP



PROJECT:	Terrace Park Mobile Home Park			
PROJECT NUMBER:	9607			
LOCATION: SECTION:	24			
TOWNSHIP:	26 South	COUNTY:	Pasco	
RANGE:	20 East	STATE:	Florida	
LONGITUDE:	82°14' 33" W	LATITUDE:	28°12' 32" N	
USGS QUADRANGLE:	Wesley Chapel, Photorevised 1987			
SOURCE:	USGS QUADRANGLE MAP, 7.5 Minute Series		SCALE:	1"=2000'
NOTES:	The longitude and Latitude relate to the location of the wastewater treatment plant. Longitude and Latitude were determined from the USGS Quad map.			

NORTH

DESIGN MEMO

PROJECT : **Terrace Park Wastewater Plant Repermitting**

P.N. : **9607**

BY : **G. Jeffery Hines, P.E.**

DATE : **September 13, 1996**

SUBJECT : **Design of Flow Splitter Box - 27,500 GPD ADF**

DATA ENTRY AREA:			
	Weir Coefficient	3.33	
	Width of Weir back to wet well	12.00 inches	*Weir 1*
	Elevation at which Weir Flow Begins	100.00 feet	*TO WET WELL*
Number of Weirs: 2	Weir Coefficient	3.33 dimensionless	
	Width Of Weir into Plant	2.20 inches	*Weir 2*
	Elevation at which Weir Flow Begins	99.90 feet	*TO PLANT*
	NOTE: Elevation of Weir to Plant is Assumed to be 100.00		
	NOTE: Weir Formulas Assume End Contractions on Both Weirs		

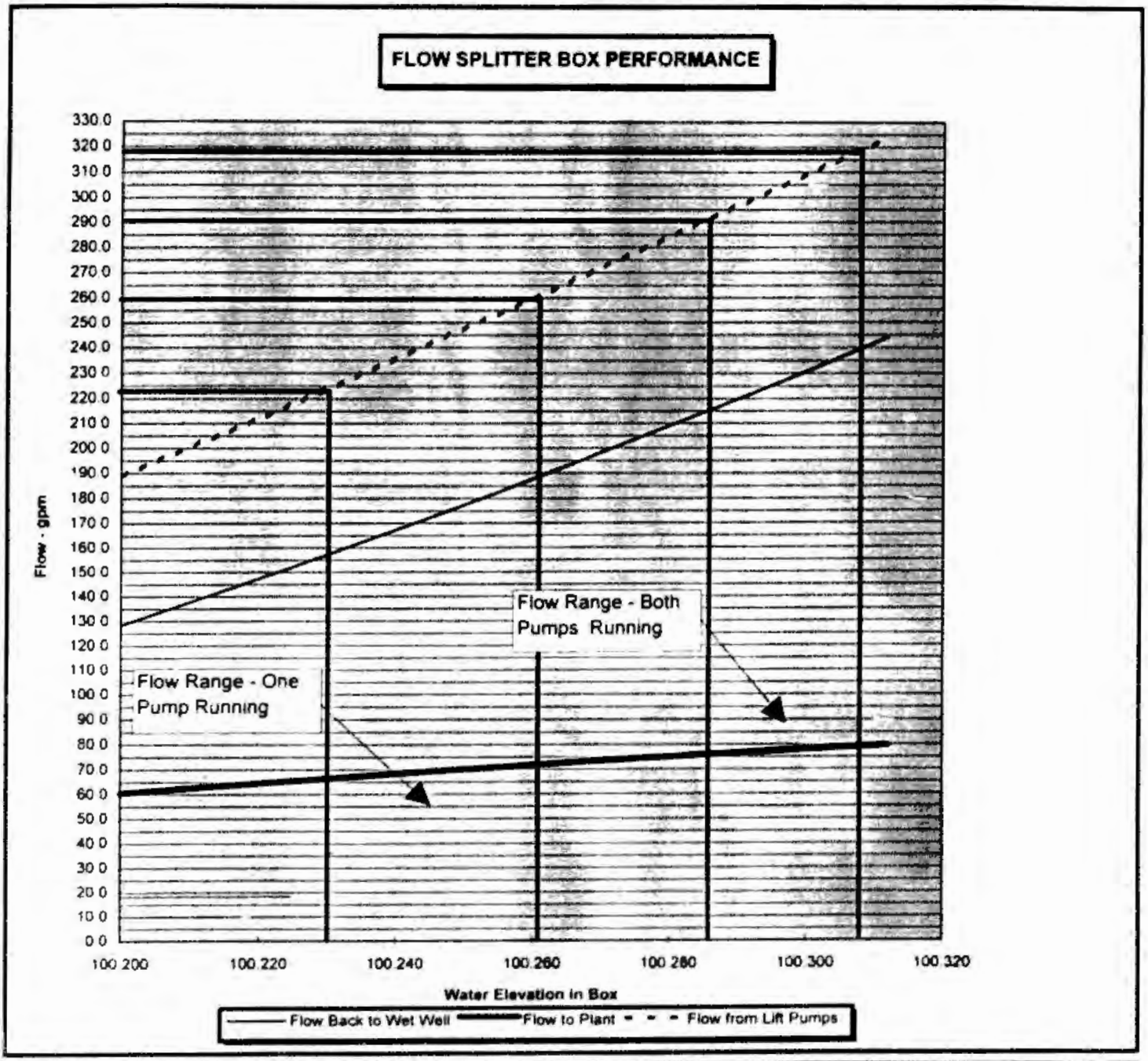
WATER ELEV. IN BOX (ft)	DEPTH OVER WEIR 1 (ft)	DEPTH OVER WEIR 2 (ft)	*Surge* FLOW WEIR 1 Weir Flow (gpm)	*Plant* FLOW WEIR 2 Weir Flow (gpm)	*Plant* FLOW WEIR 2 Weir Flow (gpd)	TOTAL FLOW FROM PUMPS (gpm)	
100.200	0.200	0.300	128.3	60.6	87,227	188.9	
100.203	0.203	0.303	130.8	61.1	87,992	191.9	
100.205	0.205	0.305	133.2	61.6	88,753	194.9	
100.208	0.208	0.308	135.7	62.2	89,508	197.9	
100.210	0.210	0.310	138.2	62.7	90,259	200.9	
100.213	0.213	0.313	140.7	63.2	91,004	203.9	
100.216	0.216	0.316	143.2	63.7	91,745	206.9	
100.218	0.218	0.318	145.7	64.2	92,480	209.9	
100.221	0.221	0.321	148.2	64.7	93,210	213.0	
100.223	0.223	0.323	150.8	65.2	93,935	216.0	
100.226	0.226	0.326	153.4	65.7	94,654	219.1	
[illegible]							*Flow at Low Water in Wet Well*
[illegible]							*Flow at High Water in Wet Well*
100.263	0.263	0.363	190.4	72.3	104,117	262.7	
100.265	0.265	0.365	193.2	72.7	104,746	265.9	
100.268	0.268	0.368	195.9	73.2	105,369	269.1	
100.270	0.270	0.370	198.7	73.6	105,985	272.3	
100.273	0.273	0.373	201.4	74.0	106,595	275.5	
100.276	0.276	0.376	204.2	74.4	107,198	278.7	
100.278	0.278	0.378	207.0	74.9	107,793	281.9	
100.281	0.281	0.381	209.8	75.3	108,382	285.1	
[illegible]							*Flow at Low Water in Wet Well - Both Pumps On*
[illegible]							*Flow at High Water in Wet Well - Both Pumps On*
100.309	0.309	0.409	241.3	79.4	114,382	320.7	
100.312	0.312	0.412	244.2	79.8	114,883	324.0	

Formulas:
Q=448.8 * Weir Coef * ((W/12) - (0.2*H)) * H^1.5

Where
Q is Flow in GPM
W is Width of Weir in inches
H is Depth over Weir in Ft

Source:
ISCO Open Channel Flow Measurement Handbook, Second Edition

ds&n inc., consulting engineers



NOTE The end contractions on the weir to the plant tend to supress the flow, even though the depth over the weir is increasing. Within the limits of the surge pumping system this accomplishes the objective of providing a very constant flow stream to the plant, even though the flow from the centrifugal surge pumps varies quite a lot depending on the water level in the wet well

DESIGN MEMO

PROJECT : **Terrace Park Wastewater Plant Repermitting**

P.N. : **9607**

BY : **G. Jeffery Hines, P.E.**

DATE : **September 13, 1996**

SUBJECT : **Design Analysis of Existing Digester - At Design ADF Rate of 27,500 gpd**

Subject: Calculation of required digester size for a 40% reduction in volatile solids.

- Number of Degree Days required for 40% Volatile Solids Reduction: 450 Degree-Days
  (From "Process Design Manual - Sludge Treatment and Disposal", USEPA 625/1-79-011)
- Estimated minimum temperature of Aerobic Digester (Winter) : 70.0 Degrees F = 21.1 Degrees C
- Number of Days of Sludge Age required to meet 40% Volatile solids reduction: 21.3 Days
  (= Number of Degree-Days/Minimum Temperature)
- Design ADF of Plant 27,500 gallons per day

Calculate Tank Volume

- Sludge Age = total pounds SS in Aerobic Digester/total pounds SS lost per day from aerobic digester
  (EPA publication states that this value will vary between the influent TSS of the WAS, and the maximum TSS value for the thickened and stabilized sludge)
  (On average, the suspended solids concentration in the digester is equal to 70% of the thickened solids concentration)
- Estimated thickened solids concentration 30,000 mg/l
  (EPA publication indicates that this value varies between 25,000 mg/l and 35,000 mg/l)
- Estimated concentration of WAS (influent to Digester) 10,000 mg/l
  (From Clarifier mass balance calculations - use an average value)
- Calculated average suspended solids concentration. in the digester @ 70% of above value for thickened sludge 21,000 mg/l
- Total Solids expected to be Wasted per day at ADF 2.00% of ADF = 45.8 pounds
- Estimated Percentage of Volatile Solids to Total 80 %
- Total Volatile solids wasted to digester per day 36.606 pounds
- Fraction of Solids not destroyed 0.68
- Calculate f
  (influent SS concentration/thickened SS concentration) x fraction of solids not destroyed
  22.7% of flow into digester is retained (this is f)
- Calculate Influent Flow to Digester (equals influent solids load/influent solids concentration)
  548 gallons per day

RESULTS:

Required Volume for 40% volatile solids reduction at assumed conditions(Worst Case Winter Weather)

3,910 gallons = 523 cubic feet

7.1 days hydraulic detention time

1,031 cubic feet required based on new Ten State Standard 3.75cf/capita rule

(Note that the 3.75 cf/capita rule assumes 20,000 maximum concentration for thickened sludge)

(Note that the 3.75 cf/capita rule also assumes a minimum temperature of 59 Degrees F)

Required Volume for 40 Day Sludge Age (Required to meet Federal Requirements for Pathogen Reduction)

7,337 gallons = 981 cubic feet

Reference This procedure is from "Process Design Manual - Sludge Treatment and Disposal", USEPA 625/1-79-011

Note Values in Bold are to be input by the Engineer Bold Italics are final results

ds&n ds & n inc., consulting engineers

DESIGN MEMO

PROJECT : **Terrace Park Wastewater Plant Repermitting**

P.N. : **9607**

BY : **G. Jeffery Hines, P.E.**

DATE : **September 13, 1996**

SUBJECT : **Analysis of Chlorination System - Prop. Condition - With Flow Equalization - Max Flow 27,500 GPD**

Flow Data:

Plant Average Daily Flow	27,500 gpd	0.0275 mgd	19.1 gpm
Does Plant have adequate flow equalization ?:		Yes	
Plant Peak Rate Factor without flow equalization(Peak Hourly Flow/ADF)			4.09
(Source Ten State Standards, 1978)			
Plant Peak Flow before Flow Equalization(Peak Hourly Flow Rate)			78.2 gpm
Estimated Maximum Flow Rate Delivered by Dosing Pumps through Splitter Box			78.0 gpm
Design Peak Flow Rate Expected (Maximum of Above Values)			***78.2 gpm***

Design Statement

Provide a chlorination system that is capable of reliably providing a 0.5 ppm residual of free chlorine after a minimum of 15 minutes contact at peak flow rates and 30 minutes at ADF in accordance with FDEP rules.

Selection of Disinfection System:

- Plant Size: Small(<0.1 mgd)
- Disinfectant Dosing: Intermittant - Dosed when influent pumps run
- Owner Preference: Sodium Hypochlorite
- Regulatory Requirements: Ten State Standards Recommends Hypochlorite for Small to Medium Plants
- Operator Skill : Low
- General Comments: Plant operators in the area are very familiar with the operation and maintenance of sodium hypochlorite feeders and disinfection systems. Parts are readily available as is 10% sodium hypochlorite solution.

Recommended Disinfection System: Liquid Sodium Hypochlorite Solution w/Peristaltic Metering Pump

Determination of Required Volume and Dosing Rate of Hypochlorite Solution:

- Percentage Sodium Hypochlorite Standard Solution 10 percent
- Specific Gravity of 100% Sodium Hypochlorite 1.14
- Regulatory Requirements: Provide for a dosage of 8 ppm for non-nitrified activated sludge plant effluent (Ten State Standards). Provide for a dosage of 6 ppm for nitrified effluent (Ten State Standards)
- Comments: The plant may be operated in non-nitrifying mode, or for operations reasons, may not fully nitrify the effluent, so a conservative design position would be to provide for at least 8 ppm dosage.
- Required Chlorine Dosage - Basic Disinfection: 8 ppm 67.57 lb./mil gal
  (Source Ten State Standards, 1978 Edition)
- Required Chlorine Residual - Basic Disinfection 0.5 ppm
  (Source FAC Chapter 17-6.060(1)(c)3.a)
- Available Chlorine In X% Solution = X% / 1.14 8.8% by weight
  (8.33 LB/gal x 0.088) = 0.73 LB/gal of 10% Solution
- Required 10% Sodium Hypochlorite (NaOCl) Dosage at ADF:
  8ppm x ADF ((% x s.g. x 8.33) + (1-% x 8.33))/Avail. Chlorine = ***2.54 gallons/day***

Determine Required Hypochlorite Solution Storage Size:

Provide at least 2 weeks storage	36 gallons
Provide no more than about 1 month storage because of degradation	76 gallons

Select Standard Size Container

Use 36 Gallon Container Minimum and 76 Gallon Maximum

Determine Required Volume of Chlorine Contact Chamber:

Provide the greater of:

30 Min. Detention at Average Daily Flow:	(ADF /(2 x 24)) =	573	gallons
15 Min. Detention at Max. Flow Rate:	(Max / (4 x 24)) =	1,173	gallons

(Source FAC Chapter 17-6.060(1)(c)3.a)

Provide Chlorine Contact Chamber of At Least 1,173 Gallons

(Existing Chlorine Contact Chamber is 1400 gallons - And will handle the required flow rate.

Size Hypochlorite Solution Feed Pump:

Maximum Design Plant Flow Rate (Peak Hourly Flow) 78.19 gpm

Chemical Feed Pump Must Handle This Rate

((Peak Hourly Rate/ ADF) x ADF Hypo Dosage Rate) ***10.4 Gallons Per Day***

Provide Pump With A Pumping Rate of At Least 15.6 Gallons/Day (150% of Peak Rate)

Estimate Monthly Cost of Hypochlorite Solution

Cost of 10% hypochlorite solution	**$1.00** per gallon	
Estimated monthly cost of solution based on feed rate for peak flow demand =		**$322.78** per month
Estimated monthly cost of solution if plant were flow equalized =		**$78.84** per month

Additional Design Notes:

- Provide Hose Bibb w/ Air Gap Backflow Preventer Near Hypochlorite Solution Tank
- Piping Requirements:
  1) Chlorine solution is highly reactive with aluminum - do not use aluminum in any valves, piping or supports that may come in contact with the solution.
  2) Assume that all chlorine piping will contain moisture and will therefore carry a highly corrosive material.
  3) Use only silver, gold, platinum, or Hasteloy "c" if metallic piping must be used.
  4) Use only hard rubber, polyethylene, or PVC any place where metal piping is not absolutely necessary.
  5) Protect all pipes from freezing or mechanical damage.
- Provide baffles in chlorine contact tank if length to width ratio is less than 30:1
- Chlorine is a settling aid, and therefore you must plan for solids deposition in the chlorine contact tank. Provide some type of pumping system that can be used on a regular basis to remove solids from the chlorine contact tank. Failure to do this can result in solids carryover to the effluent.
- Locate the chlorine diffuser in the turbulent flow area where the discharge from the clarifiers enters the chlorine contact tank

DESIGN MEMO

PROJECT : Terrace Park Wastewater Plant Repermitting

P.N. : 9607

BY : G. Jeffery Hines, P.E.

DATE : September 13, 1996

SUBJECT : Analysis of Chlorination System - Present Condition - No Flow Equalization - Max Flow 27,500 GPD

Flow Data:

Plant Average Daily Flow	27,500 gpd	0.0275 mgd	19.1 gpm
Does Plant have adequate flow equalization ?:	No		
Plant Peak Rate Factor without flow equalization(Peak Hourly Flow/ADF)			4.09
(Source. Ten State Standards, 1978)			
Plant Peak Flow before Flow Equalization(Peak Hourly Flow Rate)			78.2 gpm
Estimated Maximum Flow Rate Delivered by Dosing Pumps or Influent Force Mains			248.0 gpm
Design Peak Flow Rate Expected (Maximum of Above Values)			***248.0 gpm***

Design Statement

Provide a chlorination system that is capable of reliably providing a 0.5 ppm residual of free chlorine after a minimum of 15 minutes contact at peak flow rates and 30 minutes at ADF in accordance with FDEP rules.

Selection of Disinfection System:

- Plant Size: Small(<0.1 mgd)
- Disinfectant Dosing: Intermittant - Dosed when influent pumps run
- Owner Preference: Sodium Hypochlorite
- Regulatory Requirements: Ten State Standards Recommends Hypochlorite for Small to Medium Plants
- Operator Skill : Low
- General Comments: Plant operators in the area are very familiar with the operation and maintenance of sodium hypochlorite feeders and disinfection systems. Parts are readily available as is 10% sodium hypochlorite solution.

Recommended Disinfection System: Liquid Sodium Hypochlorite Solution w/Peristaltic Metering Pump

Determination of Required Volume and Dosing Rate of Hypochlorite Solution:

- Percentage Sodium Hypochlorite Standard Solution: 10 percent
- Specific Gravity of 100% Sodium Hypochlorite: 1.14
- Regulatory Requirements: Provide for a dosage of 8 ppm for non-nitrified activated sludge plant effluent (Ten State Standards). Provide for a dosage of 6 ppm for nitrified effluent (Ten State Standards)
- Comments: The plant may be operated in non-nitrifying mode, or for operations reasons, may not fully nitrify the effluent, so a conservative design position would be to provide for at least 8 ppm dosage.
- Required Chlorine Dosage - Basic Disinfection: 8 ppm 67.57 lb./mil gal
  (Source Ten State Standards, 1978 Edition)
- Required Chlorine Residual - Basic Disinfection: 0.5 ppm
  (Source FAC Chapter 17-6.060(1)(c)3 a)
- Available Chlorine In X% Solution = X% / 1.14: 8.8% by weight
  (8.33 LB/gal x 0.088) = 0.73 LB/gal of 10% Solution
- Required 10% Sodium Hypochlorite (NaOCl) Dosage at ADF:
  8ppm x ADF ((% x s.g. x 8.33) ÷ (1-% x 8.33))/Avail. Chlorine = ***2.54 gallons/day***

Determine Required Hypochlorite Solution Storage Size:

Provide at least 2 weeks storage	36 gallons
Provide no more than about 1 month storage because of degradation	76 gallons
Select Standard Size Container	

Use 36 Gallon Container Minimum and 76 Gallon Maximum

Determine Required Volume of Chlorine Contact Chamber:

Provide the greater of:

30 Min. Detention at Average Daily Flow:	(ADF /(2 x 24)) =	573	gallons
15 Min. Detention at Max. Flow Rate:	(Max / (4 x 24)) =	3,720	gallons

(Source FAC Chapter 17-6.060(1)(c)3.a)

Provide Chlorine Contact Chamber of At Least 3,720 Gallons

(Existing Chlorine Contact Chamber is 1400 gallons - Obviously not large enough to provide sufficient contact time). Provide larger chlorine contact tank or flow equalize plant.

Size Hypochlorite Solution Feed Pump:

Maximum Design Plant Flow Rate (Peak Hourly Flow) 248.00 gpm

Chemical Feed Pump Must Handle This Rate

((Peak Hourly Rate/ ADF) x ADF Hypo Dosage Rate) ***33.0 Gallons Per Day***

Provide Pump With A Pumping Rate of At Least 49.5 Gallons/Day (150% of Peak Rate)

Estimate Monthly Cost of Hypochlorite Solution

Cost of 10% hypochlorite solution	$1.00 per gallon	
Estimated monthly cost of solution based on feed rate for peak flow demand =		$1,023.78 per month
Estimated monthly cost of solution if plant were flow equalized =		$78.84 per month

Additional Design Notes:

- Provide Hose Bibb w/ Air Gap Backflow Preventer Near Hypochlorite Solution Tank
- Piping Requirements:
  1) Chlorine solution is highly reactive with aluminum - do not use aluminum in any valves, piping or supports that may come in contact with the solution.
  2) Assume that all chlorine piping will contain moisture and will therefore carry a highly corrosive material.
  3) Use only silver, gold, platinum, or Hasteloy "c" if metallic piping must be used.
  4) Use only hard rubber, polyethylene, or PVC any place where metal piping is not absolutely necessary.
  5) Protect all pipes from freezing or mechanical damage.
- Provide baffles in chlorine contact tank if length to width ratio is less than 30:1
- Chlorine is a setting aid, and therefore you must plan for solids deposition in the chlorine contact tank. Provide some type of pumping system that can be used on a regular basis to remove solids from the chlorine contact tank. Failure to do this can result in solids carryover to the effluent.
- Locate the chlorine diffuser in the turbulent flow area where the discharge from the clarifiers enters the chlorine contact tank.

MEMO

PROJECT : **Terrace Park Wastewater Plant Repermitting**

P.N. : **9607**

BY : **G. Jeffery Hines, P.E.**

DATE : **September 13, 1996**

SUBJECT : **Telephone Conversation w/ Mohammed Nozari**

1) Said the SIC codes for wastewater are as follows:

Wastewater Plant	4959
Collection System	4952
Mobile Home Park	7033
Effluent Disposal System	4971

DESIGN MEMO

PROJECT : **Terrace Park Wastewater Plant Repermitting**

P.N. : **9607**

BY : **G. Jeffery Hines, P.E.**

DATE : **September 15, 1996**

SUBJECT : **Calculation of Blower Speed from Motor Speed and Pulley Measurements**

Input Data:

10.75 inches	Blower Pulley Outside Diameter
5 inches	Motor Pulley Outside Diameter
1,765 RPM	Motor Speed
0.25 inches	Distance from Outside of Pulley to centerline of belts

Calculated Values:

32.20 inches	Circumference of Blower Pulley
14.14 inches	Circumference of Motor Pulley

775 RPM	**Blower Speed**

MEMO

PROJECT : **Terrace Park Wastewater Plant Repermitting**

P.N. : **9607**

BY : **G. Jeffery Hines, P.E.** Filename: R:\9607\M0918BUR.XLS

DATE : **September 18, 1996**

SUBJECT : **Telephone Conversation w/ Mike Burch**

1) If you are facing the plant, the blower on the left is blower number 1.

This is the only blower working today.

Blower #1: Sutorbilt 5M-F, 1765 RPM, 230 Volt, 3 phase., 7.5 hp
Blower #2: Sutorbilt 5M-F, 1765 RPM, 230 Volt, 3 phase., 7.5 hp

The blower pulley is 10.75" O.D., and the motor pulley is 5" O.D.

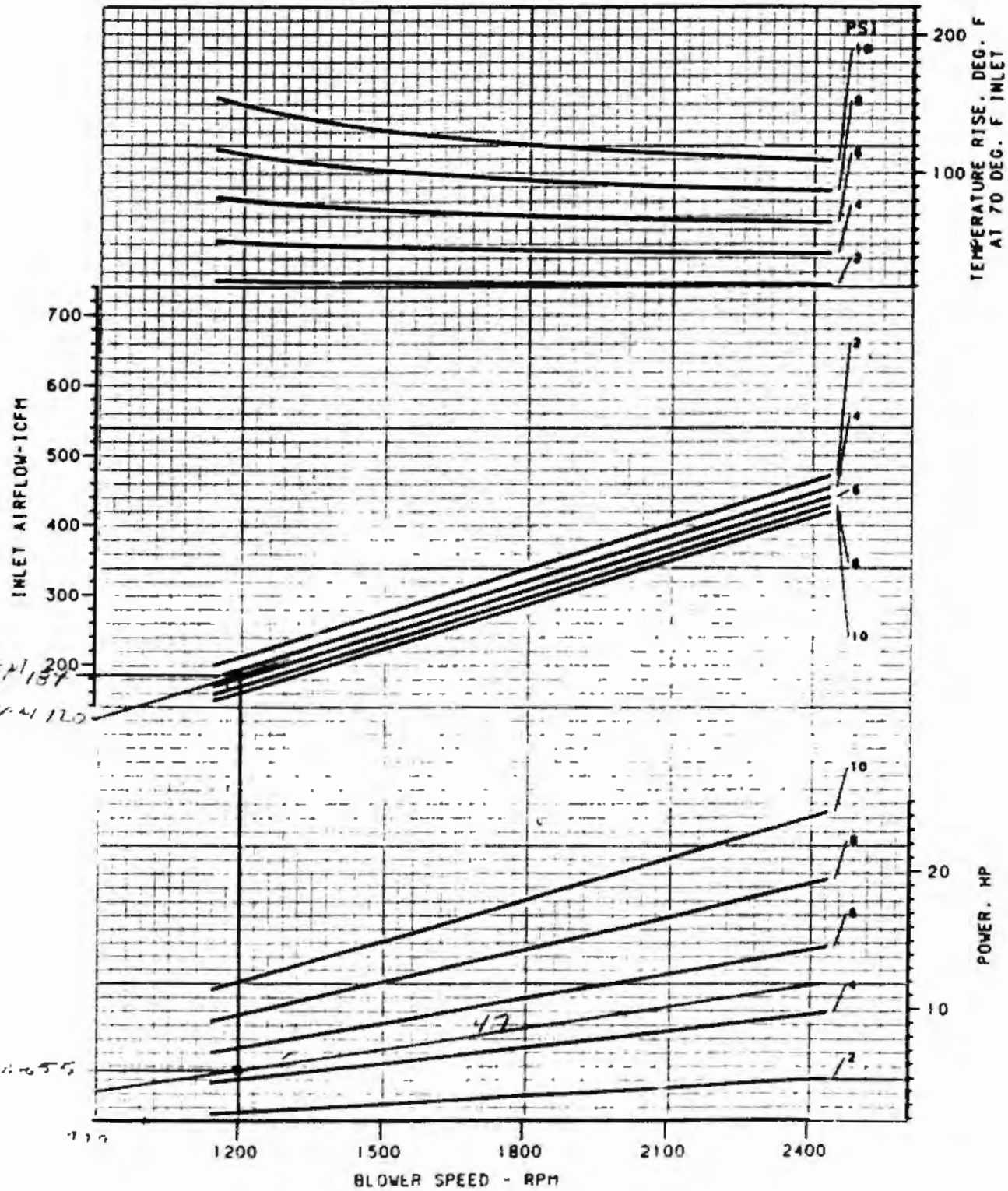
INDUSTRIAL MACHINERY

DATA SHEET: S8-2-322
DATED: 6-1-90
SUPERSEDES: 7-15-85

SUTORBILT®
LEGEND™ MODEL 5M

350° Max Rise

PRESSURE PERFORMANCE CURVE
BASED UPON 0.075 LB/FT³ AIR DENSITY
DISPLACEMENT 0.21 FT³/REV



CALCULATION OF OXYGEN TRANSFER CHARACTERISTICS OF DIFFUSERS
TERRACE PARK MOBILE HOME PARK WASTEWATER TREATMENT PLANT

DIFFUSED AERATION

INPUT VALUES:

Proposed Type :	**Coarse Bubble Diffuser**	
Manufacturer on which Design is Based :	**SNAP CAP**	
Manufacturer's Documentable Oxygen Transfer Efficiency at Standard Conditions	**6.70**	**percent at 6 scfm flow rate**
Water Depth at which Manufacturer's Efficiencies Tested	**8.50**	**feet**
Water Depth at which this System will Operate - DIGESTER	**9.00**	**feet**
Normal Range of Reported Oxygen Transfer Rates at Standard Conditions	**4 to 8**	**percent (Ref. 2, p. 497)**
Adjustment of Standard Oxygen Transfer Rate for Increased Depth	**6.04**	**percent . Formula #1**
Design Oxygen Transfer Percentage at Std. Cond . Based on the above Two Values	**6.04**	**percent**
Design Oxygen Transfer Efficiency at Field Conditions	**3.02**	**percent at 6 scfm air flow per diffuser**
(For diffused aeration systems, TEN STATE STANDARDS requires that oxygen transfer efficiency at field conditions be taken as 50% of standard condition rates, if experimentally determined rates are not available. (Ref. #1, p. 80-8)		
Water Depth at which this System will Operate - DIFFUSED AIR ZONE	**9.00**	**feet**
Normal Range of Reported Oxygen Transfer Rates at Standard Conditions	**4 to 8**	**percent (Ref. 2, p. 497)**
Adjustment of Standard Oxygen Transfer Rate for Increased Depth	**6.04**	**percent . Formula #1**
Design Oxygen Transfer Percentage at Std. Cond . Based on the above Two Values	**6.04**	**percent**
Design Oxygen Transfer Efficiency at Field Conditions	**3.02**	**percent at 6 scfm air flow per diffuser**
(For diffused aeration systems, TSS requires that oxygen transfer efficiency at field conditions be taken as 50% of standard condition rates, if experimentally determined rates are not available. (Ref. #1, p. 80-8)		

Operating Head Requirements:

Head Loss Through Diffuser at Specified Operating SCFM	**0.15**	**psi**	**(Estimated)**
Required Operating Head in Diffused Air Zone (Including Diffuser Loss) *	**4.05**	**psi**	
Required Operating Head in Aerobic Digester *	**4.05**	**psi**	

* Assumes NO head loss in air piping (Added during blower sizing), and that diffused air is throttled so that the head required is the same as the diffused air zon

NOTES:

- Recent research has indicated that alpha values for a violently mixed coarse bubble diffuser system may approach 1, even in raw wastewater. This is because of the breakup of surfactants, which have the major effect on a wastewater's alpha value. The TSS reccomendation of a 50% rate for all diffused aeration system was made before this research, so it can be taken that the 50% rate is very conservative. Note that this argument does not hold for less violently mixed medium and fine bubble diffusers, in which an alpha in the range of 0.4 to 0.7 is typical. (Ref. 3, p. 48)

- The above calculated field oxygen tranfer rates should be applicable for both the aerobic digester and the diffused air zone, since the steady state Dissolved Oxygen rate both systems will be maintained at about 2.0 ppm.

- The diffusers for the diffused air zone and the digester should be set at the exact same submergence level at ADF. This will insure that a balanced air supply will be received by both, without the need for tedious throttling of the air lines to each diffuser.

FORMULAS:

1) Transfer Efficiency Corrected for Depth = (Efficiency at Standard Depth)/(Standard Depth/Actual Depth) ... Ref. 4

REFERENCES:

1) "Recommended Standards for Sewage Works", GLUMRB, 1978
2) "Wastewater Engineering", Second Edition, Metcalf and Eddy
3) "Translation of Clean to Dirty Water Oxygen Transfer Rates", Michael L. Dowyle, William C. Boyle, Aeration Systems, Design, Operation Testing
4) Manufacturer's formula - HydroAerobics, Inc

CALCULATION OF OXYGEN REQUIRED FOR DIFFUSED AERATION ZONES
TERRACE PARK MOBILE HOME PARK WASTEWATER TREATMENT PLANT

TOTAL AERATION SYSTEM

INPUT VALUES:

Total Volume of Aeration System	**23,348**	**gallons =**	**3,122**	**cubic feet**
Design ADF	0.0276	mgd		
Design BOD5 of Raw Wastewater	200	mg/l		
Design BOD5 of Effluent	20	mg/l		
BOD5 Removed	180	mg/l		
Design TKN Value of Influent (Use as a conservative estimate of Ammonia Nitrogen to oxidized (Ref. 1)	20	mg/l		
Design Value of Pounds of Oxygen Required per Pound of BOD5 - TSS 92.331	1.5	lbs/lb of peak hourly BOD_5		
Design Value of Pounds of Oxygen Required per Pound of TKN - TSS 92.331	4.6	lbs/lb of peak hourly BOD_5		
Ratio of Total BOD5 Applied to Total Aeration System Volume	**14.66**	**lbs. BOD5 /1000 cf of Aer. Vol.**		

Note: Calculated Values are shaded.

DIFFUSED AERATION ZONE

Total Volume to Be Aerated	**23,348**	**gallons =**	**3,122**	**cubic feet**
Aeration Volume as a Percent of Total Aeration Volume	100.00%			
Total Oxygen Required for Carbonaceous BOD reduction - Formula #1	62	pounds per day		
Total Oxygen Required for Oxydation of Ammonia -(Nitrification) - Formula #2 - Not Req	21	pounds per day		
Total Oxygen Required - Diffused Aeration Zone	82	pounds per day		
Field Oxygen Transfer Efficiency of Diffusers	3.00	percent at 26 cfm air flow/diffuser		
Total SCFM of Air Required to Meet Total Oxygen Demand (Formula #3)	82	scfm		
Design Air Flow Rate per Diffuser	5.0	scfm		
Total Number of Diffusers Required	16	each - Formula #4		

Mixing Requirements

Air provided per 1000 cubic feet of aeration tank volume - must be > 25 per TSS	26	scfm per 1000 cf of volume OK

Use 82 SCFM Air Flow Rate for Diffused Aeration Zone

AEROBIC DIGESTER

INPUT VALUES:

Total Volume to Be Aerated	**10,810**	**gallons =**	**1,446**	**cubic feet**
Design Rate of Oxygen to be Added to Digester (Includes Mixing and Oxygen Req.)	30	scfm/1000 cf of Digester Volume		
Total Air Requirement for Digester	43	scfm		
Field Oxygen Transfer Efficiency of Diffusers	3.00	percent at 6 cfm air flow/diffuser		
Total Pounds of Oxygen Added to Digester - Formula #5	33	pounds per day		
Design Air Flow Rate per Diffuser	5.0	scfm		
Total Number of Diffusers Required	9	each - formula #4		

Use 43 SCFM Air Flow Rate for Aerobic Digester

FORMULAS:

1) Pounds Oxygen Required per day = ppm BOD removed * % of Total Aeration Volume * ADF * 8.32
2) Pounds Oxygen Required per day = ppm TKN converted * % of Total Aeration Volume * ADF * 8.32
3) CFM Air Required = (Pounds Oxygen Req./day) /(1440min/day)*(0.075 lbs/cf of air)*(23.2% oxygen in air)*(diffuser efficiency)
4) Number of Diffusers = 6 per aeration basin
5) Pounds of Oxygen Provided per day = CFM provided per day * (1440min/day)*(0.075 lbs/cf of air)*(0.232 per cent oxygen in air)*(diffuser efficiency)

CALCULATION OF BLOWER REQUIREMENTS FOR DIFFUSED AERATION ZONES
TERRACE PARK MOBILE HOME PARK WASTEWATER TREATMENT PLANT

DIFFUSED AERATION SYSTEM

SCFM Required for Diffused Air Zone	[redacted]	scfm	4.06	psi
SCFM Required for Digester	[redacted]	scfm	4.06	psi
SCFM required for Eductors	[redacted]	scfm	4.33	psi
TOTAL SCFM REQUIRED	[redacted]	scfm		

HEAD REQUIREMENTS:

Head required for operation of all units (Must be maximum of all values above)		4.33	psi
Allowance for head loss in distribution system - Note #1		0.40	psi
	Total	4.73	psi

CORRECTION FOR FIELD CONDITIONS:

Elevation at Site	80.00	feet msl
Inlet Pressure - Formula #1	14.7	psi
Maximum Inlet Temperature Expected	105	degrees F
Relative Humidity at the Blower Inlet	95	percent
CFM required at the Blower Inlet at Site Conditions - Formula #2, Ref. 1	184	cfm

Provide Blower Sized at 184 CFM at 4.7 psi

FORMULAS:

1) Pressure at site = (33.9 feet water - (0.001049 * elevation at site))/2.309
2) Corrected CFM = SCFM * 0.0276 * (Blower Inlet Temp in Rankin)/(Blower Inlet Pressure in psia - (Relative Humidity at Blower Inlet (in fraction) x (Vapor Pressure of Water at Inlet Temp)

NOTES:

1) Ten States Standards requires this to be no greater than 0.5 psi

COMMENTS ON SELECTION OF MOTOR TYPE:

1) Open dripproof motors run much cooler than TEFC motors, and are much less prone to overheating. this makes them last longer since heat is usually THE major factor in motor life. Open dripproof motors are cooled by air blown directly through the internal windings. TEFC motors depend on air blown over the outside of the motor to dissipate heat.
2) Open dripproof motors are also generally cheaper than TEFC motors, but they must be covered to protect them from the elements.

REFERENCES:

1) "Blower Design Considerations", G. G. Powell, p. 185

DESIGN MEMO

PROJECT : **Terrace Park Wastewater Plant Repermitting**

P.N. : **9607**

BY : **G. Jeffery Hines, P.E.**

SUBJECT : **Notes on Design Speed of Blower**

1) Blower Make and Model Selected. **Sutorbilt 5M**

2) Blower Speed at Design Flow Rate **800** **RPM**

3) Blower Gear Diameter from Manufacturer's Catalog: **5 inch**
(Note: On Roots Blowers, The gear diameter (in inches) is the first number of the frame number)
(Note: On Sutorbilt Blowers, The gear diameter (in inches) is the first number of the model number)

4) Calculated Gear Tip Speed at Design RPM: **1,047 feet per minute**

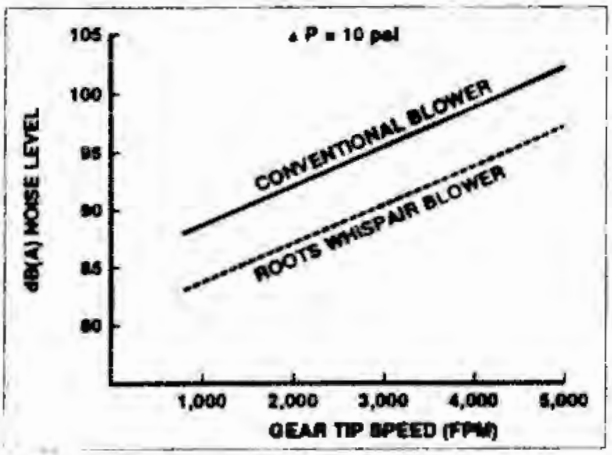
5) Blower Gear Lubrication:

Rotary lobe blowers are "splash lubricated", with the gears turning in a bath of oil. Conversations with Roots and Sutorbilt factory engineers have resulted in recommendations of a MINIMUM gear tip speed of 1000 feet per minute to insure adequate gear lubrication. Sutorbilt, in particular, has a sizing program that checks this, and most local reps use this to check designs before supplying products. If an engineer specifies a design that results in a gear tip speed of less than 1000 feet per minute, the blower may not be warranteed, or a smaller blower turning faster may be substituted.

6) Noise Considerations:

The magnitude of pulsations or air leaving the blower are the primary cause of low frequency noise from a blower. The magnitude of this pulsation is primarily affected by the gear tip speed of the blower. The greater the gear tip speed, the greater will be the pulsations and noise. Therefore, if blower noise is to be minimized, gear tip speed of the blower must be reduced as close to the above referenced 1000 foot per minimum level as possible.

The following graph illustrates this relationship and came from the Roots Blower catalog.



DESIGN MEMO

PROJECT : **Terrace Park Wastewater Plant Repermitting**

P.N. : **9607**

BY : **G. Jeffery Hines, P.E.** FileName: F:\9607\DWEIRSE.XLS

DATE : **September 16, 1996**

SUBJECT : **Calculation of Time it takes for Surface Wave to Travel To Effluent Weirs**

Design Problem:

The sudden shutoff of the return eductors and skimmers in a wastewater plant will produce a surface wave that travels from the vicinity of the eductor (which depresses the water surface while running) across the clarifier to the effluent weir. When the eductor is abruptly shut down, the water surface near the eductor immediately raises and this rise in water surface travels as a wave to the effluent weir, where it discharges the excess flow to the point where the water surface across the clarifier is stabilized.

This spreadsheet calculates the approximate time that it takes for this wave to reach the effluent weir. This time is useful to know when trying to minimize the effects of this wave on the plant.

INPUT DATA:

Approximate straight line distance from return eductor to closest point on effluent weir.	**3.0**	**feet**
Average Depth of Water in Clarifier:	**9.5**	**feet**

Wave Propagation Formula:
(Use the Lagrange celerity equation, which assumes that the height of the wave is small with relation to the depth)

$$c = (g*y)^{0.5}$$

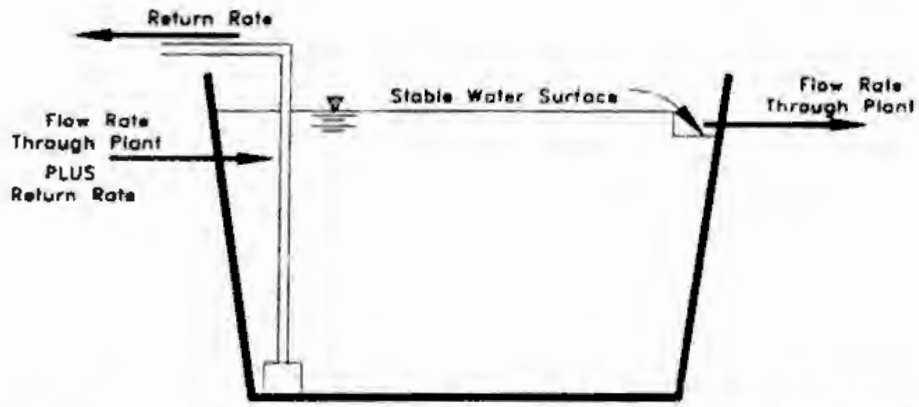
where c = wave velocity in fps
g = gravitational constant = 32.2 f/s^2
y = depth of water in feet

Calculated wave velocity based on above water depth = [redacted] feet per second

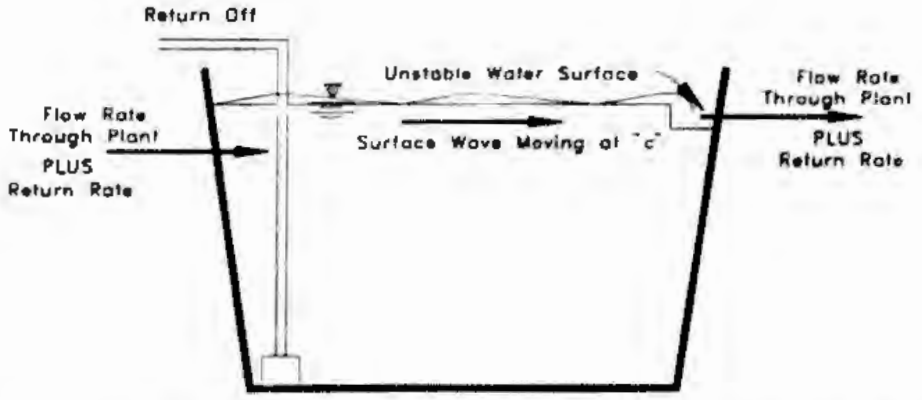
Calculated time for wave to reach effluent weir = (Velocity/Distance) = [redacted] seconds

NOTE If the return eductors and skimmer return rates are significantly more than 150% of the ADF flow rate, (very common on small plants) the above described wave can actually flood the effluent weir and cause significant solids loss. If the eductors cannot be modified to reduce their flow rates, a slow closing solenoid valve on the air supply lines to the eductors and skimmers will significantly reduce the size of the surface wave and can effectively eliminate solids loss from this cause. The solenoid valve should be selected and designed so that it takes at least twice the time calculated above to close, and this closing should be relay driven to occur just before blower shut down

An alternative to the solenoid control system would be to size the effluent weirs to handle the total flow produced by the surface wave without exceeding normal design weir overflow rates. This could result in an effluent weir that is about twice as long as would normally be required, but no controls would be necessary to prevent solids loss.



SCHEMATIC DIAGRAM OF CLARIFIER BEFORE EDUCTOR IS SHUT OFF



SCHEMATIC DIAGRAM OF CLARIFIER JUST AFTER EDUCTOR IS SHUT OFF

CALCULATION OF CLARIFIER DESIGN PARAMETERS

TERRACE PARK MOBILE HOME PARK WASTEWATER TREATMENT PLANT

INPUT VALUES:

			RECOMMENDED STANDARDS				
			EPA DESIGN MANUAL	NAVAL FACILITIES DESIGN MANUAL	TEN STATES STDS.	MANUAL ON PRACTICE 69	METCALF & EDDY
Design Average Daily Flow Rate	0.0275 mgd =	19.1 gpm					
Design Peak Flow Rate	0.1125 mgd =	78.1 gpm					
Design 5 Day BOD of Plant Influent	200 mg/l						
Design TSS of Plant Influent	200 mg/l						
Number of Clarifiers	1 each		2 min	-	2 min	-	-
Length of Clarifier	13.25 feet						
Width of Clarifier	11 feet						
Distance from Influent Channel to Effluent Weir	10 feet		10 min	-	10 min	-	-
Depth of Water Above Hopper	6.5 feet		6 min	-	-	10 min	-
Length of Hopper at Bottom	4.0 feet						
Width of Hopper at Bottom	1.0 feet						
Depth of Hopper(from Bottom to Straight Sides)	3 feet						
Weir Length for Each Clarifier	24.0 feet						
Distance from Wall to effluent weir	1.50 feet						
Side Slope of Hoppers (Horiz. . Vertical)	2.00 :1	(estimate)			0.58:1 max		
Number of Hoppers per Clarifier	1						
Estimated Ratio of MLVSS to MLSS	85%						
Estimated Ratio of WASVSS to WASSS	80%						
Estimated Ratio of RASVSS to RASSS	80%						
Total Volume of all Aeration Zones at ADF	3,122 cf =	23,348 gal					
Freeboard in clarifier(s) at ADF	1.50 feet				1.0 min.		

CALCULATED VALUES:

Area of Top of Clarifier	146.8 sf						
Area of Bottom of Clarifier Hopper	4.00 sf						
Volume of Area above Hoppers (per clarifier)	947.4 cub. ft.=	7,086 gal					
Volume of Hoppers (Per Clarifier)	173.9 cub. ft. =	1,301 gal					
Total Proposed Weir Length (All clarifiers)	24.0 lin. ft.						
Total Clarifier Volume incl all of Hopper(s)	1,121 cub. ft. =	8,387 gal					
Detention Time at Average Daily Flow (ADF)	7.32 hours						
Detention Time at Peak Flow Rate	1.79 hours						
Weir Overflow Rate at ADF	1,146 gal. per day per l.f.		14,880	29,760	10,000	9,600 to 28,80	10,000
Weir Overflow Rate At Peak Flow Rate	4,686 gal. per day per l.f.						20,000
Surface Loading Rate At Average Daily Flow	188.7 gal. per day per sq. ft.		196 to 392	809	-	809	196 to 392
Surface Loading Rate At Peak Flow Rate	771.7 gal. per day per sq. ft.		809	1,201	1,000	-	589 to 786
Max. Solids Loading Rate for all Clarifiers at ADF	14.20 lbs per day per sf.		20.1 to 30.1	-	50	-	4.9 to 24.6
Max. Solids Loading Rate for all Clarifiers at Peak	58.09 lbs per day per sf.		50	-	50	10 to 50.4	34.4
Horizontal Flow Rate Through Clarifier at ADF	1.81 feet per hour		100 max	-	-	240 max	100 max
Horizontal Flow Rate Through Clarifier at Peak Flow	7.40 feet per hour		100 max	-	-	240 max	100 max
Estimated Upflow Rate at Effluent Weirs at ADF (Assumes the upflow width is the total width of all weir troughs plus two times the distance from the wall)	2.0 feet per hour		-	-	-	-	12 to 24
Estimated Upflow Rate at Effluent Weirs at Peak Flow (Assumes the upflow width is the total width of all weir troughs plus two times the distance from the wall)	8.1 feet per hour		-	-	-	-	12 to 24

Note: All units above are the same as those used in calculations.

ds & n inc., consulting engineers

CLARIFIER MASS BALANCE CALCULATIONS

MLSS Held Constant at 3500 mg/l
Wastage Rate adjusted as required to produce target MCRT.

Target MCRT = 15 DAYS

RASVSS WASVSS	MLSS	Wastage Rate as % of ADF	Return Rate as % of ADF	EVSS =ESS	Total Solids Returned	Total Solids Wasted	Total Solids in Effluent	MCRT	F/M Ratio	Solids Loading Rate
mg/l	mg/l	percent	percent	mg/l	lbs/day	lbs/day	lbs/day	days	units	ppd/sf
6000	3500	2.0%	84%	10	1,437	34	2.29	15.0	0.104	10.1
7000	3500	1.7%	64%	10	1,277	34	2.29	15.0	0.104	9.0
8000	3500	1.6%	61%	10	1,179	34	2.29	15.0	0.104	8.3
9000	3500	1.3%	43%	10	1,112	34	2.29	15.0	0.104	7.9

MLSS Held Constant at 4000 mg/l
Wastage Rate adjusted as required to produce target MCRT.

Target MCRT = 15 DAYS

RASVSS WASVSS	MLSS	Wastage Rate as % of ADF	Return Rate as % of ADF	EVSS =ESS	Total Solids Returned	Total Solids Wasted	Total Solids in Effluent	MCRT	F/M Ratio	Solids Loading Rate
mg/l	mg/l	percent	percent	mg/l	lbs/day	lbs/day	lbs/day	days	units	ppd/sf
7000	4000	2.0%	80%	10	1,613	39	2.29	15.0	0.091	11.3
8000	4000	1.7%	64%	10	1,466	39	2.29	15.0	0.091	10.3
9000	4000	1.5%	53%	10	1,368	39	2.29	15.0	0.091	9.6
10000	4000	1.4%	46%	10	1,298	39	2.29	15.0	0.091	9.1

MLSS Held Constant at 4500 mg/l
Wastage Rate adjusted as required to produce target MCRT.

Target MCRT = 15 DAYS

RASVSS WASVSS	MLSS	Wastage Rate as % of ADF	Return Rate as % of ADF	EVSS =ESS	Total Solids Returned	Total Solids Wasted	Total Solids in Effluent	MCRT	F/M Ratio	Solids Loading Rate
mg/l	mg/l	percent	percent	mg/l	lbs/day	lbs/day	lbs/day	days	units	ppd/sf
7000	4500	2.2%	101%	10	2,028	45	2.29	15.0	0.081	14.2
8000	4500	1.9%	79%	10	1,791	45	2.29	15.0	0.081	12.6
9000	4500	1.7%	64%	10	1,642	45	2.29	15.0	0.081	11.6
10000	4500	1.5%	54%	10	1,539	45	2.29	15.0	0.081	10.9

MLSS Held Constant at 3500 mg/l
Wastage Rate adjusted as required to produce target MCRT.

Target MCRT = 20 DAYS

RASVSS WASVSS	MLSS	Wastage Rate as % of ADF	Return Rate as % of ADF	EVSS =ESS	Total Solids Returned	Total Solids Wasted	Total Solids in Effluent	MCRT	F/M Ratio	Solids Loading Rate
mg/l	mg/l	percent	percent	mg/l	lbs/day	lbs/day	lbs/day	days	units	ppd/sf
6000	3500	1.4%	85%	10	1,454	26	2.29	20.0	0.104	10.1
7000	3500	1.2%	64%	10	1,293	26	2.29	20.0	0.104	9.0
8000	3500	1.1%	52%	10	1,193	26	2.29	20.0	0.104	8.4
9000	3500	1.0%	44%	10	1,126	26	2.29	20.0	0.104	7.9

MLSS Held Constant at 4000 mg/l
Wastage Rate adjusted as required to produce target MCRT.

Target MCRT = 20 DAYS

RASVSS WASVSS	MLSS	Wastage Rate as % of ADF	Return Rate as % of ADF	EVSS =ESS	Total Solids Returned	Total Solids Wasted	Total Solids in Effluent	MCRT	F/M Ratio	Solids Loading Rate
mg/l	mg/l	percent	percent	mg/l	lbs/day	lbs/day	lbs/day	days	units	ppd/sf
7000	4000	1.4%	81%	10	1,633	29	2.29	20.0	0.091	11.4
8000	4000	1.3%	64%	10	1,477	29	2.29	20.0	0.091	10.3
9000	4000	1.1%	53%	10	1,376	29	2.29	20.0	0.091	9.6
10000	4000	1.0%	46%	10	1,303	29	2.29	20.0	0.091	9.1

CLARIFIER MASS BALANCE CALCULATIONS

MLSS Held Constant at 4500 mg/l
Wastage Rate adjusted as required to produce target MCRT.

Target MCRT = 20 DAYS

RASVSS WASVSS	MLSS	Wastage Rate as % of ADF	Return Rate as % of ADF	EVSS =ESS	Total Solids Returned	Total Solids Wasted	Total Solids in Effluent	MCRT	F/M Ratio	Solids Loading Rate
mg/l	mg/l	percent	percent	mg/l	lbs/day	lbs/day	lbs/day	days	units	ppd/sf
7000	4500	1.6%	102%	10	2,063	33	2.29	20.0	0.081	14.2
8000	4500	1.4%	79%	10	1,813	33	2.29	20.0	0.081	12.6
9000	4500	1.3%	64%	10	1,662	33	2.29	20.0	0.081	11.6
10000	4500	1.1%	54%	10	1,558	33	2.29	20.0	0.081	10.9

MLSS Held Constant at 3500 mg/l
Wastage Rate adjusted as required to produce target MCRT.

Target MCRT = 30 DAYS

RASVSS WASVSS	MLSS	Wastage Rate as % of ADF	Return Rate as % of ADF	EVSS =ESS	Total Solids Returned	Total Solids Wasted	Total Solids in Effluent	MCRT	F/M Ratio	Solids Loading Rate
mg/l	mg/l	percent	percent	mg/l	lbs/day	lbs/day	lbs/day	days	units	ppd/sf
6000	3500	0.8%	86%	10	1,472	16	2.29	30.0	0.104	10.2
7000	3500	0.8%	66%	10	1,308	16	2.29	30.0	0.104	9.1
8000	3500	0.7%	53%	10	1,207	16	2.29	30.0	0.104	8.4
9000	3500	0.6%	44%	10	1,139	16	2.29	30.0	0.104	7.9

MLSS Held Constant at 4000 mg/l
Wastage Rate adjusted as required to produce target MCRT.

Target MCRT = 30 DAYS

RASVSS WASVSS	MLSS	Wastage Rate as % of ADF	Return Rate as % of ADF	EVSS =ESS	Total Solids Returned	Total Solids Wasted	Total Solids in Effluent	MCRT	F/M Ratio	Solids Loading Rate
mg/l	mg/l	percent	percent	mg/l	lbs/day	lbs/day	lbs/day	days	units	ppd/sf
6000	4000	1.1%	112%	10	1,922	18	2.29	30.0	0.091	13.3
7000	4000	0.9%	82%	10	1,662	18	2.29	30.0	0.091	11.4
8000	4000	0.8%	66%	10	1,496	18	2.29	30.0	0.091	10.4
9000	4000	0.7%	54%	10	1,392	18	2.29	30.0	0.091	9.7

MLSS Held Constant at 4500 mg/l
Wastage Rate adjusted as required to produce target MCRT.

Target MCRT = 30 DAYS

RASVSS WASVSS	MLSS	Wastage Rate as % of ADF	Return Rate as % of ADF	EVSS =ESS	Total Solids Returned	Total Solids Wasted	Total Solids in Effluent	MCRT	F/M Ratio	Solids Loading Rate
mg/l	mg/l	percent	percent	mg/l	lbs/day	lbs/day	lbs/day	days	units	ppd/sf
7000	4500	1.0%	104%	10	2,077	21	2.29	30.0	0.081	14.4
8000	4500	0.9%	80%	10	1,834	21	2.29	30.0	0.081	12.7
9000	4500	0.8%	65%	10	1,682	21	2.29	30.0	0.081	11.7
10000	4500	0.7%	55%	10	1,576	21	2.29	30.0	0.081	10.9

CLARIFIER MASS BALANCE CALCULATIONS

NOTES, ABBREVIATIONS and FORMULAS:

- WASVSS - Waste Activated Sludge Volatile Suspended Solids Concentration - Assumed (Varied over normal range of Values)
- RASVSS - Return Activated Sludge Volatile Suspended Solids Concentration - Assumed (Same as WASVSS)
- MLSS - Mixed Liquor Suspended Solids Concentration - Assumed (Varied over normal range of values for extended aeration)
- Wastage Rate - Calculated - Formula - ((Va * MLVSS) - (MCRT * EVSS))/ (MCRT * WASVSS)
- Return Rate - Calculated - Formula: ((MLSS)(Q) - (WASSS)(W) - (EFF)(Q)) / (RASSS - MLSS)
- EVSS - Effluent Volatile Suspended Solids Concentration - Estimated based on Effluent requirements
- Total Solids Returned - Calculated - Formula: (Return Rate)(Q)(RASSS)(8.34)
- Total Solids Wasted - Calculated - Formula: (Wastage Rate)(Q)(WASSS)(8.34)
- Total Solids in Effluent - Calculated - Formula: (ESS)(Q)(8.34)
- MCRT - Input - Varied over range from 18 to 30 days. Based on formula - ((MLVSS)(Va)(8.34))/((WASVSS)(W)(8.34)+(EVSS)(Q)(8.34))
- Q = Average Daily Flow in MGD
- W = Waste Sludge Rate in MGD
- R = Return Flow Rate in MGD
- Solids Loading Rate = ((ADF + Return Flow %) * MLSS * 8.32) / (Total Area of Clarifiers)
- F/M = Influent BOD Concentration/(Va/Q)*MLVSS)
- Va = Total volume of aeration zones in (million gallons)

DESIGN ANALYSIS

- The plant should be capable of operating at an MCRT of between 18 and 30 days for the Extended Aeration Process. The design as presented achieves this goal.
- The plant should be capable of operating at at F/M ratio of between 0.08 and 0.20. The design as presented achieves this goal.

RECOMMENDED OPERATING MLSS AND MCRT
In order to insure reliable operation and minimize waste sludge production, the recommended target operating values of MCRT and MLSS are 20 to 30 days and 3500 mg/liter respectively. At 20 days MCRT and 3500 mg/liter MLSS, a reasonable rate of 26 pounds per day of solids are wasted to the digester, while providing a maximum solids loading rate of only 10.1 ppd/sf to the clarifier. This will produce stable operation, while not overloading the sludge storage and processing facilities.

DESIGN MEMO

AT DESIGN ADF of 27,500 gpd

PROJECT : Terrace Park Wastewater Plant Repermitting

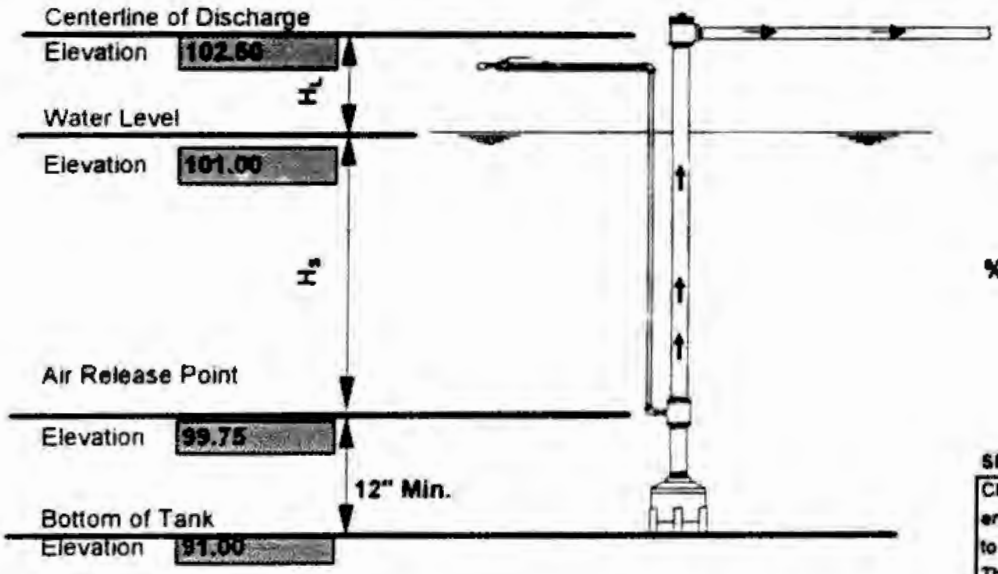
P.N. : 9607

BY : G. Jeffery Hines, P.E. FileName: R:\9607\DMODIFI.XLS

DATE : September 13, 1996

SUBJECT : Analysis of PROPOSED of 3" Air Lift Pump - Eductor (PROPOSED MODIFICATIONS)

SCHEMATIC DIAGRAM OF 3" SLUDGE EDUCTOR



H_L = 1.50 feet

H_s = 1.25 feet

% Submergence $\frac{100\ H_s}{H_L + H_s}$

= 45%

SEE BELOW

Check to make sure return rate is great enough to turn clarifier over fast enough to prevent denitrificaton and pop-ups This can be a problem at less than design flow rates in a plant with a large clarifier.

Input Values

Average Daily Flow of Plant	27,500	gallons per day
Number of Eductors	2	
Required Maximum Percentage of ADF to Be Returned	150	percent
Required Minimum Percentage of ADF to Be Returned	40	percent

Total Volume of Clarifier		
8,400	gallons	
Req. Max. Turnover Time = 3.5 hrs		
Calculated	2.53	hours OK

Calculated Values

Required Maximum Flow Rate Per Eductor	14.3	gallons per minute
Required Minimum Flow Rate Per Eductor	3.8	gallons per minute
SCFM air required at Maximum Flow Rate of 14.3 gpm per diffuse	12.4	SCFM = 24.7 SCFM Total
(Make sure Blower Can Provide This Volume of Air At	0.54	psi minimum plus line losses)
(Make sure Blower Can Provide A Pressure of	4.33	psi minimum plus line losses to allow for unclogging)

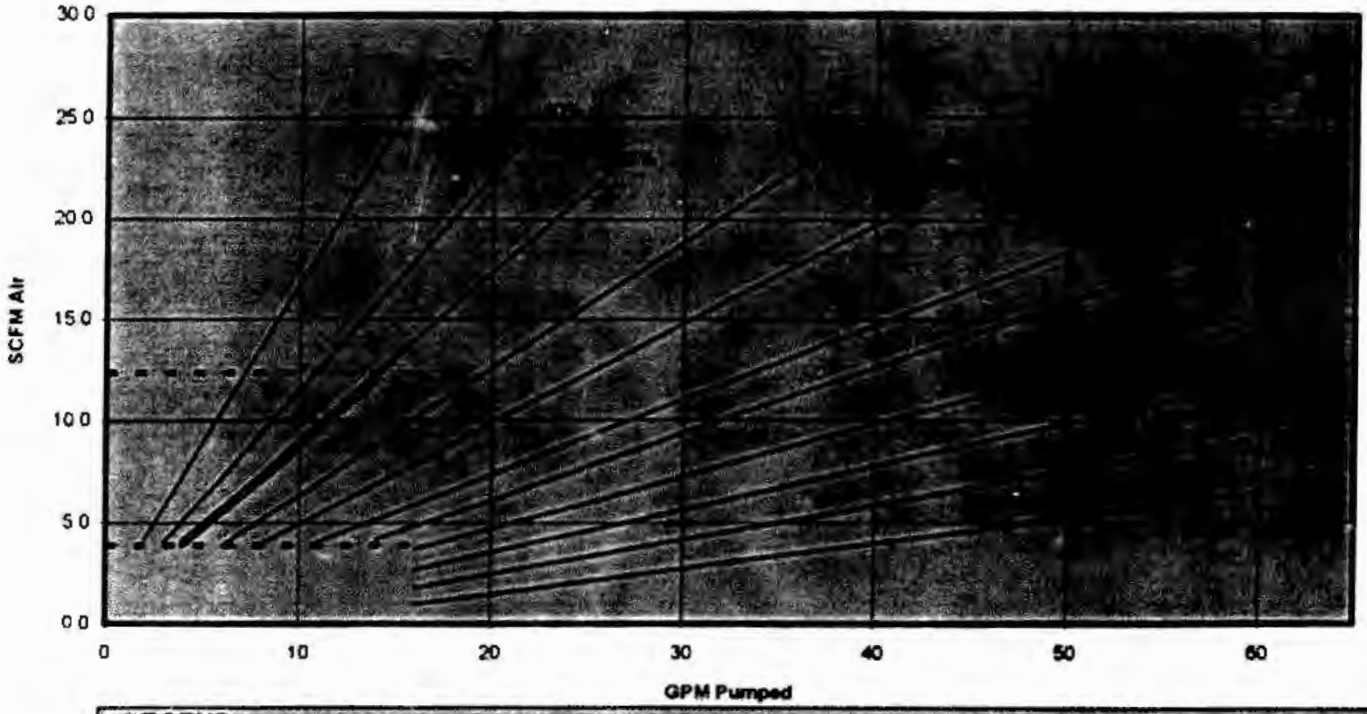
NOTES:

1) Most efficient operation is obtained with submergence between 70% and 85%. There may be other considerations that will dictate submergence - see below.
2) Multiple units or a single unit with multiple air release points is recommended for wide flow rate variations.
3) The blower must provide air pressure greater than H_s plus line losses.
4) Do NOT design eductor so that it returns too much flow, even when the air is throttled. This is a common problem on small plants Often, 300% to 500% is returned, creating too much hydraulic load on the plant. Reduce submergence and thereby maximum flow rates by raising the air inlet point.
5) If the flow consideration noted in #4 above is not a concern, place the air inlet point at the same elevation as the diffusers, so that throttling of air to the eductors is not necessary. This will simplify operation considerably.
6) Put a gate valve in the discharge line of the eductor. This will allow the operator to easily unclog the eductor by closing off the valve and forcing the air out the BOTTOM of the eductor. Note that this will ONLY work if the blower can produce enough pressure to overcome the additional depth and head loss caused by the plug. If the blower can produce the pressure, the operator may have to shut off the flow to the diffusers and skimmers to accomplish this, but it is considerably easier than any other alternative method of unclogging an eductor.
7) Graph Source Fluidyne Corp.

ds & n inc., consulting engineers

3" EDUCTOR SIZING CHART

(Source of Graph: Fluidyne Corp.)



LEGEND	
———	Represents the operating curve for the eductor being designed - 45.5% submergence
- - - -	Represents the upper and lower limits of the design operating range

NOTES:

1) Small % numbers on curves represent % submergence. A given eductor will operate along a single submergence line as the air is throttled

AIR DOWNPIPE SIZING:

Total Length of Downpipe from main header: 4.0 feet
Number of 90° ells from point where air line leaves main header: 2 each, Tees, Branch to Run: 1 each
Number of Gate or Ball Valves in Line: 1 each
Calculated equivalent total Pipe length including Fitting Losses: 21.0 feet
Actual Inside Pipe Diam. = 1.61 inches — 1.50 inches <<<—Select Nominal Pipe Diameter

Calculated Pressure Drop 0.26 psi at design flow rate of 12.4 SCFM
(Increase Air Pipe Size Until Calculated Pressure Drop is Less than 0.2 psi)
(This is the Pressure Drop in the Downpipe only)

FORMULAS:

Formula for pressure drop = $0.7 * \frac{V^{1.85}}{d^5 p_m} \cdot \frac{L}{1000}$

(Source: Compressed Air and Gas Handbook, fourth ed.)
where V = volume of air in SCFM
d = actual inside diameter of pipe in inches
p_m = mean pressure in pipe in psia, design pressure can be used as long as calc. pressure drop is less than 1.0 psi
L = total equivalent length of pipe, in feet

ANALYSIS OF PROPOSED SYSTEM

The PROPOSED eductor can be operated at the proper operating range. The submergence of the eductor will be modified so that the eductor will operate within the proper operating range shown.

ds & n inc., consulting engineers

DESIGN MEMO

Return Rate Increased to 300% - Eductors OK

PROJECT : Terrace Park Wastewater Plant Repermitting

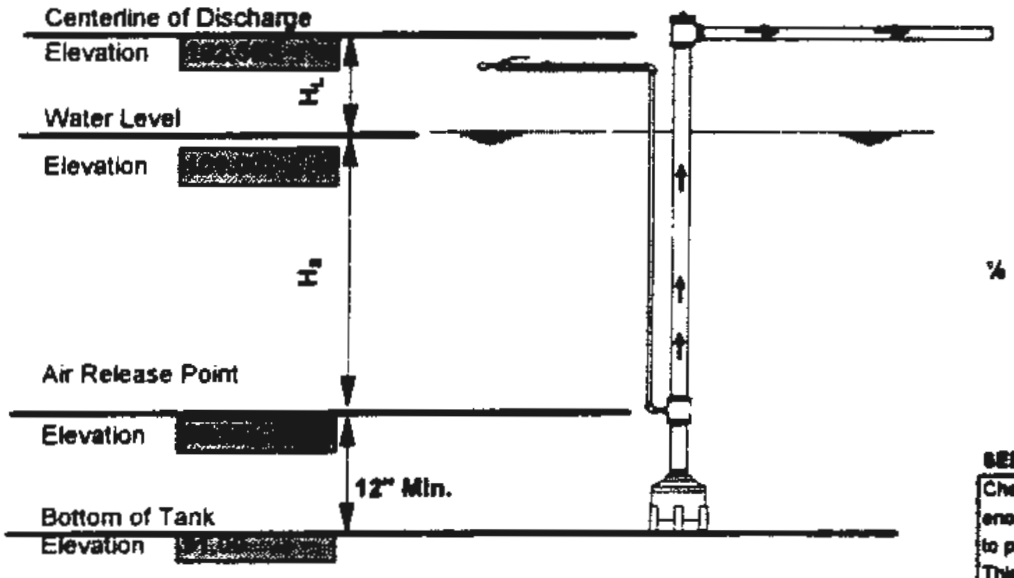
P.N. : 9607

BY : G. Jeffery Hines, P.E. FileName: R:\9607\DADFHAL.XLS

DATE : September 13, 1996

SUBJECT : Analysis of PROPOSED of 3" Air Lift Pump - Eductor - Check design at half ADF

SCHEMATIC DIAGRAM OF 3" SLUDGE EDUCTOR



H_L = 1.50 feet

H_s = 1.28 feet

% Submergence $\frac{100\ H_s}{H_L + H_s}$

= 45%

SEE BELOW

Check to make sure return rate is great enough to turn clarifier over fast enough to prevent denitrification and pop-ups This can be a problem at less than design flow rates in a plant with a large clarifier.

Input Values

Average Daily Flow of Plant		gallons per day
Number of Eductors		
Required Maximum Percentage of ADF to Be Returned		percent
Required Minimum Percentage of ADF to Be Returned		percent

Total Volume of Clarifier	
8,400	gallons
Req. Max. Turnover Time = 3.5 hrs	
Calculated 3.46 hours	OK

Required Maximum Flow Rate Per Eductor	13.8	gallons per minute
Required Minimum Flow Rate Per Eductor	1.8	gallons per minute
SCFM air required at Maximum Flow Rate of 13.8 gpm per diffuse	11.9	SCFM = 23.9 SCFM Total
(Make sure Blower Can Provide This Volume of Air At	0.54	psi minimum plus line losses)
(Make sure Blower Can Provide A Pressure of	4.33	psi minimum plus line losses to allow for unclogging)

NOTES:

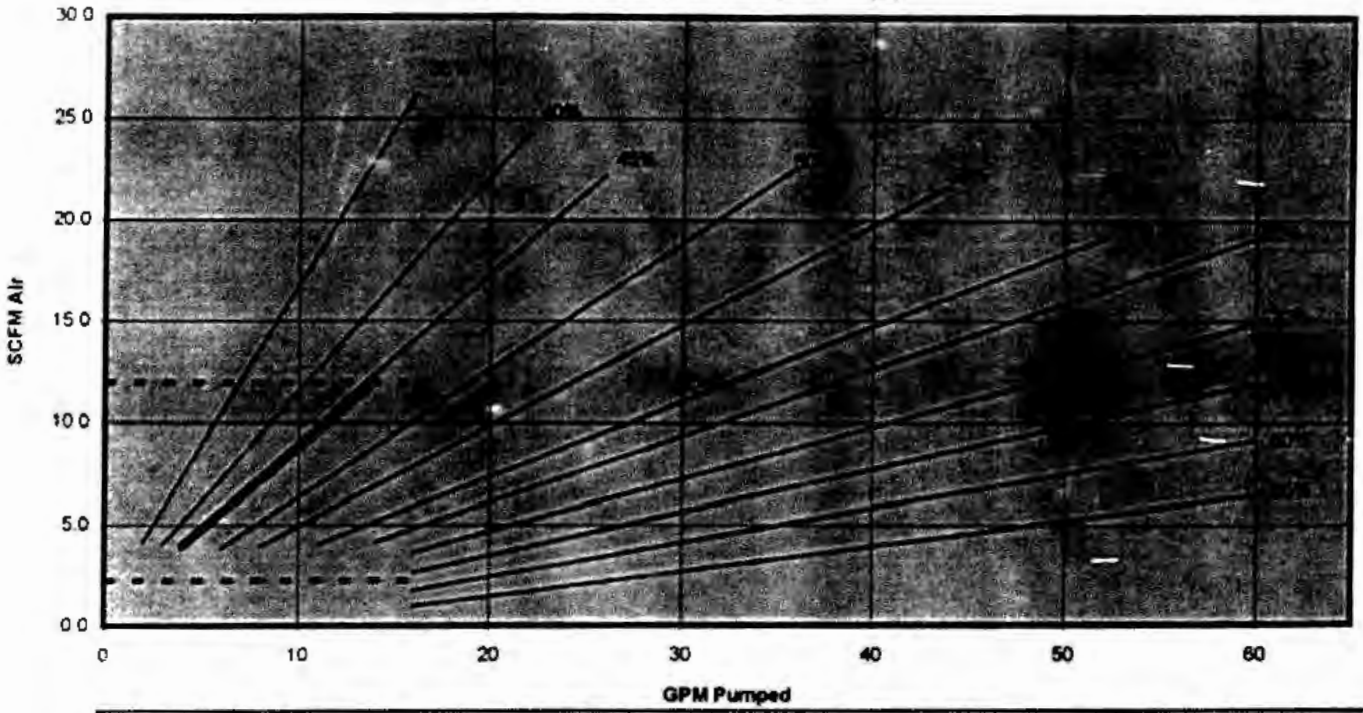
1) Most efficient operation is obtained with submergence between 70% and 85%. There may be other considerations that will dictate submergence - see below.
2) Multiple units or a single unit with multiple air release points is recommended for wide flow rate variations.
3) The blower must provide air pressure greater than H_s plus line losses.
4) Do NOT design eductor so that it returns too much flow, even when the air is throttled. This is a common problem on small plants Often, 300% to 500% is returned, creating too much hydraulic load on the plant. Reduce submergence and thereby maximum flow rates by raising the air inlet point.
5) If the flow consideration noted in #4 above is not a concern, place the air inlet point at the same elevation as the diffusers, so that throttling of air to the eductors is not necessary. This will simplify operation considerably.
6) Put a gate valve in the discharge line of the eductor This will allow the operator to easily unclog the eductor by closing off the valve and forcing the air out the BOTTOM of the eductor Note that this will ONLY work if the blower can produce enough pressure to overcome the additional depth and head loss caused by the plug. If the blower can produce the pressure, the operator may have to shut off the flow to the diffusers and skimmers to accomplish this, but it is considerably easier then any other alternative method of unclogging an eductor.
7) Graph Source: Fluidyne Corp

ds&n

ds & n inc., consulting engineers

3" EDUCTOR SIZING CHART

(Source of Graph: Fluidyne Corp.)



LEGEND	
———	Represents the operating curve for the eductor being designed - 45.5% submergence
- - - -	Represents the upper and lower limits of the design operating range

NOTES:

1) Small % numbers on curves represent % submergence. A given eductor will operate along a single submergence line as the air is throttled.

AIR DOWNPIPE SIZING:

Total Length of Downpipe from main header: 4.0 feet

Number of 90° ells from point where air line leaves main header: 2 each ; Tees, Branch to Run: 1 each

Number of Gate or Ball Valves in Line: 1 each

Calculated equivalent total Pipe length including Fitting Losses: 21.0 feet

Actual Inside Pipe Diam. = 1.61 inches ; 1.50 inches <<<----Select Nominal Pipe Diameter

Calculated Pressure Drop: 0.25 psi at design flow rate of 11.9 SCFM

(Increase Air Pipe Size Until Calculated Pressure Drop is Less than 0.2 psi)

(This is the Pressure Drop in the Downpipe only)

FORMULAS:

Formula for pressure drop = $0.7 * \frac{V^{1.85}}{d^5 p_m} \frac{L}{1000}$

(Source Compressed Air and Gas Handbook, fourth ed.)

where V = volume of air in SCFM

d = actual inside diameter of pipe in inches

p_m = mean pressure in pipe in psia, design pressure can be used as long as calc. pressure drop is less than 1.0 psi

L = total equivalent length of pipe, in feet

ANALYSIS OF PROPOSED SYSTEM

The PROPOSED eductor can be operated at the proper operating range. The submergence of the eductor will be modified so that the eductor will operate within the proper operating range shown.

TERRACE PARK LIFT STATION
PUMP DOWN CALIBRATION
JULY 26, 1996

Wetwell dimensions = 4' Dia. or 94 gal/ft.

Rate of Rise (Influent Flow) at test beginning = .12' in 2 min. = or 5.6 gal/min.

Pump 1

Test 1	**2.64' drop in 1 min = 248 GPM**
Test 2	**2.56' drop in 1 min = 241 GPM**
Test 3	**2.56' drop in 1 min = 241 GPM**

Rate of rise between tests = .32' in 2 min = 0 15 gal/min.

Pump 2

Test 1	**2.36' drop in 1 min = 222 GPM**
Test 2	**2.56' drop in 1 min = 241 GPM**
Test 3	**2.8' drop in 1 min = 263 GPM**

Rate of rise at test end = .14' in 2 min = or 6.6 gal/min.]

Wetwell was allowed to refill with influent each test to maintain normal pumping level.

Pump 1 Avg. = 243 GPM + Pump 2 Avg = 242 GPM + Influent flow avg. = 9.1 GPM = avg. pumping rate of 252 GPM.

Richard M. Graziano
Chief Operator

DESIGN MEMO

PROJECT : **Terrace Park Wastewater Plant Repermitting**

P.N. : **9607**

BY : **G. Jeffery Hines**

DATE : **September 13, 1996**

SUBJECT : **Pumping Station Performance Modeling**

I. Summary of Analysis Methodology

The following series of spreadsheets provide a complete analysis of the performance of the proposed pump station by routing a synthetic inflow curve though the pump station for a twenty four (24) hour period.

The basic flow distribution can be input from actual chart data, or a standard distribution can be used. The spreadsheet then calculates the peak hourly flow based on the Ten State Standards formula, and adjusts the base (input) flow distribution to generate the required peak hourly flow while maintaining the total ADF at the design value.

Flows generated in the procedure described above are then used as inflow to the main calculation spreadsheet. On this spreadsheet, the exact dimensions of the wet well, pump flow rates, and projected float level elevations are used to model the water level fluctuations in the wet well, with each pump cycle documented.

Finally, the pump cycle information is used to produce a graph of the pump station performance, and to calculate maximum water level elevations, minimum pump cycle and maximum "pump off" times, as well as total electrical operating costs, and estimated pump and motor service lives. All of this information can then be used to determine the adequacy of the wet well and pumping system to handle the required flows, both in terms of pump short cycling, as well as problems with odor caused by long storage times in the wet well. Float level elevation adjustments can be easily made and performance reanalyzed to assess expected improvements in pump station performance due to the changes made.

One noted limitation of the model is the fact that flow rate changes are assumed to occur abruptly at the beginning of each new hour. During periods of rapidly changing flow rate, this change can be quite significant, and can lead to strange looking curves on the graph. Flow obviously does not change in this way, but this assumption does not seriously affect the accuracy of the model because total flows remain the same, and overall pump station performance in terms of water elevations and maximum and minimum pump cycle times is not really affected.

II. Tabulation of Float Level States and Pump Conditions Used in the Model

[1] Water below "Pumps Off" float, water rising, both pumps off.

[2] Water at or above "Pumps Off" float, below "Lead Pump On" float, water rising, both pumps off.

[3] Water at or above "Lead Pump On" float, below "Lag Pump On" float, water rising, lead pump on.

[4] Water at or above "Lag Pump On" float, below "Alarm" float, water rising, both pumps on.

[5] Water at or above "Alarm" float, water rising, both pumps on.

[6] Water at or above "Alarm" float, water falling, both pumps on.

7 Water above "Lag Pump On" float, below "Alarm" float, water falling, both pumps on.

8 Water above "Lead Pump On" float, below "Lag Pump On" float, water falling, both pumps on.

9 Water above "Pumps Off" float, below "Lead Pump On" float, water falling, both pumps on.

10 Water above "Lead Pump On" float, below "Lag Pump On" float, water falling, lead pump on.

11 Water at or above "Pumps Off" float, below "Lead Pump On" float, water falling, lead pump on.

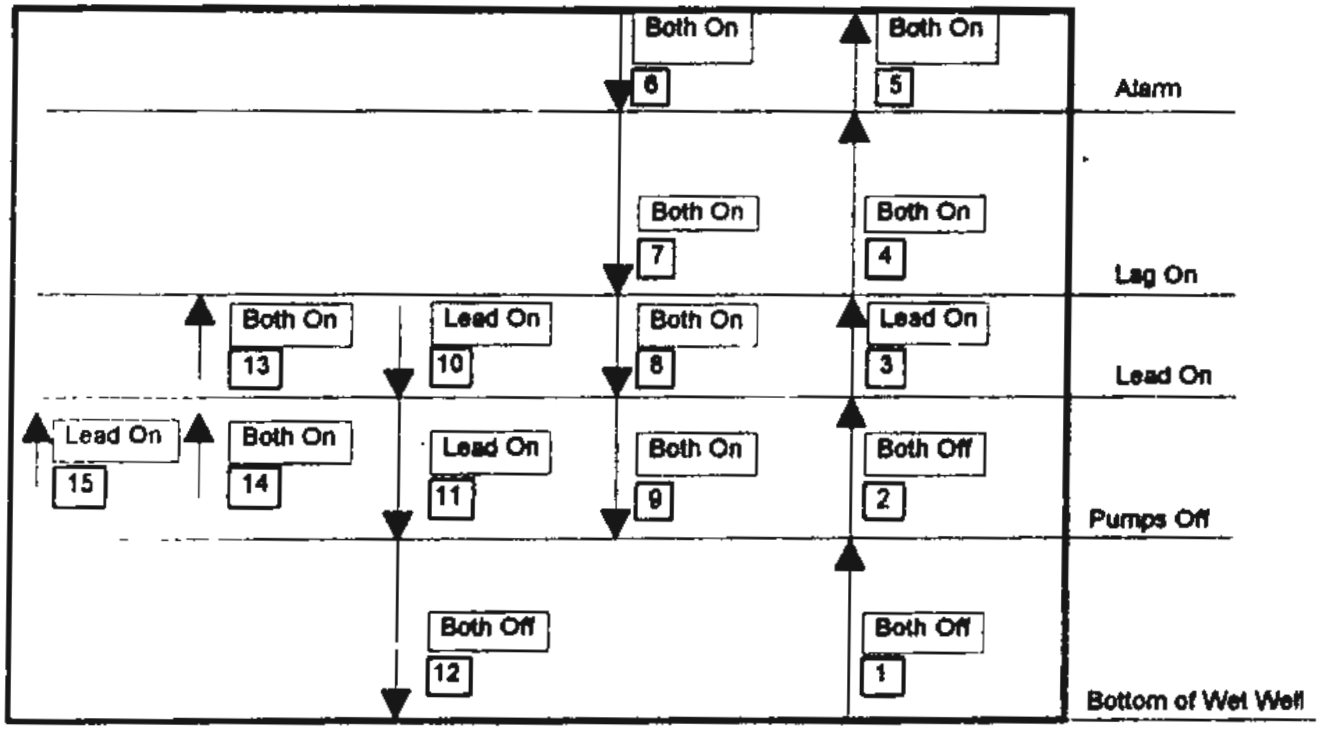
12 Water below "Pumps Off" float, both pumps off.

13 Water above "Lead Pump On" float, below "Lag Pump On" float, water rising, both pumps on.

14 Water above "Pumps Off" float, below "Lead Pump On" float, water rising, both pumps on.

15 Water at or above "Pumps Off" float, below "Lead Pump On" float, water rising, lead pump on.

III. Graphical Representation



These water level states are used to calculate outflow rates in the model that follows this page. The level state for each calculation is indicated in one column of the spreadsheet. This state information can be used to determine whether the water level is rising or falling, and which pump or pumps are running.

Number of Pump Cycles - Lead Pump	72	cycles
Number of Pump Cycles - Lag Pump	1	cycles
Total Pump Run Time for Analysis Period - Lead Pump		148.6 min.
Total Pump Run Time for Analysis Period - Lag Pump		2.0 min.

Pump #1 Horsepower	5.0
Pump #2 Horsepower	5.0
Number of Watts Per Horsepower (Constant)	648.1
Estimated Cost per Kilowatt Hour	$0.07
Month Operating Cost for Electrical Power for Pumps	$5.91

Notes:

1) Pumping rates are taken from pump station calibration done by H_2O Utilities, Inc. on July 26, 1996
2) Float levels have been adjusted so that inflow peaks to the plant are minimized. This is done by keeping the run times on the influent pumps to only about one minute.

DESIGN MEMO

PROJECT : Terrace Park Wastewater Plant Repermitting

P.N. : 9607

BY : G. Jeffery Hines

DATE : September 13, 1996

SUBJECT : Generation of Diurnal Flow Data to Use for Design

Estimated Average Daily Flow	27,500	gpd
Estimated Per Capita Flow Rate:	100	gpd
Population Equivalent based on above data	275	persons
Calculated Peak Factor from Ten State Standards	4.09	
(Ratio of Max. Peak Hourly Flow to Average Daily Flow)		

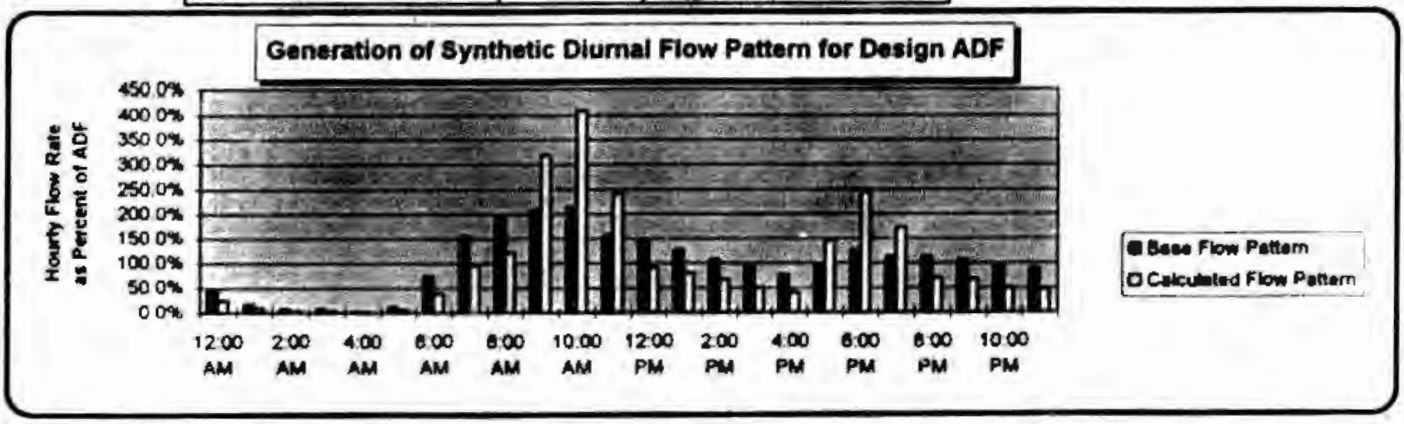
11:00 AM	30	89.3%		
12:00 AM	16	47.6%	24.9%	266
1:00 AM	6	17.9%	9.4%	107
2:00 AM	3	8.9%	4.7%	54
3:00 AM	3	8.9%	4.7%	54
4:00 AM	1	3.0%	1.6%	18
5:00 AM	4	11.9%	6.2%	71
6:00 AM	25	74.4%	39.0%	447
7:00 AM	52	154.8%	96.1%	1,101
8:00 AM	66	196.5%	122.0%	1,398
9:00 AM	70	208.4%	318.4%	3,649
10:00 AM	72	214.4%	409.4%	4,691
11:00 AM	53	157.8%	241.1%	2,763
12:00 PM	49	145.9%	90.6%	1,038
1:00 PM	43	128.0%	79.5%	911
2:00 PM	36	107.2%	66.5%	762
3:00 PM	32	95.3%	49.9%	572
4:00 PM	26	77.4%	40.5%	465
5:00 PM	32	95.3%	145.6%	1,668
6:00 PM	43	128.0%	244.5%	2,802
7:00 PM	38	113.2%	172.9%	1,981
8:00 PM	38	113.2%	70.2%	805
9:00 PM	36	107.2%	66.5%	762
10:00 PM	32	95.3%	49.9%	572
11:00 PM	30	89.3%	46.8%	536
Average =	33.58		Total Mass =	27,510
Peak Factor =	2.14		(gallons)	

Notes:

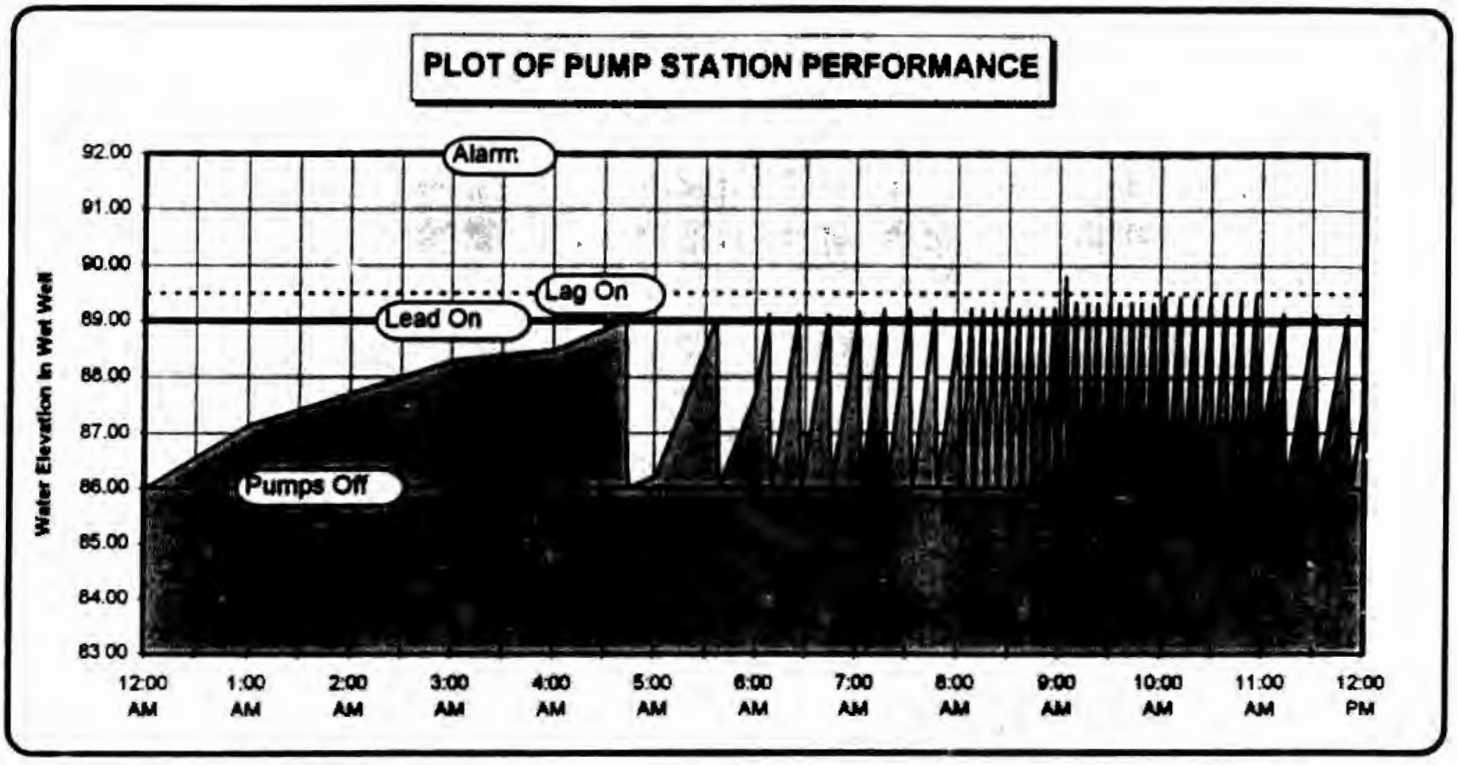
1)	This spreadsheet generates a synthetic flow distribution with the required peak factor that is based on the base flow pattern entered from actual data.
2)	The formula used to calculate peak hourly flow comes from Ten State Standards, 1990 edition, and is based entirely on population Peak Hourly Flow/ADF = (18 + (P)^0.5/(4 + (P)^0.5 where P is population in thousands
3)	The Flow Data used is data from a actual chart recorder for a similar system.

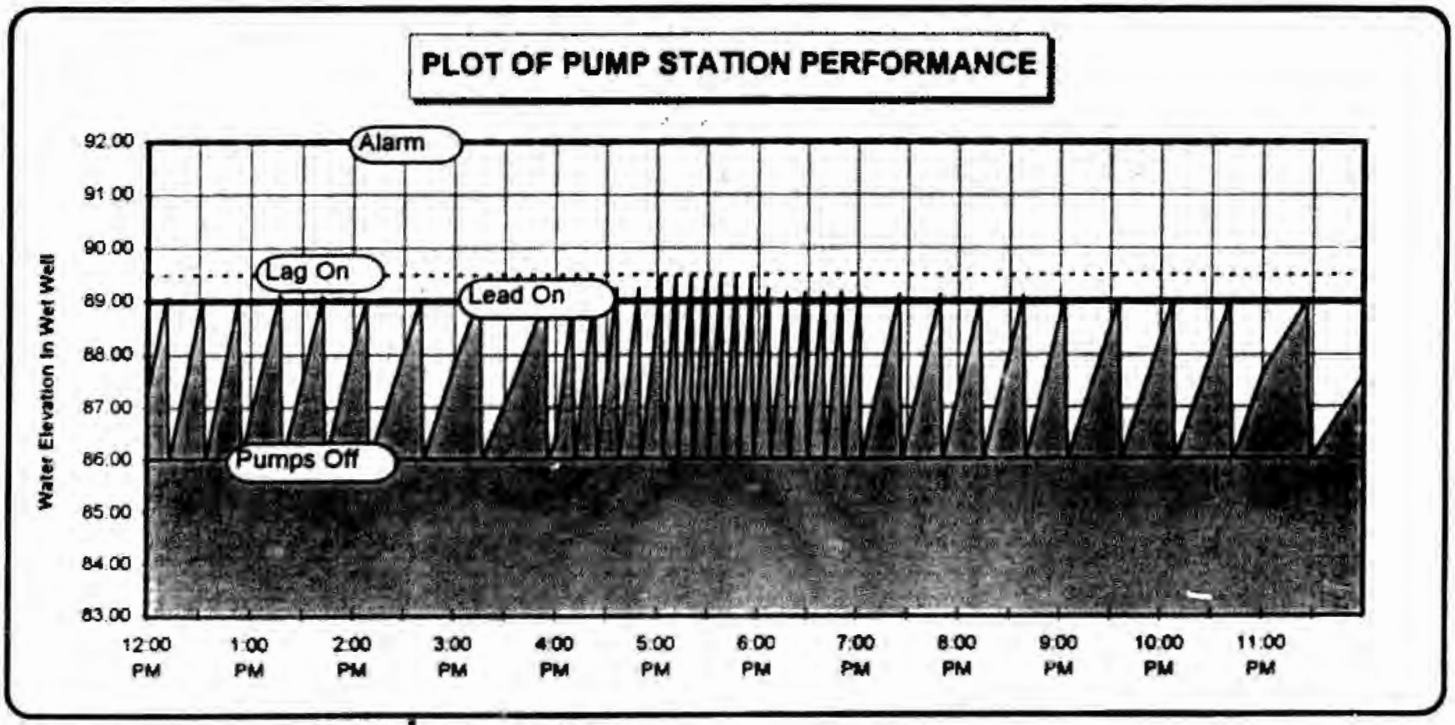
Adjustments to Curve:

0.325	Adjustment applied if base percentage is greater than 100% of ADF. This value is manually adjusted up or down until the Total Mass is equal to the required ADF.
0.8	Adjustment applied to values that are One before and after each peak in the base curve (Normally this will not change)



MEMO : Continued
PROJECT : Terrace Park Wastewater Plant Repermitting
P.N. : 9607





DESIGN MEMO

PROJECT : Terrace Park Wastewater Plant Repermitting

DATE : September 13, 1996

P.N. : 9607

BY : G. Jeffery Hines, P.E.

SUBJECT : Analysis of Pump Station Performance - Circular Wet Well

Description of Pump Station:

Inflow Information:

Time	Design Inflow gal	Design Inflow gal
12:00 AM	286	286
1:00 AM	107	393
2:00 AM	54	447
3:00 AM	54	500
4:00 AM	18	518
5:00 AM	71	590
6:00 AM	447	1,036
7:00 AM	1,101	2,137
8:00 AM	1,398	3,535
9:00 AM	3,649	7,184
10:00 AM	4,691	11,875
11:00 AM	2,763	14,638
12:00 PM	1,038	15,676
1:00 PM	911	16,586
2:00 PM	762	17,349
3:00 PM	572	17,920
4:00 PM	465	18,385
5:00 PM	1,668	20,053
6:00 PM	2,802	22,855
7:00 PM	1,981	24,836
8:00 PM	805	25,640
9:00 PM	762	26,403
10:00 PM	572	26,974
11:00 PM	536	27,510
12:00 AM	286	27,796

Notes:

1) Volume of Wet Well =

(pi *h /3)*(R1^2 + R2^2 + (R1*R2))/2

Where:

h = distance between sections

R1 = radius of lower base

R2 = radius of upper base

2) The inflow numbers shown at the right are assumed to have been received at the beginning of the time period in the column to the left of the inflow number.

3) This spreadsheet can handle different pumps for pump one and pump two, with either one being the lead pump. The model can also alternate the lead pump.

Wet well and Flow Information:

Diameter of Bottom of Wet Well	3.0 feet	
Diameter of Walls of Wet Well	4.0 feet	
Depth of Cone at Bottom	0.5 feet	
Bottom of Wet Well Elevation	85.00 ngvd	
Influent Pipe Invert Elevation	89.04 ngvd	
Bottom of Top Slab Elevation	94.10 ngvd	Assumed
Top Slab Thickness	6 inches	
Average Daily Flow	27,500 gallons	

Control Elevations:

		Depth:	
Pumps Off Elevation	86.00 ngvd	1.00	feet
Lead Pump On Elevation	89.00 ngvd	4.00	feet
Lag Pump On Elev.	89.50 ngvd	4.50	feet
Alarm Elevation	92.00 ngvd	7.00	feet
Max. Allowable Elevation	94.00 ngvd	9.00	feet

Pumping Rates:

Pump One	86.00 ngvd	240.0 gpm
	89.00 ngvd	245.0 gpm
	92.00 ngvd	250.0 gpm
	94.00 ngvd	255.0 gpm
Pump Two	86.00 ngvd	222.0 gpm
	89.00 ngvd	235.0 gpm
	92.00 ngvd	242.0 gpm
	94.00 ngvd	250.0 gpm
Pumps One	86.00 ngvd	288.0 gpm
& Two	89.00 ngvd	297.7 gpm
Together	92.00 ngvd	307.3 gpm
(estimated)	94.00 ngvd	317.0 gpm

Design Condition : Begin Midnight

Lead Pump Selected: Alternate - Start w/#1

Time Increment For Calculation: 60 Seconds

Graph Scale: 1440 Minutes

Volumes At Control Elevations:

			Useable:	
Pumps Off Elevation	80	gallons	0	gallons
Lead Pump On Elevation	362	gallons	282	gallons
Lag Pump On Elev.	489	gallons	409	gallons
Alarm Elevation	644	gallons	564	gallons
Max. Allowable Elevation	832	gallons	752	gallons

Initial State Data:

Prev. Water Elev.	86.00
Vol. above Pumps Off	0
Level State	2
Total Inflow	0
Total Pumped	0
Volume in WW	104

Maximum Storage Required in Wet Well	438	gal.
Maximum Water Level Attained in Wet Well	89.81	ngvd
Maximum Pump Off Time (Rest)	4 hrs,	42.1 min
Minimum Pump Off Time (Rest)	0 hrs,	4.0 min
Minimum Run Time (Lead Pump)	0 hrs,	2.0 min
Maximum Run Time (Lead Pump)	0 hrs,	3.0 min

12:00 AM	0.00	86.00	1.00	0	2	Pump 1	No	No	Both Off	0	240.0	222.0	288.0	0.0	0	80
12:00 AM	0.10	86.00	1.00	0	2	Pump 1	No	No	Both Off	0	240.0	222.0	288.0	0.0	0	80
12:01 AM	1.10	86.00	1.00	0	2	Pump 1	No	No	Both Off	2	240.0	222.0	288.0	0.0	0	82
12:02 AM	2.10	86.02	1.02	2	2	Pump 1	No	No	Both Off	4	240.0	222.1	288.1	0.0	0	84
12:03 AM	3.10	86.04	1.04	4	2	Pump 1	No	No	Both Off	6	240.1	222.2	288.1	0.0	0	86
12:04 AM	4.10	86.06	1.06	6	2	Pump 1	No	No	Both Off	7	240.1	222.3	288.2	0.0	0	88
12:05 AM	5.10	86.08	1.08	7	2	Pump 1	No	No	Both Off	9	240.1	222.3	288.3	0.0	0	89
12:06 AM	6.10	86.10	1.10	9	2	Pump 1	No	No	Both Off	11	240.2	222.4	288.3	0.0	0	91
12:07 AM	7.10	86.12	1.12	11	2	Pump 1	No	No	Both Off	13	240.2	222.5	288.4	0.0	0	93
12:08 AM	8.10	86.13	1.13	13	2	Pump 1	No	No	Both Off	14	240.2	222.6	288.4	0.0	0	95
12:09 AM	9.10	86.15	1.15	14	2	Pump 1	No	No	Both Off	16	240.3	222.7	288.5	0.0	0	96
12:10 AM	10.10	86.17	1.17	16	2	Pump 1	No	No	Both Off	18	240.3	222.7	288.6	0.0	0	98
12:11 AM	11.10	86.19	1.19	18	2	Pump 1	No	No	Both Off	20	240.3	222.8	288.6	0.0	0	100
12:12 AM	12.10	86.21	1.21	20	2	Pump 1	No	No	Both Off	22	240.4	222.9	288.7	0.0	0	102
12:13 AM	13.10	86.23	1.23	22	2	Pump 1	No	No	Both Off	23	240.4	223.0	288.7	0.0	0	104
12:14 AM	14.10	86.25	1.25	23	2	Pump 1	No	No	Both Off	25	240.4	223.1	288.8	0.0	0	105
12:15 AM	15.10	86.27	1.27	25	2	Pump 1	No	No	Both Off	27	240.4	223.2	288.9	0.0	0	107
12:16 AM	16.10	86.29	1.29	27	2	Pump 1	No	No	Both Off	29	240.5	223.2	288.9	0.0	0	109
12:17 AM	17.10	86.31	1.31	29	2	Pump 1	No	No	Both Off	31	240.5	223.3	289.0	0.0	0	111
12:18 AM	18.10	86.33	1.33	31	2	Pump 1	No	No	Both Off	32	240.5	223.4	289.0	0.0	0	113
12:19 AM	19.10	86.34	1.34	32	2	Pump 1	No	No	Both Off	34	240.6	223.5	289.1	0.0	0	114
12:20 AM	20.10	86.36	1.36	34	2	Pump 1	No	No	Both Off	36	240.6	223.6	289.2	0.0	0	116
12:21 AM	21.10	86.38	1.38	36	2	Pump 1	No	No	Both Off	38	240.6	223.7	289.2	0.0	0	118
12:22 AM	22.10	86.40	1.40	38	2	Pump 1	No	No	Both Off	39	240.7	223.7	289.3	0.0	0	120
12:23 AM	23.10	86.42	1.42	39	2	Pump 1	No	No	Both Off	41	240.7	223.8	289.4	0.0	0	121
12:24 AM	24.10	86.44	1.44	41	2	Pump 1	No	No	Both Off	43	240.7	223.9	289.4	0.0	0	123
12:25 AM	25.10	86.46	1.46	43	2	Pump 1	No	No	Both Off	45	240.8	224.0	289.5	0.0	0	125
12:26 AM	26.10	86.48	1.48	45	2	Pump 1	No	No	Both Off	47	240.8	224.1	289.5	0.0	0	127
12:27 AM	27.10	86.50	1.50	47	2	Pump 1	No	No	Both Off	48	240.8	224.1	289.6	0.0	0	129
12:28 AM	28.10	86.52	1.52	48	2	Pump 1	No	No	Both Off	50	240.9	224.2	289.7	0.0	0	130
12:29 AM	29.10	86.53	1.53	50	2	Pump 1	No	No	Both Off	52	240.9	224.3	289.7	0.0	0	132
12:30 AM	30.10	86.55	1.55	52	2	Pump 1	No	No	Both Off	54	240.9	224.4	289.8	0.0	0	134
12:31 AM	31.10	86.57	1.57	54	2	Pump 1	No	No	Both Off	56	241.0	224.5	289.8	0.0	0	136
12:32 AM	32.10	86.59	1.59	56	2	Pump 1	No	No	Both Off	57	241.0	224.6	289.9	0.0	0	138
12:33 AM	33.10	86.61	1.61	57	2	Pump 1	No	No	Both Off	59	241.0	224.6	290.0	0.0	0	139
12:34 AM	34.10	86.63	1.63	59	2	Pump 1	No	No	Both Off	61	241.0	224.7	290.0	0.0	0	141
12:35 AM	35.10	86.65	1.65	61	2	Pump 1	No	No	Both Off	63	241.1	224.8	290.1	0.0	0	143
12:36 AM	36.10	86.67	1.67	63	2	Pump 1	No	No	Both Off	64	241.1	224.9	290.1	0.0	0	145
12:37 AM	37.10	86.69	1.69	64	2	Pump 1	No	No	Both Off	66	241.1	225.0	290.2	0.0	0	146
12:38 AM	38.10	86.71	1.71	66	2	Pump 1	No	No	Both Off	68	241.2	225.1	290.3	0.0	0	148
12:39 AM	39.10	86.72	1.72	68	2	Pump 1	No	No	Both Off	70	241.2	225.1	290.3	0.0	0	150
12:40 AM	40.10	86.74	1.74	70	2	Pump 1	No	No	Both Off	72	241.2	225.2	290.4	0.0	0	152
12:41 AM	41.10	86.76	1.76	72	2	Pump 1	No	No	Both Off	73	241.3	225.3	290.5	0.0	0	154
12:42 AM	42.10	86.78	1.78	73	2	Pump 1	No	No	Both Off	75	241.3	225.4	290.5	0.0	0	155
12:43 AM	43.10	86.80	1.80	75	2	Pump 1	No	No	Both Off	77	241.3	225.5	290.6	0.0	0	157
12:44 AM	44.10	86.82	1.82	77	2	Pump 1	No	No	Both Off	79	241.4	225.6	290.6	0.0	0	159
12:45 AM	45.10	86.84	1.84	79	2	Pump 1	No	No	Both Off	81	241.4	225.6	290.7	0.0	0	161
12:46 AM	46.10	86.86	1.86	81	2	Pump 1	No	No	Both Off	82	241.4	225.7	290.8	0.0	0	163
12:47 AM	47.10	86.88	1.88	82	2	Pump 1	No	No	Both Off	84	241.5	225.8	290.8	0.0	0	164
12:48 AM	48.10	86.90	1.90	84	2	Pump 1	No	No	Both Off	86	241.5	225.9	290.9	0.0	0	166
12:49 AM	49.10	86.91	1.91	86	2	Pump 1	No	No	Both Off	88	241.5	226.0	290.9	0.0	0	168
12:50 AM	50.10	86.93	1.93	88	2	Pump 1	No	No	Both Off	90	241.6	226.0	291.0	0.0	0	170
12:51 AM	51.10	86.95	1.95	90	2	Pump 1	No	No	Both Off	91	241.6	226.1	291.1	0.0	0	171
12:52 AM	52.10	86.97	1.97	91	2	Pump 1	No	No	Both Off	93	241.6	226.2	291.1	0.0	0	173
12:53 AM	53.10	86.99	1.99	93	2	Pump 1	No	No	Both Off	95	241.7	226.3	291.2	0.0	0	175
12:54 AM	54.10	87.01	2.01	95	2	Pump 1	No	No	Both Off	97	241.7	226.4	291.3	0.0	0	177
12:55 AM	55.10	87.03	2.03	97	2	Pump 1	No	No	Both Off	98	241.7	226.5	291.3	0.0	0	179
12:56 AM	56.10	87.05	2.05	98	2	Pump 1	No	No	Both Off	100	241.7	226.5	291.4	0.0	0	180

12:00 AM	0.00	86.00	1.00	0	2	Pump 1	No	No	Both Off	0	240.0	222.0	288.0	0.0	0	80
12:00 AM	0.10	86.00	1.00	0	2	Pump 1	No	No	Both Off	0	240.0	222.0	288.0	0.0	0	80
12:01 AM	1.10	86.00	1.00	0	2	Pump 1	No	No	Both Off	2	240.0	222.0	288.0	0.0	0	82
12:02 AM	2.10	86.02	1.02	2	2	Pump 1	No	No	Both Off	4	240.0	222.1	288.1	0.0	0	84
12:03 AM	3.10	86.04	1.04	4	2	Pump 1	No	No	Both Off	6	240.1	222.2	288.1	0.0	0	86
12:04 AM	4.10	86.06	1.06	6	2	Pump 1	No	No	Both Off	7	240.1	222.3	288.2	0.0	0	88
12:05 AM	5.10	86.08	1.08	7	2	Pump 1	No	No	Both Off	9	240.1	222.3	288.3	0.0	0	89
12:06 AM	6.10	86.10	1.10	9	2	Pump 1	No	No	Both Off	11	240.2	222.4	288.3	0.0	0	91
12:07 AM	7.10	86.12	1.12	11	2	Pump 1	No	No	Both Off	13	240.2	222.5	288.4	0.0	0	93
12:08 AM	8.10	86.13	1.13	13	2	Pump 1	No	No	Both Off	14	240.2	222.6	288.4	0.0	0	95
12:09 AM	9.10	86.15	1.15	14	2	Pump 1	No	No	Both Off	16	240.3	222.7	288.5	0.0	0	96
12:10 AM	10.10	86.17	1.17	16	2	Pump 1	No	No	Both Off	18	240.3	222.7	288.6	0.0	0	98
12:11 AM	11.10	86.19	1.19	18	2	Pump 1	No	No	Both Off	20	240.3	222.8	288.6	0.0	0	100
12:12 AM	12.10	86.21	1.21	20	2	Pump 1	No	No	Both Off	22	240.4	222.9	288.7	0.0	0	102
12:13 AM	13.10	86.23	1.23	22	2	Pump 1	No	No	Both Off	23	240.4	223.0	288.7	0.0	0	104
12:14 AM	14.10	86.25	1.25	23	2	Pump 1	No	No	Both Off	25	240.4	223.1	288.8	0.0	0	105
12:15 AM	15.10	86.27	1.27	25	2	Pump 1	No	No	Both Off	27	240.4	223.2	288.9	0.0	0	107
12:16 AM	16.10	86.29	1.29	27	2	Pump 1	No	No	Both Off	29	240.5	223.2	288.9	0.0	0	109
12:17 AM	17.10	86.31	1.31	29	2	Pump 1	No	No	Both Off	31	240.5	223.3	289.0	0.0	0	111
12:18 AM	18.10	86.33	1.33	31	2	Pump 1	No	No	Both Off	32	240.5	223.4	289.0	0.0	0	113
12:19 AM	19.10	86.34	1.34	32	2	Pump 1	No	No	Both Off	34	240.6	223.5	289.1	0.0	0	114
12:20 AM	20.10	86.36	1.36	34	2	Pump 1	No	No	Both Off	36	240.6	223.6	289.2	0.0	0	116
12:21 AM	21.10	86.38	1.38	36	2	Pump 1	No	No	Both Off	38	240.6	223.7	289.2	0.0	0	118
12:22 AM	22.10	86.40	1.40	38	2	Pump 1	No	No	Both Off	39	240.7	223.7	289.3	0.0	0	120
12:23 AM	23.10	86.42	1.42	39	2	Pump 1	No	No	Both Off	41	240.7	223.8	289.4	0.0	0	121
12:24 AM	24.10	86.44	1.44	41	2	Pump 1	No	No	Both Off	43	240.7	223.9	289.4	0.0	0	123
12:25 AM	25.10	86.46	1.46	43	2	Pump 1	No	No	Both Off	45	240.8	224.0	289.5	0.0	0	125
12:26 AM	26.10	86.48	1.48	45	2	Pump 1	No	No	Both Off	47	240.8	224.1	289.5	0.0	0	127
12:27 AM	27.10	86.50	1.50	47	2	Pump 1	No	No	Both Off	48	240.8	224.1	289.6	0.0	0	129
12:28 AM	28.10	86.52	1.52	48	2	Pump 1	No	No	Both Off	50	240.9	224.2	289.7	0.0	0	130
12:29 AM	29.10	86.53	1.53	50	2	Pump 1	No	No	Both Off	52	240.9	224.3	289.7	0.0	0	132
12:30 AM	30.10	86.55	1.55	52	2	Pump 1	No	No	Both Off	54	240.9	224.4	289.8	0.0	0	134
12:31 AM	31.10	86.57	1.57	54	2	Pump 1	No	No	Both Off	56	241.0	224.5	289.8	0.0	0	136
12:32 AM	32.10	86.59	1.59	56	2	Pump 1	No	No	Both Off	57	241.0	224.6	289.9	0.0	0	138
12:33 AM	33.10	86.61	1.61	57	2	Pump 1	No	No	Both Off	59	241.0	224.6	290.0	0.0	0	139
12:34 AM	34.10	86.63	1.63	59	2	Pump 1	No	No	Both Off	61	241.0	224.7	290.0	0.0	0	141
12:35 AM	35.10	86.65	1.65	61	2	Pump 1	No	No	Both Off	63	241.1	224.8	290.1	0.0	0	143
12:36 AM	36.10	86.67	1.67	63	2	Pump 1	No	No	Both Off	64	241.1	224.9	290.1	0.0	0	145
12:37 AM	37.10	86.69	1.69	64	2	Pump 1	No	No	Both Off	66	241.1	225.0	290.2	0.0	0	146
12:38 AM	38.10	86.71	1.71	66	2	Pump 1	No	No	Both Off	68	241.2	225.1	290.3	0.0	0	148
12:39 AM	39.10	86.72	1.72	68	2	Pump 1	No	No	Both Off	70	241.2	225.1	290.3	0.0	0	150
12:40 AM	40.10	86.74	1.74	70	2	Pump 1	No	No	Both Off	72	241.2	225.2	290.4	0.0	0	152
12:41 AM	41.10	86.76	1.76	72	2	Pump 1	No	No	Both Off	73	241.3	225.3	290.5	0.0	0	154
12:42 AM	42.10	86.78	1.78	73	2	Pump 1	No	No	Both Off	75	241.3	225.4	290.5	0.0	0	155
12:43 AM	43.10	86.80	1.80	75	2	Pump 1	No	No	Both Off	77	241.3	225.5	290.6	0.0	0	157
12:44 AM	44.10	86.82	1.82	77	2	Pump 1	No	No	Both Off	79	241.4	225.6	290.6	0.0	0	159
12:45 AM	45.10	86.84	1.84	79	2	Pump 1	No	No	Both Off	81	241.4	225.6	290.7	0.0	0	161
12:46 AM	46.10	86.86	1.86	81	2	Pump 1	No	No	Both Off	82	241.4	225.7	290.8	0.0	0	163
12:47 AM	47.10	86.88	1.88	82	2	Pump 1	No	No	Both Off	84	241.5	225.8	290.8	0.0	0	164
12:48 AM	48.10	86.90	1.90	84	2	Pump 1	No	No	Both Off	86	241.5	225.9	290.9	0.0	0	166
12:49 AM	49.10	86.91	1.91	86	2	Pump 1	No	No	Both Off	88	241.5	226.0	290.9	0.0	0	168
12:50 AM	50.10	86.93	1.93	88	2	Pump 1	No	No	Both Off	90	241.6	226.0	291.0	0.0	0	170
12:51 AM	51.10	86.95	1.95	90	2	Pump 1	No	No	Both Off	91	241.6	226.1	291.1	0.0	0	171
12:52 AM	52.10	86.97	1.97	91	2	Pump 1	No	No	Both Off	93	241.6	226.2	291.1	0.0	0	173
12:53 AM	53.10	86.99	1.99	93	2	Pump 1	No	No	Both Off	95	241.7	226.3	291.2	0.0	0	175
12:54 AM	54.10	87.01	2.01	95	2	Pump 1	No	No	Both Off	97	241.7	226.4	291.3	0.0	0	177
12:55 AM	55.10	87.03	2.03	97	2	Pump 1	No	No	Both Off	98	241.7	226.5	291.3	0.0	0	179
12:56 AM	56.10	87.05	2.05	98	2	Pump 1	No	No	Both Off	100	241.7	226.5	291.4	0.0	0	180

12:57 AM	57.10	87.07	2.07	100	2	Pump 1	No	No	Both Off	102	241.8	226.6	291.4	0.0	0	182
12:58 AM	58.10	87.09	2.09	102	2	Pump 1	No	No	Both Off	104	241.8	226.7	291.5	0.0	0	184
12:59 AM	59.10	87.10	2.10	104	2	Pump 1	No	No	Both Off	106	241.8	226.8	291.6	0.0	0	186
1:00 AM	60.10	87.12	2.12	106	2	Pump 1	No	No	Both Off	107	241.9	226.9	291.6	0.0	0	187
1:01 AM	61.10	87.14	2.14	107	2	Pump 1	No	No	Both Off	108	241.9	226.9	291.7	0.0	0	188
1:02 AM	62.10	87.15	2.15	108	2	Pump 1	No	No	Both Off	109	241.9	227.0	291.7	0.0	0	189
1:03 AM	63.10	87.16	2.16	109	2	Pump 1	No	No	Both Off	110	241.9	227.0	291.7	0.0	0	190
1:04 AM	64.10	87.17	2.17	110	2	Pump 1	No	No	Both Off	111	241.9	227.1	291.8	0.0	0	191
1:05 AM	65.10	87.18	2.18	111	2	Pump 1	No	No	Both Off	112	242.0	227.1	291.8	0.0	0	192
1:06 AM	66.10	87.19	2.19	112	2	Pump 1	No	No	Both Off	113	242.0	227.2	291.8	0.0	0	193
1:07 AM	67.10	87.20	2.20	113	2	Pump 1	No	No	Both Off	114	242.0	227.2	291.9	0.0	0	194
1:08 AM	68.10	87.21	2.21	114	2	Pump 1	No	No	Both Off	114	242.0	227.2	291.9	0.0	0	195
1:09 AM	69.10	87.22	2.22	114	2	Pump 1	No	No	Both Off	115	242.0	227.3	291.9	0.0	0	196
1:10 AM	70.10	87.23	2.23	115	2	Pump 1	No	No	Both Off	116	242.0	227.3	292.0	0.0	0	196
1:11 AM	71.10	87.24	2.24	116	2	Pump 1	No	No	Both Off	117	242.1	227.4	292.0	0.0	0	197
1:12 AM	72.10	87.25	2.25	117	2	Pump 1	No	No	Both Off	118	242.1	227.4	292.0	0.0	0	198
1:13 AM	73.10	87.26	2.26	118	2	Pump 1	No	No	Both Off	119	242.1	227.4	292.0	0.0	0	199
1:14 AM	74.10	87.26	2.26	119	2	Pump 1	No	No	Both Off	120	242.1	227.5	292.1	0.0	0	200
1:15 AM	75.10	87.27	2.27	120	2	Pump 1	No	No	Both Off	121	242.1	227.5	292.1	0.0	0	201
1:16 AM	76.10	87.28	2.28	121	2	Pump 1	No	No	Both Off	122	242.1	227.6	292.1	0.0	0	202
1:17 AM	77.10	87.29	2.29	122	2	Pump 1	No	No	Both Off	122	242.2	227.6	292.2	0.0	0	203
1:18 AM	78.10	87.30	2.30	122	2	Pump 1	No	No	Both Off	123	242.2	227.6	292.2	0.0	0	204
1:19 AM	79.10	87.31	2.31	123	2	Pump 1	No	No	Both Off	124	242.2	227.7	292.2	0.0	0	204
1:20 AM	80.10	87.32	2.32	124	2	Pump 1	No	No	Both Off	125	242.2	227.7	292.3	0.0	0	205
1:21 AM	81.10	87.33	2.33	125	2	Pump 1	No	No	Both Off	126	242.2	227.8	292.3	0.0	0	206
1:22 AM	82.10	87.34	2.34	126	2	Pump 1	No	No	Both Off	127	242.2	227.8	292.3	0.0	0	207
1:23 AM	83.10	87.35	2.35	127	2	Pump 1	No	No	Both Off	128	242.3	227.9	292.4	0.0	0	208
1:24 AM	84.10	87.36	2.36	128	2	Pump 1	No	No	Both Off	129	242.3	227.9	292.4	0.0	0	209
1:25 AM	85.10	87.37	2.37	129	2	Pump 1	No	No	Both Off	130	242.3	227.9	292.4	0.0	0	210
1:26 AM	86.10	87.38	2.38	130	2	Pump 1	No	No	Both Off	131	242.3	228.0	292.4	0.0	0	211
1:27 AM	87.10	87.39	2.39	131	2	Pump 1	No	No	Both Off	131	242.3	228.0	292.5	0.0	0	212
1:28 AM	88.10	87.40	2.40	131	2	Pump 1	No	No	Both Off	132	242.3	228.1	292.5	0.0	0	212
1:29 AM	89.10	87.41	2.41	132	2	Pump 1	No	No	Both Off	133	242.3	228.1	292.5	0.0	0	213
1:30 AM	90.10	87.42	2.42	133	2	Pump 1	No	No	Both Off	134	242.4	228.1	292.6	0.0	0	214
1:31 AM	91.10	87.43	2.43	134	2	Pump 1	No	No	Both Off	135	242.4	228.2	292.6	0.0	0	215
1:32 AM	92.10	87.44	2.44	135	2	Pump 1	No	No	Both Off	136	242.4	228.2	292.6	0.0	0	216
1:33 AM	93.10	87.45	2.45	136	2	Pump 1	No	No	Both Off	137	242.4	228.3	292.7	0.0	0	217
1:34 AM	94.10	87.46	2.46	137	2	Pump 1	No	No	Both Off	138	242.4	228.3	292.7	0.0	0	218
1:35 AM	95.10	87.46	2.46	138	2	Pump 1	No	No	Both Off	139	242.4	228.3	292.7	0.0	0	219
1:36 AM	96.10	87.47	2.47	139	2	Pump 1	No	No	Both Off	139	242.5	228.4	292.7	0.0	0	220
1:37 AM	97.10	87.48	2.48	139	2	Pump 1	No	No	Both Off	140	242.5	228.4	292.8	0.0	0	221
1:38 AM	98.10	87.49	2.49	140	2	Pump 1	No	No	Both Off	141	242.5	228.5	292.8	0.0	0	221
1:39 AM	99.10	87.50	2.50	141	2	Pump 1	No	No	Both Off	142	242.5	228.5	292.8	0.0	0	222
1:40 AM	100.10	87.51	2.51	142	2	Pump 1	No	No	Both Off	143	242.5	228.6	292.9	0.0	0	223
1:41 AM	101.10	87.52	2.52	143	2	Pump 1	No	No	Both Off	144	242.5	228.6	292.9	0.0	0	224
1:42 AM	102.10	87.53	2.53	144	2	Pump 1	No	No	Both Off	145	242.6	228.6	292.9	0.0	0	225
1:43 AM	103.10	87.54	2.54	145	2	Pump 1	No	No	Both Off	146	242.6	228.7	292.0	0.0	0	226
1:44 AM	104.10	87.55	2.55	146	2	Pump 1	No	No	Both Off	147	242.6	228.7	293.0	0.0	0	227
1:45 AM	105.10	87.56	2.56	147	2	Pump 1	No	No	Both Off	147	242.6	228.8	293.0	0.0	0	228
1:46 AM	106.10	87.57	2.57	147	2	Pump 1	No	No	Both Off	148	242.6	228.8	292.1	0.0	0	229
1:47 AM	107.10	87.58	2.58	148	2	Pump 1	No	No	Both Off	149	242.6	228.8	293.1	0.0	0	229
1:48 AM	108.10	87.59	2.59	149	2	Pump 1	No	No	Both Off	150	242.6	228.9	293.1	0.0	0	230
1:49 AM	109.10	87.60	2.60	150	2	Pump 1	No	No	Both Off	151	242.7	228.9	293.1	0.0	0	231
1:50 AM	110.10	87.61	2.61	151	2	Pump 1	No	No	Both Off	152	242.7	229.0	293.2	0.0	0	232
1:51 AM	111.10	87.62	2.62	152	2	Pump 1	No	No	Both Off	153	242.7	229.0	293.2	0.0	0	233
1:52 AM	112.10	87.63	2.63	153	2	Pump 1	No	No	Both Off	154	242.7	229.0	293.2	0.0	0	234
1:53 AM	113.10	87.64	2.64	154	2	Pump 1	No	No	Both Off	155	242.7	229.1	293.3	0.0	0	235
1:54 AM	114.10	87.65	2.65	155	2	Pump 1	No	No	Both Off	156	242.7	229.1	293.3	0.0	0	236
1:55 AM	115.10	87.66	2.65	156	2	Pump 1	No	No	Both Off	156	242.8	229.2	293.3	0.0	0	237
1:56 AM	116.10	87.66	2.66	156	2	Pump 1	No	No	Both Off	157	242.8	229.2	293.4	0.0	0	237
1:57 AM	117.10	87.67	2.67	157	2	Pump 1	No	No	Both Off	158	242.8	229.3	293.4	0.0	0	238
1:58 AM	118.10	87.68	2.68	158	2	Pump 1	No	No	Both Off	159	242.8	229.3	293.4	0.0	0	239

1:59 AM	119.10	87.69	2.69	159	2	Pump 1	No	No	Both Off	160	242.8	229.3	293.5	0.0	0	240
2:00 AM	120.10	87.70	2.70	160	2	Pump 1	No	No	Both Off	161	242.8	229.4	293.5	0.0	0	241
2:01 AM	121.10	87.71	2.71	161	2	Pump 1	No	No	Both Off	162	242.9	229.4	293.5	0.0	0	242
2:02 AM	122.10	87.72	2.72	162	2	Pump 1	No	No	Both Off	163	242.9	229.5	293.5	0.0	0	243
2:03 AM	123.10	87.73	2.73	163	2	Pump 1	No	No	Both Off	164	242.9	229.5	293.6	0.0	0	244
2:04 AM	124.10	87.74	2.74	164	2	Pump 1	No	No	Both Off	164	242.9	229.5	293.6	0.0	0	245
2:05 AM	125.10	87.75	2.75	164	2	Pump 1	No	No	Both Off	165	242.9	229.6	293.6	0.0	0	246
2:06 AM	126.10	87.76	2.76	165	2	Pump 1	No	No	Both Off	166	242.9	229.6	293.7	0.0	0	246
2:07 AM	127.10	87.77	2.77	166	2	Pump 1	No	No	Both Off	167	242.9	229.7	293.7	0.0	0	247
2:08 AM	128.10	87.78	2.78	167	2	Pump 1	No	No	Both Off	168	243.0	229.7	293.7	0.0	0	248
2:09 AM	129.10	87.79	2.79	168	2	Pump 1	No	No	Both Off	169	243.0	229.7	293.8	0.0	0	249
2:10 AM	130.10	87.80	2.80	169	2	Pump 1	No	No	Both Off	170	243.0	229.8	293.8	0.0	0	250
2:11 AM	131.10	87.81	2.81	170	2	Pump 1	No	No	Both Off	171	243.0	229.8	293.8	0.0	0	251
2:12 AM	132.10	87.82	2.82	171	2	Pump 1	No	No	Both Off	172	243.0	229.9	293.9	0.0	0	252
2:13 AM	133.10	87.83	2.83	172	2	Pump 1	No	No	Both Off	172	243.0	229.9	293.9	0.0	0	253
2:14 AM	134.10	87.84	2.84	172	2	Pump 1	No	No	Both Off	173	243.1	230.0	293.9	0.0	0	254
2:15 AM	135.10	87.84	2.84	173	2	Pump 1	No	No	Both Off	174	243.1	230.0	293.9	0.0	0	254
2:16 AM	136.10	87.85	2.85	174	2	Pump 1	No	No	Both Off	175	243.1	230.0	294.0	0.0	0	255
2:17 AM	137.10	87.86	2.86	175	2	Pump 1	No	No	Both Off	176	243.1	230.1	294.0	0.0	0	256
2:18 AM	138.10	87.87	2.87	176	2	Pump 1	No	No	Both Off	177	243.1	230.1	294.0	0.0	0	257
2:19 AM	139.10	87.88	2.88	177	2	Pump 1	No	No	Both Off	178	243.1	230.2	294.1	0.0	0	258
2:20 AM	140.10	87.89	2.89	178	2	Pump 1	No	No	Both Off	179	243.2	230.2	294.1	0.0	0	259
2:21 AM	141.10	87.90	2.90	179	2	Pump 1	No	No	Both Off	180	243.2	230.2	294.1	0.0	0	260
2:22 AM	142.10	87.91	2.91	180	2	Pump 1	No	No	Both Off	181	243.2	230.3	294.2	0.0	0	261
2:23 AM	143.10	87.92	2.92	181	2	Pump 1	No	No	Both Off	181	243.2	230.3	294.2	0.0	0	262
2:24 AM	144.10	87.93	2.93	181	2	Pump 1	No	No	Both Off	182	243.2	230.4	294.2	0.0	0	262
2:25 AM	145.10	87.94	2.94	182	2	Pump 1	No	No	Both Off	183	243.2	230.4	294.2	0.0	0	263
2:26 AM	146.10	87.95	2.95	183	2	Pump 1	No	No	Both Off	184	243.2	230.4	294.3	0.0	0	264
2:27 AM	147.10	87.96	2.96	184	2	Pump 1	No	No	Both Off	185	243.3	230.5	294.3	0.0	0	265
2:28 AM	148.10	87.97	2.97	185	2	Pump 1	No	No	Both Off	186	243.3	230.5	294.3	0.0	0	266
2:29 AM	149.10	87.98	2.98	186	2	Pump 1	No	No	Both Off	187	243.3	230.6	294.4	0.0	0	267
2:30 AM	150.10	87.99	2.99	187	2	Pump 1	No	No	Both Off	188	243.3	230.6	294.4	0.0	0	268
2:31 AM	151.10	88.00	3.00	188	2	Pump 1	No	No	Both Off	189	243.3	230.7	294.4	0.0	0	269
2:32 AM	152.10	88.01	3.01	189	2	Pump 1	No	No	Both Off	189	243.3	230.7	294.5	0.0	0	270
2:33 AM	153.10	88.02	3.02	189	2	Pump 1	No	No	Both Off	190	243.4	230.7	294.5	0.0	0	271
2:34 AM	154.10	88.03	3.03	190	2	Pump 1	No	No	Both Off	191	243.4	230.8	294.5	0.0	0	271
2:35 AM	155.10	88.03	3.03	191	2	Pump 1	No	No	Both Off	192	243.4	230.8	294.6	0.0	0	272
2:36 AM	156.10	88.04	3.04	192	2	Pump 1	No	No	Both Off	193	243.4	230.9	294.6	0.0	0	273
2:37 AM	157.10	88.05	3.05	193	2	Pump 1	No	No	Both Off	194	243.4	230.9	294.6	0.0	0	274
2:38 AM	158.10	88.06	3.06	194	2	Pump 1	No	No	Both Off	195	243.4	230.9	294.6	0.0	0	275
2:39 AM	159.10	88.07	3.07	195	2	Pump 1	No	No	Both Off	196	243.5	231.0	294.7	0.0	0	276
2:40 AM	160.10	88.08	3.08	196	2	Pump 1	No	No	Both Off	197	243.5	231.0	294.7	0.0	0	277
2:41 AM	161.10	88.09	3.09	197	2	Pump 1	No	No	Both Off	198	243.5	231.1	294.7	0.0	0	278
2:42 AM	162.10	88.10	3.10	198	2	Pump 1	No	No	Both Off	198	243.5	231.1	294.8	0.0	0	279
2:43 AM	163.10	88.11	3.11	198	2	Pump 1	No	No	Both Off	199	243.5	231.1	294.8	0.0	0	279
2:44 AM	164.10	88.12	3.12	199	2	Pump 1	No	No	Both Off	200	243.5	231.2	294.8	0.0	0	280
2:45 AM	165.10	88.13	3.13	200	2	Pump 1	No	No	Both Off	201	243.5	231.2	294.9	0.0	0	281
2:46 AM	166.10	88.14	3.14	201	2	Pump 1	No	No	Both Off	202	243.6	231.3	294.9	0.0	0	282
2:47 AM	167.10	88.15	3.15	202	2	Pump 1	No	No	Both Off	203	243.6	231.3	294.9	0.0	0	283
2:48 AM	168.10	88.16	3.16	203	2	Pump 1	No	No	Both Off	204	243.6	231.4	295.0	0.0	0	284
2:49 AM	169.10	88.17	3.17	204	2	Pump 1	No	No	Both Off	205	243.6	231.4	295.0	0.0	0	285
2:50 AM	170.10	88.18	3.18	205	2	Pump 1	No	No	Both Off	206	243.6	231.4	295.0	0.0	0	286
2:51 AM	171.10	88.19	3.19	206	2	Pump 1	No	No	Both Off	206	243.6	231.5	295.0	0.0	0	287
2:52 AM	172.10	88.20	3.20	206	2	Pump 1	No	No	Both Off	207	243.7	231.5	295.1	0.0	0	288
2:53 AM	173.10	88.21	3.21	207	2	Pump 1	No	No	Both Off	208	243.7	231.6	295.1	0.0	0	288
2:54 AM	174.10	88.22	3.22	208	2	Pump 1	No	No	Both Off	209	243.7	231.6	295.1	0.0	0	289
2:55 AM	175.10	88.22	3.22	209	2	Pump 1	No	No	Both Off	210	243.7	231.6	295.2	0.0	0	290
2:56 AM	176.10	88.23	3.23	210	2	Pump 1	No	No	Both Off	211	243.7	231.7	295.2	0.0	0	291
2:57 AM	177.10	88.24	3.24	211	2	Pump 1	No	No	Both Off	212	243.7	231.7	295.2	0.0	0	292
2:58 AM	178.10	88.25	3.25	212	2	Pump 1	No	No	Both Off	213	243.8	231.8	295.3	0.0	0	293
2:59 AM	179.10	88.26	3.26	213	2	Pump 1	No	No	Both Off	214	243.8	231.8	295.3	0.0	0	294
3:00 AM	180.10	88.27	3.27	214	2	Pump 1	No	No	Both Off	214	243.8	231.8	295.3	0.0	0	295

3:01 AM	181.10	88.28	3.28	214	2	Pump 1	No	No	Both Off	215	243.8	231.9	295.4	0.0	0	295
3:02 AM	182.10	88.28	3.28	215	2	Pump 1	No	No	Both Off	215	243.8	231.9	295.4	0.0	0	295
3:03 AM	183.10	88.29	3.29	215	2	Pump 1	No	No	Both Off	215	243.8	231.9	295.4	0.0	0	295
3:04 AM	184.10	88.29	3.29	215	2	Pump 1	No	No	Both Off	216	243.8	231.9	295.4	0.0	0	296
3:05 AM	185.10	88.29	3.29	216	2	Pump 1	No	No	Both Off	216	243.8	231.9	295.4	0.0	0	296
3:06 AM	186.10	88.30	3.30	216	2	Pump 1	No	No	Both Off	216	243.8	232.0	295.4	0.0	0	296
3:07 AM	187.10	88.30	3.30	216	2	Pump 1	No	No	Both Off	217	243.8	232.0	295.4	0.0	0	297
3:08 AM	188.10	88.30	3.30	217	2	Pump 1	No	No	Both Off	217	243.8	232.0	295.4	0.0	0	297
3:09 AM	189.10	88.31	3.31	217	2	Pump 1	No	No	Both Off	217	243.8	232.0	295.4	0.0	0	297
3:10 AM	190.10	88.31	3.31	217	2	Pump 1	No	No	Both Off	217	243.8	232.0	295.4	0.0	0	298
3:11 AM	191.10	88.31	3.31	217	2	Pump 1	No	No	Both Off	218	243.9	232.0	295.5	0.0	0	298
3:12 AM	192.10	88.32	3.32	218	2	Pump 1	No	No	Both Off	218	243.9	232.0	295.5	0.0	0	298
3:13 AM	193.10	88.32	3.32	218	2	Pump 1	No	No	Both Off	218	243.9	232.1	295.5	0.0	0	298
3:14 AM	194.10	88.32	3.32	218	2	Pump 1	No	No	Both Off	219	243.9	232.1	295.5	0.0	0	299
3:15 AM	195.10	88.33	3.33	219	2	Pump 1	No	No	Both Off	219	243.9	232.1	295.5	0.0	0	299
3:16 AM	196.10	88.33	3.33	219	2	Pump 1	No	No	Both Off	219	243.9	232.1	295.5	0.0	0	299
3:17 AM	197.10	88.33	3.33	219	2	Pump 1	No	No	Both Off	219	243.9	232.1	295.5	0.0	0	300
3:18 AM	198.10	88.34	3.34	219	2	Pump 1	No	No	Both Off	220	243.9	232.1	295.5	0.0	0	300
3:19 AM	199.10	88.34	3.34	220	2	Pump 1	No	No	Both Off	220	243.9	232.1	295.5	0.0	0	300
3:20 AM	200.10	88.34	3.34	220	2	Pump 1	No	No	Both Off	220	243.9	232.1	295.5	0.0	0	301
3:21 AM	201.10	88.34	3.34	220	2	Pump 1	No	No	Both Off	221	243.9	232.2	295.6	0.0	0	301
3:22 AM	202.10	88.35	3.35	221	2	Pump 1	No	No	Both Off	221	243.9	232.2	295.6	0.0	0	301
3:23 AM	203.10	88.35	3.35	221	2	Pump 1	No	No	Both Off	221	243.9	232.2	295.6	0.0	0	301
3:24 AM	204.10	88.35	3.35	221	2	Pump 1	No	No	Both Off	222	243.9	232.2	295.6	0.0	0	302
3:25 AM	205.10	88.36	3.36	222	2	Pump 1	No	No	Both Off	222	243.9	232.2	295.6	0.0	0	302
3:26 AM	206.10	88.36	3.36	222	2	Pump 1	No	No	Both Off	222	243.9	232.2	295.6	0.0	0	302
3:27 AM	207.10	88.36	3.36	222	2	Pump 1	No	No	Both Off	222	243.9	232.2	295.6	0.0	0	303
3:28 AM	208.10	88.37	3.37	222	2	Pump 1	No	No	Both Off	223	243.9	232.3	295.6	0.0	0	303
3:29 AM	209.10	88.37	3.37	223	2	Pump 1	No	No	Both Off	223	243.9	232.3	295.6	0.0	0	303
3:30 AM	210.10	88.37	3.37	223	2	Pump 1	No	No	Both Off	223	244.0	232.3	295.6	0.0	0	304
3:31 AM	211.10	88.38	3.38	223	2	Pump 1	No	No	Both Off	224	244.0	232.3	295.7	0.0	0	304
3:32 AM	212.10	88.38	3.38	224	2	Pump 1	No	No	Both Off	224	244.0	232.3	295.7	0.0	0	304
3:33 AM	213.10	88.38	3.38	224	2	Pump 1	No	No	Both Off	224	244.0	232.3	295.7	0.0	0	304
3:34 AM	214.10	88.39	3.39	224	2	Pump 1	No	No	Both Off	225	244.0	232.3	295.7	0.0	0	305
3:35 AM	215.10	88.39	3.39	225	2	Pump 1	No	No	Both Off	225	244.0	232.4	295.7	0.0	0	305
3:36 AM	216.10	88.39	3.39	225	2	Pump 1	No	No	Both Off	225	244.0	232.4	295.7	0.0	0	305
3:37 AM	217.10	88.40	3.40	225	2	Pump 1	No	No	Both Off	225	244.0	232.4	295.7	0.0	0	306
3:38 AM	218.10	88.40	3.40	225	2	Pump 1	No	No	Both Off	226	244.0	232.4	295.7	0.0	0	306
3:39 AM	219.10	88.40	3.40	226	2	Pump 1	No	No	Both Off	226	244.0	232.4	295.7	0.0	0	306
3:40 AM	220.10	88.40	3.40	226	2	Pump 1	No	No	Both Off	226	244.0	232.4	295.7	0.0	0	307
3:41 AM	221.10	88.41	3.41	226	2	Pump 1	No	No	Both Off	227	244.0	232.4	295.8	0.0	0	307
3:42 AM	222.10	88.41	3.41	227	2	Pump 1	No	No	Both Off	227	244.0	232.4	295.8	0.0	0	307
3:43 AM	223.10	88.41	3.41	227	2	Pump 1	No	No	Both Off	227	244.0	232.5	295.8	0.0	0	307
3:44 AM	224.10	88.42	3.42	227	2	Pump 1	No	No	Both Off	228	244.0	232.5	295.8	0.0	0	308
3:45 AM	225.10	88.42	3.42	228	2	Pump 1	No	No	Both Off	228	244.0	232.5	295.8	0.0	0	308
3:46 AM	226.10	88.42	3.42	228	2	Pump 1	No	No	Both Off	228	244.0	232.5	295.8	0.0	0	308
3:47 AM	227.10	88.43	3.43	228	2	Pump 1	No	No	Both Off	228	244.0	232.5	295.8	0.0	0	309
3:48 AM	228.10	88.43	3.43	228	2	Pump 1	No	No	Both Off	229	244.1	232.5	295.8	0.0	0	309
3:49 AM	229.10	88.43	3.43	229	2	Pump 1	No	No	Both Off	229	244.1	232.5	295.8	0.0	0	309
3:50 AM	230.10	88.44	3.44	229	2	Pump 1	No	No	Both Off	229	244.1	232.6	295.9	0.0	0	309
3:51 AM	231.10	88.44	3.44	229	2	Pump 1	No	No	Both Off	230	244.1	232.6	295.9	0.0	0	310
3:52 AM	232.10	88.44	3.44	230	2	Pump 1	No	No	Both Off	230	244.1	232.6	295.9	0.0	0	310
3:53 AM	233.10	88.45	3.45	230	2	Pump 1	No	No	Both Off	230	244.1	232.6	295.9	0.0	0	310
3:54 AM	234.10	88.45	3.45	230	2	Pump 1	No	No	Both Off	230	244.1	232.6	295.9	0.0	0	311
3:55 AM	235.10	88.45	3.45	230	2	Pump 1	No	No	Both Off	231	244.1	232.6	295.9	0.0	0	311
3:56 AM	236.10	88.46	3.46	231	2	Pump 1	No	No	Both Off	231	244.1	232.6	295.9	0.0	0	311
3:57 AM	237.10	88.46	3.46	231	2	Pump 1	No	No	Both Off	231	244.1	232.7	295.9	0.0	0	312
3:58 AM	238.10	88.46	3.46	231	2	Pump 1	No	No	Both Off	232	244.1	232.7	295.9	0.0	0	312
3:59 AM	239.10	88.47	3.47	232	2	Pump 1	No	No	Both Off	232	244.1	232.7	295.9	0.0	0	312
4:00 AM	240.10	88.47	3.47	232	2	Pump 1	No	No	Both Off	232	244.1	232.7	296.0	0.0	0	313
4:01 AM	241.10	88.47	3.47	232	2	Pump 1	No	No	Both Off	234	244.1	232.7	296.0	0.0	0	314
4:02 AM	242.10	88.48	3.48	234	2	Pump 1	No	No	Both Off	235	244.1	232.8	296.0	0.0	0	315

4:03 AM	243.10	88.50	3.50	235	2	Pump 1	No	No	Both Off	236	244.2	232.8	296.0	0.0	0	316
4:04 AM	244.10	88.51	3.51	236	2	Pump 1	No	No	Both Off	237	244.2	232.9	296.1	0.0	0	317
4:05 AM	245.10	88.52	3.52	237	2	Pump 1	No	No	Both Off	238	244.2	232.9	296.1	0.0	0	319
4:06 AM	246.10	88.54	3.54	238	2	Pump 1	No	No	Both Off	240	244.2	233.0	296.2	0.0	0	320
4:07 AM	247.10	88.55	3.55	240	2	Pump 1	No	No	Both Off	241	244.2	233.0	296.2	0.0	0	321
4:08 AM	248.10	88.56	3.56	241	2	Pump 1	No	No	Both Off	242	244.3	233.1	296.3	0.0	0	322
4:09 AM	249.10	88.57	3.57	242	2	Pump 1	No	No	Both Off	243	244.3	233.2	296.3	0.0	0	323
4:10 AM	250.10	88.59	3.59	243	2	Pump 1	No	No	Both Off	244	244.3	233.2	296.3	0.0	0	324
4:11 AM	251.10	88.60	3.60	244	2	Pump 1	No	No	Both Off	245	244.3	233.3	296.4	0.0	0	326
4:12 AM	252.10	88.61	3.61	245	2	Pump 1	No	No	Both Off	247	244.4	233.3	296.4	0.0	0	327
4:13 AM	253.10	88.62	3.62	247	2	Pump 1	No	No	Both Off	248	244.4	233.4	296.5	0.0	0	328
4:14 AM	254.10	88.64	3.64	248	2	Pump 1	No	No	Both Off	249	244.4	233.4	296.5	0.0	0	329
4:15 AM	255.10	88.65	3.65	249	2	Pump 1	No	No	Both Off	250	244.4	233.5	296.5	0.0	0	330
4:16 AM	256.10	88.66	3.66	250	2	Pump 1	No	No	Both Off	251	244.4	233.5	296.6	0.0	0	332
4:17 AM	257.10	88.68	3.68	251	2	Pump 1	No	No	Both Off	253	244.5	233.6	296.6	0.0	0	333
4:18 AM	258.10	88.69	3.69	253	2	Pump 1	No	No	Both Off	254	244.5	233.6	296.7	0.0	0	334
4:19 AM	259.10	88.70	3.70	254	2	Pump 1	No	No	Both Off	255	244.5	233.7	296.7	0.0	0	335
4:20 AM	260.10	88.71	3.71	255	2	Pump 1	No	No	Both Off	256	244.5	233.8	296.7	0.0	0	336
4:21 AM	261.10	88.73	3.73	256	2	Pump 1	No	No	Both Off	257	244.5	233.8	296.8	0.0	0	338
4:22 AM	262.10	88.74	3.74	257	2	Pump 1	No	No	Both Off	259	244.6	233.9	296.8	0.0	0	339
4:23 AM	263.10	88.75	3.75	259	2	Pump 1	No	No	Both Off	260	244.6	233.9	296.9	0.0	0	340
4:24 AM	264.10	88.76	3.76	260	2	Pump 1	No	No	Both Off	261	244.6	234.0	296.9	0.0	0	341
4:25 AM	265.10	88.78	3.78	261	2	Pump 1	No	No	Both Off	262	244.6	234.0	296.9	0.0	0	342
4:26 AM	266.10	88.79	3.79	262	2	Pump 1	No	No	Both Off	263	244.6	234.1	297.0	0.0	0	344
4:27 AM	267.10	88.80	3.80	263	2	Pump 1	No	No	Both Off	265	244.7	234.1	297.0	0.0	0	345
4:28 AM	268.10	88.81	3.81	265	2	Pump 1	No	No	Both Off	266	244.7	234.2	297.1	0.0	0	346
4:29 AM	269.10	88.83	3.83	266	2	Pump 1	No	No	Both Off	267	244.7	234.3	297.1	0.0	0	347
4:30 AM	270.10	88.84	3.84	267	2	Pump 1	No	No	Both Off	268	244.7	234.3	297.2	0.0	0	348
4:31 AM	271.10	88.85	3.85	268	2	Pump 1	No	No	Both Off	269	244.8	234.4	297.2	0.0	0	349
4:32 AM	272.10	88.87	3.87	269	2	Pump 1	No	No	Both Off	270	244.8	234.4	297.2	0.0	0	351
4:33 AM	273.10	88.88	3.88	270	2	Pump 1	No	No	Both Off	272	244.8	234.5	297.3	0.0	0	352
4:34 AM	274.10	88.89	3.89	272	2	Pump 1	No	No	Both Off	273	244.8	234.5	297.3	0.0	0	353
4:35 AM	275.10	88.90	3.90	273	2	Pump 1	No	No	Both Off	274	244.8	234.6	297.4	0.0	0	354
4:36 AM	276.10	88.92	3.92	274	2	Pump 1	No	No	Both Off	275	244.9	234.6	297.4	0.0	0	355
4:37 AM	277.10	88.93	3.93	275	2	Pump 1	No	No	Both Off	276	244.9	234.7	297.4	0.0	0	357
4:38 AM	278.10	88.94	3.94	276	2	Pump 1	No	No	Both Off	278	244.9	234.7	297.5	0.0	0	358
4:39 AM	279.10	88.95	3.95	278	2	Pump 1	No	No	Both Off	279	244.9	234.8	297.5	0.0	0	359
4:40 AM	280.10	88.97	3.97	279	2	Pump 1	No	No	Both Off	280	244.9	234.9	297.6	0.0	0	360
4:41 AM	281.10	88.98	3.98	280	2	Pump 1	No	No	Both Off	281	245.0	234.9	297.6	0.0	0	361
4:42 AM	282.10	88.99	3.99	281	2	Pump 1	No	No	Both Off	282	245.0	235.0	297.6	0.0	0	363
4:43 AM	283.10	89.00	4.00	282	3	Pump 1	Yes	No	Pump 1	284	245.0	235.0	297.7	245.0	245	119
4:44 AM	284.10	86.41	1.41	39	11	Pump 1	Yes	No	Pump 1	285	240.7	223.8	289.3	240.7	285	80
4:45 AM	285.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	286	240.0	222.0	288.0	0.0	285	81
4:46 AM	286.10	86.01	1.01	1	2	Pump 2	No	No	Both Off	287	240.0	222.1	288.0	0.0	285	83
4:47 AM	287.10	86.03	1.03	2	2	Pump 2	No	No	Both Off	288	240.0	222.1	288.1	0.0	285	84
4:48 AM	288.10	86.04	1.04	4	2	Pump 2	No	No	Both Off	290	240.1	222.2	288.1	0.0	285	85
4:49 AM	289.10	86.05	1.05	5	2	Pump 2	No	No	Both Off	291	240.1	222.2	288.2	0.0	285	86
4:50 AM	290.10	86.06	1.06	6	2	Pump 2	No	No	Both Off	292	240.1	222.3	288.2	0.0	285	87
4:51 AM	291.10	86.08	1.08	7	2	Pump 2	No	No	Both Off	293	240.1	222.3	288.2	0.0	285	89
4:52 AM	292.10	86.09	1.09	8	2	Pump 2	No	No	Both Off	294	240.1	222.4	288.3	0.0	285	90
4:53 AM	293.10	86.10	1.10	10	2	Pump 2	No	No	Both Off	296	240.2	222.4	288.3	0.0	285	91
4:54 AM	294.10	86.11	1.11	11	2	Pump 2	No	No	Both Off	297	240.2	222.5	288.4	0.0	285	92
4:55 AM	295.10	86.13	1.13	12	2	Pump 2	No	No	Both Off	298	240.2	222.5	288.4	0.0	285	93
4:56 AM	296.10	86.14	1.14	13	2	Pump 2	No	No	Both Off	299	240.2	222.6	288.4	0.0	285	94
4:57 AM	297.10	86.15	1.15	14	2	Pump 2	No	No	Both Off	300	240.3	222.7	288.5	0.0	285	96
4:58 AM	298.10	86.16	1.16	15	2	Pump 2	No	No	Both Off	301	240.3	222.7	288.5	0.0	285	97
4:59 AM	299.10	86.18	1.18	17	2	Pump 2	No	No	Both Off	303	240.3	222.8	288.6	0.0	285	98
5:00 AM	300.10	86.19	1.19	18	2	Pump 2	No	No	Both Off	304	240.3	222.8	288.6	0.0	285	100
5:01 AM	301.10	86.21	1.21	20	2	Pump 2	No	No	Both Off	312	240.3	222.9	288.7	0.0	285	107
5:02 AM	302.10	86.29	1.29	27	2	Pump 2	No	No	Both Off	319	240.5	223.3	288.9	0.0	285	115
5:03 AM	303.10	86.37	1.37	35	2	Pump 2	No	No	Both Off	327	240.6	223.6	289.2	0.0	285	122
5:04 AM	304.10	86.45	1.45	42	2	Pump 2	No	No	Both Off	334	240.7	223.9	289.4	0.0	285	130

4:03 AM	243.10	88.50	3.50	235	2	Pump 1	No	No	Both Off	236	244.2	232.8	296.0	0.0	0	316
4:04 AM	244.10	88.51	3.51	236	2	Pump 1	No	No	Both Off	237	244.2	232.9	296.1	0.0	0	317
4:05 AM	245.10	88.52	3.52	237	2	Pump 1	No	No	Both Off	238	244.2	232.9	296.1	0.0	0	319
4:06 AM	246.10	88.54	3.54	238	2	Pump 1	No	No	Both Off	240	244.2	233.0	296.2	0.0	0	320
4:07 AM	247.10	88.55	3.55	240	2	Pump 1	No	No	Both Off	241	244.2	233.0	296.2	0.0	0	321
4:08 AM	248.10	88.56	3.56	241	2	Pump 1	No	No	Both Off	242	244.3	233.1	296.3	0.0	0	322
4:09 AM	249.10	88.57	3.57	242	2	Pump 1	No	No	Both Off	243	244.3	233.2	296.3	0.0	0	323
4:10 AM	250.10	88.59	3.59	243	2	Pump 1	No	No	Both Off	244	244.3	233.2	296.3	0.0	0	324
4:11 AM	251.10	88.60	3.60	244	2	Pump 1	No	No	Both Off	245	244.3	233.3	296.4	0.0	0	326
4:12 AM	252.10	88.61	3.61	245	2	Pump 1	No	No	Both Off	247	244.4	233.3	296.4	0.0	0	327
4:13 AM	253.10	88.62	3.62	247	2	Pump 1	No	No	Both Off	248	244.4	233.4	296.5	0.0	0	328
4:14 AM	254.10	88.64	3.64	248	2	Pump 1	No	No	Both Off	249	244.4	233.4	296.5	0.0	0	329
4:15 AM	255.10	88.65	3.65	249	2	Pump 1	No	No	Both Off	250	244.4	233.5	296.5	0.0	0	330
4:16 AM	256.10	88.66	3.66	250	2	Pump 1	No	No	Both Off	251	244.4	233.5	296.6	0.0	0	332
4:17 AM	257.10	88.68	3.68	251	2	Pump 1	No	No	Both Off	253	244.5	233.6	296.6	0.0	0	333
4:18 AM	258.10	88.69	3.69	253	2	Pump 1	No	No	Both Off	254	244.5	233.6	296.7	0.0	0	334
4:19 AM	259.10	88.70	3.70	254	2	Pump 1	No	No	Both Off	255	244.5	233.7	296.7	0.0	0	335
4:20 AM	260.10	88.71	3.71	255	2	Pump 1	No	No	Both Off	256	244.5	233.8	296.7	0.0	0	336
4:21 AM	261.10	88.73	3.73	256	2	Pump 1	No	No	Both Off	257	244.5	233.8	296.8	0.0	0	338
4:22 AM	262.10	88.74	3.74	257	2	Pump 1	No	No	Both Off	259	244.6	233.9	296.8	0.0	0	339
4:23 AM	263.10	88.75	3.75	259	2	Pump 1	No	No	Both Off	260	244.6	233.9	296.9	0.0	0	340
4:24 AM	264.10	88.76	3.76	260	2	Pump 1	No	No	Both Off	261	244.6	234.0	296.9	0.0	0	341
4:25 AM	265.10	88.78	3.78	261	2	Pump 1	No	No	Both Off	262	244.6	234.0	296.9	0.0	0	342
4:26 AM	266.10	88.79	3.79	262	2	Pump 1	No	No	Both Off	263	244.6	234.1	297.0	0.0	0	344
4:27 AM	267.10	88.80	3.80	263	2	Pump 1	No	No	Both Off	265	244.7	234.1	297.0	0.0	0	345
4:28 AM	268.10	88.81	3.81	265	2	Pump 1	No	No	Both Off	266	244.7	234.2	297.1	0.0	0	346
4:29 AM	269.10	88.83	3.83	266	2	Pump 1	No	No	Both Off	267	244.7	234.3	297.1	0.0	0	347
4:30 AM	270.10	88.84	3.84	267	2	Pump 1	No	No	Both Off	268	244.7	234.3	297.2	0.0	0	348
4:31 AM	271.10	88.85	3.85	268	2	Pump 1	No	No	Both Off	269	244.8	234.4	297.2	0.0	0	349
4:32 AM	272.10	88.87	3.87	269	2	Pump 1	No	No	Both Off	270	244.8	234.4	297.2	0.0	0	351
4:33 AM	273.10	88.88	3.88	270	2	Pump 1	No	No	Both Off	272	244.8	234.5	297.3	0.0	0	352
4:34 AM	274.10	88.89	3.89	272	2	Pump 1	No	No	Both Off	273	244.8	234.5	297.3	0.0	0	353
4:35 AM	275.10	88.90	3.90	273	2	Pump 1	No	No	Both Off	274	244.8	234.6	297.4	0.0	0	354
4:36 AM	276.10	88.92	3.92	274	2	Pump 1	No	No	Both Off	275	244.9	234.6	297.4	0.0	0	355
4:37 AM	277.10	88.93	3.93	275	2	Pump 1	No	No	Both Off	276	244.9	234.7	297.4	0.0	0	357
4:38 AM	278.10	88.94	3.94	276	2	Pump 1	No	No	Both Off	278	244.9	234.7	297.5	0.0	0	358
4:39 AM	279.10	88.95	3.95	278	2	Pump 1	No	No	Both Off	279	244.9	234.8	297.5	0.0	0	359
4:40 AM	280.10	88.97	3.97	279	2	Pump 1	No	No	Both Off	280	244.9	234.9	297.6	0.0	0	360
4:41 AM	281.10	88.98	3.98	280	2	Pump 1	No	No	Both Off	281	245.0	234.9	297.6	0.0	0	361
4:42 AM	282.10	88.99	3.99	281	2	Pump 1	No	No	Both Off	282	245.0	235.0	297.6	0.0	0	363
4:43 AM	283.10	89.00	4.00	282	3	Pump 1	Yes	No	Pump 1	284	245.0	235.0	297.7	245.0	245	119
4:44 AM	284.10	86.41	1.41	39	11	Pump 1	Yes	No	Pump 1	285	240.7	223.8	289.3	240.7	285	80
4:45 AM	285.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	286	240.0	222.0	288.0	0.0	285	81
4:46 AM	286.10	86.01	1.01	1	2	Pump 2	No	No	Both Off	287	240.0	222.1	288.0	0.0	285	83
4:47 AM	287.10	86.03	1.03	2	2	Pump 2	No	No	Both Off	288	240.0	222.1	288.1	0.0	285	84
4:48 AM	288.10	86.04	1.04	4	2	Pump 2	No	No	Both Off	290	240.1	222.2	288.1	0.0	285	85
4:49 AM	289.10	86.05	1.05	5	2	Pump 2	No	No	Both Off	291	240.1	222.2	288.2	0.0	285	86
4:50 AM	290.10	86.06	1.06	6	2	Pump 2	No	No	Both Off	292	240.1	222.3	288.2	0.0	285	87
4:51 AM	291.10	86.08	1.08	7	2	Pump 2	No	No	Both Off	293	240.1	222.3	288.2	0.0	285	89
4:52 AM	292.10	86.09	1.09	8	2	Pump 2	No	No	Both Off	294	240.1	222.4	288.3	0.0	285	90
4:53 AM	293.10	86.10	1.10	10	2	Pump 2	No	No	Both Off	296	240.2	222.4	288.3	0.0	285	91
4:54 AM	294.10	86.11	1.11	11	2	Pump 2	No	No	Both Off	297	240.2	222.5	288.4	0.0	285	92
4:55 AM	295.10	86.13	1.13	12	2	Pump 2	No	No	Both Off	298	240.2	222.5	288.4	0.0	285	93
4:56 AM	296.10	86.14	1.14	13	2	Pump 2	No	No	Both Off	299	240.2	222.6	288.4	0.0	285	94
4:57 AM	297.10	86.15	1.15	14	2	Pump 2	No	No	Both Off	300	240.3	222.7	288.5	0.0	285	96
4:58 AM	298.10	86.16	1.16	15	2	Pump 2	No	No	Both Off	301	240.3	222.7	288.5	0.0	285	97
4:59 AM	299.10	86.18	1.18	17	2	Pump 2	No	No	Both Off	303	240.3	222.8	288.6	0.0	285	98
5:00 AM	300.10	86.19	1.19	18	2	Pump 2	No	No	Both Off	304	240.3	222.8	288.6	0.0	285	100
5:01 AM	301.10	86.21	1.21	20	2	Pump 2	No	No	Both Off	312	240.3	222.9	288.7	0.0	285	107
5:02 AM	302.10	86.29	1.29	27	2	Pump 2	No	No	Both Off	319	240.5	223.3	288.9	0.0	285	115
5:03 AM	303.10	86.37	1.37	35	2	Pump 2	No	No	Both Off	327	240.6	223.6	289.2	0.0	285	122
5:04 AM	304.10	86.45	1.45	42	2	Pump 2	No	No	Both Off	334	240.7	223.9	289.4	0.0	285	130

5:05 AM	305.10	86.53	1.53	49	2	Pump 2	No	No	Both Off	342	240.9	224.3	289.7	0.0	285	137
5:06 AM	306.10	86.61	1.61	57	2	Pump 2	No	No	Both Off	349	241.0	224.6	290.0	0.0	285	145
5:07 AM	307.10	86.68	1.68	64	2	Pump 2	No	No	Both Off	357	241.1	225.0	290.2	0.0	285	152
5:08 AM	308.10	86.76	1.76	72	2	Pump 2	No	No	Both Off	364	241.3	225.3	290.5	0.0	285	159
5:09 AM	309.10	86.84	1.84	79	2	Pump 2	No	No	Both Off	371	241.4	225.7	290.7	0.0	285	167
5:10 AM	310.10	86.92	1.92	87	2	Pump 2	No	No	Both Off	379	241.5	226.0	291.0	0.0	285	174
5:11 AM	311.10	87.00	2.00	94	2	Pump 2	No	No	Both Off	386	241.7	226.3	291.2	0.0	285	182
5:12 AM	312.10	87.08	2.08	102	2	Pump 2	No	No	Both Off	394	241.8	226.7	291.5	0.0	285	189
5:13 AM	313.10	87.16	2.16	109	2	Pump 2	No	No	Both Off	401	241.9	227.0	291.7	0.0	285	197
5:14 AM	314.10	87.24	2.24	116	2	Pump 2	No	No	Both Off	409	242.1	227.4	292.0	0.0	285	204
5:15 AM	315.10	87.32	2.32	124	2	Pump 2	No	No	Both Off	416	242.2	227.7	292.2	0.0	285	212
5:16 AM	316.10	87.40	2.40	131	2	Pump 2	No	No	Both Off	424	242.3	228.1	292.5	0.0	285	219
5:17 AM	317.10	87.48	2.48	139	2	Pump 2	No	No	Both Off	431	242.5	228.4	292.8	0.0	285	226
5:18 AM	318.10	87.56	2.56	146	2	Pump 2	No	No	Both Off	438	242.6	228.7	293.0	0.0	285	234
5:19 AM	319.10	87.64	2.64	154	2	Pump 2	No	No	Both Off	446	242.7	229.1	293.3	0.0	285	241
5:20 AM	320.10	87.71	2.71	161	2	Pump 2	No	No	Both Off	453	242.9	229.4	293.5	0.0	285	249
5:21 AM	321.10	87.79	2.79	169	2	Pump 2	No	No	Both Off	461	243.0	229.8	293.8	0.0	285	256
5:22 AM	322.10	87.87	2.87	176	2	Pump 2	No	No	Both Off	468	243.1	230.1	294.0	0.0	285	264
5:23 AM	323.10	87.95	2.95	183	2	Pump 2	No	No	Both Off	476	243.3	230.5	294.3	0.0	285	271
5:24 AM	324.10	88.03	3.03	191	2	Pump 2	No	No	Both Off	483	243.4	230.8	294.5	0.0	285	279
5:25 AM	325.10	88.11	3.11	198	2	Pump 2	No	No	Both Off	491	243.5	231.1	294.8	0.0	285	286
5:26 AM	326.10	88.19	3.19	206	2	Pump 2	No	No	Both Off	498	243.6	231.5	295.1	0.0	285	293
5:27 AM	327.10	88.27	3.27	213	2	Pump 2	No	No	Both Off	505	243.8	231.8	295.3	0.0	285	301
5:28 AM	328.10	88.35	3.35	221	2	Pump 2	No	No	Both Off	513	243.9	232.2	295.6	0.0	285	308
5:29 AM	329.10	88.43	3.43	228	2	Pump 2	No	No	Both Off	520	244.0	232.5	295.8	0.0	285	316
5:30 AM	330.10	88.51	3.51	236	2	Pump 2	No	No	Both Off	528	244.2	232.9	296.1	0.0	285	323
5:31 AM	331.10	88.59	3.59	243	2	Pump 2	No	No	Both Off	535	244.3	233.2	296.3	0.0	285	331
5:32 AM	332.10	88.66	3.66	250	2	Pump 2	No	No	Both Off	543	244.4	233.5	296.6	0.0	285	338
5:33 AM	333.10	88.74	3.74	258	2	Pump 2	No	No	Both Off	550	244.6	233.9	296.8	0.0	285	346
5:34 AM	334.10	88.82	3.82	265	2	Pump 2	No	No	Both Off	558	244.7	234.2	297.1	0.0	285	353
5:35 AM	335.10	88.90	3.90	273	2	Pump 2	No	No	Both Off	565	244.8	234.6	297.4	0.0	285	360
5:36 AM	336.10	88.98	3.98	280	2	Pump 2	No	No	Both Off	572	245.0	234.9	297.6	0.0	285	368
5:37 AM	337.10	89.06	4.06	288	3	Pump 2	Yes	No	Pump 2	580	245.1	235.1	297.9	235.1	520	140
5:38 AM	338.10	86.64	1.64	60	11	Pump 2	Yes	No	Pump 2	587	241.1	224.8	290.1	224.8	587	80
5:39 AM	339.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	595	240.0	222.0	288.0	0.0	587	88
5:40 AM	340.10	86.08	1.08	7	2	Pump 1	No	No	Both Off	602	240.1	222.3	288.3	0.0	587	95
5:41 AM	341.10	86.16	1.16	15	2	Pump 1	No	No	Both Off	610	240.3	222.7	288.5	0.0	587	103
5:42 AM	342.10	86.24	1.24	22	2	Pump 1	No	No	Both Off	617	240.4	223.0	288.8	0.0	587	110
5:43 AM	343.10	86.32	1.32	30	2	Pump 1	No	No	Both Off	625	240.5	223.4	289.0	0.0	587	117
5:44 AM	344.10	86.40	1.40	37	2	Pump 1	No	No	Both Off	632	240.7	223.7	289.3	0.0	587	125
5:45 AM	345.10	86.48	1.48	45	2	Pump 1	No	No	Both Off	639	240.8	224.1	289.5	0.0	587	132
5:46 AM	346.10	86.55	1.55	52	2	Pump 1	No	No	Both Off	647	240.9	224.4	289.8	0.0	587	140
5:47 AM	347.10	86.63	1.63	60	2	Pump 1	No	No	Both Off	654	241.1	224.7	290.0	0.0	587	147
5:48 AM	348.10	86.71	1.71	67	2	Pump 1	No	No	Both Off	662	241.2	225.1	290.3	0.0	587	155
5:49 AM	349.10	86.79	1.79	74	2	Pump 1	No	No	Both Off	669	241.3	225.4	290.6	0.0	587	162
5:50 AM	350.10	86.87	1.87	82	2	Pump 1	No	No	Both Off	677	241.5	225.8	290.8	0.0	587	170
5:51 AM	351.10	86.95	1.95	89	2	Pump 1	No	No	Both Off	684	241.6	226.1	291.1	0.0	587	177
5:52 AM	352.10	87.03	2.03	97	2	Pump 1	No	No	Both Off	692	241.7	226.5	291.3	0.0	587	184
5:53 AM	353.10	87.11	2.11	104	2	Pump 1	No	No	Both Off	699	241.8	226.8	291.6	0.0	587	192
5:54 AM	354.10	87.19	2.19	112	2	Pump 1	No	No	Both Off	706	242.0	227.1	291.8	0.0	587	199
5:55 AM	355.10	87.27	2.27	119	2	Pump 1	No	No	Both Off	714	242.1	227.5	292.1	0.0	587	207
5:56 AM	356.10	87.35	2.35	127	2	Pump 1	No	No	Both Off	721	242.2	227.8	292.3	0.0	587	214
5:57 AM	357.10	87.43	2.43	134	2	Pump 1	No	No	Both Off	729	242.4	228.2	292.6	0.0	587	222
5:58 AM	358.10	87.50	2.50	141	2	Pump 1	No	No	Both Off	736	242.5	228.5	292.8	0.0	587	229
5:59 AM	359.10	87.58	2.58	149	2	Pump 1	No	No	Both Off	744	242.6	228.9	293.1	0.0	587	237
6:00 AM	360.10	87.66	2.66	156	2	Pump 1	No	No	Both Off	752	242.8	229.2	293.4	0.0	587	245
6:01 AM	361.10	87.75	2.75	165	2	Pump 1	No	No	Both Off	771	242.9	229.6	293.7	0.0	587	263
6:02 AM	362.10	87.95	2.95	183	2	Pump 1	No	No	Both Off	789	243.2	230.4	294.3	0.0	587	282
6:03 AM	363.10	88.14	3.14	202	2	Pump 1	No	No	Both Off	807	243.6	231.3	294.9	0.0	587	300
6:04 AM	364.10	88.34	3.34	220	2	Pump 1	No	No	Both Off	826	243.9	232.1	295.5	0.0	587	318
6:05 AM	365.10	88.54	3.54	238	2	Pump 1	No	No	Both Off	844	244.2	233.0	296.2	0.0	587	337
6:06 AM	366.10	88.73	3.73	257	2	Pump 1	No	No	Both Off	862	244.6	233.8	296.8	0.0	587	355

5:05 AM	305.10	86.53	1.53	49	2	Pump 2	No	No	Both Off	342	240.9	224.3	289.7	0.0	285	137
5:06 AM	306.10	86.61	1.61	57	2	Pump 2	No	No	Both Off	349	241.0	224.6	290.0	0.0	285	145
5:07 AM	307.10	86.68	1.68	64	2	Pump 2	No	No	Both Off	357	241.1	225.0	290.2	0.0	285	152
5:08 AM	308.10	86.76	1.76	72	2	Pump 2	No	No	Both Off	364	241.3	225.3	290.5	0.0	285	159
5:09 AM	309.10	86.84	1.84	79	2	Pump 2	No	No	Both Off	371	241.4	225.7	290.7	0.0	285	167
5:10 AM	310.10	86.92	1.92	87	2	Pump 2	No	No	Both Off	379	241.5	226.0	291.0	0.0	285	174
5:11 AM	311.10	87.00	2.00	94	2	Pump 2	No	No	Both Off	386	241.7	226.3	291.2	0.0	285	182
5:12 AM	312.10	87.08	2.08	102	2	Pump 2	No	No	Both Off	394	241.8	226.7	291.5	0.0	285	189
5:13 AM	313.10	87.16	2.16	109	2	Pump 2	No	No	Both Off	401	241.9	227.0	291.7	0.0	285	197
5:14 AM	314.10	87.24	2.24	116	2	Pump 2	No	No	Both Off	409	242.1	227.4	292.0	0.0	285	204
5:15 AM	315.10	87.32	2.32	124	2	Pump 2	No	No	Both Off	416	242.2	227.7	292.2	0.0	285	212
5:16 AM	316.10	87.40	2.40	131	2	Pump 2	No	No	Both Off	424	242.3	228.1	292.5	0.0	285	219
5:17 AM	317.10	87.48	2.48	139	2	Pump 2	No	No	Both Off	431	242.5	228.4	292.8	0.0	285	226
5:18 AM	318.10	87.56	2.56	146	2	Pump 2	No	No	Both Off	438	242.6	228.7	293.0	0.0	285	234
5:19 AM	319.10	87.64	2.64	154	2	Pump 2	No	No	Both Off	446	242.7	229.1	293.3	0.0	285	241
5:20 AM	320.10	87.71	2.71	161	2	Pump 2	No	No	Both Off	453	242.9	229.4	293.5	0.0	285	249
5:21 AM	321.10	87.79	2.79	169	2	Pump 2	No	No	Both Off	461	243.0	229.8	293.8	0.0	285	256
5:22 AM	322.10	87.87	2.87	176	2	Pump 2	No	No	Both Off	468	243.1	230.1	294.0	0.0	285	264
5:23 AM	323.10	87.95	2.95	183	2	Pump 2	No	No	Both Off	476	243.3	230.5	294.3	0.0	285	271
5:24 AM	324.10	88.03	3.03	191	2	Pump 2	No	No	Both Off	483	243.4	230.8	294.5	0.0	285	279
5:25 AM	325.10	88.11	3.11	198	2	Pump 2	No	No	Both Off	491	243.5	231.1	294.8	0.0	285	286
5:26 AM	326.10	88.19	3.19	206	2	Pump 2	No	No	Both Off	498	243.6	231.5	295.1	0.0	285	293
5:27 AM	327.10	88.27	3.27	213	2	Pump 2	No	No	Both Off	505	243.8	231.8	295.3	0.0	285	301
5:28 AM	328.10	88.35	3.35	221	2	Pump 2	No	No	Both Off	513	243.9	232.2	295.6	0.0	285	308
5:29 AM	329.10	88.43	3.43	228	2	Pump 2	No	No	Both Off	520	244.0	232.5	295.8	0.0	285	316
5:30 AM	330.10	88.51	3.51	236	2	Pump 2	No	No	Both Off	528	244.2	232.9	296.1	0.0	285	323
5:31 AM	331.10	88.59	3.59	243	2	Pump 2	No	No	Both Off	535	244.3	233.2	296.3	0.0	285	331
5:32 AM	332.10	88.66	3.66	250	2	Pump 2	No	No	Both Off	543	244.4	233.5	296.6	0.0	285	338
5:33 AM	333.10	88.74	3.74	258	2	Pump 2	No	No	Both Off	550	244.6	233.9	296.8	0.0	285	346
5:34 AM	334.10	88.82	3.82	265	2	Pump 2	No	No	Both Off	558	244.7	234.2	297.1	0.0	285	353
5:35 AM	335.10	88.90	3.90	273	2	Pump 2	No	No	Both Off	565	244.8	234.6	297.4	0.0	285	360
5:36 AM	336.10	88.98	3.98	280	2	Pump 2	No	No	Both Off	572	245.0	234.9	297.6	0.0	285	368
5:37 AM	337.10	89.06	4.06	288	3	Pump 2	Yes	No	Pump 2	580	245.1	235.1	297.9	235.1	520	140
5:38 AM	338.10	86.64	1.64	60	11	Pump 2	Yes	No	Pump 2	587	241.1	224.8	290.1	224.8	587	80
5:39 AM	339.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	395	240.0	222.0	288.0	0.0	587	88
5:40 AM	340.10	86.08	1.08	7	2	Pump 1	No	No	Both Off	602	240.1	222.3	288.3	0.0	587	95
5:41 AM	341.10	86.16	1.16	15	2	Pump 1	No	No	Both Off	610	240.3	222.7	288.5	0.0	587	103
5:42 AM	342.10	86.24	1.24	22	2	Pump 1	No	No	Both Off	617	240.4	223.0	288.8	0.0	587	110
5:43 AM	343.10	86.32	1.32	30	2	Pump 1	No	No	Both Off	625	240.5	223.4	289.0	0.0	587	117
5:44 AM	344.10	86.40	1.40	37	2	Pump 1	No	No	Both Off	632	240.7	223.7	289.3	0.0	587	125
5:45 AM	345.10	86.48	1.48	45	2	Pump 1	No	No	Both Off	639	240.8	224.1	289.5	0.0	587	132
5:46 AM	346.10	86.55	1.55	52	2	Pump 1	No	No	Both Off	647	240.9	224.4	289.8	0.0	587	140
5:47 AM	347.10	86.63	1.63	60	2	Pump 1	No	No	Both Off	654	241.1	224.7	290.0	0.0	587	147
5:48 AM	348.10	86.71	1.71	67	2	Pump 1	No	No	Both Off	662	241.2	225.1	290.3	0.0	587	155
5:49 AM	349.10	86.79	1.79	74	2	Pump 1	No	No	Both Off	669	241.3	225.4	290.6	0.0	587	162
5:50 AM	350.10	86.87	1.87	82	2	Pump 1	No	No	Both Off	677	241.5	225.8	290.8	0.0	587	170
5:51 AM	351.10	86.95	1.95	89	2	Pump 1	No	No	Both Off	684	241.6	226.1	291.1	0.0	587	177
5:52 AM	352.10	87.03	2.03	97	2	Pump 1	No	No	Both Off	692	241.7	226.5	291.3	0.0	587	184
5:53 AM	353.10	87.11	2.11	104	2	Pump 1	No	No	Both Off	699	241.8	226.8	291.6	0.0	587	192
5:54 AM	354.10	87.19	2.19	112	2	Pump 1	No	No	Both Off	706	242.0	227.1	291.8	0.0	587	199
5:55 AM	355.10	87.27	2.27	119	2	Pump 1	No	No	Both Off	714	242.1	227.5	292.1	0.0	587	207
5:56 AM	356.10	87.35	2.35	127	2	Pump 1	No	No	Both Off	721	242.2	227.8	292.3	0.0	587	214
5:57 AM	357.10	87.43	2.43	134	2	Pump 1	No	No	Both Off	729	242.4	228.2	292.6	0.0	587	222
5:58 AM	358.10	87.50	2.50	141	2	Pump 1	No	No	Both Off	736	242.5	228.5	292.8	0.0	587	229
5:59 AM	359.10	87.58	2.58	149	2	Pump 1	No	No	Both Off	744	242.6	228.9	293.1	0.0	587	237
6:00 AM	360.10	87.66	2.66	156	2	Pump 1	No	No	Both Off	752	242.8	229.2	293.4	0.0	587	245
6:01 AM	361.10	87.75	2.75	165	2	Pump 1	No	No	Both Off	771	242.9	229.6	293.7	0.0	587	263
6:02 AM	362.10	87.95	2.95	183	2	Pump 1	No	No	Both Off	789	243.2	230.4	294.3	0.0	587	282
6:03 AM	363.10	88.14	3.14	202	2	Pump 1	No	No	Both Off	807	243.6	231.3	294.9	0.0	587	300
6:04 AM	364.10	88.34	3.34	220	2	Pump 1	No	No	Both Off	826	243.9	232.1	295.5	0.0	587	318
6:05 AM	365.10	88.54	3.54	238	2	Pump 1	No	No	Both Off	844	244.2	233.0	296.2	0.0	587	337
6:06 AM	366.10	88.73	3.73	257	2	Pump 1	No	No	Both Off	862	244.6	233.8	296.8	0.0	587	355

6:07 AM	367.10	88.93	3.93	275	2	Pump 1	No	No	Both Off	881	244.9	234.7	297.4	0.0	587	374
6:08 AM	368.10	89.12	4.12	293	3	Pump 1	Yes	No	Pump 1	899	245.2	235.3	298.1	245.2	833	147
6:09 AM	369.10	86.71	1.71	66	11	Pump 1	Yes	No	Pump 1	917	241.2	225.1	290.3	241.2	917	80
6:10 AM	370.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	936	240.0	222.0	288.0	0.0	917	99
6:11 AM	371.10	86.20	1.20	18	2	Pump 2	No	No	Both Off	954	240.3	222.8	288.6	0.0	917	117
6:12 AM	372.10	86.39	1.39	37	2	Pump 2	No	No	Both Off	972	240.7	223.7	289.3	0.0	917	135
6:13 AM	373.10	86.59	1.59	55	2	Pump 2	No	No	Both Off	991	241.0	224.5	289.9	0.0	917	154
6:14 AM	374.10	86.78	1.78	73	2	Pump 2	No	No	Both Off	1,009	241.3	225.4	290.5	0.0	917	172
6:15 AM	375.10	86.98	1.98	92	2	Pump 2	No	No	Both Off	1,027	241.6	226.2	291.1	0.0	917	190
6:16 AM	376.10	87.17	2.17	110	2	Pump 2	No	No	Both Off	1,046	242.0	227.1	291.8	0.0	917	209
6:17 AM	377.10	87.37	2.37	128	2	Pump 2	No	No	Both Off	1,064	242.3	227.9	292.4	0.0	917	227
6:18 AM	378.10	87.56	2.56	147	2	Pump 2	No	No	Both Off	1,083	242.6	228.8	293.0	0.0	917	245
6:19 AM	379.10	87.76	2.76	165	2	Pump 2	No	No	Both Off	1,101	242.9	229.6	293.7	0.0	917	264
6:20 AM	380.10	87.95	2.95	184	2	Pump 2	No	No	Both Off	1,119	243.3	230.5	294.3	0.0	917	282
6:21 AM	381.10	88.15	3.15	202	2	Pump 2	No	No	Both Off	1,138	243.6	231.3	294.9	0.0	917	300
6:22 AM	382.10	88.34	3.34	220	2	Pump 2	No	No	Both Off	1,156	243.9	232.2	295.6	0.0	917	319
6:23 AM	383.10	88.54	3.54	239	2	Pump 2	No	No	Both Off	1,174	244.2	233.0	296.2	0.0	917	337
6:24 AM	384.10	88.73	3.73	257	2	Pump 2	No	No	Both Off	1,193	244.6	233.8	296.8	0.0	917	355
6:25 AM	385.10	88.93	3.93	275	2	Pump 2	No	No	Both Off	1,211	244.9	234.7	297.4	0.0	917	374
6:26 AM	386.10	89.12	4.12	294	3	Pump 2	Yes	No	Pump 2	1,229	245.2	235.3	298.1	235.3	1153	157
6:27 AM	387.10	86.82	1.82	77	11	Pump 2	Yes	No	Pump 2	1,248	241.4	225.5	290.6	225.5	1248	80
6:28 AM	388.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	1,266	240.0	222.0	288.0	0.0	1248	99
6:29 AM	389.10	86.20	1.20	18	2	Pump 1	No	No	Both Off	1,284	240.3	222.8	288.6	0.0	1248	117
6:30 AM	390.10	86.39	1.39	37	2	Pump 1	No	No	Both Off	1,303	240.7	223.7	289.3	0.0	1248	135
6:31 AM	391.10	86.59	1.59	55	2	Pump 1	No	No	Both Off	1,321	241.0	224.5	289.9	0.0	1248	154
6:32 AM	392.10	86.78	1.78	73	2	Pump 1	No	No	Both Off	1,339	241.3	225.4	290.5	0.0	1248	172
6:33 AM	393.10	86.98	1.98	92	2	Pump 1	No	No	Both Off	1,358	241.6	226.2	291.1	0.0	1248	190
6:34 AM	394.10	87.17	2.17	110	2	Pump 1	No	No	Both Off	1,376	242.0	227.1	291.8	0.0	1248	209
6:35 AM	395.10	87.37	2.37	128	2	Pump 1	No	No	Both Off	1,395	242.3	227.9	292.4	0.0	1248	227
6:36 AM	396.10	87.56	2.56	147	2	Pump 1	No	No	Both Off	1,413	242.6	228.8	293.0	0.0	1248	245
6:37 AM	397.10	87.76	2.76	165	2	Pump 1	No	No	Both Off	1,431	242.9	229.6	293.7	0.0	1248	264
6:38 AM	398.10	87.95	2.95	184	2	Pump 1	No	No	Both Off	1,450	243.3	230.5	294.3	0.0	1248	282
6:39 AM	399.10	88.15	3.15	202	2	Pump 1	No	No	Both Off	1,468	243.6	231.3	294.9	0.0	1248	300
6:40 AM	400.10	88.34	3.34	220	2	Pump 1	No	No	Both Off	1,486	243.9	232.2	295.6	0.0	1248	319
6:41 AM	401.10	88.54	3.54	239	2	Pump 1	No	No	Both Off	1,505	244.2	233.0	296.2	0.0	1248	337
6:42 AM	402.10	88.73	3.73	257	2	Pump 1	No	No	Both Off	1,523	244.6	233.8	296.8	0.0	1248	355
6:43 AM	403.10	88.93	3.93	275	2	Pump 1	No	No	Both Off	1,541	244.9	234.7	297.4	0.0	1248	374
6:44 AM	404.10	89.12	4.12	294	3	Pump 1	Yes	No	Pump 1	1,560	245.2	235.3	298.1	245.2	1493	147
6:45 AM	405.10	86.71	1.71	67	11	Pump 1	Yes	No	Pump 1	1,578	241.2	225.1	290.3	241.2	1578	80
6:46 AM	406.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	1,596	240.0	222.0	288.0	0.0	1578	99
6:47 AM	407.10	86.20	1.20	18	2	Pump 2	No	No	Both Off	1,615	240.3	222.8	288.6	0.0	1578	117
6:48 AM	408.10	86.39	1.39	37	2	Pump 2	No	No	Both Off	1,633	240.7	223.7	289.3	0.0	1578	135
6:49 AM	409.10	86.59	1.59	55	2	Pump 2	No	No	Both Off	1,651	241.0	224.5	289.9	0.0	1578	154
6:50 AM	410.10	86.78	1.78	73	2	Pump 2	No	No	Both Off	1,670	241.3	225.4	290.5	0.0	1578	172
6:51 AM	411.10	86.98	1.98	92	2	Pump 2	No	No	Both Off	1,688	241.6	226.2	291.1	0.0	1578	190
6:52 AM	412.10	87.17	2.17	110	2	Pump 2	No	No	Both Off	1,707	242.0	227.1	291.8	0.0	1578	209
6:53 AM	413.10	87.37	2.37	128	2	Pump 2	No	No	Both Off	1,725	242.3	227.9	292.4	0.0	1578	227
6:54 AM	414.10	87.56	2.56	147	2	Pump 2	No	No	Both Off	1,743	242.6	228.8	293.0	0.0	1578	245
6:55 AM	415.10	87.76	2.76	165	2	Pump 2	No	No	Both Off	1,762	242.9	229.6	293.7	0.0	1578	264
6:56 AM	416.10	87.95	2.95	184	2	Pump 2	No	No	Both Off	1,780	243.3	230.5	294.3	0.0	1578	282
6:57 AM	417.10	88.15	3.15	202	2	Pump 2	No	No	Both Off	1,798	243.6	231.3	294.9	0.0	1578	300
6:58 AM	418.10	88.34	3.34	220	2	Pump 2	No	No	Both Off	1,817	243.9	232.2	295.6	0.0	1578	319
6:59 AM	419.10	88.54	3.54	239	2	Pump 2	No	No	Both Off	1,835	244.2	233.0	296.2	0.0	1578	337
7:00 AM	420.10	88.73	3.73	257	2	Pump 2	No	No	Both Off	1,854	244.6	233.8	296.8	0.0	1578	356
7:01 AM	421.10	88.93	3.93	276	2	Pump 2	No	No	Both Off	1,877	244.9	234.7	297.5	0.0	1578	379
7:02 AM	422.10	89.18	4.18	299	3	Pump 2	Yes	No	Pump 2	1,900	245.3	235.4	298.3	235.4	1814	167
7:03 AM	423.10	86.93	1.93	87	11	Pump 2	Yes	No	Pump 2	1,924	241.5	226.0	291.0	226.0	1924	80
7:04 AM	424.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	1,947	240.0	222.0	288.0	0.0	1924	103
7:05 AM	425.10	86.25	1.25	23	2	Pump 1	No	No	Both Off	1,970	240.4	223.1	288.8	0.0	1924	127
7:06 AM	426.10	86.50	1.50	47	2	Pump 1	No	No	Both Off	1,994	240.8	224.1	289.6	0.0	1924	150
7:07 AM	427.10	86.74	1.74	70	2	Pump 1	No	No	Both Off	2,017	241.2	225.2	290.4	0.0	1924	173
7:08 AM	428.10	86.99	1.99	93	2	Pump 1	No	No	Both Off	2,040	241.7	226.3	291.2	0.0	1924	197

Time	(hr)														
7:09 AM	429.10	87.24	2.24	116	2	Pump 1	No	No	Both Off	2,064	242.1	227.4	292.0	0.0	1924	220
7:10 AM	430.10	87.49	2.49	140	2	Pump 1	No	No	Both Off	2,087	242.5	228.4	292.8	0.0	1924	243
7:11 AM	431.10	87.73	2.73	163	2	Pump 1	No	No	Both Off	2,110	242.9	229.5	293.6	0.0	1924	267
7:12 AM	432.10	87.98	2.98	186	2	Pump 1	No	No	Both Off	2,133	243.3	230.6	294.4	0.0	1924	290
7:13 AM	433.10	88.23	3.23	210	2	Pump 1	No	No	Both Off	2,157	243.7	231.7	295.2	0.0	1924	313
7:14 AM	434.10	88.48	3.48	233	2	Pump 1	No	No	Both Off	2,180	244.1	232.7	296.0	0.0	1924	336
7:15 AM	435.10	88.73	3.73	256	2	Pump 1	No	No	Both Off	2,203	244.5	233.8	296.8	0.0	1924	360
7:16 AM	436.10	88.97	3.97	280	2	Pump 1	No	No	Both Off	2,227	245.0	234.9	297.6	0.0	1924	383
7:17 AM	437.10	89.22	4.22	303	3	Pump 1	Yes	No	Pump 1	2,250	245.4	235.5	298.4	245.4	2169	161
7:18 AM	438.10	86.86	1.86	81	11	Pump 1	Yes	No	Pump 1	2,273	241.4	225.7	290.8	241.4	2273	80
7:19 AM	439.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	2,296	240.0	222.0	288.0	0.0	2273	103
7:20 AM	440.10	86.25	1.25	23	2	Pump 2	No	No	Both Off	2,320	240.4	223.1	288.8	0.0	2273	127
7:21 AM	441.10	86.50	1.50	47	2	Pump 2	No	No	Both Off	2,343	240.8	224.1	289.6	0.0	2273	150
7:22 AM	442.10	86.74	1.74	70	2	Pump 2	No	No	Both Off	2,366	241.2	225.2	290.4	0.0	2273	173
7:23 AM	443.10	86.99	1.99	93	2	Pump 2	No	No	Both Off	2,390	241.7	226.3	291.2	0.0	2273	197
7:24 AM	444.10	87.24	2.24	116	2	Pump 2	No	No	Both Off	2,413	242.1	227.4	292.0	0.0	2273	220
7:25 AM	445.10	87.49	2.49	140	2	Pump 2	No	No	Both Off	2,436	242.5	228.4	292.8	0.0	2273	243
7:26 AM	446.10	87.73	2.73	163	2	Pump 2	No	No	Both Off	2,460	242.9	229.5	293.6	0.0	2273	267
7:27 AM	447.10	87.98	2.98	186	2	Pump 2	No	No	Both Off	2,483	243.3	230.6	294.4	0.0	2273	290
7:28 AM	448.10	88.23	3.23	210	2	Pump 2	No	No	Both Off	2,506	243.7	231.7	295.2	0.0	2273	313
7:29 AM	449.10	88.48	3.48	233	2	Pump 2	No	No	Both Off	2,529	244.1	232.7	296.0	0.0	2273	336
7:30 AM	450.10	88.73	3.73	256	2	Pump 2	No	No	Both Off	2,553	244.5	233.8	296.8	0.0	2273	360
7:31 AM	451.10	88.97	3.97	280	2	Pump 2	No	No	Both Off	2,576	245.0	234.9	297.6	0.0	2273	383
7:32 AM	452.10	89.22	4.22	303	3	Pump 2	Yes	No	Pump 2	2,599	245.4	235.5	298.4	235.5	2509	171
7:33 AM	453.10	86.96	1.96	91	11	Pump 2	Yes	No	Pump 2	2,623	241.6	226.2	291.1	226.2	2623	80
7:34 AM	454.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	2,646	240.0	222.0	288.0	0.0	2623	103
7:35 AM	455.10	86.25	1.25	23	2	Pump 1	No	No	Both Off	2,669	240.4	223.1	288.8	0.0	2623	127
7:36 AM	456.10	86.50	1.50	47	2	Pump 1	No	No	Both Off	2,692	240.8	224.1	289.6	0.0	2623	150
7:37 AM	457.10	86.74	1.74	70	2	Pump 1	No	No	Both Off	2,716	241.2	225.2	290.4	0.0	2623	173
7:38 AM	458.10	86.99	1.99	93	2	Pump 1	No	No	Both Off	2,739	241.7	226.3	291.2	0.0	2623	197
7:39 AM	459.10	87.24	2.24	116	2	Pump 1	No	No	Both Off	2,762	242.1	227.4	292.0	0.0	2623	220
7:40 AM	460.10	87.49	2.49	140	2	Pump 1	No	No	Both Off	2,786	242.5	228.4	292.8	0.0	2623	243
7:41 AM	461.10	87.73	2.73	163	2	Pump 1	No	No	Both Off	2,809	242.9	229.5	293.6	0.0	2623	267
7:42 AM	462.10	87.98	2.98	186	2	Pump 1	No	No	Both Off	2,832	243.3	230.6	294.4	0.0	2623	290
7:43 AM	463.10	88.23	3.23	210	2	Pump 1	No	No	Both Off	2,856	243.7	231.7	295.2	0.0	2623	31.
7:44 AM	464.10	88.48	3.48	233	2	Pump 1	No	No	Both Off	2,879	244.1	232.7	296.0	0.0	2623	336
7:45 AM	465.10	88.73	3.73	256	2	Pump 1	No	No	Both Off	2,902	244.5	233.8	296.8	0.0	2623	360
7:46 AM	466.10	88.97	3.97	280	2	Pump 1	No	No	Both Off	2,925	245.0	234.9	297.6	0.0	2623	383
7:47 AM	467.10	89.22	4.22	303	3	Pump 1	Yes	No	Pump 1	2,949	245.4	235.5	298.4	245.4	2868	161
7:48 AM	468.10	86.86	1.86	81	11	Pump 1	Yes	No	Pump 1	2,972	241.4	225.7	290.8	241.4	2972	80
7:49 AM	469.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	2,995	240.0	222.0	288.0	0.0	2972	103
7:50 AM	470.10	86.25	1.25	23	2	Pump 2	No	No	Both Off	3,019	240.4	223.1	288.8	0.0	2972	127
7:51 AM	471.10	86.50	1.50	47	2	Pump 2	No	No	Both Off	3,042	240.8	224.1	289.6	0.0	2972	150
7:52 AM	472.10	86.74	1.74	70	2	Pump 2	No	No	Both Off	3,065	241.2	225.2	290.4	0.0	2972	173
7:53 AM	473.10	86.99	1.99	93	2	Pump 2	No	No	Both Off	3,088	241.7	226.3	291.2	0.0	2972	197
7:54 AM	474.10	87.24	2.24	116	2	Pump 2	No	No	Both Off	3,112	242.1	227.4	292.0	0.0	2972	220
7:55 AM	475.10	87.49	2.49	140	2	Pump 2	No	No	Both Off	3,135	242.5	228.4	292.8	0.0	2972	243
7:56 AM	476.10	87.73	2.73	163	2	Pump 2	No	No	Both Off	3,158	242.9	229.5	293.6	0.0	2972	267
7:57 AM	477.10	87.98	2.98	186	2	Pump 2	No	No	Both Off	3,182	243.3	230.6	294.4	0.0	2972	290
7:58 AM	478.10	88.23	3.23	210	2	Pump 2	No	No	Both Off	3,205	243.7	231.7	295.2	0.0	2972	313
7:59 AM	479.10	88.48	3.48	233	2	Pump 2	No	No	Both Off	3,228	244.1	232.7	296.0	0.0	2972	336
8:00 AM	480.10	88.73	3.73	256	2	Pump 2	No	No	Both Off	3,255	244.5	233.8	296.8	0.0	2972	363
8:01 AM	481.10	89.01	4.01	283	3	Pump 2	Yes	No	Pump 2	3,316	245.0	235.0	297.7	235.0	3207	189
8:02 AM	482.10	87.16	2.16	109	11	Pump 2	Yes	No	Pump 2	3,377	241.9	227.0	291.7	227.0	3377	80
8:03 AM	483.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	3,438	240.0	222.0	288.0	0.0	3377	141
8:04 AM	484.10	86.65	1.65	61	2	Pump 1	No	No	Both Off	3,499	241.1	224.8	290.1	0.0	3377	202
8:05 AM	485.10	87.29	2.29	122	2	Pump 1	No	No	Both Off	3,559	242.2	227.6	292.2	0.0	3377	263
8:06 AM	486.10	87.94	2.94	182	2	Pump 1	No	No	Both Off	3,620	243.2	230.4	294.3	0.0	3377	323
8:07 AM	487.10	88.59	3.59	243	2	Pump 1	No	No	Both Off	3,681	244.3	233.2	296.3	0.0	3377	384
8:08 AM	488.10	89.24	4.24	304	3	Pump 1	Yes	No	Pump 1	3,742	245.4	235.5	298.4	245.4	3622	200
8:09 AM	489.10	87.27	2.27	119	11	Pump 1	Yes	No	Pump 1	3,803	242.1	227.5	292.1	242.1	3803	80
8:10 AM	490.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	3,863	240.0	222.0	288.0	0.0	3803	141

8:11 AM	491.10	86.65	1.65	61	2	Pump 2	No	No	Both Off	3,924	241.1	224.8	290.1	0.0	3803	202
8:12 AM	492.10	87.29	2.29	122	2	Pump 2	No	No	Both Off	3,985	242.2	227.6	292.2	0.0	3803	263
8:13 AM	493.10	87.94	2.94	182	2	Pump 2	No	No	Both Off	4,046	243.2	230.4	294.3	0.0	3803	323
8:14 AM	494.10	88.59	3.59	243	2	Pump 2	No	No	Both Off	4,107	244.3	233.2	296.3	0.0	3803	384
8:15 AM	495.10	89.24	4.24	304	3	Pump 2	Yes	No	Pump 2	4,167	245.4	235.5	298.4	235.5	4038	210
8:16 AM	496.10	87.38	2.38	129	11	Pump 2	Yes	No	Pump 2	4,228	242.3	228.0	292.4	228.0	4228	80
8:17 AM	497.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	4,289	240.0	222.0	288.0	0.0	4228	141
8:18 AM	498.10	86.65	1.65	61	2	Pump 1	No	No	Both Off	4,350	241.1	224.8	290.1	0.0	4228	202
8:19 AM	499.10	87.29	2.29	122	2	Pump 1	No	No	Both Off	4,411	242.2	227.6	292.2	0.0	4228	263
8:20 AM	500.10	87.94	2.94	182	2	Pump 1	No	No	Both Off	4,472	243.2	230.4	294.3	0.0	4228	323
8:21 AM	501.10	88.59	3.59	243	2	Pump 1	No	No	Both Off	4,532	244.3	233.2	296.3	0.0	4228	384
8:22 AM	502.10	89.24	4.24	304	3	Pump 1	Yes	No	Pump 1	4,593	245.4	235.5	298.4	245.4	4474	200
8:23 AM	503.10	87.27	2.27	119	11	Pump 1	Yes	No	Pump 1	4,654	242.1	227.5	292.1	242.1	4654	80
8:24 AM	504.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	4,715	240.0	222.0	288.0	0.0	4654	141
8:25 AM	505.10	86.65	1.65	61	2	Pump 2	No	No	Both Off	4,776	241.1	224.8	290.1	0.0	4654	202
8:26 AM	506.10	87.29	2.29	122	2	Pump 2	No	No	Both Off	4,836	242.2	227.6	292.2	0.0	4654	263
8:27 AM	507.10	87.94	2.94	182	2	Pump 2	No	No	Both Off	4,897	243.2	230.4	294.3	0.0	4654	323
8:28 AM	508.10	88.59	3.59	243	2	Pump 2	No	No	Both Off	4,958	244.3	233.2	296.3	0.0	4654	384
8:29 AM	509.10	89.24	4.24	304	3	Pump 2	Yes	No	Pump 2	5,019	245.4	235.5	298.4	235.5	4890	210
8:30 AM	510.10	87.38	2.38	129	11	Pump 2	Yes	No	Pump 2	5,080	242.3	228.0	292.4	228.0	5080	80
8:31 AM	511.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	5,141	240.0	222.0	288.0	0.0	5080	141
8:32 AM	512.10	86.65	1.65	61	2	Pump 1	No	No	Both Off	5,201	241.1	224.8	290.1	0.0	5080	202
8:33 AM	513.10	87.29	2.29	122	2	Pump 1	No	No	Both Off	5,262	242.2	227.6	292.2	0.0	5080	263
8:34 AM	514.10	87.94	2.94	182	2	Pump 1	No	No	Both Off	5,323	243.2	230.4	294.3	0.0	5080	323
8:35 AM	515.10	88.59	3.59	243	2	Pump 1	No	No	Both Off	5,384	244.3	233.2	296.3	0.0	5080	384
8:36 AM	516.10	89.24	4.24	304	3	Pump 1	Yes	No	Pump 1	5,445	245.4	235.5	298.4	245.4	5325	200
8:37 AM	517.10	87.27	2.27	119	11	Pump 1	Yes	No	Pump 1	5,505	242.1	227.5	292.1	242.1	5505	80
8:38 AM	518.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	5,566	240.0	222.0	288.0	0.0	5505	141
8:39 AM	519.10	86.65	1.65	61	2	Pump 2	No	No	Both Off	5,627	241.1	224.8	290.1	0.0	5505	202
8:40 AM	520.10	87.29	2.29	122	2	Pump 2	No	No	Both Off	5,688	242.2	227.6	292.2	0.0	5505	263
8:41 AM	521.10	87.94	2.94	182	2	Pump 2	No	No	Both Off	5,749	243.2	230.4	294.3	0.0	5505	323
8:42 AM	522.10	88.59	3.59	243	2	Pump 2	No	No	Both Off	5,809	244.3	233.2	296.3	0.0	5505	384
8:43 AM	523.10	89.24	4.24	304	3	Pump 2	Yes	No	Pump 2	5,870	245.4	235.5	298.4	235.5	5741	210
8:44 AM	524.10	87.38	2.38	129	11	Pump 2	Yes	No	Pump 2	5,931	242.3	228.0	292.4	228.0	5931	80
8:45 AM	525.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	5,992	240.0	222.0	288.0	0.0	5931	141
8:46 AM	526.10	86.65	1.65	61	2	Pump 1	No	No	Both Off	6,053	241.1	224.8	290.1	0.0	5931	202
8:47 AM	527.10	87.29	2.29	122	2	Pump 1	No	No	Both Off	6,114	242.2	227.6	292.2	0.0	5931	263
8:48 AM	528.10	87.94	2.94	182	2	Pump 1	No	No	Both Off	6,174	243.2	230.4	294.3	0.0	5931	323
8:49 AM	529.10	88.59	3.59	243	2	Pump 1	No	No	Both Off	6,235	244.3	233.2	296.3	0.0	5931	384
8:50 AM	530.10	89.24	4.24	304	3	Pump 1	Yes	No	Pump 1	6,296	245.4	235.5	298.4	245.4	6177	200
8:51 AM	531.10	87.27	2.27	119	11	Pump 1	Yes	No	Pump 1	6,357	242.1	227.5	292.1	242.1	6357	80
8:52 AM	532.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	6,418	240.0	222.0	288.0	0.0	6357	141
8:53 AM	533.10	86.65	1.65	61	2	Pump 2	No	No	Both Off	6,478	241.1	224.8	290.1	0.0	6357	202
8:54 AM	534.10	87.29	2.29	122	2	Pump 2	No	No	Both Off	6,539	242.2	227.6	292.2	0.0	6357	263
8:55 AM	535.10	87.94	2.94	182	2	Pump 2	No	No	Both Off	6,600	243.2	230.4	294.3	0.0	6357	323
8:56 AM	536.10	88.59	3.59	243	2	Pump 2	No	No	Both Off	6,661	244.3	233.2	296.3	0.0	6357	384
8:57 AM	537.10	89.24	4.24	304	3	Pump 2	Yes	No	Pump 2	6,722	245.4	235.5	298.4	235.5	6592	210
8:58 AM	538.10	87.38	2.38	129	11	Pump 2	Yes	No	Pump 2	6,783	242.3	228.0	292.4	228.0	6783	80
8:59 AM	539.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	6,843	240.0	222.0	288.0	0.0	6783	141
9:00 AM	540.10	86.65	1.65	61	2	Pump 1	No	No	Both Off	6,906	241.1	224.8	290.1	0.0	6783	204
9:01 AM	541.10	87.31	2.31	123	2	Pump 1	No	No	Both Off	6,984	242.2	227.7	292.2	0.0	6783	282
9:02 AM	542.10	88.14	3.14	202	2	Pump 1	No	No	Both Off	7,062	243.6	231.3	294.9	0.0	6783	360
9:03 AM	543.10	88.98	3.98	280	2	Pump 1	No	No	Both Off	7,140	245.0	234.9	297.6	0.0	6783	438
9:04 AM	544.10	89.81	4.81	358	4	Pump 1	Yes	Yes	Both On	7,219	246.3	236.9	300.3	300.3	7083	216
9:05 AM	545.10	87.45	2.45	136	9	Pump 1	Yes	Yes	Both On	7,297	242.4	228.3	292.7	292.7	7297	80
9:06 AM	546.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	7,375	240.0	222.0	288.0	0.0	7297	158
9:07 AM	547.10	86.83	1.83	78	2	Pump 2	No	No	Both Off	7,453	241.4	225.6	290.7	0.0	7297	237
9:08 AM	548.10	87.66	2.66	156	2	Pump 2	No	No	Both Off	7,531	242.8	229.2	293.4	0.0	7297	315
9:09 AM	549.10	88.50	3.50	235	2	Pump 2	No	No	Both Off	7,610	244.2	232.8	296.0	0.0	7297	393
9:10 AM	550.10	89.33	4.33	313	3	Pump 2	Yes	No	Pump 2	7,688	245.5	235.8	298.7	235.8	7533	235
9:11 AM	551.10	87.65	2.65	155	11	Pump 2	Yes	No	Pump 2	7,766	242.8	229.2	293.5	229.2	7762	84
9:12 AM	552.10	86.04	1.04	4	11	Pump 2	Yes	No	Pump 2	7,844	240.1	222.2	288.1	222.2	7844	80

Time	Time (min)														
9:13 AM	553.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	7,922	240.0	222.0	288.0	0.0	7844	158
9:14 AM	554.10	86.83	1.83	78	2	Pump 1	No	No	Both Off	8,001	241.4	225.6	290.7	0.0	7844	237
9:15 AM	555.10	87.66	2.66	156	2	Pump 1	No	No	Both Off	8,079	242.8	229.2	293.4	0.0	7844	315
9:16 AM	556.10	88.50	3.50	235	2	Pump 1	No	No	Both Off	8,157	244.2	232.8	296.0	0.0	7844	393
9:17 AM	557.10	89.33	4.33	313	3	Pump 1	Yes	No	Pump 1	8,235	245.5	235.8	298.7	245.5	8090	226
9:18 AM	558.10	87.55	2.55	145	11	Pump 1	Yes	No	Pump 1	8,313	242.6	228.7	293.0	242.6	8313	80
9:19 AM	559.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	8,392	240.0	222.0	288.0	0.0	8313	158
9:20 AM	560.10	86.83	1.83	78	2	Pump 2	No	No	Both Off	8,470	241.4	225.6	290.7	0.0	8313	237
9:21 AM	561.10	87.66	2.66	156	2	Pump 2	No	No	Both Off	8,548	242.8	229.2	293.4	0.0	8313	315
9:22 AM	562.10	88.50	3.50	235	2	Pump 2	No	No	Both Off	8,626	244.2	232.8	296.0	0.0	8313	393
9:23 AM	563.10	89.33	4.33	313	3	Pump 2	Yes	No	Pump 2	8,704	245.5	235.8	298.7	235.8	8549	235
9:24 AM	564.10	87.65	2.65	155	11	Pump 2	Yes	No	Pump 2	8,782	242.8	229.2	293.3	229.2	8778	84
9:25 AM	565.10	86.04	1.04	4	11	Pump 2	Yes	No	Pump 2	8,861	240.1	222.2	288.1	222.2	8861	80
9:26 AM	566.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	8,939	240.0	222.0	288.0	0.0	8861	158
9:27 AM	567.10	86.83	1.83	78	2	Pump 1	No	No	Both Off	9,017	241.4	225.6	290.7	0.0	8861	237
9:28 AM	568.10	87.66	2.66	156	2	Pump 1	No	No	Both Off	9,095	242.8	229.2	293.4	0.0	8861	315
9:29 AM	569.10	88.50	3.50	235	2	Pump 1	No	No	Both Off	9,173	244.2	232.8	296.0	0.0	8861	393
9:30 AM	570.10	89.33	4.33	313	3	Pump 1	Yes	No	Pump 1	9,252	245.5	235.8	298.7	245.5	9106	226
9:31 AM	571.10	87.55	2.55	145	11	Pump 1	Yes	No	Pump 1	9,330	242.6	228.7	293.0	242.6	9330	80
9:32 AM	572.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	9,408	240.0	222.0	288.0	0.0	9330	158
9:33 AM	573.10	86.83	1.83	78	2	Pump 2	No	No	Both Off	9,486	241.4	225.6	290.7	0.0	9330	237
9:34 AM	574.10	87.66	2.66	156	2	Pump 2	No	No	Both Off	9,564	242.8	229.2	293.4	0.0	9330	315
9:35 AM	575.10	88.50	3.50	235	2	Pump 2	No	No	Both Off	9,643	244.2	232.8	296.0	0.0	9330	393
9:36 AM	576.10	89.33	4.33	313	3	Pump 2	Yes	No	Pump 2	9,721	245.5	235.8	298.7	235.8	9566	235
9:37 AM	577.10	87.65	2.65	155	11	Pump 2	Yes	No	Pump 2	9,799	242.8	229.2	293.3	229.2	9795	84
9:38 AM	578.10	86.04	1.04	4	11	Pump 2	Yes	No	Pump 2	9,877	240.1	222.2	288.1	222.2	9877	80
9:39 AM	579.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	9,955	240.0	222.0	288.0	0.0	9877	158
9:40 AM	580.10	86.83	1.83	78	2	Pump 1	No	No	Both Off	10,034	241.4	225.6	290.7	0.0	9877	237
9:41 AM	581.10	87.66	2.66	156	2	Pump 1	No	No	Both Off	10,112	242.8	229.2	293.4	0.0	9877	315
9:42 AM	582.10	88.50	3.50	235	2	Pump 1	No	No	Both Off	10,190	244.2	232.8	296.0	0.0	9877	393
9:43 AM	583.10	89.33	4.33	313	3	Pump 1	Yes	No	Pump 1	10,268	245.5	235.8	298.7	245.5	10123	226
9:44 AM	584.10	87.55	2.55	145	11	Pump 1	Yes	No	Pump 1	10,346	242.6	228.7	293.0	242.6	10346	80
9:45 AM	585.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	10,424	240.0	222.0	288.0	0.0	10346	158
9:46 AM	586.10	86.83	1.83	78	2	Pump 2	No	No	Both Off	10,503	241.4	225.6	290.7	0.0	10346	237
9:47 AM	587.10	87.66	2.66	156	2	Pump 2	No	No	Both Off	10,581	242.8	229.2	293.4	0.0	10346	315
9:48 AM	588.10	88.50	3.50	235	2	Pump 2	No	No	Both Off	10,659	244.2	232.8	296.0	0.0	10346	393
9:49 AM	589.10	89.33	4.33	313	3	Pump 2	Yes	No	Pump 2	10,737	245.5	235.8	298.7	235.8	10582	235
9:50 AM	590.10	87.65	2.65	155	11	Pump 2	Yes	No	Pump 2	10,815	242.8	229.2	293.3	229.2	10811	84
9:51 AM	591.10	86.04	1.04	4	11	Pump 2	Yes	No	Pump 2	10,894	240.1	222.2	288.1	222.2	10894	80
9:52 AM	592.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	10,972	240.0	222.0	288.0	0.0	10894	158
9:53 AM	593.10	86.83	1.83	78	2	Pump 1	No	No	Both Off	11,050	241.4	225.6	290.7	0.0	10894	237
9:54 AM	594.10	87.66	2.66	156	2	Pump 1	No	No	Both Off	11,128	242.8	229.2	293.4	0.0	10894	315
9:55 AM	595.10	88.50	3.50	235	2	Pump 1	No	No	Both Off	11,206	244.2	232.8	296.0	0.0	10894	393
9:56 AM	596.10	89.33	4.33	313	3	Pump 1	Yes	No	Pump 1	11,285	245.5	235.8	298.7	245.5	11139	226
9:57 AM	597.10	87.55	2.55	145	11	Pump 1	Yes	No	Pump 1	11,363	242.6	228.7	293.0	242.6	11363	80
9:58 AM	598.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	11,441	240.0	222.0	288.0	0.0	11363	158
9:59 AM	599.10	86.83	1.83	78	2	Pump 2	No	No	Both Off	11,519	241.4	225.6	290.7	0.0	11363	237
10:00 AM	600.10	87.66	2.66	156	2	Pump 2	No	No	Both Off	11,594	242.8	229.2	293.4	0.0	11363	312
10:01 AM	601.10	88.46	3.46	231	2	Pump 2	No	No	Both Off	11,640	244.1	232.7	295.9	0.0	11363	358
10:02 AM	602.10	88.95	3.95	277	2	Pump 2	No	No	Both Off	11,686	244.9	234.8	297.5	0.0	11363	404
10:03 AM	603.10	89.44	4.44	323	3	Pump 2	Yes	No	Pump 2	11,732	245.7	236.0	299.1	236.0	11599	214
10:04 AM	604.10	87.42	2.42	133	11	Pump 2	Yes	No	Pump 2	11,778	242.4	228.2	292.6	228.2	11778	80
10:05 AM	605.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	11,824	240.0	222.0	288.0	0.0	11778	126
10:06 AM	606.10	86.49	1.49	46	2	Pump 1	No	No	Both Off	11,870	240.8	224.1	289.6	0.0	11778	172
10:07 AM	607.10	86.98	1.98	92	2	Pump 1	No	No	Both Off	11,916	241.6	226.2	291.2	0.0	11778	218
10:08 AM	608.10	87.47	2.47	138	2	Pump 1	No	No	Both Off	11,962	242.4	228.4	292.7	0.0	11778	264
10:09 AM	609.10	87.96	2.96	184	2	Pump 1	No	No	Both Off	12,009	243.3	230.5	294.3	0.0	11778	310
10:10 AM	610.10	88.45	3.45	230	2	Pump 1	No	No	Both Off	12,055	244.1	232.6	295.9	0.0	11778	356
10:11 AM	611.10	88.94	3.94	276	2	Pump 1	No	No	Both Off	12,101	244.9	234.7	297.5	0.0	11778	402
10:12 AM	612.10	89.43	4.43	322	3	Pump 1	Yes	No	Pump 1	12,147	245.7	236.0	299.0	245.7	12024	203
10:13 AM	613.10	87.30	2.30	123	11	Pump 1	Yes	No	Pump 1	12,193	242.2	227.7	292.2	242.2	12193	80
10:14 AM	614.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	12,239	240.0	222.0	288.0	0.0	12193	126

10:15 AM	615.10	86.49	1.49	46	2	Pump 2	No	No	Both Off	12,285	240.8	224.1	289.6	0.0	12193	172
10:16 AM	616.10	86.98	1.98	92	2	Pump 2	No	No	Both Off	12,331	241.6	226.2	291.2	0.0	12193	218
10:17 AM	617.10	87.47	2.47	138	2	Pump 2	No	No	Both Off	12,377	242.4	228.4	292.7	0.0	12193	264
10:18 AM	618.10	87.96	2.96	184	2	Pump 2	No	No	Both Off	12,423	243.3	230.5	294.3	0.0	12193	310
10:19 AM	619.10	88.45	3.45	230	2	Pump 2	No	No	Both Off	12,469	244.1	232.6	295.9	0.0	12193	356
10:20 AM	620.10	88.94	3.94	276	2	Pump 2	No	No	Both Off	12,515	244.9	234.7	297.5	0.0	12193	402
10:21 AM	621.10	89.43	4.43	322	3	Pump 2	Yes	No	Pump 2	12,561	245.7	236.0	299.0	236.0	12429	213
10:22 AM	622.10	87.41	2.41	132	11	Pump 2	Yes	No	Pump 2	12,607	242.3	228.1	292.5	228.1	12607	80
10:23 AM	623.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	12,653	240.0	222.0	288.0	0.0	12607	126
10:24 AM	624.10	86.49	1.49	46	2	Pump 1	No	No	Both Off	12,699	240.8	224.1	289.6	0.0	12607	172
10:25 AM	625.10	86.98	1.98	92	2	Pump 1	No	No	Both Off	12,745	241.6	226.2	291.2	0.0	12607	218
10:26 AM	626.10	87.47	2.47	138	2	Pump 1	No	No	Both Off	12,791	242.4	228.4	292.7	0.0	12607	264
10:27 AM	627.10	87.96	2.96	184	2	Pump 1	No	No	Both Off	12,837	243.3	230.5	294.3	0.0	12607	310
10:28 AM	628.10	88.45	3.45	230	2	Pump 1	No	No	Both Off	12,883	244.1	232.6	295.9	0.0	12607	356
10:29 AM	629.10	88.94	3.94	276	2	Pump 1	No	No	Both Off	12,929	244.9	234.7	297.5	0.0	12607	402
10:30 AM	630.10	89.43	4.43	322	3	Pump 1	Yes	No	Pump 1	12,975	245.7	236.0	299.0	245.7	12853	203
10:31 AM	631.10	87.30	2.30	123	11	Pump 1	Yes	No	Pump 1	13,022	242.2	227.7	292.2	242.2	13022	80
10:32 AM	632.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	13,068	240.0	222.0	288.0	0.0	13022	126
10:33 AM	633.10	86.49	1.49	46	2	Pump 2	No	No	Both Off	13,114	240.8	224.1	289.6	0.0	13022	172
10:34 AM	634.10	86.98	1.98	92	2	Pump 2	No	No	Both Off	13,160	241.6	226.2	291.2	0.0	13022	218
10:35 AM	635.10	87.47	2.47	138	2	Pump 2	No	No	Both Off	13,206	242.4	228.4	292.7	0.0	13022	264
10:36 AM	636.10	87.96	2.96	184	2	Pump 2	No	No	Both Off	13,252	243.2	230.5	294.3	0.0	13022	310
10:37 AM	637.10	88.45	3.45	230	2	Pump 2	No	No	Both Off	13,298	244.1	232.6	295.9	0.0	13022	356
10:38 AM	638.10	88.94	3.94	276	2	Pump 2	No	No	Both Off	13,344	244.9	234.7	297.5	0.0	13022	402
10:39 AM	639.10	89.43	4.43	322	3	Pump 2	Yes	No	Pump 2	13,390	245.7	236.0	299.0	236.0	13258	213
10:40 AM	640.10	87.41	2.41	132	11	Pump 2	Yes	No	Pump 2	13,436	242.3	228.1	292.5	228.1	13436	80
10:41 AM	641.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	13,482	240.0	222.0	288.0	0.0	13436	126
10:42 AM	642.10	86.49	1.49	46	2	Pump 1	No	No	Both Off	13,528	240.8	224.1	289.6	0.0	13436	172
10:43 AM	643.10	86.98	1.98	92	2	Pump 1	No	No	Both Off	13,574	241.6	226.2	291.2	0.0	13436	218
10:44 AM	644.10	87.47	2.47	138	2	Pump 1	No	No	Both Off	13,620	242.4	228.4	292.7	0.0	13436	264
10:45 AM	645.10	87.96	2.96	184	2	Pump 1	No	No	Both Off	13,666	243.3	230.5	294.3	0.0	13436	310
10:46 AM	646.10	88.45	3.45	230	2	Pump 1	No	No	Both Off	13,712	244.1	232.6	295.9	0.0	13436	356
10:47 AM	647.10	88.94	3.94	276	2	Pump 1	No	No	Both Off	13,758	244.9	234.7	297.5	0.0	13436	402
10:48 AM	648.10	89.43	4.43	322	3	Pump 1	Yes	No	Pump 1	13,804	245.7	236.0	299.0	245.7	13682	203
10:49 AM	649.10	87.30	2.30	123	11	Pump 1	Yes	No	Pump 1	13,850	242.2	227.7	292.2	242.2	13850	80
10:50 AM	650.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	13,896	240.0	222.0	288.0	0.0	13850	126
10:51 AM	651.10	86.49	1.49	46	2	Pump 2	No	No	Both Off	13,942	240.8	224.1	289.6	0.0	13850	172
10:52 AM	652.10	86.98	1.98	92	2	Pump 2	No	No	Both Off	13,988	241.6	226.2	291.2	0.0	13850	218
10:53 AM	653.10	87.47	2.47	138	2	Pump 2	No	No	Both Off	14,035	242.4	228.4	292.7	0.0	13850	264
10:54 AM	654.10	87.96	2.96	184	2	Pump 2	No	No	Both Off	14,081	243.3	230.5	294.3	0.0	13850	310
10:55 AM	655.10	88.45	3.45	230	2	Pump 2	No	No	Both Off	14,127	244.1	232.6	295.9	0.0	13850	356
10:56 AM	656.10	88.94	3.94	276	2	Pump 2	No	No	Both Off	14,173	244.9	234.7	297.5	0.0	13850	402
10:57 AM	657.10	89.43	4.43	322	3	Pump 2	Yes	No	Pump 2	14,219	245.7	236.0	299.0	236.0	14086	213
10:58 AM	658.10	87.41	2.41	132	11	Pump 2	Yes	No	Pump 2	14,265	242.3	228.1	292.5	228.1	14265	80
10:59 AM	659.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	14,311	240.0	222.0	288.0	0.0	14265	126
11:00 AM	660.10	86.49	1.49	46	2	Pump 1	No	No	Both Off	14,354	240.8	224.1	289.6	0.0	14265	169
11:01 AM	661.10	86.95	1.95	89	2	Pump 1	No	No	Both Off	14,371	241.6	226.1	291.1	0.0	14265	187
11:02 AM	662.10	87.13	2.13	107	2	Pump 1	No	No	Both Off	14,389	241.9	226.9	291.7	0.0	14265	204
11:03 AM	663.10	87.32	2.32	124	2	Pump 1	No	No	Both Off	14,406	242.2	227.7	292.2	0.0	14265	221
11:04 AM	664.10	87.50	2.50	141	2	Pump 1	No	No	Both Off	14,423	242.5	228.5	292.8	0.0	14265	239
11:05 AM	665.10	87.69	2.69	158	2	Pump 1	No	No	Both Off	14,440	242.8	229.3	293.4	0.0	14265	256
11:06 AM	666.10	87.87	2.87	176	2	Pump 1	No	No	Both Off	14,458	243.1	230.1	294.0	0.0	14265	273
11:07 AM	667.10	88.05	3.05	193	2	Pump 1	No	No	Both Off	14,475	243.4	230.9	294.6	0.0	14265	290
11:08 AM	668.10	88.24	3.24	210	2	Pump 1	No	No	Both Off	14,492	243.7	231.7	295.2	0.0	14265	308
11:09 AM	669.10	88.42	3.42	228	2	Pump 1	No	No	Both Off	14,510	244.0	232.5	295.8	0.0	14265	325
11:10 AM	670.10	88.61	3.61	245	2	Pump 1	No	No	Both Off	14,527	244.3	233.3	296.4	0.0	14265	342
11:11 AM	671.10	88.79	3.79	262	2	Pump 1	No	No	Both Off	14,544	244.6	234.1	297.0	0.0	14265	360
11:12 AM	672.10	88.97	3.97	279	2	Pump 1	No	No	Both Off	14,561	245.0	234.9	297.6	0.0	14265	377
11:13 AM	673.10	89.16	4.16	297	3	Pump 1	Yes	No	Pump 1	14,579	245.3	235.4	298.2	245.3	14510	149
11:14 AM	674.10	86.73	1.73	69	11	Pump 1	Yes	No	Pump 1	14,596	241.2	225.2	290.4	241.2	14596	80
11:15 AM	675.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	14,613	240.0	222.0	288.0	0.0	14596	97
11:16 AM	676.10	86.18	1.18	17	2	Pump 2	No	No	Both Off	14,631	240.3	222.8	288.6	0.0	14596	115

Time															
11:17 AM	677.10	86.37	1.37	35	2	Pump 2	No	No	Both Off	14,648	240.6	223.6	289.2	0.0	14596	132
11:18 AM	678.10	86.55	1.55	52	2	Pump 2	No	No	Both Off	14,665	240.9	224.4	289.8	0.0	14596	149
11:19 AM	679.10	86.74	1.74	69	2	Pump 2	No	No	Both Off	14,683	241.2	225.2	290.4	0.0	14596	167
11:20 AM	680.10	86.92	1.92	86	2	Pump 2	No	No	Both Off	14,700	241.5	226.0	291.0	0.0	14596	184
11:21 AM	681.10	87.10	2.10	104	2	Pump 2	No	No	Both Off	14,717	241.8	226.8	291.6	0.0	14596	201
11:22 AM	682.10	87.29	2.29	121	2	Pump 2	No	No	Both Off	14,734	242.1	227.6	292.2	0.0	14596	219
11:23 AM	683.10	87.47	2.47	138	2	Pump 2	No	No	Both Off	14,752	242.5	228.4	292.7	0.0	14596	236
11:24 AM	684.10	87.66	2.66	156	2	Pump 2	No	No	Both Off	14,769	242.8	229.2	293.3	0.0	14596	253
11:25 AM	685.10	87.84	2.84	173	2	Pump 2	No	No	Both Off	14,786	243.1	230.0	293.9	0.0	14596	270
11:26 AM	686.10	88.02	3.02	190	2	Pump 2	No	No	Both Off	14,804	243.4	230.8	294.5	0.0	14596	288
11:27 AM	687.10	88.21	3.21	208	2	Pump 2	No	No	Both Off	14,821	243.7	231.6	295.1	0.0	14596	305
11:28 AM	688.10	88.39	3.39	225	2	Pump 2	No	No	Both Off	14,838	244.0	232.4	295.7	0.0	14596	322
11:29 AM	689.10	88.58	3.58	242	2	Pump 2	No	No	Both Off	14,855	244.3	233.2	296.3	0.0	14596	340
11:30 AM	690.10	88.76	3.76	259	2	Pump 2	No	No	Both Off	14,873	244.6	234.0	296.9	0.0	14596	357
11:31 AM	691.10	88.94	3.94	277	2	Pump 2	No	No	Both Off	14,890	244.9	234.8	297.5	0.0	14596	374
11:32 AM	692.10	89.13	4.13	294	3	Pump 2	Yes	No	Pump 2	14,907	245.2	235.3	298.1	235.3	14831	156
11:33 AM	693.10	86.81	1.81	76	11	Pump 2	Yes	No	Pump 2	14,925	241.3	225.5	290.6	225.5	14925	80
11:34 AM	694.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	14,942	240.0	222.0	288.0	0.0	14925	97
11:35 AM	695.10	86.18	1.18	17	2	Pump 1	No	No	Both Off	14,959	240.3	222.8	288.6	0.0	14925	115
11:36 AM	696.10	86.37	1.37	35	2	Pump 1	No	No	Both Off	14,977	240.6	223.6	289.2	0.0	14925	132
11:37 AM	697.10	86.55	1.55	52	2	Pump 1	No	No	Both Off	14,994	240.9	224.4	289.8	0.0	14925	149
11:38 AM	698.10	86.74	1.74	69	2	Pump 1	No	No	Both Off	15,011	241.2	225.2	290.4	0.0	14925	167
11:39 AM	699.10	86.92	1.92	86	2	Pump 1	No	No	Both Off	15,028	241.5	226.0	291.0	0.0	14925	184
11:40 AM	700.10	87.10	2.10	104	2	Pump 1	No	No	Both Off	15,046	241.8	226.8	291.6	0.0	14925	201
11:41 AM	701.10	87.29	2.29	121	2	Pump 1	No	No	Both Off	15,063	242.1	227.6	292.2	0.0	14925	219
11:42 AM	702.10	87.47	2.47	138	2	Pump 1	No	No	Both Off	15,080	242.5	228.4	292.7	0.0	14925	236
11:43 AM	703.10	87.66	2.66	156	2	Pump 1	No	No	Both Off	15,098	242.8	229.2	293.3	0.0	14925	253
11:44 AM	704.10	87.84	2.84	173	2	Pump 1	No	No	Both Off	15,115	243.1	230.0	293.9	0.0	14925	270
11:45 AM	705.10	88.02	3.02	190	2	Pump 1	No	No	Both Off	15,132	243.4	230.8	294.5	0.0	14925	288
11:46 AM	706.10	88.21	3.21	208	2	Pump 1	No	No	Both Off	15,149	243.7	231.6	295.1	0.0	14925	305
11:47 AM	707.10	88.39	3.39	225	2	Pump 1	No	No	Both Off	15,167	244.0	232.4	295.7	0.0	14925	322
11:48 AM	708.10	88.58	3.58	242	2	Pump 1	No	No	Both Off	15,184	244.3	233.2	296.3	0.0	14925	340
11:49 AM	709.10	88.76	3.76	259	2	Pump 1	No	No	Both Off	15,201	244.6	234.0	296.9	0.0	14925	357
11:50 AM	710.10	88.94	3.94	277	2	Pump 1	No	No	Both Off	15,219	244.9	234.8	297.5	0.0	14925	374
11:51 AM	711.10	89.13	4.13	294	3	Pump 1	Yes	No	Pump 1	15,236	245.2	235.3	298.1	245.2	15170	146
11:52 AM	712.10	86.70	1.70	66	11	Pump 1	Yes	No	Pump 1	15,253	241.2	225.0	290.3	241.2	15253	80
11:53 AM	713.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	15,271	240.0	222.0	288.0	0.0	15253	97
11:54 AM	714.10	86.18	1.18	17	2	Pump 2	No	No	Both Off	15,288	240.3	222.8	288.6	0.0	15253	115
11:55 AM	715.10	86.37	1.37	35	2	Pump 2	No	No	Both Off	15,305	240.6	223.6	289.2	0.0	15253	132
11:56 AM	716.10	86.55	1.55	52	2	Pump 2	No	No	Both Off	15,322	240.9	224.4	289.8	0.0	15253	149
11:57 AM	717.10	86.74	1.74	69	2	Pump 2	No	No	Both Off	15,340	241.2	225.2	290.4	0.0	15253	167
11:58 AM	718.10	86.92	1.92	86	2	Pump 2	No	No	Both Off	15,357	241.5	226.0	291.0	0.0	15253	184
11:59 AM	719.10	87.10	2.10	104	2	Pump 2	No	No	Both Off	15,374	241.8	226.8	291.6	0.0	15253	201
12:00 PM	720.10	87.29	2.29	121	2	Pump 2	No	No	Both Off	15,391	242.1	227.6	292.2	0.0	15253	218
12:01 PM	721.10	87.47	2.47	138	2	Pump 2	No	No	Both Off	15,407	242.4	228.4	292.7	0.0	15253	233
12:02 PM	722.10	87.63	2.63	153	2	Pump 2	No	No	Both Off	15,422	242.7	229.1	293.3	0.0	15253	249
12:03 PM	723.10	87.79	2.79	168	2	Pump 2	No	No	Both Off	15,437	243.0	229.8	293.8	0.0	15253	264
12:04 PM	724.10	87.95	2.95	184	2	Pump 2	No	No	Both Off	15,452	243.3	230.5	294.3	0.0	15253	279
12:05 PM	725.10	88.12	3.12	199	2	Pump 2	No	No	Both Off	15,467	243.5	231.2	294.8	0.0	15253	294
12:06 PM	726.10	88.28	3.28	214	2	Pump 2	No	No	Both Off	15,482	243.8	231.9	295.3	0.0	15253	309
12:07 PM	727.10	88.44	3.44	229	2	Pump 2	No	No	Both Off	15,498	244.1	232.6	295.9	0.0	15253	325
12:08 PM	728.10	88.60	3.60	244	2	Pump 2	No	No	Both Off	15,513	244.3	233.3	296.4	0.0	15253	340
12:09 PM	729.10	88.76	3.76	260	2	Pump 2	No	No	Both Off	15,528	244.6	234.0	296.9	0.0	15253	355
12:10 PM	730.10	88.92	3.92	275	2	Pump 2	No	No	Both Off	15,543	244.9	234.7	297.4	0.0	15253	370
12:11 PM	731.10	89.08	4.08	290	3	Pump 2	Yes	No	Pump 2	15,558	245.1	235.2	297.9	235.2	15488	150
12:12 PM	732.10	86.74	1.74	70	11	Pump 2	Yes	No	Pump 2	15,574	241.2	225.2	290.4	225.2	15574	80
12:13 PM	733.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	15,589	240.0	222.0	288.0	0.0	15574	95
12:14 PM	734.10	86.16	1.16	15	2	Pump 1	No	No	Both Off	15,604	240.3	222.7	288.5	0.0	15574	111
12:15 PM	735.10	86.32	1.32	30	2	Pump 1	No	No	Both Off	15,619	240.5	223.4	289.0	0.0	15574	126
12:16 PM	736.10	86.48	1.48	46	2	Pump 1	No	No	Both Off	15,634	240.8	224.1	289.6	0.0	15574	141
12:17 PM	737.10	86.65	1.65	61	2	Pump 1	No	No	Both Off	15,649	241.1	224.8	290.1	0.0	15574	156
12:18 PM	738.10	86.81	1.81	76	2	Pump 1	No	No	Both Off	15,665	241.3	225.5	290.6	0.0	15574	171

12:19 PM	739.10	86.97	1.97	91	2	Pump 1	No	No	Both Off	15,680	241.6	226.2	291.1	0.0	15574	186
12:20 PM	740.10	87.13	2.13	106	2	Pump 1	No	No	Both Off	15,695	241.9	226.9	291.6	0.0	15574	202
12:21 PM	741.10	87.29	2.29	121	2	Pump 1	No	No	Both Off	15,710	242.2	227.6	292.2	0.0	15574	217
12:22 PM	742.10	87.45	2.45	137	2	Pump 1	No	No	Both Off	15,725	242.4	228.3	292.7	0.0	15574	232
12:23 PM	743.10	87.61	2.61	152	2	Pump 1	No	No	Both Off	15,740	242.7	229.0	293.2	0.0	15574	247
12:24 PM	744.10	87.78	2.78	167	2	Pump 1	No	No	Both Off	15,756	243.0	229.7	293.7	0.0	15574	262
12:25 PM	745.10	87.94	2.94	182	2	Pump 1	No	No	Both Off	15,771	243.2	230.4	294.2	0.0	15574	277
12:26 PM	746.10	88.10	3.10	197	2	Pump 1	No	No	Both Off	15,786	243.5	231.1	294.8	0.0	15574	293
12:27 PM	747.10	88.26	3.26	212	2	Pump 1	No	No	Both Off	15,801	243.8	231.8	295.3	0.0	15574	308
12:28 PM	748.10	88.42	3.42	228	2	Pump 1	No	No	Both Off	15,816	244.0	232.5	295.8	0.0	15574	323
12:29 PM	749.10	88.58	3.58	243	2	Pump 1	No	No	Both Off	15,832	244.3	233.2	296.3	0.0	15574	338
12:30 PM	750.10	88.74	3.74	258	2	Pump 1	No	No	Both Off	15,847	244.6	233.9	296.8	0.0	15574	353
12:31 PM	751.10	88.91	3.91	273	2	Pump 1	No	No	Both Off	15,862	244.8	234.6	297.4	0.0	15574	369
12:32 PM	752.10	89.07	4.07	288	3	Pump 1	Yes	No	Pump 1	15,877	245.1	235.2	297.9	245.1	15819	139
12:33 PM	753.10	86.62	1.62	58	11	Pump 1	Yes	No	Pump 1	15,892	241.0	224.7	290.0	241.0	15892	80
12:34 PM	754.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	15,907	240.0	222.0	288.0	0.0	15892	95
12:35 PM	755.10	86.16	1.16	15	2	Pump 2	No	No	Both Off	15,923	240.3	222.7	288.5	0.0	15892	111
12:36 PM	756.10	86.32	1.32	30	2	Pump 2	No	No	Both Off	15,938	240.5	223.4	289.0	0.0	15892	126
12:37 PM	757.10	86.48	1.48	46	2	Pump 2	No	No	Both Off	15,953	240.8	224.1	289.6	0.0	15892	141
12:38 PM	758.10	86.65	1.65	61	2	Pump 2	No	No	Both Off	15,968	241.1	224.8	290.1	0.0	15892	156
12:39 PM	759.10	86.81	1.81	76	2	Pump 2	No	No	Both Off	15,983	241.3	225.5	290.6	0.0	15892	171
12:40 PM	760.10	86.97	1.97	91	2	Pump 2	No	No	Both Off	15,998	241.6	226.2	291.1	0.0	15892	186
12:41 PM	761.10	87.13	2.13	106	2	Pump 2	No	No	Both Off	16,014	241.9	226.9	291.6	0.0	15892	202
12:42 PM	762.10	87.29	2.29	121	2	Pump 2	No	No	Both Off	16,029	242.2	227.6	292.2	0.0	15892	217
12:43 PM	763.10	87.45	2.45	137	2	Pump 2	No	No	Both Off	16,044	242.4	228.3	292.7	0.0	15892	232
12:44 PM	764.10	87.61	2.61	152	2	Pump 2	No	No	Both Off	16,059	242.7	229.0	293.2	0.0	15892	247
12:45 PM	765.10	87.78	2.78	167	2	Pump 2	No	No	Both Off	16,074	243.0	229.7	293.7	0.0	15892	262
12:46 PM	766.10	87.94	2.94	182	2	Pump 2	No	No	Both Off	16,090	243.2	230.4	294.2	0.0	15892	277
12:47 PM	767.10	88.10	3.10	197	2	Pump 2	No	No	Both Off	16,105	243.5	231.1	294.8	0.0	15892	293
12:48 PM	768.10	88.26	3.26	212	2	Pump 2	No	No	Both Off	16,120	243.8	231.8	295.3	0.0	15892	308
12:49 PM	769.10	88.42	3.42	228	2	Pump 2	No	No	Both Off	16,135	244.0	232.5	295.8	0.0	15892	323
12:50 PM	770.10	88.58	3.58	243	2	Pump 2	No	No	Both Off	16,150	244.3	233.2	296.3	0.0	15892	338
12:51 PM	771.10	88.74	3.74	258	2	Pump 2	No	No	Both Off	16,165	244.6	233.9	296.8	0.0	15892	353
12:52 PM	772.10	88.91	3.91	273	2	Pump 2	No	No	Both Off	16,181	244.8	234.6	297.4	0.0	15892	369
12:53 PM	773.10	89.07	4.07	288	3	Pump 2	Yes	No	Pump 2	16,196	245.1	235.2	297.9	235.2	16127	149
12:54 PM	774.10	86.73	1.73	68	11	Pump 2	Yes	No	Pump 2	16,211	241.2	225.2	290.3	225.2	16211	80
12:55 PM	775.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	16,226	240.0	222.0	288.0	0.0	16211	95
12:56 PM	776.10	86.16	1.16	15	2	Pump 1	No	No	Both Off	16,241	240.3	222.7	288.5	0.0	16211	111
12:57 PM	777.10	86.32	1.32	30	2	Pump 1	No	No	Both Off	16,256	240.5	223.4	289.0	0.0	16211	126
12:58 PM	778.10	86.48	1.48	46	2	Pump 1	No	No	Both Off	16,272	240.8	224.1	289.6	0.0	16211	141
12:59 PM	779.10	86.65	1.65	61	2	Pump 1	No	No	Both Off	16,287	241.1	224.8	290.1	0.0	16211	156
1:00 PM	780.10	86.81	1.81	76	2	Pump 1	No	No	Both Off	16,302	241.3	225.5	290.6	0.0	16211	171
1:01 PM	781.10	86.97	1.97	91	2	Pump 1	No	No	Both Off	16,314	241.6	226.2	291.1	0.0	16211	184
1:02 PM	782.10	87.10	2.10	104	2	Pump 1	No	No	Both Off	16,327	241.8	226.8	291.5	0.0	16211	196
1:03 PM	783.10	87.24	2.24	116	2	Pump 1	No	No	Both Off	16,340	242.1	227.4	292.0	0.0	16211	209
1:04 PM	784.10	87.37	2.37	129	2	Pump 1	No	No	Both Off	16,353	242.3	227.9	292.4	0.0	16211	222
1:05 PM	785.10	87.51	2.51	142	2	Pump 1	No	No	Both Off	16,365	242.5	228.5	292.9	0.0	16211	235
1:06 PM	786.10	87.64	2.64	154	2	Pump 1	No	No	Both Off	16,378	242.7	229.1	293.3	0.0	16211	247
1:07 PM	787.10	87.78	2.78	167	2	Pump 1	No	No	Both Off	16,391	243.0	229.7	293.7	0.0	16211	260
1:08 PM	788.10	87.91	2.91	180	2	Pump 1	No	No	Both Off	16,403	243.2	230.3	294.2	0.0	16211	273
1:09 PM	789.10	88.05	3.05	192	2	Pump 1	No	No	Both Off	16,416	243.4	230.9	294.6	0.0	16211	285
1:10 PM	790.10	88.18	3.18	205	2	Pump 1	No	No	Both Off	16,429	243.6	231.5	295.0	0.0	16211	298
1:11 PM	791.10	88.32	3.32	218	2	Pump 1	No	No	Both Off	16,442	243.9	232.0	295.5	0.0	16211	311
1:12 PM	792.10	88.45	3.45	231	2	Pump 1	No	No	Both Off	16,454	244.1	232.6	295.9	0.0	16211	323
1:13 PM	793.10	88.59	3.59	243	2	Pump 1	No	No	Both Off	16,467	244.3	233.2	296.3	0.0	16211	336
1:14 PM	794.10	88.72	3.72	256	2	Pump 1	No	No	Both Off	16,480	244.5	233.8	296.8	0.0	16211	349
1:15 PM	795.10	88.86	3.86	269	2	Pump 1	No	No	Both Off	16,492	244.8	234.4	297.2	0.0	16211	362
1:16 PM	796.10	88.99	3.99	281	2	Pump 1	No	No	Both Off	16,505	245.0	235.0	297.6	0.0	16211	374
1:17 PM	797.10	89.13	4.13	294	3	Pump 1	Yes	No	Pump 1	16,518	245.2	235.3	298.1	245.2	16456	142
1:18 PM	798.10	86.66	1.66	62	11	Pump 1	Yes	No	Pump 1	16,530	241.1	224.8	290.1	241.1	16530	80
1:19 PM	799.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	16,543	240.0	222.0	288.0	0.0	16530	93
1:20 PM	800.10	86.14	1.14	13	2	Pump 2	No	No	Both Off	16,556	240.2	222.6	288.4	0.0	16530	106

1:21 PM	801.10	86.27	1.27	25	2	Pump 2	No	No	Both Off	16,569	240.5	223.2	288.9	0.0	16530	118
1:22 PM	802.10	86.41	1.41	38	2	Pump 2	No	No	Both Off	16,581	240.7	223.8	289.3	0.0	16530	131
1:23 PM	803.10	86.54	1.54	51	2	Pump 2	No	No	Both Off	16,594	240.9	224.3	289.7	0.0	16530	144
1:24 PM	804.10	86.68	1.68	64	2	Pump 2	No	No	Both Off	16,607	241.1	224.9	290.2	0.0	16530	156
1:25 PM	805.10	86.81	1.81	76	2	Pump 2	No	No	Both Off	16,619	241.4	225.5	290.6	0.0	16530	169
1:26 PM	806.10	86.95	1.95	89	2	Pump 2	No	No	Both Off	16,632	241.6	226.1	291.0	0.0	16530	182
1:27 PM	807.10	87.08	2.08	102	2	Pump 2	No	No	Both Off	16,645	241.8	226.7	291.5	0.0	16530	195
1:28 PM	808.10	87.22	2.22	114	2	Pump 2	No	No	Both Off	16,658	242.0	227.3	291.9	0.0	16530	207
1:29 PM	809.10	87.35	2.35	127	2	Pump 2	No	No	Both Off	16,670	242.3	227.9	292.4	0.0	16530	220
1:30 PM	810.10	87.49	2.49	140	2	Pump 2	No	No	Both Off	16,683	242.5	228.4	292.8	0.0	16530	233
1:31 PM	811.10	87.62	2.62	152	2	Pump 2	No	No	Both Off	16,696	242.7	229.0	293.2	0.0	16530	245
1:32 PM	812.10	87.76	2.76	165	2	Pump 2	No	No	Both Off	16,708	242.9	229.6	293.7	0.0	16530	258
1:33 PM	813.10	87.89	2.89	178	2	Pump 2	No	No	Both Off	16,721	243.2	230.2	294.1	0.0	16530	271
1:34 PM	814.10	88.03	3.03	191	2	Pump 2	No	No	Both Off	16,734	243.4	230.8	294.5	0.0	16530	283
1:35 PM	815.10	88.16	3.16	203	2	Pump 2	No	No	Both Off	16,746	243.6	231.4	295.0	0.0	16530	296
1:36 PM	816.10	88.30	3.30	216	2	Pump 2	No	No	Both Off	16,759	243.8	232.0	295.4	0.0	16530	309
1:37 PM	817.10	88.43	3.43	229	2	Pump 2	No	No	Both Off	16,772	244.1	232.5	295.8	0.0	16530	322
1:38 PM	818.10	88.57	3.57	241	2	Pump 2	No	No	Both Off	16,785	244.3	233.1	296.3	0.0	16530	334
1:39 PM	819.10	88.70	3.70	254	2	Pump 2	No	No	Both Off	16,797	244.5	233.7	296.7	0.0	16530	347
1:40 PM	820.10	88.84	3.84	267	2	Pump 2	No	No	Both Off	16,810	244.7	234.3	297.1	0.0	16530	360
1:41 PM	821.10	88.97	3.97	280	2	Pump 2	No	No	Both Off	16,823	245.0	234.9	297.6	0.0	16530	372
1:42 PM	822.10	89.11	4.11	292	3	Pump 2	Yes	No	Pump 2	16,835	245.2	235.3	298.0	235.3	16766	150
1:43 PM	823.10	86.74	1.74	70	11	Pump 2	Yes	No	Pump 2	16,848	241.2	225.2	290.4	225.2	16848	80
1:44 PM	824.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	16,861	240.0	222.0	288.0	0.0	16848	93
1:45 PM	825.10	86.14	1.14	13	2	Pump 1	No	No	Both Off	16,874	240.2	222.6	288.4	0.0	16848	106
1:46 PM	826.10	86.27	1.27	25	2	Pump 1	No	No	Both Off	16,886	240.5	223.2	288.9	0.0	16848	118
1:47 PM	827.10	86.41	1.41	38	2	Pump 1	No	No	Both Off	16,899	240.7	223.8	289.3	0.0	16848	131
1:48 PM	828.10	86.54	1.54	51	2	Pump 1	No	No	Both Off	16,912	240.9	224.3	289.7	0.0	16848	144
1:49 PM	829.10	86.68	1.68	64	2	Pump 1	No	No	Both Off	16,924	241.1	224.9	290.2	0.0	16848	156
1:50 PM	830.10	86.81	1.81	76	2	Pump 1	No	No	Both Off	16,937	241.4	225.5	290.6	0.0	16848	169
1:51 PM	831.10	86.95	1.95	89	2	Pump 1	No	No	Both Off	16,950	241.6	226.1	291.0	0.0	16848	182
1:52 PM	832.10	87.08	2.08	102	2	Pump 1	No	No	Both Off	16,962	241.8	226.7	291.5	0.0	16848	195
1:53 PM	833.10	87.22	2.22	114	2	Pump 1	No	No	Both Off	16,975	242.0	227.3	291.9	0.0	16848	207
1:54 PM	834.10	87.35	2.35	127	2	Pump 1	No	No	Both Off	16,988	242.3	227.9	292.4	0.0	16848	220
1:55 PM	835.10	87.49	2.49	140	2	Pump 1	No	No	Both Off	17,001	242.5	228.4	292.8	0.0	16848	233
1:56 PM	836.10	87.62	2.62	152	2	Pump 1	No	No	Both Off	17,013	242.7	229.0	293.2	0.0	16848	245
1:57 PM	837.10	87.76	2.76	165	2	Pump 1	No	No	Both Off	17,026	242.9	229.6	293.7	0.0	16848	258
1:58 PM	838.10	87.89	2.89	178	2	Pump 1	No	No	Both Off	17,039	243.2	230.2	294.1	0.0	16848	271
1:59 PM	839.10	88.03	3.03	191	2	Pump 1	No	No	Both Off	17,051	243.4	230.8	294.5	0.0	16848	283
2:00 PM	840.10	88.16	3.16	203	2	Pump 1	No	No	Both Off	17,064	243.6	231.4	295.0	0.0	16848	296
2:01 PM	841.10	88.29	3.29	216	2	Pump 1	No	No	Both Off	17,073	243.8	231.9	295.4	0.0	16848	305
2:02 PM	842.10	88.40	3.40	225	2	Pump 1	No	No	Both Off	17,083	244.0	232.4	295.7	0.0	16848	315
2:03 PM	843.10	88.50	3.50	235	2	Pump 1	No	No	Both Off	17,092	244.2	232.8	296.0	0.0	16848	324
2:04 PM	844.10	88.60	3.60	244	2	Pump 1	No	No	Both Off	17,102	244.3	233.3	296.4	0.0	16848	334
2:05 PM	845.10	88.70	3.70	254	2	Pump 1	No	No	Both Off	17,111	244.5	233.7	296.7	0.0	16848	344
2:06 PM	846.10	88.80	3.80	263	2	Pump 1	No	No	Both Off	17,121	244.7	234.1	297.0	0.0	16848	353
2:07 PM	847.10	88.90	3.90	273	2	Pump 1	No	No	Both Off	17,130	244.8	234.6	297.4	0.0	16848	363
2:08 PM	848.10	89.00	4.00	282	3	Pump 1	Yes	No	Pump 1	17,140	245.0	235.0	297.7	245.0	17093	127
2:09 PM	849.10	86.50	1.50	47	11	Pump 1	Yes	No	Pump 1	17,150	240.8	224.2	289.6	240.8	17150	80
2:10 PM	850.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	17,159	240.0	222.0	288.0	0.0	17150	90
2:11 PM	851.10	86.10	1.10	10	2	Pump 2	No	No	Both Off	17,169	240.2	222.4	288.3	0.0	17150	99
2:12 PM	852.10	86.20	1.20	19	2	Pump 2	No	No	Both Off	17,178	240.3	222.9	288.7	0.0	17150	109
2:13 PM	853.10	86.30	1.30	29	2	Pump 2	No	No	Both Off	17,188	240.5	223.3	289.0	0.0	17150	118
2:14 PM	854.10	86.41	1.41	38	2	Pump 2	No	No	Both Off	17,197	240.7	223.8	289.3	0.0	17150	128
2:15 PM	855.10	86.51	1.51	48	2	Pump 2	No	No	Both Off	17,207	240.8	224.2	289.4	0.0	17150	137
2:16 PM	856.10	86.61	1.61	57	2	Pump 2	No	No	Both Off	17,216	241.0	224.6	290.0	0.0	17150	147
2:17 PM	857.10	86.71	1.71	67	2	Pump 2	No	No	Both Off	17,226	241.2	225.1	290.3	0.0	17150	156
2:18 PM	858.10	86.81	1.81	76	2	Pump 2	No	No	Both Off	17,235	241.4	225.5	290.6	0.0	17150	166
2:19 PM	859.10	86.91	1.91	86	2	Pump 2	No	No	Both Off	17,245	241.5	226.0	290.9	0.0	17150	175
2:20 PM	860.10	87.01	2.01	95	2	Pump 2	No	No	Both Off	17,254	241.7	226.4	291.3	0.0	17150	185
2:21 PM	861.10	87.12	2.12	105	2	Pump 2	No	No	Both Off	17,264	241.9	226.8	291.6	0.0	17150	195
2:22 PM	862.10	87.22	2.22	114	2	Pump 2	No	No	Both Off	17,273	242.0	227.3	291.9	0.0	17150	204

2:23 PM	863.10	87.32	2.32	124	2	Pump 2	No	No	Both Off	17,283	242.2	227.7	292.2	0.0	17150	214
2:24 PM	864.10	87.42	2.42	133	2	Pump 2	No	No	Both Off	17,292	242.4	228.2	292.6	0.0	17150	223
2:25 PM	865.10	87.52	2.52	143	2	Pump 2	No	No	Both Off	17,302	242.5	228.6	292.9	0.0	17150	233
2:26 PM	866.10	87.62	2.62	152	2	Pump 2	No	No	Both Off	17,312	242.7	229.0	293.2	0.0	17150	242
2:27 PM	867.10	87.72	2.72	162	2	Pump 2	No	No	Both Off	17,321	242.9	229.5	293.6	0.0	17150	252
2:28 PM	868.10	87.82	2.82	172	2	Pump 2	No	No	Both Off	17,331	243.0	229.9	293.9	0.0	17150	261
2:29 PM	869.10	87.93	2.93	181	2	Pump 2	No	No	Both Off	17,340	243.2	230.3	294.2	0.0	17150	271
2:30 PM	870.10	88.03	3.03	191	2	Pump 2	No	No	Both Off	17,350	243.4	230.8	294.5	0.0	17150	280
2:31 PM	871.10	88.13	3.13	200	2	Pump 2	No	No	Both Off	17,359	243.5	231.2	294.9	0.0	17150	290
2:32 PM	872.10	88.23	3.23	210	2	Pump 2	No	No	Both Off	17,369	243.7	231.7	295.2	0.0	17150	299
2:33 PM	873.10	88.33	3.33	219	2	Pump 2	No	No	Both Off	17,378	243.9	232.1	295.5	0.0	17150	309
2:34 PM	874.10	88.43	3.43	229	2	Pump 2	No	No	Both Off	17,388	244.1	232.5	295.8	0.0	17150	318
2:35 PM	875.10	88.53	3.53	238	2	Pump 2	No	No	Both Off	17,397	244.2	233.0	296.2	0.0	17150	328
2:36 PM	876.10	88.64	3.64	248	2	Pump 2	No	No	Both Off	17,407	244.4	233.4	296.5	0.0	17150	337
2:37 PM	877.10	88.74	3.74	257	2	Pump 2	No	No	Both Off	17,416	244.6	233.9	296.8	0.0	17150	347
2:38 PM	878.10	88.84	3.84	267	2	Pump 2	No	No	Both Off	17,426	244.7	234.3	297.1	0.0	17150	357
2:39 PM	879.10	88.94	3.94	276	2	Pump 2	No	No	Both Off	17,435	244.9	234.7	297.5	0.0	17150	366
2:40 PM	880.10	89.04	4.04	286	3	Pump 2	Yes	No	Pump 2	17,445	245.1	235.1	297.8	235.1	17385	140
2:41 PM	881.10	86.64	1.64	60	11	Pump 2	Yes	No	Pump 2	17,454	241.1	224.8	290.1	224.8	17454	80
2:42 PM	882.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	17,464	240.0	222.0	288.0	0.0	17454	90
2:43 PM	883.10	86.10	1.10	10	2	Pump 1	No	No	Both Off	17,473	240.2	222.4	288.3	0.0	17454	99
2:44 PM	884.10	86.20	1.20	19	2	Pump 1	No	No	Both Off	17,483	240.3	222.9	288.7	0.0	17454	109
2:45 PM	885.10	86.30	1.30	29	2	Pump 1	No	No	Both Off	17,493	240.5	223.3	289.0	0.0	17454	118
2:46 PM	886.10	86.41	1.41	38	2	Pump 1	No	No	Both Off	17,502	240.7	223.8	289.3	0.0	17454	128
2:47 PM	887.10	86.51	1.51	48	2	Pump 1	No	No	Both Off	17,512	240.8	224.2	289.6	0.0	17454	137
2:48 PM	888.10	86.61	1.61	57	2	Pump 1	No	No	Both Off	17,521	241.0	224.6	290.0	0.0	17454	147
2:49 PM	889.10	86.71	1.71	67	2	Pump 1	No	No	Both Off	17,531	241.2	225.1	290.3	0.0	17454	156
2:50 PM	890.10	86.81	1.81	76	2	Pump 1	No	No	Both Off	17,540	241.4	225.5	290.6	0.0	17454	166
2:51 PM	891.10	86.91	1.91	86	2	Pump 1	No	No	Both Off	17,550	241.5	226.0	290.9	0.0	17454	175
2:52 PM	892.10	87.01	2.01	95	2	Pump 1	No	No	Both Off	17,559	241.7	226.4	291.3	0.0	17454	185
2:53 PM	893.10	87.12	2.12	105	2	Pump 1	No	No	Both Off	17,569	241.9	226.8	291.6	0.0	17454	195
2:54 PM	894.10	87.22	2.22	114	2	Pump 1	No	No	Both Off	17,578	242.0	227.3	291.9	0.0	17454	204
2:55 PM	895.10	87.32	2.32	124	2	Pump 1	No	No	Both Off	17,588	242.2	227.7	292.2	0.0	17454	214
2:56 PM	896.10	87.42	2.42	133	2	Pump 1	No	No	Both Off	17,597	242.4	228.2	292.6	0.0	17454	223
2:57 PM	897.10	87.52	2.52	143	2	Pump 1	No	No	Both Off	17,607	242.5	228.6	292.9	0.0	17454	233
2:58 PM	898.10	87.62	2.62	152	2	Pump 1	No	No	Both Off	17,616	242.7	229.0	293.2	0.0	17454	242
2:59 PM	899.10	87.72	2.72	162	2	Pump 1	No	No	Both Off	17,626	242.9	229.5	293.6	0.0	17454	252
3:00 PM	900.10	87.82	2.82	172	2	Pump 1	No	No	Both Off	17,635	243.0	229.9	293.9	0.0	17454	261
3:01 PM	901.10	87.92	2.92	181	2	Pump 1	No	No	Both Off	17,643	243.2	230.3	294.2	0.0	17454	269
3:02 PM	902.10	88.01	3.01	189	2	Pump 1	No	No	Both Off	17,651	243.3	230.7	294.5	0.0	17454	277
3:03 PM	903.10	88.09	3.09	196	2	Pump 1	No	No	Both Off	17,659	243.5	231.1	294.7	0.0	17454	284
3:04 PM	904.10	88.17	3.17	204	2	Pump 1	No	No	Both Off	17,666	243.6	231.4	295.0	0.0	17454	292
3:05 PM	905.10	88.25	3.25	212	2	Pump 1	No	No	Both Off	17,674	243.8	231.8	295.3	0.0	17454	300
3:06 PM	906.10	88.34	3.34	220	2	Pump 1	No	No	Both Off	17,682	243.9	232.1	295.5	0.0	17454	307
3:07 PM	907.10	88.42	3.42	227	2	Pump 1	No	No	Both Off	17,689	244.0	232.5	295.8	0.0	17454	315
3:08 PM	908.10	88.50	3.50	235	2	Pump 1	No	No	Both Off	17,697	244.2	232.8	296.1	0.0	17454	323
3:09 PM	909.10	88.58	3.58	243	2	Pump 1	No	No	Both Off	17,705	244.3	233.2	296.3	0.0	17454	331
3:10 PM	910.10	88.67	3.67	251	2	Pump 1	No	No	Both Off	17,713	244.4	233.6	296.6	0.0	17454	338
3:11 PM	911.10	88.75	3.75	258	2	Pump 1	No	No	Both Off	17,720	244.6	233.9	296.9	0.0	17454	346
3:12 PM	912.10	88.83	3.83	266	2	Pump 1	No	No	Both Off	17,728	244.7	234.3	297.1	0.0	17454	354
3:13 PM	913.10	88.91	3.91	274	2	Pump 1	No	No	Both Off	17,736	244.9	234.6	297.4	0.0	17454	362
3:14 PM	914.10	89.00	4.00	282	2	Pump 1	No	No	Both Off	17,744	245.0	235.0	297.7	0.0	17454	369
3:15 PM	915.10	89.08	4.08	289	3	Pump 1	Yes	No	Pump 1	17,751	245.1	235.2	297.9	245.1	17700	132
3:16 PM	916.10	86.55	1.55	52	11	Pump 1	Yes	No	Pump 1	17,759	240.9	224.4	289.8	240.9	17759	80
3:17 PM	917.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	17,767	240.0	222.0	288.0	0.0	17759	88
3:18 PM	918.10	86.08	1.08	8	2	Pump 2	No	No	Both Off	17,775	240.1	222.4	288.3	0.0	17759	96
3:19 PM	919.10	86.16	1.16	15	2	Pump 2	No	No	Both Off	17,782	240.3	222.7	288.5	0.0	17759	103
3:20 PM	920.10	86.25	1.25	23	2	Pump 2	No	No	Both Off	17,790	240.4	223.1	288.8	0.0	17759	111
3:21 PM	921.10	86.33	1.33	31	2	Pump 2	No	No	Both Off	17,798	240.5	223.4	289.1	0.0	17759	119
3:22 PM	922.10	86.41	1.41	39	2	Pump 2	No	No	Both Off	17,806	240.7	223.8	289.3	0.0	17759	127
3:23 PM	923.10	86.49	1.49	46	2	Pump 2	No	No	Both Off	17,813	240.8	224.1	289.6	0.0	17759	134
3:24 PM	924.10	86.58	1.58	54	2	Pump 2	No	No	Both Off	17,821	241.0	224.5	289.9	0.0	17759	142

3:25 PM	925.10	86.66	1.66	62	2	Pump 2	No	No	Both Off	17,829	241.1	224.9	290.1	0.0	17759	150
3:26 PM	926.10	86.74	1.74	70	2	Pump 2	No	No	Both Off	17,837	241.2	225.2	290.4	0.0	17759	158
3:27 PM	927.10	86.82	1.82	77	2	Pump 2	No	No	Both Off	17,844	241.4	225.6	290.7	0.0	17759	165
3:28 PM	928.10	86.91	1.91	85	2	Pump 2	No	No	Both Off	17,852	241.5	225.9	290.9	0.0	17759	173
3:29 PM	929.10	86.99	1.99	93	2	Pump 2	No	No	Both Off	17,860	241.6	226.3	291.2	0.0	17759	181
3:30 PM	930.10	87.07	2.07	101	2	Pump 2	No	No	Both Off	17,868	241.8	226.6	291.5	0.0	17759	189
3:31 PM	931.10	87.15	2.15	108	2	Pump 2	No	No	Both Off	17,875	241.9	227.0	291.7	0.0	17759	196
3:32 PM	932.10	87.24	2.24	116	2	Pump 2	No	No	Both Off	17,883	242.1	227.4	292.0	0.0	17759	204
3:33 PM	933.10	87.32	2.32	124	2	Pump 2	No	No	Both Off	17,891	242.2	227.7	292.2	0.0	17759	212
3:34 PM	934.10	87.40	2.40	132	2	Pump 2	No	No	Both Off	17,899	242.3	228.1	292.5	0.0	17759	220
3:35 PM	935.10	87.48	2.48	139	2	Pump 2	No	No	Both Off	17,906	242.5	228.4	292.8	0.0	17759	227
3:36 PM	936.10	87.56	2.56	147	2	Pump 2	No	No	Both Off	17,914	242.6	228.8	293.0	0.0	17759	235
3:37 PM	937.10	87.65	2.65	155	2	Pump 2	No	No	Both Off	17,922	242.7	229.1	293.3	0.0	17759	243
3:38 PM	938.10	87.73	2.73	163	2	Pump 2	No	No	Both Off	17,929	242.9	229.5	293.6	0.0	17759	250
3:39 PM	939.10	87.81	2.81	170	2	Pump 2	No	No	Both Off	17,937	243.0	229.9	293.8	0.0	17759	258
3:40 PM	940.10	87.89	2.89	178	2	Pump 2	No	No	Both Off	17,945	243.2	230.2	294.1	0.0	17759	266
3:41 PM	941.10	87.98	2.98	186	2	Pump 2	No	No	Both Off	17,953	243.3	230.6	294.4	0.0	17759	274
3:42 PM	942.10	88.06	3.06	194	2	Pump 2	No	No	Both Off	17,960	243.4	230.9	294.6	0.0	17759	281
3:43 PM	943.10	88.14	3.14	201	2	Pump 2	No	No	Both Off	17,968	243.6	231.3	294.9	0.0	17759	289
3:44 PM	944.10	88.22	3.22	209	2	Pump 2	No	No	Both Off	17,976	243.7	231.6	295.2	0.0	17759	297
3:45 PM	945.10	88.31	3.31	217	2	Pump 2	No	No	Both Off	17,984	243.8	232.0	295.4	0.0	17759	305
3:46 PM	946.10	88.39	3.39	225	2	Pump 2	No	No	Both Off	17,991	244.0	232.4	295.7	0.0	17759	312
3:47 PM	947.10	88.47	3.47	232	2	Pump 2	No	No	Both Off	17,999	244.1	232.7	296.0	0.0	17759	320
3:48 PM	948.10	88.55	3.55	240	2	Pump 2	No	No	Both Off	18,007	244.3	233.1	296.2	0.0	17759	328
3:49 PM	949.10	88.64	3.64	248	2	Pump 2	No	No	Both Off	18,015	244.4	233.4	296.5	0.0	17759	336
3:50 PM	950.10	88.72	3.72	255	2	Pump 2	No	No	Both Off	18,022	244.5	233.8	296.8	0.0	17759	343
3:51 PM	951.10	88.80	3.80	263	2	Pump 2	No	No	Both Off	18,030	244.7	234.1	297.0	0.0	17759	351
3:52 PM	952.10	88.88	3.88	271	2	Pump 2	No	No	Both Off	18,038	244.8	234.5	297.3	0.0	17759	359
3:53 PM	953.10	88.97	3.97	279	2	Pump 2	No	No	Both Off	18,046	244.9	234.8	297.6	0.0	17759	367
3:54 PM	954.10	89.05	4.05	286	3	Pump 2	Yes	No	Pump 2	18,053	245.1	235.1	297.8	235.1	17994	139
3:55 PM	955.10	86.63	1.63	59	11	Pump 2	Yes	No	Pump 2	18,061	241.0	224.7	290.0	224.7	18061	80
3:56 PM	956.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	18,069	240.0	222.0	288.0	0.0	18061	88
3:57 PM	957.10	86.08	1.08	8	2	Pump 1	No	No	Both Off	18,077	240.1	222.4	288.3	0.0	18061	96
3:58 PM	958.10	86.16	1.16	15	2	Pump 1	No	No	Both Off	18,084	240.3	222.7	288.5	0.0	18061	103
3:59 PM	959.10	86.25	1.25	23	2	Pump 1	No	No	Both Off	18,092	240.4	223.1	288.8	0.0	18061	111
4:00 PM	960.10	86.33	1.33	31	2	Pump 1	No	No	Both Off	18,102	240.5	223.4	289.1	0.0	18061	121
4:01 PM	961.10	86.43	1.43	41	2	Pump 1	No	No	Both Off	18,130	240.7	223.9	289.4	0.0	18061	149
4:02 PM	962.10	86.73	1.73	69	2	Pump 1	No	No	Both Off	18,157	241.2	225.2	290.3	0.0	18061	176
4:03 PM	963.10	87.02	2.02	96	2	Pump 1	No	No	Both Off	18,185	241.7	226.4	291.3	0.0	18061	204
4:04 PM	964.10	87.32	2.32	124	2	Pump 1	No	No	Both Off	18,213	242.2	227.7	292.3	0.0	18061	232
4:05 PM	965.10	87.62	2.62	152	2	Pump 1	No	No	Both Off	18,241	242.7	229.0	293.2	0.0	18061	260
4:06 PM	966.10	87.91	2.91	180	2	Pump 1	No	No	Both Off	18,269	243.2	230.3	294.2	0.0	18061	288
4:07 PM	967.10	88.21	3.21	208	2	Pump 1	No	No	Both Off	18,296	243.7	231.6	295.1	0.0	18061	315
4:08 PM	968.10	88.50	3.50	235	2	Pump 1	No	No	Both Off	18,324	244.2	232.8	296.1	0.0	18061	343
4:09 PM	969.10	88.80	3.80	263	2	Pump 1	No	No	Both Off	18,352	244.7	234.1	297.0	0.0	18061	371
4:10 PM	970.10	89.10	4.10	291	3	Pump 1	Yes	No	Pump 1	18,380	245.2	235.2	298.0	245.2	18306	154
4:11 PM	971.10	86.78	1.78	74	11	Pump 1	Yes	No	Pump 1	18,408	241.3	225.4	290.5	241.3	18408	80
4:12 PM	972.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	18,435	240.0	222.0	288.0	0.0	18408	108
4:13 PM	973.10	86.30	1.30	28	2	Pump 2	No	No	Both Off	18,463	240.5	223.3	289.0	0.0	18408	136
4:14 PM	974.10	86.59	1.59	56	2	Pump 2	No	No	Both Off	18,491	241.0	224.6	289.9	0.0	18408	164
4:15 PM	975.10	86.89	1.89	83	2	Pump 2	No	No	Both Off	18,519	241.5	225.8	290.9	0.0	18408	191
4:16 PM	976.10	87.18	2.18	111	2	Pump 2	No	No	Both Off	18,547	242.0	227.1	291.8	0.0	18408	219
4:17 PM	977.10	87.48	2.48	139	2	Pump 2	No	No	Both Off	18,574	242.5	228.4	292.8	0.0	18408	247
4:18 PM	978.10	87.77	2.77	167	2	Pump 2	No	No	Both Off	18,602	243.0	229.7	293.7	0.0	18408	275
4:19 PM	979.10	88.07	3.07	195	2	Pump 2	No	No	Both Off	18,630	243.5	231.0	294.7	0.0	18408	303
4:20 PM	980.10	88.37	3.37	222	2	Pump 2	No	No	Both Off	18,658	243.9	232.3	295.6	0.0	18408	330
4:21 PM	981.10	88.66	3.66	250	2	Pump 2	No	No	Both Off	18,686	244.4	233.5	296.6	0.0	18408	358
4:22 PM	982.10	88.96	3.96	278	2	Pump 2	No	No	Both Off	18,713	244.9	234.8	297.5	0.0	18408	386
4:23 PM	983.10	89.25	4.25	306	3	Pump 2	Yes	No	Pump 2	18,741	245.4	235.6	298.5	235.6	18643	178
4:24 PM	984.10	87.04	2.04	98	11	Pump 2	Yes	No	Pump 2	18,769	241.7	226.5	291.4	226.5	18769	80
4:25 PM	985.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	18,797	240.0	222.0	288.0	0.0	18769	108
4:26 PM	986.10	86.30	1.30	28	2	Pump 1	No	No	Both Off	18,825	240.5	223.3	289.0	0.0	18769	136

4:27 PM	987.10	86.59	1.59	56	2	Pump 1	No	No	Both Off	18,852	241.0	224.6	289.9	0.0	18769	164
4:28 PM	988.10	86.89	1.89	83	2	Pump 1	No	No	Both Off	18,880	241.5	225.8	290.9	0.0	18769	191
4:29 PM	989.10	87.18	2.18	111	2	Pump 1	No	No	Both Off	18,908	242.0	227.1	291.8	0.0	18769	219
4:30 PM	990.10	87.48	2.48	139	2	Pump 1	No	No	Both Off	18,936	242.5	228.4	292.8	0.0	18769	247
4:31 PM	991.10	87.77	2.77	167	2	Pump 1	No	No	Both Off	18,964	243.0	229.7	293.7	0.0	18769	275
4:32 PM	992.10	88.07	3.07	195	2	Pump 1	No	No	Both Off	18,991	243.5	231.0	294.7	0.0	18769	303
4:33 PM	993.10	88.37	3.37	222	2	Pump 1	No	No	Both Off	19,019	243.9	232.3	295.6	0.0	18769	330
4:34 PM	994.10	88.66	3.66	250	2	Pump 1	No	No	Both Off	19,047	244.4	233.5	296.6	0.0	18769	358
4:35 PM	995.10	88.96	3.96	278	2	Pump 1	No	No	Both Off	19,075	244.9	234.8	297.5	0.0	18769	386
4:36 PM	996.10	89.25	4.25	306	3	Pump 1	Yes	No	Pump 1	19,103	245.4	235.6	298.5	245.4	19014	168
4:37 PM	997.10	86.94	1.94	88	11	Pump 1	Yes	No	Pump 1	19,130	241.6	226.1	291.0	241.6	19130	80
4:38 PM	998.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	19,158	240.0	222.0	288.0	0.0	19130	108
4:39 PM	999.10	86.30	1.30	28	2	Pump 2	No	No	Both Off	19,186	240.5	223.3	289.0	0.0	19130	136
4:40 PM	1000.10	86.59	1.59	56	2	Pump 2	No	No	Both Off	19,214	241.0	224.6	289.9	0.0	19130	164
4:41 PM	1001.10	86.89	1.89	83	2	Pump 2	No	No	Both Off	19,242	241.5	225.8	290.9	0.0	19130	191
4:42 PM	1002.10	87.18	2.18	111	2	Pump 2	No	No	Both Off	19,269	242.0	227.1	291.8	0.0	19130	219
4:43 PM	1003.10	87.48	2.48	139	2	Pump 2	No	No	Both Off	19,297	242.5	228.4	292.8	0.0	19130	247
4:44 PM	1004.10	87.77	2.77	167	2	Pump 2	No	No	Both Off	19,325	243.0	229.7	293.7	0.0	19130	275
4:45 PM	1005.10	88.07	3.07	195	2	Pump 2	No	No	Both Off	19,353	243.5	231.0	294.7	0.0	19130	303
4:46 PM	1006.10	88.37	3.37	222	2	Pump 2	No	No	Both Off	19,381	243.9	232.3	295.6	0.0	19130	330
4:47 PM	1007.10	88.66	3.66	250	2	Pump 2	No	No	Both Off	19,408	244.4	233.5	296.6	0.0	19130	358
4:48 PM	1008.10	88.96	3.96	278	2	Pump 2	No	No	Both Off	19,436	244.9	234.8	297.5	0.0	19130	386
4:49 PM	1009.10	89.25	4.25	306	3	Pump 2	Yes	No	Pump 2	19,464	245.4	235.6	298.5	235.6	19366	178
4:50 PM	1010.10	87.04	2.04	98	11	Pump 2	Yes	No	Pump 2	19,492	241.7	226.5	291.4	226.5	19492	80
4:51 PM	1011.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	19,520	240.0	222.0	288.0	0.0	19492	108
4:52 PM	1012.10	86.30	1.30	28	2	Pump 1	No	No	Both Off	19,547	240.5	223.3	289.0	0.0	19492	136
4:53 PM	1013.10	86.59	1.59	56	2	Pump 1	No	No	Both Off	19,575	241.0	224.6	289.9	0.0	19492	164
4:54 PM	1014.10	86.89	1.89	83	2	Pump 1	No	No	Both Off	19,603	241.5	225.8	290.9	0.0	19492	191
4:55 PM	1015.10	87.18	2.18	111	2	Pump 1	No	No	Both Off	19,631	242.0	227.1	291.8	0.0	19492	219
4:56 PM	1016.10	87.48	2.48	139	2	Pump 1	No	No	Both Off	19,659	242.5	228.4	292.8	0.0	19492	247
4:57 PM	1017.10	87.77	2.77	167	2	Pump 1	No	No	Both Off	19,686	243.0	229.7	293.7	0.0	19492	275
4:58 PM	1018.10	88.07	3.07	195	2	Pump 1	No	No	Both Off	19,714	243.5	231.0	294.7	0.0	19492	303
4:59 PM	1019.10	88.37	3.37	222	2	Pump 1	No	No	Both Off	19,742	243.9	232.3	295.6	0.0	19492	330
5:00 PM	1020.10	88.66	3.66	250	2	Pump 1	No	No	Both Off	19,772	244.4	233.5	296.6	0.0	19492	360
5:01 PM	1021.10	88.98	3.98	280	2	Pump 1	No	No	Both Off	19,818	245.0	234.9	297.6	0.0	19492	407
5:02 PM	1022.10	89.47	4.47	327	3	Pump 1	Yes	No	Pump 1	19,865	245.8	236.1	299.2	245.8	19738	208
5:03 PM	1023.10	87.36	2.36	128	11	Pump 1	Yes	No	Pump 1	19,912	242.3	227.9	292.4	242.3	19912	80
5:04 PM	1024.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	19,959	240.0	222.0	288.0	0.0	19912	127
5:05 PM	1025.10	86.50	1.50	47	2	Pump 2	No	No	Both Off	20,005	240.8	224.2	289.6	0.0	19912	174
5:06 PM	1026.10	86.99	1.99	93	2	Pump 2	No	No	Both Off	20,052	241.7	226.3	291.2	0.0	19912	220
5:07 PM	1027.10	87.49	2.49	140	2	Pump 2	No	No	Both Off	20,099	242.5	228.5	292.8	0.0	19912	267
5:08 PM	1028.10	87.99	2.99	187	2	Pump 2	No	No	Both Off	20,145	243.3	230.6	294.4	0.0	19912	314
5:09 PM	1029.10	88.48	3.48	233	2	Pump 2	No	No	Both Off	20,192	244.1	232.8	296.0	0.0	19912	360
5:10 PM	1030.10	88.98	3.98	280	2	Pump 2	No	No	Both Off	20,239	245.0	234.9	297.6	0.0	19912	407
5:11 PM	1031.10	89.48	4.48	327	3	Pump 2	Yes	No	Pump 2	20,285	245.8	236.1	299.2	236.1	20148	218
5:12 PM	1032.10	87.46	2.46	137	11	Pump 2	Yes	No	Pump 2	20,332	242.4	225.3	292.7	228.3	20332	80
5:13 PM	1033.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	20,379	240.0	222.0	288.0	0.0	20332	127
5:14 PM	1034.10	86.50	1.50	47	2	Pump 1	No	No	Both Off	20,426	240.8	224.2	289.6	0.0	20332	174
5:15 PM	1035.10	86.99	1.99	93	2	Pump 1	No	No	Both Off	20,472	241.7	226.3	291.2	0.0	20332	220
5:16 PM	1036.10	87.49	2.49	140	2	Pump 1	No	No	Both Off	20,519	242.5	228.5	292.8	0.0	20332	267
5:17 PM	1037.10	87.99	2.99	187	2	Pump 1	No	No	Both Off	20,566	243.3	230.6	294.4	0.0	20332	314
5:18 PM	1038.10	88.48	3.48	233	2	Pump 1	No	No	Both Off	20,612	244.1	232.8	296.0	0.0	20332	360
5:19 PM	1039.10	88.98	3.98	280	2	Pump 1	No	No	Both Off	20,659	245.0	234.9	297.6	0.0	20332	407
5:20 PM	1040.10	89.48	4.48	327	3	Pump 1	Yes	No	Pump 1	20,706	245.8	236.1	299.2	245.8	20578	208
5:21 PM	1041.10	87.36	2.36	128	11	Pump 1	Yes	No	Pump 1	20,752	242.3	227.9	292.4	242.3	20752	80
5:22 PM	1042.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	20,799	240.0	222.0	288.0	0.0	20752	127
5:23 PM	1043.10	86.50	1.50	47	2	Pump 2	No	No	Both Off	20,846	240.8	224.2	289.6	0.0	20752	174
5:24 PM	1044.10	86.99	1.99	93	2	Pump 2	No	No	Both Off	20,892	241.7	226.3	291.2	0.0	20752	220
5:25 PM	1045.10	87.49	2.49	140	2	Pump 2	No	No	Both Off	20,939	242.5	228.5	292.8	0.0	20752	267
5:26 PM	1046.10	87.99	2.99	187	2	Pump 2	No	No	Both Off	20,986	243.3	230.6	294.4	0.0	20752	314
5:27 PM	1047.10	88.48	3.48	233	2	Pump 2	No	No	Both Off	21,033	244.1	232.8	296.0	0.0	20752	360
5:28 PM	1048.10	88.98	3.98	280	2	Pump 2	No	No	Both Off	21,079	245.0	234.9	297.6	0.0	20752	407

5:29 PM	1049.10	89.48	4.48	327	3	Pump 2	Yes	No	Pump 2	21,126	245.8	236.1	299.2	236.1	20989	218
5:30 PM	1050.10	87.46	2.46	137	11	Pump 2	Yes	No	Pump 2	21,173	242.4	228.3	292.7	228.3	21173	80
5:31 PM	1051.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	21,219	240.0	222.0	288.0	0.0	21173	127
5:32 PM	1052.10	86.50	1.50	47	2	Pump 1	No	No	Both Off	21,266	240.8	224.2	289.6	0.0	21173	174
5:33 PM	1053.10	86.99	1.99	93	2	Pump 1	No	No	Both Off	21,313	241.7	226.3	291.2	0.0	21173	220
5:34 PM	1054.10	87.49	2.49	140	2	Pump 1	No	No	Both Off	21,359	242.5	228.5	292.8	0.0	21173	267
5:35 PM	1055.10	87.99	2.99	187	2	Pump 1	No	No	Both Off	21,406	243.3	230.6	294.4	0.0	21173	314
5:36 PM	1056.10	88.48	3.48	233	2	Pump 1	No	No	Both Off	21,453	244.1	232.8	296.0	0.0	21173	360
5:37 PM	1057.10	88.98	3.98	280	2	Pump 1	No	No	Both Off	21,500	245.0	234.9	297.6	0.0	21173	407
5:38 PM	1058.10	89.48	4.48	327	3	Pump 1	Yes	No	Pump 1	21,546	245.8	236.1	299.2	245.8	21418	208
5:39 PM	1059.10	87.36	2.36	128	11	Pump 1	Yes	No	Pump 1	21,593	242.3	227.9	292.4	242.3	21593	80
5:40 PM	1060.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	21,640	240.0	222.0	288.0	0.0	21593	127
5:41 PM	1061.10	86.50	1.50	47	2	Pump 2	No	No	Both Off	21,686	240.8	224.2	289.6	0.0	21593	174
5:42 PM	1062.10	86.99	1.99	93	2	Pump 2	No	No	Both Off	21,733	241.7	226.3	291.2	0.0	21593	220
5:43 PM	1063.10	87.49	2.49	140	2	Pump 2	No	No	Both Off	21,780	242.5	228.5	292.8	0.0	21593	267
5:44 PM	1064.10	87.99	2.99	187	2	Pump 2	No	No	Both Off	21,826	243.3	230.6	294.4	0.0	21593	314
5:45 PM	1065.10	88.48	3.48	233	2	Pump 2	No	No	Both Off	21,873	244.1	232.8	296.0	0.0	21593	360
5:46 PM	1066.10	88.98	3.98	280	2	Pump 2	No	No	Both Off	21,920	245.0	234.9	297.6	0.0	21593	407
5:47 PM	1067.10	89.48	4.48	327	3	Pump 2	Yes	No	Pump 2	21,967	245.8	236.1	299.2	236.1	21829	218
5:48 PM	1068.10	87.46	2.46	137	11	Pump 2	Yes	No	Pump 2	22,013	242.4	228.3	292.7	228.3	22013	80
5:49 PM	1069.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	22,060	240.0	222.0	288.0	0.0	22013	127
5:50 PM	1070.10	86.50	1.50	47	2	Pump 1	No	No	Both Off	22,107	240.8	224.2	289.6	0.0	22013	174
5:51 PM	1071.10	86.99	1.99	93	2	Pump 1	No	No	Both Off	22,153	241.7	226.3	291.2	0.0	22013	220
5:52 PM	1072.10	87.49	2.49	140	2	Pump 1	No	No	Both Off	22,200	242.5	228.5	292.8	0.0	22013	267
5:53 PM	1073.10	87.99	2.99	187	2	Pump 1	No	No	Both Off	22,247	243.3	230.6	294.4	0.0	22013	314
5:54 PM	1074.10	88.48	3.48	233	2	Pump 1	No	No	Both Off	22,293	244.1	232.8	296.0	0.0	22013	360
5:55 PM	1075.10	88.98	3.98	280	2	Pump 1	No	No	Both Off	22,340	245.0	234.9	297.6	0.0	22013	407
5:56 PM	1076.10	89.48	4.48	327	3	Pump 1	Yes	No	Pump 1	22,387	245.8	236.1	299.2	245.8	22259	208
5:57 PM	1077.10	87.36	2.36	128	11	Pump 1	Yes	No	Pump 1	22,434	242.3	227.9	292.4	242.3	22434	80
5:58 PM	1078.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	22,480	240.0	222.0	288.0	0.0	22434	127
5:59 PM	1079.10	86.50	1.50	47	2	Pump 2	No	No	Both Off	22,527	240.8	224.2	289.6	0.0	22434	174
6:00 PM	1080.10	86.99	1.99	93	2	Pump 2	No	No	Both Off	22,573	241.7	226.3	291.2	0.0	22434	219
6:01 PM	1081.10	87.48	2.48	139	2	Pump 2	No	No	Both Off	22,605	242.5	228.4	292.8	0.0	22434	252
6:02 PM	1082.10	87.83	2.83	172	2	Pump 2	No	No	Both Off	22,638	243.0	229.9	293.9	0.0	22434	285
6:03 PM	1083.10	88.18	3.18	205	2	Pump 2	No	No	Both Off	22,671	243.6	231.4	295.0	0.0	22434	318
6:04 PM	1084.10	88.53	3.53	238	2	Pump 2	No	No	Both Off	22,704	244.2	233.0	296.2	0.0	22434	351
6:05 PM	1085.10	88.88	3.88	271	2	Pump 2	No	No	Both Off	22,737	244.8	234.5	297.3	0.0	22434	384
6:06 PM	1086.10	89.23	4.23	304	3	Pump 2	Yes	No	Pump 2	22,770	245.4	235.5	298.4	235.5	22669	181
6:07 PM	1087.10	87.08	2.08	101	11	Pump 2	Yes	No	Pump 2	22,803	241.8	226.7	291.5	226.7	22803	80
6:08 PM	1088.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	22,836	240.0	222.0	288.0	0.0	22803	113
6:09 PM	1089.10	86.35	1.35	33	2	Pump 1	No	No	Both Off	22,869	240.6	223.5	289.1	0.0	22803	146
6:10 PM	1090.10	86.70	1.70	66	2	Pump 1	No	No	Both Off	22,902	241.2	225.0	290.3	0.0	22803	179
6:11 PM	1091.10	87.05	2.05	99	2	Pump 1	No	No	Both Off	22,935	241.8	226.6	291.4	0.0	22803	212
6:12 PM	1092.10	87.40	2.40	132	2	Pump 1	No	No	Both Off	22,968	242.3	228.1	292.5	0.0	22803	245
6:13 PM	1093.10	87.76	2.76	165	2	Pump 1	No	No	Both Off	23,001	242.9	229.6	293.7	0.0	22803	278
6:14 PM	1094.10	88.11	3.11	198	2	Pump 1	No	No	Both Off	23,034	243.5	231.1	294.8	0.0	22803	311
6:15 PM	1095.10	88.46	3.46	231	2	Pump 1	No	No	Both Off	23,067	244.1	232.7	295.9	0.0	22803	344
6:16 PM	1096.10	88.81	3.81	264	2	Pump 1	No	No	Both Off	23,100	244.7	234.2	297.1	0.0	22803	377
6:17 PM	1097.10	89.16	4.16	297	3	Pump 1	Yes	No	Pump 1	23,133	245.3	235.4	298.2	245.3	23049	165
6:18 PM	1098.10	86.90	1.90	85	11	Pump 1	Yes	No	Pump 1	23,166	241.5	225.9	290.9	241.5	23166	80
6:19 PM	1099.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	23,199	240.0	222.0	288.0	0.0	23166	113
6:20 PM	1100.10	86.35	1.35	33	2	Pump 2	No	No	Both Off	23,232	240.6	223.5	289.1	0.0	23166	146
6:21 PM	1101.10	86.70	1.70	66	2	Pump 2	No	No	Both Off	23,266	241.2	225.0	290.3	0.0	23166	179
6:22 PM	1102.10	87.05	2.05	99	2	Pump 2	No	No	Both Off	23,299	241.8	226.6	291.4	0.0	23166	212
6:23 PM	1103.10	87.40	2.40	132	2	Pump 2	No	No	Both Off	23,332	242.3	228.1	292.5	0.0	23166	245
6:24 PM	1104.10	87.76	2.76	165	2	Pump 2	No	No	Both Off	23,365	242.9	229.6	293.7	0.0	23166	278
6:25 PM	1105.10	88.11	3.11	198	2	Pump 2	No	No	Both Off	23,398	243.5	231.1	294.8	0.0	23166	311
6:26 PM	1106.10	88.46	3.46	231	2	Pump 2	No	No	Both Off	23,431	244.1	232.7	295.9	0.0	23166	344
6:27 PM	1107.10	88.81	3.81	264	2	Pump 2	No	No	Both Off	23,464	244.7	234.2	297.1	0.0	23166	377
6:28 PM	1108.10	89.16	4.16	297	3	Pump 2	Yes	No	Pump 2	23,497	245.3	235.4	298.2	235.4	23402	175
6:29 PM	1109.10	87.01	2.01	95	11	Pump 2	Yes	No	Pump 2	23,530	241.7	226.4	291.2	226.4	23530	80
6:30 PM	1110.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	23,563	240.0	222.0	288.0	0.0	23530	113

Time	Time (min)				Lead Pump	Lead Pump On?	Lag Pump On?	Pump Status	Total Inflow (gpm)						
6:31 PM	1111.10	86.35	1.35	33	2	Pump 1	No	No	Both Off	23,596	240.6	223.5	289.1	0.0	23530	146
6:32 PM	1112.10	86.70	1.70	66	2	Pump 1	No	No	Both Off	23,629	241.2	225.0	290.3	0.0	23530	179
6:33 PM	1113.10	87.05	2.05	99	2	Pump 1	No	No	Both Off	23,662	241.8	226.6	291.4	0.0	23530	212
6:34 PM	1114.10	87.40	2.40	132	2	Pump 1	No	No	Both Off	23,695	242.3	228.1	292.5	0.0	23530	245
6:35 PM	1115.10	87.76	2.76	165	2	Pump 1	No	No	Both Off	23,728	242.9	229.6	293.7	0.0	23530	278
6:36 PM	1116.10	88.11	3.11	198	2	Pump 1	No	No	Both Off	23,761	243.5	231.1	294.8	0.0	23530	311
6:37 PM	1117.10	88.46	3.46	231	2	Pump 1	No	No	Both Off	23,794	244.1	232.7	295.9	0.0	23530	344
6:38 PM	1118.10	88.81	3.81	264	2	Pump 1	No	No	Both Off	23,827	244.7	234.2	297.1	0.0	23530	377
6:39 PM	1119.10	89.16	4.16	297	3	Pump 1	Yes	No	Pump 1	23,860	245.3	235.4	298.2	245.3	23775	165
6:40 PM	1120.10	86.90	1.90	85	11	Pump 1	Yes	No	Pump 1	23,893	241.5	225.9	290.9	241.5	23893	80
6:41 PM	1121.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	23,926	240.0	222.0	288.0	0.0	23893	113
6:42 PM	1122.10	86.35	1.35	33	2	Pump 2	No	No	Both Off	23,959	240.6	223.5	289.1	0.0	23893	146
6:43 PM	1123.10	86.70	1.70	66	2	Pump 2	No	No	Both Off	23,992	241.2	225.0	290.3	0.0	23893	179
6:44 PM	1124.10	87.05	2.05	99	2	Pump 2	No	No	Both Off	24,025	241.8	226.6	291.4	0.0	23893	212
6:45 PM	1125.10	87.40	2.40	132	2	Pump 2	No	No	Both Off	24,058	242.3	228.1	292.5	0.0	23893	245
6:46 PM	1126.10	87.76	2.76	165	2	Pump 2	No	No	Both Off	24,091	242.9	229.6	293.7	0.0	23893	278
6:47 PM	1127.10	88.11	3.11	198	2	Pump 2	No	No	Both Off	24,124	243.5	231.1	294.8	0.0	23893	311
6:48 PM	1128.10	88.46	3.46	231	2	Pump 2	No	No	Both Off	24,157	244.1	232.7	295.9	0.0	23893	344
6:49 PM	1129.10	88.81	3.81	264	2	Pump 2	No	No	Both Off	24,190	244.7	234.2	297.1	0.0	23893	377
6:50 PM	1130.10	89.16	4.16	297	3	Pump 2	Yes	No	Pump 2	24,223	245.3	235.4	298.2	235.4	24128	175
6:51 PM	1131.10	87.01	2.01	95	11	Pump 2	Yes	No	Pump 2	24,256	241.7	226.4	291.2	226.4	24256	80
6:52 PM	1132.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	24,289	240.0	222.0	288.0	0.0	24256	113
6:53 PM	1133.10	86.35	1.35	33	2	Pump 1	No	No	Both Off	24,322	240.6	223.5	289.1	0.0	24256	146
6:54 PM	1134.10	86.70	1.70	66	2	Pump 1	No	No	Both Off	24,355	241.2	225.0	290.3	0.0	24256	179
6:55 PM	1135.10	87.05	2.05	99	2	Pump 1	No	No	Both Off	24,388	241.8	226.6	291.4	0.0	24256	212
6:56 PM	1136.10	87.40	2.40	132	2	Pump 1	No	No	Both Off	24,421	242.3	228.1	292.5	0.0	24256	245
6:57 PM	1137.10	87.76	2.76	165	2	Pump 1	No	No	Both Off	24,454	242.9	229.6	293.7	0.0	24256	278
6:58 PM	1138.10	88.11	3.11	198	2	Pump 1	No	No	Both Off	24,487	243.5	231.1	294.8	0.0	24256	311
6:59 PM	1139.10	88.46	3.46	231	2	Pump 1	No	No	Both Off	24,520	244.1	232.7	295.9	0.0	24256	344
7:00 PM	1140.10	88.81	3.81	264	2	Pump 1	No	No	Both Off	24,551	244.7	234.2	297.1	0.0	24256	375
7:01 PM	1141.10	89.14	4.14	295	3	Pump 1	Yes	No	Pump 1	24,564	245.2	235.3	298.1	245.2	24501	144
7:02 PM	1142.10	86.67	1.67	63	11	Pump 1	Yes	No	Pump 1	24,578	241.1	224.9	290.2	241.1	24578	80
7:03 PM	1143.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	24,591	240.0	222.0	288.0	0.0	24578	94
7:04 PM	1144.10	86.14	1.14	13	2	Pump 2	No	No	Both Off	24,605	240.2	222.6	288.5	0.0	24578	107
7:05 PM	1145.10	86.29	1.29	27	2	Pump 2	No	No	Both Off	24,618	240.5	223.2	288.9	0.0	24578	120
7:06 PM	1146.10	86.43	1.43	40	2	Pump 2	No	No	Both Off	24,632	240.7	223.9	289.4	0.0	24578	134
7:07 PM	1147.10	86.57	1.57	54	2	Pump 2	No	No	Both Off	24,645	241.0	224.5	289.8	0.0	24578	147
7:08 PM	1148.10	86.71	1.71	67	2	Pump 2	No	No	Both Off	24,658	241.2	225.1	290.3	0.0	24578	161
7:09 PM	1149.10	86.86	1.86	80	2	Pump 2	No	No	Both Off	24,672	241.4	225.7	290.8	0.0	24578	174
7:10 PM	1150.10	87.00	2.00	94	2	Pump 2	No	No	Both Off	24,685	241.7	226.3	291.2	0.0	24578	187
7:11 PM	1151.10	87.14	2.14	107	2	Pump 2	No	No	Both Off	24,699	241.9	226.9	291.7	0.0	24578	201
7:12 PM	1152.10	87.28	2.28	121	2	Pump 2	No	No	Both Off	24,712	242.1	227.6	292.1	0.0	24578	214
7:13 PM	1153.10	87.43	2.43	134	2	Pump 2	No	No	Both Off	24,725	242.4	228.2	292.6	0.0	24578	228
7:14 PM	1154.10	87.57	2.57	148	2	Pump 2	No	No	Both Off	24,739	242.6	228.8	293.1	0.0	24578	241
7:15 PM	1155.10	87.71	2.71	161	2	Pump 2	No	No	Both Off	24,752	242.9	229.4	293.5	0.0	24578	255
7:16 PM	1156.10	87.86	2.86	174	2	Pump 2	No	No	Both Off	24,766	243.1	230.0	294.0	0.0	24578	268
7:17 PM	1157.10	88.00	3.00	188	2	Pump 2	No	No	Both Off	24,779	243.3	230.7	294.4	0.0	24578	281
7:18 PM	1158.10	88.14	3.14	201	2	Pump 2	No	No	Both Off	24,792	243.6	231.3	294.9	0.0	24578	295
7:19 PM	1159.10	88.28	3.28	215	2	Pump 2	No	No	Both Off	24,806	243.8	231.9	295.4	0.0	24578	308
7:20 PM	1160.10	88.43	3.43	228	2	Pump 2	No	No	Both Off	24,819	244.0	232.5	295.8	0.0	24578	322
7:21 PM	1161.10	88.57	3.57	241	2	Pump 2	No	No	Both Off	24,833	244.3	233.1	296.3	0.0	24578	335
7:22 PM	1162.10	88.71	3.71	255	2	Pump 2	No	No	Both Off	24,846	244.5	233.7	296.7	0.0	24578	348
7:23 PM	1163.10	88.85	3.85	268	2	Pump 2	No	No	Both Off	24,860	244.8	234.4	297.2	0.0	24578	362
7:24 PM	1164.10	89.00	4.00	282	2	Pump 2	No	No	Both Off	24,873	245.0	235.0	297.7	0.0	24578	375
7:25 PM	1165.10	89.14	4.14	295	3	Pump 2	Yes	No	Pump 2	24,886	245.2	235.3	298.1	235.3	24813	153
7:26 PM	1166.10	86.78	1.78	73	11	Pump 2	Yes	No	Pump 2	24,900	241.3	225.4	290.5	225.4	24900	80
7:27 PM	1167.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	24,913	240.0	222.0	288.0	0.0	24900	94
7:28 PM	1168.10	86.14	1.14	13	2	Pump 1	No	No	Both Off	24,927	240.2	222.6	288.5	0.0	24900	107
7:29 PM	1169.10	86.29	1.29	27	2	Pump 1	No	No	Both Off	24,940	240.5	223.2	288.9	0.0	24900	120
7:30 PM	1170.10	86.43	1.43	40	2	Pump 1	No	No	Both Off	24,953	240.7	223.9	289.4	0.0	24900	134
7:31 PM	1171.10	86.57	1.57	54	2	Pump 1	No	No	Both Off	24,967	241.0	224.5	289.8	0.0	24900	147
7:32 PM	1172.10	86.71	1.71	67	2	Pump 1	No	No	Both Off	24,980	241.2	225.1	290.3	0.0	24900	161

7:33 PM	1173.10	86.86	1.86	80	2	Pump 1	No	No	Both Off	24,994	241.4	225.7	290.8	0.0	24900	174
7:34 PM	1174.10	87.00	2.00	94	2	Pump 1	No	No	Both Off	25,007	241.7	226.3	291.2	0.0	24900	187
7:35 PM	1175.10	87.14	2.14	107	2	Pump 1	No	No	Both Off	25,020	241.9	226.9	291.7	0.0	24900	201
7:36 PM	1176.10	87.28	2.28	121	2	Pump 1	No	No	Both Off	25,034	242.1	227.6	292.1	0.0	24900	214
7:37 PM	1177.10	87.43	2.43	134	2	Pump 1	No	No	Both Off	25,047	242.4	228.2	292.6	0.0	24900	228
7:38 PM	1178.10	87.57	2.57	148	2	Pump 1	No	No	Both Off	25,061	242.6	228.8	293.1	0.0	24900	241
7:39 PM	1179.10	87.71	2.71	161	2	Pump 1	No	No	Both Off	25,074	242.9	229.4	293.5	0.0	24900	255
7:40 PM	1180.10	87.86	2.86	174	2	Pump 1	No	No	Both Off	25,088	243.1	230.0	294.0	0.0	24900	268
7:41 PM	1181.10	88.00	3.00	188	2	Pump 1	No	No	Both Off	25,101	243.3	230.7	294.4	0.0	24900	281
7:42 PM	1182.10	88.14	3.14	201	2	Pump 1	No	No	Both Off	25,114	243.6	231.3	294.9	0.0	24900	295
7:43 PM	1183.10	88.28	3.28	215	2	Pump 1	No	No	Both Off	25,128	243.8	231.9	295.4	0.0	24900	308
7:44 PM	1184.10	88.43	3.43	228	2	Pump 1	No	No	Both Off	25,141	244.0	232.5	295.8	0.0	24900	322
7:45 PM	1185.10	88.57	3.57	241	2	Pump 1	No	No	Both Off	25,155	244.3	233.1	296.3	0.0	24900	335
7:46 PM	1186.10	88.71	3.71	255	2	Pump 1	No	No	Both Off	25,168	244.5	233.7	296.7	0.0	24900	348
7:47 PM	1187.10	88.85	3.85	268	2	Pump 1	No	No	Both Off	25,181	244.8	234.4	297.2	0.0	24900	362
7:48 PM	1188.10	89.00	4.00	282	2	Pump 1	No	No	Both Off	25,195	245.0	235.0	297.7	0.0	24900	375
7:49 PM	1189.10	89.14	4.14	295	3	Pump 1	Yes	No	Pump 1	25,208	245.2	235.3	298.1	245.2	25145	143
7:50 PM	1190.10	86.67	1.67	63	11	Pump 1	Yes	No	Pump 1	25,222	241.1	224.9	290.2	241.1	25222	80
7:51 PM	1191.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	25,235	240.0	222.0	288.0	0.0	25222	94
7:52 PM	1192.10	86.14	1.14	13	2	Pump 2	No	No	Both Off	25,248	240.2	222.6	288.5	0.0	25222	107
7:53 PM	1193.10	86.29	1.29	27	2	Pump 2	No	No	Both Off	25,262	240.5	223.2	288.9	0.0	25222	120
7:54 PM	1194.10	86.43	1.43	40	2	Pump 2	No	No	Both Off	25,275	240.7	223.9	289.4	0.0	25222	134
7:55 PM	1195.10	86.57	1.57	54	2	Pump 2	No	No	Both Off	25,289	241.0	224.5	289.8	0.0	25222	147
7:56 PM	1196.10	86.71	1.71	67	2	Pump 2	No	No	Both Off	25,302	241.2	225.1	290.3	0.0	25222	161
7:57 PM	1197.10	86.86	1.86	80	2	Pump 2	No	No	Both Off	25,316	241.4	225.7	290.8	0.0	25222	174
7:58 PM	1198.10	87.00	2.00	94	2	Pump 2	No	No	Both Off	25,329	241.7	226.3	291.2	0.0	25222	187
7:59 PM	1199.10	87.14	2.14	107	2	Pump 2	No	No	Both Off	25,342	241.9	226.9	291.7	0.0	25222	201
8:00 PM	1200.10	87.28	2.28	121	2	Pump 2	No	No	Both Off	25,356	242.1	227.6	292.1	0.0	25222	214
8:01 PM	1201.10	87.43	2.43	134	2	Pump 2	No	No	Both Off	25,368	242.4	228.2	292.6	0.0	25222	227
8:02 PM	1202.10	87.56	2.56	147	2	Pump 2	No	No	Both Off	25,381	242.6	228.8	293.0	0.0	25222	240
8:03 PM	1203.10	87.70	2.70	159	2	Pump 2	No	No	Both Off	25,394	242.8	229.4	293.5	0.0	25222	252
8:04 PM	1204.10	87.83	2.83	172	2	Pump 2	No	No	Both Off	25,407	243.1	229.9	293.9	0.0	25222	265
8:05 PM	1205.10	87.97	2.97	185	2	Pump 2	No	No	Both Off	25,419	243.3	230.5	294.3	0.0	25222	278
8:06 PM	1206.10	88.10	3.10	198	2	Pump 2	No	No	Both Off	25,432	243.5	231.1	294.8	0.0	25222	290
8:07 PM	1207.10	88.24	3.24	210	2	Pump 2	No	No	Both Off	25,445	243.7	231.7	295.2	0.0	25222	303
8:08 PM	1208.10	88.37	3.37	223	2	Pump 2	No	No	Both Off	25,457	244.0	232.3	295.6	0.0	25222	316
8:09 PM	1209.10	88.51	3.51	236	2	Pump 2	No	No	Both Off	25,470	244.2	232.9	296.1	0.0	25222	329
8:10 PM	1210.10	88.64	3.64	248	2	Pump 2	No	No	Both Off	25,483	244.4	233.5	296.5	0.0	25222	341
8:11 PM	1211.10	88.78	3.78	261	2	Pump 2	No	No	Both Off	25,495	244.6	234.0	297.0	0.0	25222	354
8:12 PM	1212.10	88.91	3.91	274	2	Pump 2	No	No	Both Off	25,508	244.9	234.6	297.4	0.0	25222	367
8:13 PM	1213.10	89.05	4.05	287	3	Pump 2	Yes	No	Pump 2	25,521	245.1	235.1	297.8	235.1	25457	144
8:14 PM	1214.10	86.68	1.68	64	11	Pump 2	Yes	No	Pump 2	25,534	241.1	225.0	290.2	225.0	25534	80
8:15 PM	1215.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	25,546	240.0	222.0	288.0	0.0	25534	93
8:16 PM	1216.10	86.14	1.14	13	2	Pump 1	No	No	Both Off	25,559	240.2	222.6	288.4	0.0	25534	106
8:17 PM	1217.10	86.27	1.27	25	2	Pump 1	No	No	Both Off	25,572	240.5	223.2	288.9	0.0	25534	118
8:18 PM	1218.10	86.41	1.41	38	2	Pump 1	No	No	Both Off	25,584	240.7	223.8	289.3	0.0	25534	131
8:19 PM	1219.10	86.54	1.54	51	2	Pump 1	No	No	Both Off	25,597	240.9	224.3	289.7	0.0	25534	144
8:20 PM	1220.10	86.68	1.68	64	2	Pump 1	No	No	Both Off	25,610	241.1	224.9	290.2	0.0	25534	156
8:21 PM	1221.10	86.81	1.81	76	2	Pump 1	No	No	Both Off	25,623	241.4	225.5	290.6	0.0	25534	169
8:22 PM	1222.10	86.95	1.95	89	2	Pump 1	No	No	Both Off	25,635	241.6	226.1	291.0	0.0	25534	182
8:23 PM	1223.10	87.08	2.08	102	2	Pump 1	No	No	Both Off	25,648	241.8	226.7	291.5	0.0	25534	195
8:24 PM	1224.10	87.22	2.22	114	2	Pump 1	No	No	Both Off	25,661	242.0	227.3	291.9	0.0	25534	207
8:25 PM	1225.10	87.35	2.35	127	2	Pump 1	No	No	Both Off	25,673	242.3	227.9	292.4	0.0	25534	220
8:26 PM	1226.10	87.49	2.49	140	2	Pump 1	No	No	Both Off	25,686	242.5	228.4	292.8	0.0	25534	233
8:27 PM	1227.10	87.62	2.62	152	2	Pump 1	No	No	Both Off	25,699	242.7	229.0	293.2	0.0	25534	245
8:28 PM	1228.10	87.76	2.76	165	2	Pump 1	No	No	Both Off	25,711	242.9	229.6	293.7	0.0	25534	258
8:29 PM	1229.10	87.89	2.89	178	2	Pump 1	No	No	Both Off	25,724	243.2	230.2	294.1	0.0	25534	271
8:30 PM	1230.10	88.03	3.03	191	2	Pump 1	No	No	Both Off	25,737	243.4	230.8	294.5	0.0	25534	283
8:31 PM	1231.10	88.16	3.16	203	2	Pump 1	No	No	Both Off	25,750	243.6	231.4	295.0	0.0	25534	296
8:32 PM	1232.10	88.30	3.30	216	2	Pump 1	No	No	Both Off	25,762	243.8	232.0	295.4	0.0	25534	309
8:33 PM	1233.10	88.43	3.43	229	2	Pump 1	No	No	Both Off	25,775	244.1	232.5	295.8	0.0	25534	322
8:34 PM	1234.10	88.57	3.57	241	2	Pump 1	No	No	Both Off	25,788	244.3	233.1	296.3	0.0	25534	334

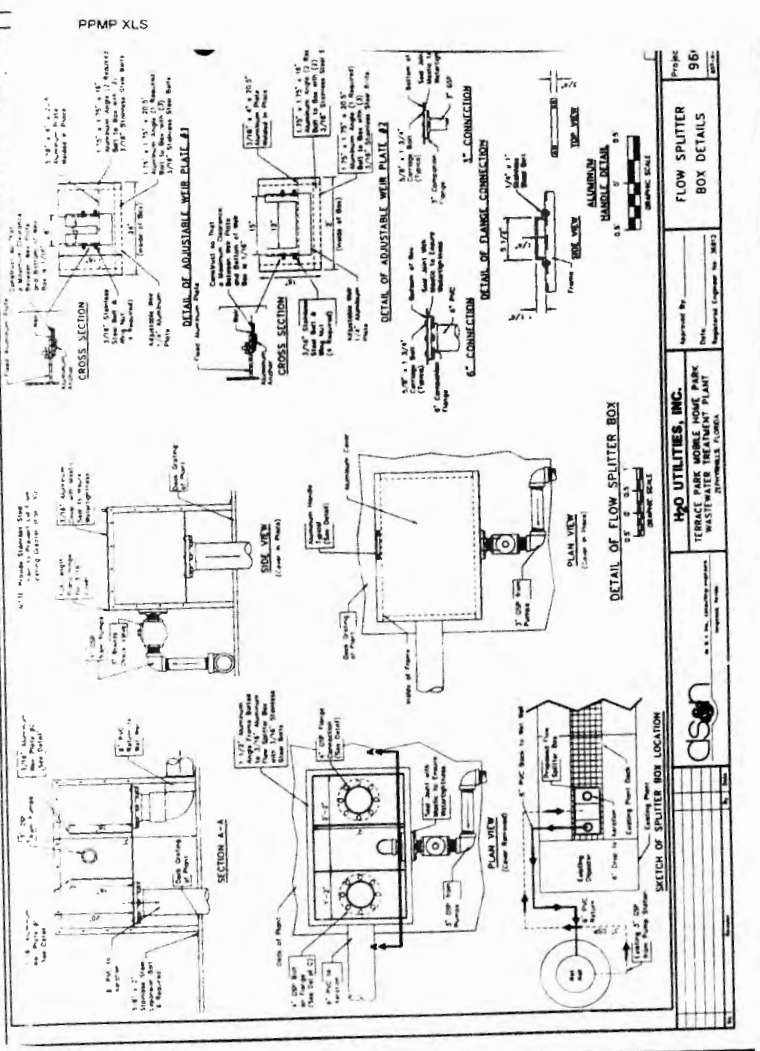
Time															
8:35 PM	1235.10	88.70	3.70	254	2	Pump 1	No	No	Both Off	25,800	244.5	233.7	296.7	0.0	25534	347
8:36 PM	1236.10	88.84	3.84	267	2	Pump 1	No	No	Both Off	25,813	244.7	234.3	297.1	0.0	25534	360
8:37 PM	1237.10	88.97	3.97	280	2	Pump 1	No	No	Both Off	25,826	245.0	234.9	297.6	0.0	25534	372
8:38 PM	1238.10	89.11	4.11	292	3	Pump 1	Yes	No	Pump 1	25,839	245.2	235.3	298.0	245.2	25779	140
8:39 PM	1239.10	86.64	1.64	60	11	Pump 1	Yes	No	Pump 1	25,851	241.1	224.8	290.0	241.1	25851	80
8:40 PM	1240.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	25,864	240.0	222.0	288.0	0.0	25851	93
8:41 PM	1241.10	86.14	1.14	13	2	Pump 2	No	No	Both Off	25,877	240.2	222.6	288.4	0.0	25851	106
8:42 PM	1242.10	86.27	1.27	25	2	Pump 2	No	No	Both Off	25,889	240.5	223.2	288.9	0.0	25851	118
8:43 PM	1243.10	86.41	1.41	38	2	Pump 2	No	No	Both Off	25,902	240.7	223.8	289.3	0.0	25851	131
8:44 PM	1244.10	86.54	1.54	51	2	Pump 2	No	No	Both Off	25,915	240.9	224.3	289.7	0.0	25851	144
8:45 PM	1245.10	86.68	1.68	64	2	Pump 2	No	No	Both Off	25,927	241.1	224.9	290.2	0.0	25851	156
8:46 PM	1246.10	86.81	1.81	76	2	Pump 2	No	No	Both Off	25,940	241.4	225.5	290.6	0.0	25851	169
8:47 PM	1247.10	86.95	1.95	89	2	Pump 2	No	No	Both Off	25,953	241.6	226.1	291.0	0.0	25851	182
8:48 PM	1248.10	87.08	2.08	102	2	Pump 2	No	No	Both Off	25,966	241.8	226.7	291.5	0.0	25851	195
8:49 PM	1249.10	87.22	2.22	114	2	Pump 2	No	No	Both Off	25,978	242.0	227.3	291.9	0.0	25851	207
8:50 PM	1250.10	87.35	2.35	127	2	Pump 2	No	No	Both Off	25,991	242.3	227.9	292.4	0.0	25851	220
8:51 PM	1251.10	87.49	2.49	140	2	Pump 2	No	No	Both Off	26,004	242.5	228.4	292.8	0.0	25851	233
8:52 PM	1252.10	87.62	2.62	152	2	Pump 2	No	No	Both Off	26,016	242.7	229.0	293.2	0.0	25851	245
8:53 PM	1253.10	87.76	2.76	165	2	Pump 2	No	No	Both Off	26,029	242.9	229.6	293.7	0.0	25851	258
8:54 PM	1254.10	87.89	2.89	178	2	Pump 2	No	No	Both Off	26,042	243.2	230.2	294.1	0.0	25851	271
8:55 PM	1255.10	88.03	3.03	191	2	Pump 2	No	No	Both Off	26,055	243.4	230.8	294.5	0.0	25851	283
8:56 PM	1256.10	88.16	3.16	203	2	Pump 2	No	No	Both Off	26,067	243.6	231.4	295.0	0.0	25851	296
8:57 PM	1257.10	88.30	3.30	216	2	Pump 2	No	No	Both Off	26,080	243.8	232.0	295.4	0.0	25851	309
8:58 PM	1258.10	88.43	3.43	229	2	Pump 2	No	No	Both Off	26,093	244.1	232.5	295.8	0.0	25851	322
8:59 PM	1259.10	88.57	3.57	241	2	Pump 2	No	No	Both Off	26,105	244.3	233.1	296.3	0.0	25851	334
9:00 PM	1260.10	88.70	3.70	254	2	Pump 2	No	No	Both Off	26,118	244.5	233.7	296.7	0.0	25851	347
9:01 PM	1261.10	88.84	3.84	267	2	Pump 2	No	No	Both Off	26,127	244.7	234.3	297.1	0.0	25851	356
9:02 PM	1262.10	88.94	3.94	276	2	Pump 2	No	No	Both Off	26,137	244.9	234.7	297.5	0.0	25851	366
9:03 PM	1263.10	89.04	4.04	286	3	Pump 2	Yes	No	Pump 2	26,146	245.1	235.1	297.8	235.1	26086	140
9:04 PM	1264.10	86.64	1.64	60	11	Pump 2	Yes	No	Pump 2	26,156	241.1	224.8	290.1	224.8	26156	80
9:05 PM	1265.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	26,165	240.0	222.0	288.0	0.0	26156	90
9:06 PM	1266.10	86.10	1.10	10	2	Pump 1	No	No	Both Off	26,175	240.2	222.4	288.3	0.0	26156	99
9:07 PM	1267.10	86.20	1.20	19	2	Pump 1	No	No	Both Off	26,184	240.3	222.9	288.7	0.0	26156	109
9:08 PM	1268.10	86.30	1.30	29	2	Pump 1	No	No	Both Off	26,194	240.5	223.3	289.0	0.0	26156	118
9:09 PM	1269.10	86.41	1.41	38	2	Pump 1	No	No	Both Off	26,204	240.7	223.8	289.3	0.0	26156	128
9:10 PM	1270.10	86.51	1.51	48	2	Pump 1	No	No	Both Off	26,213	240.8	224.2	289.6	0.0	26156	137
9:11 PM	1271.10	86.61	1.61	57	2	Pump 1	No	No	Both Off	26,223	241.0	224.6	290.0	0.0	26156	147
9:12 PM	1272.10	86.71	1.71	67	2	Pump 1	No	No	Both Off	26,232	241.2	225.1	290.3	0.0	26156	156
9:13 PM	1273.10	86.81	1.81	76	2	Pump 1	No	No	Both Off	26,242	241.4	225.5	290.6	0.0	26156	166
9:14 PM	1274.10	86.91	1.91	86	2	Pump 1	No	No	Both Off	26,251	241.5	226.0	290.9	0.0	26156	175
9:15 PM	1275.10	87.01	2.01	95	2	Pump 1	No	No	Both Off	26,261	241.7	226.4	291.3	0.0	26156	185
9:16 PM	1276.10	87.12	2.12	105	2	Pump 1	No	No	Both Off	26,270	241.9	226.8	291.6	0.0	26156	195
9:17 PM	1277.10	87.22	2.22	114	2	Pump 1	No	No	Both Off	26,280	242.0	227.3	291.9	0.0	26156	204
9:18 PM	1278.10	87.32	2.32	124	2	Pump 1	No	No	Both Off	26,289	242.2	227.7	292.2	0.0	26156	214
9:19 PM	1279.10	87.42	2.42	133	2	Pump 1	No	No	Both Off	26,299	242.4	228.2	292.6	0.0	26156	223
9:20 PM	1280.10	87.52	2.52	143	2	Pump 1	No	No	Both Off	26,308	242.5	228.6	292.9	0.0	26156	233
9:21 PM	1281.10	87.62	2.62	152	2	Pump 1	No	No	Both Off	26,318	242.7	229.0	293.2	0.0	26156	242
9:22 PM	1282.10	87.72	2.72	162	2	Pump 1	No	No	Both Off	26,327	242.9	229.5	293.6	0.0	26156	252
9:23 PM	1283.10	87.82	2.82	172	2	Pump 1	No	No	Both Off	26,337	243.0	229.9	293.9	0.0	26156	261
9:24 PM	1284.10	87.93	2.93	181	2	Pump 1	No	No	Both Off	26,346	243.2	230.3	294.2	0.0	26156	271
9:25 PM	1285.10	88.03	3.03	191	2	Pump 1	No	No	Both Off	26,356	243.4	230.8	294.5	0.0	26156	280
9:26 PM	1286.10	88.13	3.13	200	2	Pump 1	No	No	Both Off	26,366	243.5	231.2	294.9	0.0	26156	290
9:27 PM	1287.10	88.23	3.23	210	2	Pump 1	No	No	Both Off	26,375	243.7	231.7	295.2	0.0	26156	299
9:28 PM	1288.10	88.33	3.33	219	2	Pump 1	No	No	Both Off	26,385	243.9	232.1	295.5	0.0	26156	309
9:29 PM	1289.10	88.43	3.43	229	2	Pump 1	No	No	Both Off	26,394	244.1	232.5	295.8	0.0	26156	318
9:30 PM	1290.10	88.53	3.53	238	2	Pump 1	No	No	Both Off	26,404	244.2	233.0	296.2	0.0	26156	328
9:31 PM	1291.10	88.64	3.64	248	2	Pump 1	No	No	Both Off	26,413	244.4	233.4	296.5	0.0	26156	337
9:32 PM	1292.10	88.74	3.74	257	2	Pump 1	No	No	Both Off	26,423	244.6	233.9	296.8	0.0	26156	347
9:33 PM	1293.10	88.84	3.84	267	2	Pump 1	No	No	Both Off	26,432	244.7	234.3	297.1	0.0	26156	357
9:34 PM	1294.10	88.94	3.94	276	2	Pump 1	No	No	Both Off	26,442	244.9	234.7	297.5	0.0	26156	366
9:35 PM	1295.10	89.04	4.04	286	3	Pump 1	Yes	No	Pump 1	26,451	245.1	235.1	297.8	245.1	26401	130
9:36 PM	1296.10	86.54	1.54	50	11	Pump 1	Yes	No	Pump 1	26,461	240.9	224.3	289.7	240.9	26461	80

Time																
9:37 PM	1297.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	26,470	240.0	222.0	288.0	0.0	26461	90
9:38 PM	1298.10	86.10	1.10	10	2	Pump 2	No	No	Both Off	26,480	240.2	222.4	288.3	0.0	26461	99
9:39 PM	1299.10	86.20	1.20	19	2	Pump 2	No	No	Both Off	26,489	240.3	222.9	288.7	0.0	26461	109
9:40 PM	1300.10	86.30	1.30	29	2	Pump 2	No	No	Both Off	26,499	240.5	223.3	289.0	0.0	26461	118
9:41 PM	1301.10	86.41	1.41	38	2	Pump 2	No	No	Both Off	26,508	240.7	223.8	289.3	0.0	26461	128
9:42 PM	1302.10	86.51	1.51	48	2	Pump 2	No	No	Both Off	26,518	240.8	224.2	289.6	0.0	26461	137
9:43 PM	1303.10	86.61	1.61	57	2	Pump 2	No	No	Both Off	26,527	241.0	224.6	290.0	0.0	26461	147
9:44 PM	1304.10	86.71	1.71	67	2	Pump 2	No	No	Both Off	26,537	241.2	225.1	290.3	0.0	26461	156
9:45 PM	1305.10	86.81	1.81	76	2	Pump 2	No	No	Both Off	26,547	241.4	225.5	290.6	0.0	26461	166
9:46 PM	1306.10	86.91	1.91	86	2	Pump 2	No	No	Both Off	26,556	241.5	226.0	290.9	0.0	26461	175
9:47 PM	1307.10	87.01	2.01	95	2	Pump 2	No	No	Both Off	26,566	241.7	226.4	291.3	0.0	26461	185
9:48 PM	1308.10	87.12	2.12	105	2	Pump 2	No	No	Both Off	26,575	241.9	226.8	291.6	0.0	26461	195
9:49 PM	1309.10	87.22	2.22	114	2	Pump 2	No	No	Both Off	26,585	242.0	227.3	291.9	0.0	26461	204
9:50 PM	1310.10	87.32	2.32	124	2	Pump 2	No	No	Both Off	26,594	242.2	227.7	292.2	0.0	26461	214
9:51 PM	1311.10	87.42	2.42	133	2	Pump 2	No	No	Both Off	26,604	242.4	228.2	292.6	0.0	26461	223
9:52 PM	1312.10	87.52	2.52	143	2	Pump 2	No	No	Both Off	26,613	242.5	228.6	292.9	0.0	26461	233
9:53 PM	1313.10	87.62	2.62	152	2	Pump 2	No	No	Both Off	26,623	242.7	229.0	293.2	0.0	26461	242
9:54 PM	1314.10	87.72	2.72	162	2	Pump 2	No	No	Both Off	26,632	242.9	229.5	293.6	0.0	26461	252
9:55 PM	1315.10	87.82	2.82	172	2	Pump 2	No	No	Both Off	26,642	243.0	229.9	293.9	0.0	26461	261
9:56 PM	1316.10	87.93	2.93	181	2	Pump 2	No	No	Both Off	26,651	243.2	230.3	294.2	0.0	26461	271
9:57 PM	1317.10	88.03	3.03	191	2	Pump 2	No	No	Both Off	26,661	243.4	230.8	294.5	0.0	26461	280
9:58 PM	1318.10	88.13	3.13	200	2	Pump 2	No	No	Both Off	26,670	243.5	231.2	294.9	0.0	26461	290
9:59 PM	1319.10	88.23	3.23	210	2	Pump 2	No	No	Both Off	26,680	243.7	231.7	295.2	0.0	26461	299
10:00 PM	1320.10	88.33	3.33	219	2	Pump 2	No	No	Both Off	26,689	243.9	232.1	295.5	0.0	26461	309
10:01 PM	1321.10	88.43	3.43	229	2	Pump 2	No	No	Both Off	26,698	244.1	232.5	295.8	0.0	26461	318
10:02 PM	1322.10	88.53	3.53	238	2	Pump 2	No	No	Both Off	26,707	244.2	233.0	296.1	0.0	26461	327
10:03 PM	1323.10	88.62	3.62	246	2	Pump 2	No	No	Both Off	26,716	244.4	233.4	296.5	0.0	26461	336
10:04 PM	1324.10	88.72	3.72	255	2	Pump 2	No	No	Both Off	26,725	244.5	233.8	296.8	0.0	26461	345
10:05 PM	1325.10	88.81	3.81	264	2	Pump 2	No	No	Both Off	26,734	244.7	234.2	297.1	0.0	26461	353
10:06 PM	1326.10	88.91	3.91	273	2	Pump 2	No	No	Both Off	26,743	244.8	234.6	297.4	0.0	26461	362
10:07 PM	1327.10	89.00	4.00	282	3	Pump 2	Yes	No	Pump 2	26,752	245.0	235.0	297.7	235.0	26696	136
10:08 PM	1328.10	86.60	1.60	56	11	Pump 2	Yes	No	Pump 2	26,761	241.0	224.6	289.9	224.6	26761	80
10:09 PM	1329.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	26,770	240.0	222.0	288.0	0.0	26761	89
10:10 PM	1330.10	86.10	1.10	9	2	Pump 1	No	No	Both Off	26,779	240.2	222.4	288.3	0.0	26761	98
10:11 PM	1331.10	86.19	1.19	18	2	Pump 1	No	No	Both Off	26,788	240.3	222.8	288.6	0.0	26761	107
10:12 PM	1332.10	86.29	1.29	27	2	Pump 1	No	No	Both Off	26,797	240.5	223.2	288.9	0.0	26761	116
10:13 PM	1333.10	86.38	1.38	36	2	Pump 1	No	No	Both Off	26,806	240.6	223.6	289.2	0.0	26761	125
10:14 PM	1334.10	86.48	1.48	45	2	Pump 1	No	No	Both Off	26,814	240.8	224.1	289.5	0.0	26761	134
10:15 PM	1335.10	86.57	1.57	54	2	Pump 1	No	No	Both Off	26,823	241.0	224.5	289.8	0.0	26761	143
10:16 PM	1336.10	86.67	1.67	63	2	Pump 1	No	No	Both Off	26,832	241.1	224.9	290.1	0.0	26761	152
10:17 PM	1337.10	86.76	1.76	71	2	Pump 1	No	No	Both Off	26,841	241.3	225.3	290.4	0.0	26761	161
10:18 PM	1338.10	86.86	1.86	80	2	Pump 1	No	No	Both Off	26,850	241.4	225.7	290.8	0.0	26761	170
10:19 PM	1339.10	86.95	1.95	89	2	Pump 1	No	No	Both Off	26,859	241.6	226.1	291.1	0.0	26761	178
10:20 PM	1340.10	87.05	2.05	98	2	Pump 1	No	No	Both Off	26,868	241.7	226.5	291.4	0.0	26761	187
10:21 PM	1341.10	87.14	2.14	107	2	Pump 1	No	No	Both Off	26,877	241.9	226.9	291.7	0.0	26761	196
10:22 PM	1342.10	87.24	2.24	116	2	Pump 1	No	No	Both Off	26,886	242.1	227.4	292.0	0.0	26761	205
10:23 PM	1343.10	87.33	2.33	125	2	Pump 1	No	No	Both Off	26,895	242.2	227.8	292.3	0.0	26761	214
10:24 PM	1344.10	87.43	2.43	134	2	Pump 1	No	No	Both Off	26,904	242.4	228.2	292.6	0.0	26761	223
10:25 PM	1345.10	87.52	2.52	143	2	Pump 1	No	No	Both Off	26,913	242.5	228.6	292.9	0.0	26761	232
10:26 PM	1346.10	87.62	2.62	152	2	Pump 1	No	No	Both Off	26,922	242.7	229.0	293.2	0.0	26761	241
10:27 PM	1347.10	87.71	2.71	161	2	Pump 1	No	No	Both Off	26,931	242.9	229.4	293.5	0.0	26761	250
10:28 PM	1348.10	87.81	2.81	170	2	Pump 1	No	No	Both Off	26,940	243.0	229.8	293.8	0.0	26761	259
10:29 PM	1349.10	87.90	2.90	179	2	Pump 1	No	No	Both Off	26,948	243.2	230.2	294.1	0.0	26761	268
10:30 PM	1350.10	88.00	3.00	188	2	Pump 1	No	No	Both Off	26,957	243.3	230.6	294.4	0.0	26761	277
10:31 PM	1351.10	88.09	3.09	197	2	Pump 1	No	No	Both Off	26,966	243.5	231.1	294.7	0.0	26761	286
10:32 PM	1352.10	88.19	3.19	205	2	Pump 1	No	No	Both Off	26,975	243.6	231.5	295.0	0.0	26761	295
10:33 PM	1353.10	88.28	3.28	214	2	Pump 1	No	No	Both Off	26,984	243.8	231.9	295.3	0.0	26761	304
10:34 PM	1354.10	88.38	3.38	223	2	Pump 1	No	No	Both Off	26,993	244.0	232.3	295.7	0.0	26761	312
10:35 PM	1355.10	88.47	3.47	232	2	Pump 1	No	No	Both Off	27,002	244.1	232.7	296.0	0.0	26761	321
10:36 PM	1356.10	88.57	3.57	241	2	Pump 1	No	No	Both Off	27,011	244.3	233.1	296.3	0.0	26761	330
10:37 PM	1357.10	88.66	3.66	250	2	Pump 1	No	No	Both Off	27,020	244.4	233.5	296.6	0.0	26761	339
10:38 PM	1358.10	88.76	3.76	259	2	Pump 1	No	No	Both Off	27,029	244.6	233.9	296.9	0.0	26761	348

Time (hh:mm)	Time (min)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] (gal)	[illegible]	[illegible] (gal)	[illegible]	[illegible] (gal)	Total Pumped (gal)	Vol. in WW
10:39 PM	1359.10	88.85	3.85	268	2	Pump 1	No	No	Both Off	27,038	244.8	234.4	297.2	0.0	26761	357
10:40 PM	1360.10	88.95	3.95	277	2	Pump 1	No	No	Both Off	27,047	244.9	234.8	297.5	0.0	26761	366
10:41 PM	1361.10	89.04	4.04	286	3	Pump 1	Yes	No	Pump 1	27,056	245.1	235.1	297.8	245.1	27006	130
10:42 PM	1362.10	86.53	1.53	50	11	Pump 1	Yes	No	Pump 1	27,065	240.9	224.3	289.7	240.9	27065	80
10:43 PM	1363.10	86.00	1.00	0	12	Pump 2	No	No	Both Off	27,074	240.0	222.0	288.0	0.0	27065	89
10:44 PM	1364.10	86.10	1.10	9	2	Pump 2	No	No	Both Off	27,082	240.2	222.4	288.3	0.0	27065	98
10:45 PM	1365.10	86.19	1.19	18	2	Pump 2	No	No	Both Off	27,091	240.3	222.8	288.6	0.0	27065	107
10:46 PM	1366.10	86.29	1.29	27	2	Pump 2	No	No	Both Off	27,100	240.5	223.2	288.9	0.0	27065	116
10:47 PM	1367.10	86.38	1.38	36	2	Pump 2	No	No	Both Off	27,109	240.6	223.6	289.2	0.0	27065	125
10:48 PM	1368.10	86.48	1.48	45	2	Pump 2	No	No	Both Off	27,118	240.8	224.1	289.5	0.0	27065	134
10:49 PM	1369.10	86.57	1.57	54	2	Pump 2	No	No	Both Off	27,127	241.0	224.5	289.8	0.0	27065	143
10:50 PM	1370.10	86.67	1.67	63	2	Pump 2	No	No	Both Off	27,136	241.1	224.9	290.1	0.0	27065	152
10:51 PM	1371.10	86.76	1.76	71	2	Pump 2	No	No	Both Off	27,145	241.3	225.3	290.4	0.0	27065	161
10:52 PM	1372.10	86.86	1.86	80	2	Pump 2	No	No	Both Off	27,154	241.4	225.7	290.8	0.0	27065	170
10:53 PM	1373.10	86.95	1.9[illegible]	89	2	Pump 2	No	No	Both Off	27,163	241.6	226.1	291.1	0.0	27065	.78
10:54 PM	1374.10	87.05	2.05	98	2	Pump 2	No	No	Both Off	27,172	241.7	226.5	291.4	0.0	27065	187
10:55 PM	1375.10	87.14	2.14	107	2	Pump 2	No	No	Both Off	27,181	241.9	226.9	291.7	0.0	27065	196
10:56 PM	1376.10	87.24	2.24	116	2	Pump 2	No	No	Both Off	27,190	242.1	227.4	292.0	0.0	27065	205
10:57 PM	1377.10	87.33	2.33	125	2	Pump 2	No	No	Both Off	27,199	242.2	227.8	292.3	0.0	27065	214
10:58 PM	1378.10	87.43	2.43	134	2	Pump 2	No	No	Both Off	27,208	242.4	228.2	292.6	0.0	27065	223
10:59 PM	1379.10	87.52	2.52	143	2	Pump 2	No	No	Both Off	27,216	242.5	228.6	292.9	0.0	27065	232
11:00 PM	1380.10	87.62	2.62	152	2	Pump 2	No	No	Both Off	27,225	242.7	229.0	293.2	0.0	27065	241
11:01 PM	1381.10	87.71	2.71	160	2	Pump 2	No	No	Both Off	27,230	242.8	229.4	293.5	0.0	27065	245
11:02 PM	1382.10	87.76	2.76	165	2	Pump 2	No	No	Both Off	27,234	242.9	229.6	293.7	0.0	27065	250
11:03 PM	1383.10	87.81	2.81	170	2	Pump 2	No	No	Both Off	27,239	243.0	229.8	293.8	0.0	27065	255
11:04 PM	1384.10	87.86	2.86	175	2	Pump 2	No	No	Both Off	27,244	243.1	230.1	294.0	0.0	27065	260
11:05 PM	1385.10	87.91	2.91	179	2	Pump 2	No	No	Both Off	27,249	243.2	230.3	294.2	0.0	27065	264
11:06 PM	1386.10	87.96	2.96	184	2	Pump 2	No	No	Both Off	27,254	243.3	230.5	294.3	0.0	27065	269
11:07 PM	1387.10	88.01	3.01	189	2	Pump 2	No	No	Both Off	27,258	243.4	230.7	294.5	0.0	27065	274
11:08 PM	1388.10	88.06	3.06	194	2	Pump 2	No	No	Both Off	27,263	243.4	230.9	294.6	0.0	27065	279
11:09 PM	1389.10	88.11	3.11	198	2	Pump 2	No	No	Both Off	27,268	243.5	231.2	294.8	0.0	27065	283
11:10 PM	1390.10	88.16	3.16	203	2	Pump 2	No	No	Both Off	27,273	243.6	231.4	295.0	0.0	27065	288
11:11 PM	1391.10	88.21	3.21	208	2	Pump 2	No	No	Both Off	27,277	243.7	231.6	295.1	0.0	27065	293
11:12 PM	1392.10	88.26	3.26	213	2	Pump 2	No	No	Both Off	27,282	243.8	231.8	295.3	0.0	27065	298
11:13 PM	1393.10	88.31	3.31	218	2	Pump 2	No	No	Both Off	27,287	243.9	232.0	295.5	0.0	27065	302
11:14 PM	1394.10	88.37	3.37	222	2	Pump 2	No	No	Both Off	27,292	243.9	232.2	295.6	0.0	27065	307
11:15 PM	1395.10	88.42	3.42	227	2	Pump 2	No	No	Both Off	27,296	244.0	232.5	295.8	0.0	27065	312
11:16 PM	1396.10	88.47	3.47	232	2	Pump 2	No	No	Both Off	27,301	244.1	232.7	295.9	0.0	27065	317
11:17 PM	1397.10	88.52	3.52	237	2	Pump 2	No	No	Both Off	27,306	244.2	232.9	296.1	0.0	27065	322
11:18 PM	1398.10	88.57	3.57	241	2	Pump 2	No	No	Both Off	27,311	244.3	233.1	296.3	0.0	27065	326
11:19 PM	1399.10	88.62	3.62	246	2	Pump 2	No	No	Both Off	27,315	244.4	233.3	296.4	0.0	27065	331
11:20 PM	1400.10	88.67	3.67	251	2	Pump 2	No	No	Both Off	27,320	244.4	233.6	296.6	0.0	27065	336
11:21 PM	1401.10	88.72	3.72	256	2	Pump 2	No	No	Both Off	27,325	244.5	233.8	296.8	0.0	27065	341
11:22 PM	1402.10	88.77	3.77	260	2	Pump 2	No	No	Both Off	27,330	244.6	234.0	296.9	0.0	27065	345
11:23 PM	1403.10	88.82	3.82	265	2	Pump 2	No	No	Both Off	27,335	244.7	234.2	297.1	0.0	27065	350
11:24 PM	1404.10	88.87	3.87	270	2	Pump 2	No	No	Both Off	27,339	244.8	234.4	297.3	0.0	27065	355
11:25 PM	1405.10	88.92	3.92	275	2	Pump 2	No	No	Both Off	27,344	244.9	234.7	297.4	0.0	27065	360
11:26 PM	1406.10	88.97	3.97	279	2	Pump 2	No	No	Both Off	27,349	245.0	234.9	297.6	0.0	27065	364
11:27 PM	1407.10	89.02	4.02	284	3	Pump 2	Yes	No	Pump 2	27,354	245.0	235.1	297.7	235.1	27300	134
11:28 PM	1408.10	86.57	1.57	54	11	Pump 2	Yes	No	Pump 2	27,358	241.0	224.5	289.8	224.5	27358	80
11:29 PM	1409.10	86.00	1.00	0	12	Pump 1	No	No	Both Off	27,363	240.0	222.0	288.0	0.0	27358	85
11:30 PM	1410.10	86.05	1.05	5	2	Pump 1	No	No	Both Off	27,368	240.1	222.2	288.2	0.0	27358	90
11:31 PM	1411.10	86.10	1.10	10	2	Pump 1	No	No	Both Off	27,373	240.2	222.4	288.3	0.0	27358	94
11:32 PM	1412.10	86.15	1.15	14	2	Pump 1	No	No	Both Off	27,377	240.3	222.7	288.5	0.0	27358	99
11:33 PM	1413.10	86.20	1.20	19	2	Pump 1	No	No	Both Off	27,382	240.3	222.9	288.7	0.0	27358	104
11:34 PM	1414.10	86.25	1.25	24	2	Pump 1	No	No	Both Off	27,387	240.4	223.1	288.8	0.0	27358	109
11:35 PM	1415.10	86.30	1.30	29	2	Pump 1	No	No	Both Off	27,392	240.5	223.3	289.0	0.0	27358	114
11:36 PM	1416.10	86.35	1.35	33	2	Pump [illegible]	No	No	Both Off	27,396	240.6	223.5	289.1	0.0	27358	118
11:37 PM	1417.10	86.41	1.41	38	2	Pump 1	No	No	Both Off	27,401	240.7	223.8	289.3	0.0	27358	123
11:38 PM	1418.10	86.46	1.46	43	2	Pump 1	No	No	Both Off	27,406	240.8	224.0	289.5	0.0	27358	128
11:39 PM	1419.10	86.51	1.51	48	2	Pump 1	No	No	Both Off	27,411	240.8	224.2	289.6	0.0	27358	133
11:40 PM	1420.10	86.56	1.56	52	2	Pump 1	No	No	Both Off	27,416	240.9	224.4	289.8	0.0	27358	137

11:42 PM	1422.10	86.66	1.66	62	2	Pump 1	No	No	Both Off	27,[illegible]	[illegible]	—			
11:43 PM	1423.10	86.71	1.71	67	2	Pump 1	No	No	Both Off	27,430	241.2	225.1	290.3	0.0	27358
11:44 PM	1424.10	86.76	1.76	71	2	Pump 1	No	No	Both Off	27,435	241.3	225.3	290.4	0.0	27358
11:45 PM	1425.10	86.81	1.81	76	2	Pump 1	No	No	Both Off	27,439	241.4	225.5	290.6	0.0	27358
11:46 PM	1426.10	86.86	1.86	81	2	Pump 1	No	No	Both Off	27,444	241.4	225.7	290.8	0.0	27358
11:47 PM	1427.10	86.91	1.91	86	2	Pump 1	No	No	Both Off	27,449	241.5	226.0	290.9	0.0	27358
11:48 PM	1428.10	86.96	1.96	91	2	Pump 1	No	No	Both Off	27,454	241.6	226.2	291.1	0.0	27358
11:49 PM	1429.10	87.01	2.01	95	2	Pump 1	No	No	Both Off	27,458	241.7	226.4	291.3	0.0	27358
11:50 PM	1430.10	87.06	2.06	100	2	Pump 1	No	No	Both Off	27,463	241.8	226.6	291.4	0.0	27358
11:51 PM	1431.10	87.12	2.12	105	2	Pump 1	No	No	Both Off	27,468	241.9	226.8	291.6	0.0	27358
11:52 PM	1432.10	87.17	2.17	110	2	Pump 1	No	No	Both Off	27,473	241.9	227.1	291.8	0.0	27358
11:53 PM	1433.10	87.22	2.22	114	2	Pump 1	No	No	Both Off	27,477	242.0	227.3	291.9	0.0	27358
11:54 PM	1434.10	87.27	2.27	119	2	Pump 1	No	No	Both Off	27,482	242.1	227.5	292.1	0.0	27358
11:55 PM	1435.10	87.32	2.32	124	2	Pump 1	No	No	Both Off	27,487	242.2	227.7	292.2	0.0	27358
11:56 PM	1436.10	87.37	2.37	129	2	Pump 1	No	No	Both Off	27,492	242.3	227.9	292.4	0.0	27358
11:57 PM	1437.10	87.42	2.42	133	2	Pump 1	No	No	Both Off	27,497	242.4	228.2	292.6	0.0	27358
11:58 PM	1438.10	87.47	2.47	138	2	Pump 1	No	No	Both Off	27,501	242.4	228.4	292.7	0.0	27358
11:59 PM	1439.10	87.52	2.52	143	2	Pump 1	No	No	Both Off	27,506	242.5	228.6	292.9	0.0	27358
12:00 AM	1440.10	87.57	2.57	148	2	Pump 1	No	No	Both Off	27,512	242.6	228.8	293.1	0.0	27358

PPMP XLS



CORRECTED DEED
WARRANTY DEED FROM CORPORATION

THIS WARRANTY DEED Made this 21 day of October

19 96 by HAL VERHOVEN, as Trustee, and AMANDA COMPANY, INCORPORATED, of Wisconsin, a Corporation existing under the laws of Wisconsin, of the county of Marathon, and State of Wisconsin, hereinafter called the grantor, to

SKY ACRES ENTERPRISES D B A TERRACE PARK VENTURES, a Partnership consisting of Patricia Berens, Ronald Hoffer, Terry Hoffer, Sharon Verhoven, Marilyn Chesak and Marianne Pocklington, Partners, 700 Grand Avenue, Wausau, Wisconsin, 54403, of the County of Marathon, and the State of Wisconsin

hereinafter called the grantee (Whenever used herein the term "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations)

WITNESSETH: That the grantor, for and in consideration of the sum of Ten Dollars ($ 10 00) and other valuable consideration, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee, all that certain land situated in Pasco County, Florida, viz

THE NE 1/4 OF THE NE 1/4 OF SECTION 24, TOWNSHIP 26 SOUTH, RANGE 20 EAST, PASCO COUNTY, FLORIDA, LESS ALL LOTS IN TERRACE PARK ONE (PB 21, PAGE 122) AND TERRACE PARK TWO (PB 22, PAGE 36) PREVIOUSLY CONVEYED BY GRANTOR.
THIS DEED OF CONVENIENCE FOR WHICH NO CONSIDERATION IS EXCHANGED.
PARCEL I.D. # _____
SUBJECT TO ALL LIENS, EASEMENTS & RESTRICTIONS OF RECORD.

TOGETHER with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining

TO HAVE AND TO HOLD, the same in fee simple forever

AND the grantor hereby covenants with said grantee that it is lawfully seized of said land in fee simple, that the grantor has in good right and lawful authority to sell and convey said land, that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever, and that said land is free of all encumbrances except taxes accruing subsequent to December, 1996, and subsequent years

IN WITNESS WHEREOF, the grantor has signed and sealed these presents the day and year first above written

(CORPORATE SEAL)

AMANDA COMPANY, INCORPORATED, of Wisconsin

Signed, sealed and delivered in our presence

Witness: Corinne C Wolfe
Print Name: Corinne C Wolfe

Witness: Susan C Daniello
Print Name: Susan C Daniello

Witness: Debra L Evers
Print Name: Debra L Evers

Witness: Paul Hoffer
Print Name: Paul Hoffer

BY _____
TERRY HOFFER, President

ATTESTED _____
HAL VERHOVEN as Secretary and Trustee

STATE OF Wisconsin

COUNTY OF Marathon

The foregoing instrument was acknowledged before me this October 22, 1996, by TERRY HOFFER, the President of AMANDA COMPANY, INCORPORATED, of Wisconsin, who is personally known or who has produced Wi Drivers Lic. as Identification.

Heidi L Fleurant Commission Expires 1-16-2000
Signature of Notary Public, State of Wisconsin

Heidi L Fleurant
Print, type or stamp Commissioned Name of Notary Public

Personally X OR ___ Presented Identification

Wi Drivers License
Type of Identification Presented

STATE OF Georgia

COUNTY OF Fulton

The foregoing instrument was acknowledged before me this October 23, 1996, by HAL VERHOVEN as Trustee and as Secretary of AMANDA COMPANY, INCORPORATED, of Wisconsin, who is personally known or who has produced GADL 041153522 as Identification

David B. Harrison
Signature of Notary Public, State of Georgia
My Commission Expires Sept. 15, 1999

David B. Harrison
Print, type or stamp Commissioned Name of Notary Public

Personally ___ OR ✓ Presented Identification

Georgia D.L.
Type of Identification Presented

This instrument prepared by
AMANDA COMPANY, INCORPORATED, of Wisconsin
310 Bellis Street, Wausau, Wisconsin 54403

RETURN TO
AMANDA COMPANY, INCORPORATED, of Wisconsin
700 Grand Avenue, Wausau, Wisconsin 54403