



**WEST NORRITON TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA**

**2017 Municipal Wasteload Management Report
(Chapter 94 Report)**

Prepared For:

**West Norriton Township
1630 W. Marshall Street
Jeffersonville, PA 19403**

March 2018

File No. 2018-01102T

Prepared By:

**Gilmore & Associates, Inc.
Engineers ♦ Land Surveyors ♦ Planners ♦ GIS Consultants
65 E. Butler Avenue, Suite 100
New Britain, PA 18901
215-345-4330**





CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

For Calendar Year: 2017

- Permittee is owner and/or operator of a POTW or other sewage treatment facility
 Permittee is owner and/or operator of a collection system tributary to a POTW not owned/operated by permittee

GENERAL INFORMATION			
Permittee Name:	West Norriton Township	Permit No.:	PA (N/A)
Mailing Address:	1630 W. Marshall Street	Effective Date:	N/A
City, State, Zip:	Jeffersonville, PA 19403	Expiration Date:	N/A
Contact Person:	Jason Bobst	Renewal Due Date:	N/A
Title:	Township Manager	Municipality:	West Norriton Township
Phone:	(610) 631-0450	County:	Montgomery County
Email:	JBobst@WNTwp.com	Consultant Name:	Gilmore & Associates, Inc.
CHAPTER 94 REPORT COMPONENTS			
<p>1. Attach to this report a line graph depicting the monthly average flows (expressed in MGD) for each month for the past 5 years and projecting the flows for the next 5 years. The graph must also include a line depicting the hydraulic design capacity per the WQM permit. <u>(25 Pa. Code § 94.12(a)(1))</u></p> <p>Check the appropriate boxes:</p> <p><input type="checkbox"/> Line graph for flows attached (Attachment)</p> <p><input type="checkbox"/> DEP Chapter 94 Spreadsheet used (Attachment)</p> <p><input checked="" type="checkbox"/> Section 1 is not applicable (report is for a collection system).</p>			
<p>2. Attach to this report a line graph depicting the monthly average organic loads (express as lbs BOD5/day) for each month for the past 5 years and projecting the organic loads for the next 5 years. The graph must also include a line depicting the organic design capacity of the treatment plant per the WQM permit. <u>(25 Pa. Code § 94.12(a)(2))</u></p> <p>Check the appropriate boxes:</p> <p><input type="checkbox"/> Line graph for organic loads attached (Attachment)</p> <p><input type="checkbox"/> DEP Chapter 94 Spreadsheet used (Attachment)</p> <p><input checked="" type="checkbox"/> Section 2 is not applicable (report is for a collection system).</p>			
<p>3. If the DEP Chapter 94 Spreadsheet was not used to determine projections, discuss the basis for the hydraulic and organic projections. In all cases, include a description of the time needed to expand the plant to meet the load projections, if necessary, and data used to support the projections should be included in an appendix to this report. <u>(25 Pa. Code § 94.12(a)(3))</u></p> <p>All flow is treated by Norritown Municipal Waste Authority at their wastewater treatment plant. See Attachment E.</p>			

4. Attach a map showing all sewer extensions constructed within the past calendar year, sewer extensions approved or exempted in the past year in accordance with Act 537 and Chapter 71, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary planning stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served. (25 Pa. Code § 94.12(a)(4))

Check the appropriate boxes:

- Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects attached (**Attachment B**)
- List summarizing each extension or project attached (**Attachment A**)
- Schedules describing how each project will be completed over time and effects attached (**Attachment A**)

Comments:

Approximately 2,556 linear feet of 8 inch PVC gravity sanitary sewer was constructed with 13 manholes in Markley Farms Phase I in 2017 (not dedicated) with no connections.

Approximately 1,563 linear feet of 8 inch PVC gravity sanitary sewer was constructed with 9 manholes in Reserve at Stoney Creek in 2017 (not dedicated) with 8 new connections.

One (1) new connection occurred in 2017 (68 W. Indian Lane).

5. Discuss the permittee's program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities, personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and, where applicable, maintenance and control of combined sewer regulators during the past year. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(5))

See Attachment C

6. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, CSOs, SSOs, excessive infiltration and other system problems. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(6))

Check the appropriate boxes:

- System experienced capacity-related bypassing, SSOs or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.
- System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Comments:

The Township is currently in the process of televising the and repairing the system as budget allows. See attached map of work done to date.

7. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station. (25 Pa. Code § 94.12(a)(7))

Check the appropriate boxes:

- The collection system does not contain pump stations
- The collection system does contain pump stations (Number – 6)
- Discussion of condition of each pump station attached (**Attachment D**)

8. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information listed below. (25 Pa. Code § 94.12(a)(8))

- a. A copy of any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94, if it has not previously been submitted.
- b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into the sewer system during the past year.
- c. A discussion of specific problems in the sewer system or at the plant, known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries known to be discharging wastes which create problems in the plant or in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

Check the appropriate boxes:

- Industrial waste report as described in 8 a., b. and c. attached (**Attachment F**)
- Industrial pretreatment report as required in an NPDES permit attached (**Attachment**)

9. Existing or Projected Overload.

Check the appropriate boxes:

- This report demonstrates an existing hydraulic overload condition.
- This report demonstrates a projected hydraulic overload condition.
- This report demonstrates an existing organic overload condition.
- This report demonstrates a projected organic overload condition.

If one or more boxes above have been checked, attach a Corrective Action Plan (CAP) to reduce or eliminate present or projected overloaded conditions under §§ 94.21 and/or 94.22 (relating to existing overload and projected overload). (25 Pa. Code § 94.12(a)(9))

- Corrective Action Plan attached (**Attachment**)

10. Where required by the NPDES permit, attach a Sewage Sludge Management inventory that demonstrates a mass balance of solids coming in and leaving the facility over the previous calendar year.

- Sewage Sludge Management Inventory attached (**Attachment**)

11. For facilities with CSOs and where required by the NPDES permit, attach an Annual CSO Report (including satellite combined sewer systems).

Annual CSO Report attached (Attachment)

12. For POTWs, attach a calibration report documenting that flow measuring, indicating and recording equipment has been calibrated annually. (25 Pa. Code § 94.13(b))

Flow calibration report attached (Attachment G)

RESPONSIBLE OFFICIAL CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Jason Bobst, Township Manager



Name of Responsible Official

Signature

(610) 631-0450

3/23/2018

Telephone No.

Date

PREPARER CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared by me or otherwise under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Thomas J. Figaniak, P.E.



Name of Preparer

Signature

(215) 345-4330

3/23/2018

Telephone No.

Date

ATTACHMENT A

ACTIVE, APPROVED AND PLANNED DEVELOPMENT

**TABLE 1
ACTIVE, APPROVED AND PLANNED DEVELOPMENTS
WEST NORRITON TOWNSHIP**

NAME Approved Developments		Map Reference ⁽¹⁾	Drainage Basin	Status	2017 Connections		Remaining EDUs		Projected Buildout Schedule									
							Total	Total	2018		2019		2020		2021		2022	
					EDUs	Flow	EDUs	Flow ⁽²⁾	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow
1	The Reserve at Stoney Creek	1	Whitehall	Under Construction	8	2,280	43	12,255	15	4,275	15	4,275	13	3,705	0	0	0	0
2	Norristown School District	2	Whitehall	Approved	0	0	10	2,850	0	0	0	0	0	0	0	0	10	2,850
3	Apartments at Schuylkill & Main Street	3	Rittenhouse	Under Construction	0	0	22	6,270	10	2,850	12	3,420	0	0	0	0	0	0
4	Markley Farms	4	Whitehall	Under Construction	0	0	79	22,515	20	5,700	25	7,125	20	5,700	14	3,990	0	0
5	226 Joseph Street	5	Jackson	Approved	0	0	1	285	1	285	0	0	0	0	0	0	0	0
6	68 W. Indian Lane	6	Rittenhouse	Connected	1	285	0	0	0	0	0	0	0	0	0	0	0	0
Approved Sub Total EDUs / Flow					9	2,565	155	21,375	46	13,110	52	14,820	33	9,405	14	3,990	10	2,850

Planned Developments		Map Reference ⁽¹⁾	Drainage Basin	Status	2017 Connections	2017 Connections	Remaining EDUs	Remaining EDUs	Projected Buildout Schedule									
					EDUs	Flow	Total	Total	2018		2019		2020		2021		2022	
					EDUs	Flow	EDUs	Flow ⁽²⁾	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow
7	Office Building at 239 Egypt Road	7	Rittenhouse	In Planning Stages	-	-	11	3,135	0	0	11	3,135	0	0	0	0	0	0
8	Fill in Lots and OLDs	8	-	-	-	-	5	1,425	1	285	1	285	1	285	1	285	1	285
Planned Sub Total EDUs / Flow							16	4,560	1	285	12	3,420	1	285	1	285	1	285

TOTAL	171	25,935	47	13,395	64	18,240	34	9,690	15	4,275	11	3,135
Approved EDU's issued to WNT from NMWA/PADEP	241											
Remaining EDU's	77											

Notes:
(1) See Attachment B for Development locations
(2) Total Flow based on 1 EDU = 285 gpd

ATTACHMENT B
SANITARY SEWER SYSTEM MAP

\\TRAPPE\gilmore\local\TRAPPE\Share\Municipal\West_Norriton_Township-2016_Wastewater\2018\18-01021-Chapter 94_Sewer_Map_for_CY_2017.dwg Layout: NEW 24 x 36 BORDER Plotted By: mdelowski, on Wed Mar 21, 2018 at 11:14am



MH670

<p>GILMORE & ASSOCIATES, INC. ENGINEERING & CONSULTING SERVICES</p> <p>68 EAST BUTLER AVENUE, SUITE 100, NORRISTOWN, PA 19381 • (610) 345-6300 • www.gilmore-assoc.com</p> <p>ONLY THOSE PLANS INCORPORATING THE PROFESSIONAL SEAL SHOULD BE CONSIDERED OFFICIAL AND RELIED UPON BY USER. THIS PLAN IS PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. CONSENT OF GILMORE & ASSOCIATES, INC. IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF GILMORE & ASSOCIATES, INC. ALL RIGHTS RESERVED. ©COPYRIGHT 2018 GILMORE & ASSOCIATES, INC.</p>	
<p>JOB NO.: 2018-01021</p> <p>MUNICIPAL FILE NO.: XX</p>	<p>TAX MAP PARCEL NO.: XX</p>
<p>OWNER: WEST NORRITON TOWNSHIP 1630 W. MARSHALL STREET NORRISTOWN, PA 19380 (610) 631-0400</p>	<p>TOTAL LOTS: XX</p> <p>SCALE: 1"=600'</p> <p>DATE: 3/2018</p>
<p>SANITARY SEWER PLAN</p> <p>2017 CHAPTER 94 REPORT</p> <p>WEST NORRITON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA</p>	
<p>DESIGNED BY: MTH</p> <p>DRAWN BY: MTH</p> <p>CHECKED BY: TF</p>	<p>DESIGNATION: MTH</p> <p>DATE: BY</p> <p>DESCRIPTION</p>
<p>SHEET NO.: 1 OF 1</p>	

ATTACHMENT C

SANITARY SEWER SYSTEM

MONITORING, MAINTENANCE, REPAIR & REHABILITATION

SANITARY SEWER SYSTEM **MONITORING, MAINTENANCE, REPAIR & REHABILITATION**

Pump Stations

West Norriton Township (WNT) currently performs routine maintenance on all pump stations owned and operated. Routine maintenance of the pump stations generally includes, but is not limited to, the following tasks:

- Inspected daily
- Wet wells cleaned
- Floats cleaned
- Standby pumps exercised
- Pumps lubricated
- Filter(s) cleaned
- Compressor tank drained of condensation and inspected
- Oil and coolant checked in generators
- Exercise generators
- Exercise alarms
- Bubbler system and sump pumps inspected
- Grease removed
- Basket cleaned
- Building(s) cleaned
- Grounds maintained

Specific maintenance performed and improvements made on the pump stations during 2017 can be found within Attachment D.

Collection System

WNT is continuously working to remove Inflow & Infiltration (I&I) from the sanitary sewer system. During 2017, WNT concentrated on the Upper Jackson Street drainage basin area. A majority of the televising took place predominantly in the area tributary to the Whitehall Pump Station. Additionally, some televising took place in the Chestnut Street Pump Station and Port Indian Interceptor tributary areas. The map shows the sewers and manholes that were televised and repaired during 2017. Repairs to the sanitary sewers and manholes are being prioritized. Corrective repair has commenced during 2017. WNT has contracted with Sewer Specialty Services Co., Inc. and they are repairing mains/laterals utilizing trenchless technologies such as grouting and cured in place pipe (CIPP) repair liners. During 2017, the following was completed:

- 16,068 linear feet of sanitary sewer televised
- 15 laterals televised
- 1,232 linear feet of sanitary sewer was lightly cleaned
- 7,624 linear feet of sanitary sewer hydraulically cleaned
- 382 sanitary sewer joints tested
- 151 joints sealed with 448.5 gallons of grout
- 21 laterals grouted with 215 gallons of grout
- 9 laterals were cleaned and roots removed
- 2 lateral connections were replaced
- 74 CIPP installed

As I&I is reduced in the system, WNT will request additional EDUs be released by the DEP. WNT is slowly running out of funding to complete the repairs to the sanitary sewer system and the release of some EDUs will be required to obtain the additional funding to accomplish the repairs.

WNT is committed to continue with I&I remediation until the system has controlled its peak hourly flows. WNT is committed to eliminate all illegal connections to the system, such as sump pumps, rain water conductors, and deficient laterals. WNT will continue inspections of properties at time of sale to locate any potential remaining connections.

ATTACHMENT D
PUMP STATION INFORMATION

PUMP STATION INFORMATION

The Township owns and maintains six (6) pump stations within the existing collection system:

- Rittenhouse Pump Station
- Whitehall Pump Station
- Forrest Avenue Pump Station
- Port Indian Pump Station
- Chestnut Avenue Pump Station
- Halford Hills Pump Station

1. Rittenhouse Pump Station: Originally constructed in 1965, was comprised of three (3)-75 hp pumps, each capable of 1,750 gpm. The pump station was configured in a wet/well dry well orientation. This station was upgraded circa 1983 and 1995, each time with larger pumps to accommodate additional flow. A new submersible pump station with an emergency generator was constructed in 2015 on the same site. The firm pumping capacity for the new pump station is 3,680 gallons per minute (gpm) (5.3 mgd) with two pumps operating. The system has a standard alarm system with a dialer to notify the Township of any problems.
2. Whitehall Pump Station: Constructed in 1965, is comprised of three (3)-60 hp pumps, each capable of 950 gpm. This station was upgraded in 1995 with pumps relocated from Rittenhouse Pump Station, each pump is 100 hp and capable of 1,750 gpm as part of the upgrade. PA DEP Water Quality Management (WQM) permit application for Whitehall Pump Station is approved. Project is currently on hold until funding is available.
3. Forrest Avenue Pump Station: Constructed in the 1960s, is comprised of two (2)-50 hp pumps, each capable of 600 gpm. This station was upgraded in the 1980s with the addition of an emergency generator. Pumps have been rebuilt in 2013.
4. Port Indian Pump Station: Constructed in the 1990s, is comprised of two (2)-40 hp pumps, each capable of 1,000 gpm. Pumps have been rebuilt in 2013.
5. Chestnut Avenue Pump Station: Constructed in the 1970s, is comprised of two (2)-15 hp pumps, each capable of 150 gpm. This pump station was replaced in 2004 with a new station with two (2)-20 pumps, capable of 180 gpm and an emergency generator.
6. Halford Hills Pump Station: Constructed in the 1970s, is comprised of two (2)-5 hp pumps, each capable of 25 gpm.

The following tables represent pump run times and flows for the six (6) collection system pump stations operated by the Township. Flow data has been included in the appendices to show the five (5) year summary of pump station flows for each pumping station.

ATTACHMENT D
TABLE 4
PUMP STATION INFORMATION
WEST NORRITON TOWNSHIP
2017

Name and Location of Pumping Station	Installation / Expansion Date	Number of Pumps	Pump Manufacturer	Drive Type	Capacity (gpm) each Pump	Maximum Pumping Capacity	Flow Meter	Standby Generator	Estimated Connected EDUs	Flow (mgd) 2017 Monthly Average / Peak	Additional EDUs Projected in Next 2 Years	Projected Flow in Next 2 Years (mgd) Average / Peak
Rittenhouse Boulevard	2015	3	Fairbanks-Morse	Variable	2500 gpm @124 ft. TDH	3,680 gpm - 5.3 mgd with 2 pumps	Yes	Yes	3,197	1.574 / 1.829	33 EDUs / 9,405 gpd / 0.009 mgd	1.58 / 1.84
Chesnut Avenue	2004	2	Hydromatic	Fixed	180 gpm @30 ft. TDH	180 gpm - 0.259 mgd	Yes	Yes	280	0.062/ 0.076	0	0.062/ 0.076
Whitehall Road	1994	3	Fairbanks-Morse	Variable	1750 gpm @220 ft. TDH	2625 gpm - 3.78 mgd with 2 pumps	Yes	Yes	1,550	0.457 / 0.588	75 EDUs / 21,735 gpd / 0.02 mgd	0.477 / 0.608
Forrest Avenue	1987	2	Chicago	Fixed	600 gpm @63 ft. TDH	600 gpm - 0.864 mgd	No	Yes	530	0.156 / 0.256	0	0.156 / 0.256
Port Indian Road	1999	2	Fairbanks-Morse	Fixed	1000 gpm @113 ft. TDH	1000 gpm -1.44 mgd	Yes	Yes	1,230	0.300 / 0.422	0	0.300 / 0.422
Halford Hills	1995	2	Hydromatic	Fixed	25 gpm @50 ft. TDH	25 gpm - 0.036 mgd	No	No	10	0.0030 / 0.0033	0	0.0030 / 0.0033

1 EDU = 285 gpd

TABLE 5
PUMP STATIONS MONTHLY AVERAGE DAILY FLOWS
WEST NORRITON TOWNSHIP
2017

Month	Rittenhouse Blvd (gpd)	Whitehall Road (gpd)	Port Indian Road (gpd)	Forrest Avenue (gpd)	Chestnut Avenue (gpd)	Halford Hills (gpd)
January	1,316,032	464,560	316,812	150,840	63,870	2,985
February	1,270,321	399,217	275,118	158,040	59,436	3,000
March	1,829,354	536,877	421,938	256,320	76,448	3,240
April	1,710,233	587,753	417,276	174,240	63,640	2,645
May	1,650,709	523,494	390,326	168,840	66,106	3,240
June	1,748,633	463,533	388,003	171,720	64,433	3,176
July	1,770,258	506,206	350,400	126,720	56,284	2,850
August	1,719,645	446,677	119,713	133,560	54,729	3,015
September	1,399,866	374,250	241,477	118,080	52,687	2,895
October	1,380,613	388,555	204,790	110,160	51,216	2,790
November	1,607,500	442,490	241,206	119,880	57,977	2,984
December	1,486,967	360,396	229,664	184,320	56,587	3,345
Average	1,574,178	457,834	299,727	156,060	60,284	3,014

2017 Chestnut Avenue Pump Station Annual Report

West Norriton Township
Montgomery County, Pennsylvania

PERIODS	PUMP #1		PUMP #2		PUMP STATION TOTAL FLOW	
	TOTAL RUN HOURS	AVE HOURS/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	GALLON	GAL/DAY
1/1/2017 - 2/1/2017	82.37	2.66	158.36	5.11	1,980,000	63,870
2/1/2017 - 3/1/2017	77.09	2.75	132.46	4.73	1,664,200	59,436
3/1/2017 - 4/1/2017	98.11	3.16	156.31	5.04	2,369,900	76,448
4/1/2017 - 5/1/2017	87.59	2.92	151.87	5.06	1,909,200	63,640
5/1/2017 - 6/1/2017	92.57	2.97	162.26	5.23	2,049,400	66,106
6/1/2017 - 7/1/2017	90.58	2.92	146.35	4.88	1,933,000	64,433
7/1/2017 - 8/1/2017	86.43	2.79	134.66	4.34	1,744,800	56,284
8/1/2017 - 9/1/2017	84.45	2.72	135.09	4.36	1,696,600	54,729
9/1/2017 - 10/1/2017	75.25	2.51	123.81	4.13	1,580,600	52,687
10/1/2017 - 11/1/2017	64.14	2.07	129.14	4.17	1,587,700	51,216
11/1/2017 - 12/1/2017	61.89	2.06	130.18	4.34	1,739,300	57,977
12/1/2017 - 1/1/2018	82.9	2.67	101.09	3.26	1,754,200	56,587
Annual Average Month						60,284
Peak Month						76,448
Peaking Factor						1.27

Months	Comments
January	Sealy in to work on the #2 pump and check valve
March	McGovern in to clean wet well. Meter Guys in to calibrate flow meter.
June	Meter Guys in to calibrate flow meter.
July	McGovern in to clean wet well.
November	McGovern in to clean wet well.
December	Flow meter was calibrated.

2017 Whitehall Road Pump Station Annual Report
West Norriton Township
Montgomery County, Pennsylvania

PERIODS	PUMP #1		PUMP #2		PUMP #3		PUMP STATION TOTAL FLOW	
	TOTAL RUN HOURS	AVE HOURS/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	GALLON	GAL/DAY
1/1/2017 - 2/1/2017	261.20	8.43	240.70	7.73	221.10	7.13	14,401,400	464,560
2/1/2017 - 3/1/2017	162.60	5.81	295.90	10.57	213.50	7.63	11,178,100	399,217
3/1/2017 - 4/1/2017	204.30	6.59	301.50	9.72	312.00	10.06	16,643,200	536,877
4/1/2017 - 5/1/2017	274.50	9.15	194.40	6.48	212.50	7.08	17,632,600	587,753
5/1/2017 - 6/1/2017	284.00	9.16	304.20	9.81	168.90	5.45	16,228,300	523,494
6/1/2017 - 7/1/2017	423.10	14.10	249.50	8.32	0.60	0.60	13,906,000	463,533
7/1/2017 - 8/1/2017	469.90	16.03	212.70	6.86	0.60	0.60	15,692,400	506,206
8/1/2017 - 9/1/2017	384.90	12.42	361.70	11.67	-	-	13,847,000	446,677
9/1/2017 - 10/1/2017	428.20	14.30	97.40	3.25	194.00	6.47	11,227,500	374,250
10/1/2017 - 11/1/2017	380.80	12.28	-	-	341.90	11.03	12,045,200	388,555
11/1/2017 - 12/1/2017	245.30	8.17	91.30	3.04	361.30	12.04	13,274,700	442,490
12/1/2017 - 1/1/2018	357.00	11.52	174.80	5.64	235.30	7.59	11,172,300	360,396
							Annual Average Month	457,834
							Peak Month	587,753
							Peaking Factor	1.28

Months	Comments
February	Force main found to be leaking in front of pump station and repaired. Pump #1 air line was replaced by Sealy.
March	Meter guys in to calibrate flow meter.
May	Verizon fixed phone line that was but by lawn mower
June	Meter guys in to calibrate flow meter. The #3 pump was pulled out for repair. The #2 pump compressor failed and Sealy replalced #2 compressor with #3 while #3 pump is out for repair.
August	Pump #3 was repaired and installed
September	Pump #3 check vave was replaced. Pump #2 was pulled for repair
November	Pump #2 was installed.
December	Flow meter was calibrated.

2017 Forrest Avenue Pump Station Annual Report
West Norriton Township
Montgomery County, Pennsylvania

PERIODS	PUMP #1			PUMP #2			PUMP STATION TOTAL FLOW	
	TOTAL RUN HOURS	AVE HOURS/DAY	GAL/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	GAL/DAY	GALLON	GAL/DAY
1/1/2017 - 2/1/2017	64.00	2.06	74,160	66.00	2.13	76,680	4,680,000	150,840
2/1/2017 - 3/1/2017	53.60	1.91	68,760	69.50	2.48	89,280	4,431,600	158,040
3/1/2017 - 4/1/2017	113.60	3.66	131,760	107.20	3.46	124,560	7,948,800	256,320
4/1/2017 - 5/1/2017	72.30	2.41	86,760	73.00	2.43	87,480	5,230,800	174,240
5/1/2017 - 6/1/2017	72.50	2.34	84,240	73.00	2.35	84,600	5,238,000	168,840
6/1/2017 - 7/1/2017	71.30	2.38	85,680	71.60	2.39	86,040	5,144,400	171,720
7/1/2017 - 8/1/2017	54.70	1.76	63,360	54.70	1.76	63,360	3,938,400	126,720
8/1/2017 - 9/1/2017	57.40	1.85	66,600	57.70	1.86	66,960	4,143,600	133,560
9/1/2017 - 10/1/2017	49.00	1.63	58,680	49.70	1.65	59,400	3,553,200	118,080
10/1/2017 - 11/1/2017	47.00	1.52	54,720	47.80	1.54	55,440	3,412,800	110,160
11/1/2017 - 12/1/2017	50.00	1.66	59,760	50.30	1.67	60,120	3,610,800	119,880
12/1/2017 - 1/1/2018	79.40	2.56	92,160	30.10	2.56	92,160	3,942,000	184,320
							Annual Average Month	156,060
							Peak Month	256,320
							Peaking Factor	1.64

Months	Comments
March	McGovern in to clean wetwell.
April	McGovern in to clean top off wetwell. Sealy in to work on transducer and set level.
June	The influent sewer main to the pump station was jetted and cleaned. The station was greased.
July	The station was greased.
November	McGovern in to clean wetwell.
December	Pump #2 was taken for repair.

2017 Port Indian Pump Station Annual Report

West Norriton Township
Montgomery County, Pennsylvania

PERIODS	PUMP #1		PUMP #2		PUMP STATION TOTAL FLOW	
	TOTAL RUN HOURS	AVE HOURS/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	GALLON	GAL/DAY
1/1/2017 - 2/1/2017	98.72	3.18	94.31	3.04	9,821,200	316,812
2/1/2017 - 3/1/2017	76.81	2.74	73.10	2.61	7,703,300	275,118
3/1/2017 - 4/1/2017	133.15	4.29	124.46	4.01	13,080,100	421,938
4/1/2017 - 5/1/2017	128.05	4.27	120.27	4.00	12,518,300	417,276
5/1/2017 - 6/1/2017	118.32	3.82	111.61	3.60	12,100,200	390,326
6/1/2017 - 7/1/2017	103.65	3.46	102.01	3.40	11,640,100	388,003
7/1/2017 - 8/1/2017	91.38	2.95	89.71	2.89	10,865,400	350,400
8/1/2017 - 9/1/2017	90.92	2.93	87	2.8	3,711,100	119,713
9/1/2017 - 10/1/2017	67.90	2.26	65.42	2.18	7,244,300	241,477
10/1/2017 - 11/1/2017	59.49	1.92	57.54	1.86	6,348,500	204,790
11/1/2017 - 12/1/2017	69.58	2.32	67.69	2.26	7,233,200	241,206
12/1/2017 - 1/1/2018	48.40	1.56	82.64	2.67	7,119,600	229,664
Annual Average Month					299,727	
Peak Month					421,938	
Peaking Factor					1.41	

Date	Comments
March	Meter guys in to calibrate flow meter
June	Meter guys in to calibrate flow meter
July	Flow meter out of service
August	Meter guys in to fix flow meter
December	Pump #1 contacts in control panel were replaced. Flow meter wa calibrated.

Note:

1. Pump Station Total Flow for July based upon pump capacity of 1,000 gpm at 113 TDH

2017 Halford Hills Estates Pump Station Annual Report
West Norriton Township
Montgomery County, Pennsylvania

PERIODS	PUMP #1			PUMP #2			PUMP STATION TOTAL FLOW	
	TOTAL RUN HOURS	AVE HOURS/DAY	GAL/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	GAL/DAY	GALLON	GAL/DAY
1/1/2017 - 2/1/2017	33.62	1.08	1,620	28.24	0.91	1,365	92,790	2,985
2/1/2017 - 3/1/2017	29.84	1.07	1,605	26.12	0.93	1,395	83,940	3,000
3/1/2017 - 4/1/2017	37.43	1.20	1,800	29.82	0.96	1,440	100,875	3,240
4/1/2017 - 5/1/2017	29.83	0.99	1,491	23.07	0.77	1,154	79,350	2,645
5/1/2017 - 6/1/2017	37.64	1.21	1,815	29.30	0.95	1,425	100,410	3,240
6/1/2017 - 7/1/2017	34.88	1.16	1,743	28.65	0.96	1,433	95,295	3,176
7/1/2017 - 8/1/2017	32.20	1.04	1,560	26.53	0.86	1,290	88,095	2,850
8/1/2017 - 9/1/2017	34.12	1.1	1,650	28.36	0.91	1,365	93,720	3,015
9/1/2017 - 10/1/2017	31.31	1.04	1,560	26.57	0.89	1,335	86,820	2,895
10/1/2017 - 11/1/2017	30.87	0.99	1,485	27.04	0.87	1,305	86,865	2,790
11/1/2017 - 12/1/2017	32.69	1.09	1,634	27.01	0.90	1,350	89,550	2,984
12/1/2017 - 1/1/2018	37.24	1.20	1,800	31.91	1.03	1,545	103,725	3,345
							Annual Average Month	3,014
							Peak Month	3,345
							Peaking Factor	1.11

Months	Comments
June	Cleaned wet well

2017 Rittenhouse Pump Station Annual Report

West Norriton Township
Montgomery County, Pennsylvania

PERIODS	PUMP #1		PUMP #2		PUMP #3		PUMP STATION TOTAL FLOW	
	TOTAL RUN HOURS	AVE HOURS/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	GALLON	GAL/DAY
1/1/2017 - 2/1/2017	195.60	6.31	201.90	6.51	192.00	6.19	40,797,000	1,316,032
2/1/2017 - 3/1/2017	172.60	6.16	166.60	5.95	170.10	6.08	35,569,000	1,270,321
3/1/2017 - 4/1/2017	229.40	7.40	227.50	7.33	233.00	7.53	56,710,000	1,829,354
4/1/2017 - 5/1/2017	198.20	6.60	198.60	6.62	188.80	6.29	51,307,000	1,710,233
5/1/2017 - 6/1/2017	198.60	6.41	197.40	6.51	201.70		51,172,000	1,650,709
6/1/2017 - 7/1/2017	206.20	6.87	197.60	6.59	204.50	6.82	52,459,000	1,748,633
7/1/2017 - 8/1/2017	190.70	6.15	185.40	5.98	186.50	6.02	54,878,000	1,770,258
8/1/2017 - 9/1/2017	204.4	6.59	204.1	6.58	204	6.58	53,309,000	1,719,645
9/1/2017 - 10/1/2017	171.40	5.71	168.40	5.61	172.00	5.73	41,996,000	1,399,866
10/1/2017 - 11/1/2017	162.80	5.25	174.90	5.64	164.30	5.30	42,799,000	1,380,613
11/1/2017 - 12/1/2017	189.20	6.31	188.70	6.29	177.30	5.91	48,225,000	1,607,500
12/1/2017 - 1/1/2018	202.00	6.51	195.10	6.29	186.90	6.02	46,096,000	1,486,967
							Annual Average Month	1,574,178
							Peak Month	1,829,354
							Peaking Factor	1.16

Months	Comments
March	Sealy changed pump run time to 4 hours between aleration. Meter Guys in to calibrate flow meter.
June	Meter guys in to calibrate flow meter
July	Transducer was replaced in wet well along with the backup float stick by Sealy.
September	Penn Power to inspect generator and transfer switch.
October	Generator tested under load.
November	PECO in to test transfer switch.
December	Meter guys in to calibrate flow meter.

CHESTNUT AVENUE

Operator: Ed Chelius

Date: January 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Control Panel</u>		
Level Controls	3	
Backup System	3	
<u>#1 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>#2 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>Generator</u>		
Operational	3	
Generator Run Hours ____		
<u>Air Relief Valve</u>		
Operation	3	
<u>Auto Dialer</u>		
Operational	3	
<u>Wetwell</u>		
Condition	3	
<u>Building Condition</u>		
Exterior	3	
Interior	3	
Driveway	3	
Grounds, Weeds	3	

1- Immediate Priority; 2- Priority; 3 – Needs No Attention

DATE	PUMP 1		PUMP 2	
	Run Hour	Per Day	Run Hour	Per Day
1/1/2017 - 2/1/2017	82.37	2.66	158.36	5.11

DATE	TOTAL GALLONS	GALLONS/DAY
1/1/2017 - 2/1/2017	1,980,000	63,870

Comments: Generator hours = 2.53

1/20/2017 – Sealy in to work on the #2 pump and check valve.

CHESTNUT AVENUE

Operator: Ed Chelius

Date: February 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Control Panel</u>		
Level Controls	3	
Backup System	3	
<u>#1 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>#2 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>Generator</u>		
Operational	3	
Generator Run Hours ____		
<u>Air Relief Valve</u>		
Operation	3	
<u>Auto Dialer</u>		
Operational	3	
<u>Wetwell</u>		
Condition	3	
<u>Building Condition</u>		
Exterior	3	
Interior	3	
Driveway	3	
Grounds, Weeds	3	

1- Immediate Priority; 2- Priority; 3 – Needs No Attention

DATE	PUMP 1		PUMP 2	
	Run Hour	Per Day	Run Hour	Per Day
2/1/2017 - 3/1/2017	77.09	2.75	132.46	4.73

DATE	TOTAL GALLONS	GALLONS/DAY
2/1/2017 - 3/1/2017	1,664,200	59,436

Comments: Generator hours= 1.34

CHESTNUT AVENUE

Operator: Ed Chelius

Date: March 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Control Panel</u>		
Level Controls	3	
Backup System	3	
<u>#1 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>#2 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>Generator</u>		
Operational	3	
Generator Run Hours ____		
<u>Air Relief Valve</u>		
Operation	3	
<u>Auto Dialer</u>		
Operational	3	
<u>Wetwell</u>		
Condition	3	
<u>Building Condition</u>		
Exterior	3	
Interior	3	
Driveway	3	
Grounds, Weeds	3	

1- Immediate Priority; 2- Priority; 3 – Needs No Attention

DATE	PUMP 1		PUMP 2	
	Run Hour	Per Day	Run Hour	Per Day
3/1/2017 - 4/1/2017	98.11	3.16	156.31	5.04

DATE	TOTAL GALLONS	GALLONS/DAY
3/1/2017 - 4/1/2017	2,369,900	76,448

Comments: Generator hours = 2.1

3/1/17: McGovern in to clean wet well.

3/16/17: Meter Guys in to calibrate flow meter.

CHESTNUT AVENUE

Operator: Ed Chelius

Date: April 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Control Panel</u>		
Level Controls	3	
Backup System	3	
<u>#1 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>#2 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>Generator</u>		
Operational	3	
Generator Run Hours ____		
<u>Air Relief Valve</u>		
Operation	3	
<u>Auto Dialer</u>		
Operational	3	
<u>Wetwell</u>		
Condition	3	
<u>Building Condition</u>		
Exterior	3	
Interior	3	
Driveway	3	
Grounds, Weeds	3	

1- Immediate Priority; 2- Priority; 3 – Needs No Attention

DATE	PUMP 1		PUMP 2	
	Run Hour	Per Day	Run Hour	Per Day
4/1/2017 - 5/1/2017	87.59	2.919	151.87	5.06

DATE	TOTAL GALLONS	GALLONS/DAY
4/1/2017 - 5/1/2017	1,909,200	63,640

Comments: Generator hours = 1.42

CHESTNUT AVENUE

Operator: Ed Chelius

Date: May 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Control Panel</u>		
Level Controls	3	
Backup System	3	
<u>#1 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>#2 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>Generator</u>		
Operational	3	
Generator Run Hours ____		
<u>Air Relief Valve</u>		
Operation	3	
<u>Auto Dialer</u>		
Operational	3	
<u>Wetwell</u>		
Condition	3	
<u>Building Condition</u>		
Exterior	3	
Interior	3	
Driveway	3	
Grounds, Weeds	3	

1- Immediate Priority; 2- Priority; 3 – Needs No Attention

DATE	PUMP 1		PUMP 2	
	Run Hour	Per Day	Run Hour	Per Day
5/1/2017 - 6/1/2017	92.57	2.97	162.26	5.23

DATE	TOTAL GALLONS	GALLONS/DAY
5/1/2017 - 6/1/2017	2,049,400	66,106

Comments: Generator hours = 1.00

CHESTNUT AVENUE

Operator: Ed Chelius

Date: June 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Control Panel</u>		
Level Controls	3	
Backup System	3	
<u>#1 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>#2 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>Generator</u>		
Operational	3	
Generator Run Hours ____		
<u>Air Relief Valve</u>		
Operation	3	
<u>Auto Dialer</u>		
Operational	3	
<u>Wetwell</u>		
Condition	3	
<u>Building Condition</u>		
Exterior	3	
Interior	3	
Driveway	3	
Grounds, Weeds	3	

1- Immediate Priority; 2- Priority; 3 – Needs No Attention

DATE	PUMP 1		PUMP 2	
	Run Hour	Per Day	Run Hour	Per Day
6/1/2017 - 7/1/2017	90.58	2.92	146.35	4.88

DATE	TOTAL GALLONS	GALLONS/DAY
6/1/2017 - 7/1/2017	1,933,000	64,433

Comments: Generator hours = 1.34

- The meter guys were at the station to calibrate the flow meter on 6/14

- Engineer at station to look at preparations to install a comminutor in the wet well.
- The guide rails need to be replaced in wet well for pulling and installing pumps.
- One pump in the wet well needs to be pulled out. Seems to be stuck in wet well and is out pumping the other pump.

CHESTNUT AVENUE

Operator: Ed Chelius

Date: July 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Control Panel</u>		
Level Controls	3	
Backup System	3	
<u>#1 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>#2 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>Generator</u>		
Operational	3	
Generator Run Hours ____		
<u>Air Relief Valve</u>		
Operation	3	
<u>Auto Dialer</u>		
Operational	3	
<u>Wetwell</u>		
Condition	3	
<u>Building Condition</u>		
Exterior	3	
Interior	3	
Driveway	3	
Grounds, Weeds	3	

1- Immediate Priority; 2- Priority; 3 – Needs No Attention

DATE	PUMP 1		PUMP 2	
	Run Hour	Per Day	Run Hour	Per Day
7/1/2017 - 8/1/2017	86.43	2.79	134.66	4.34

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
7/1/2017 - 8/1/2017	1,744,800	56,284

Comments: Generator hours = 1.34
McGovern came to clean wet well out on 7-31.

CHESTNUT AVENUE

Operator: Ed Chelius

Date: August 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Control Panel</u>		
Level Controls	3	
Backup System	3	
<u>#1 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>#2 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>Generator</u>		
Operational	3	
Generator Run Hours ____		
<u>Air Relief Valve</u>		
Operation	3	
<u>Auto Dialer</u>		
Operational	3	
<u>Wetwell</u>		
Condition	3	
<u>Building Condition</u>		
Exterior	3	
Interior	3	
Driveway	3	
Grounds, Weeds	3	

1- Immediate Priority; 2- Priority; 3 – Needs No Attention

DATE	PUMP 1		PUMP 2	
	Run Hour	Per Day	Run Hour	Per Day
8/1/2017 - 9/1/2017	84.45	2.72	135.09	4.36

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
8/1/2017 - 9/1/2017	1,696,600	54,729

Comments: Generator hours = 1.0

CHESTNUT AVENUE

Operator: Ed Chelius

Date: September 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Control Panel</u>		
Level Controls	3	
Backup System	3	
<u>#1 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>#2 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>Generator</u>		
Operational	3	
Generator Run Hours ____		
<u>Air Relief Valve</u>		
Operation	3	
<u>Auto Dialer</u>		
Operational	3	
<u>Wetwell</u>		
Condition	3	
<u>Building Condition</u>		
Exterior	3	
Interior	3	
Driveway	3	
Grounds, Weeds	3	

1- Immediate Priority; 2- Priority; 3 – Needs No Attention

DATE	PUMP 1		PUMP 2	
	Run Hour	Per Day	Run Hour	Per Day
9/1/2017 - 10/1/2017	75.25	2.51	123.81	4.13

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
9/1/2017 - 10/1/2017	1,580,600	52,687

Comments: Generator hours = 0.93

CHESTNUT AVENUE

Operator: Ed Chelius

Date: October 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Control Panel</u>		
Level Controls	3	
Backup System	3	
<u>#1 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>#2 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>Generator</u>		
Operational	3	
Generator Run Hours ____		
<u>Air Relief Valve</u>		
Operation	3	
<u>Auto Dialer</u>		
Operational	3	
<u>Wetwell</u>		
Condition	3	
<u>Building Condition</u>		
Exterior	3	
Interior	3	
Driveway	3	
Grounds, Weeds	3	

1- Immediate Priority; 2- Priority; 3 – Needs No Attention

DATE	PUMP 1		PUMP 2	
	Run Hour	Per Day	Run Hour	Per Day
10/1/2017 - 11/1/2017	64.14	2.07	129.14	4.17

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
10/1/2017 - 11/1/2017	1,587,700	51,216

Comments: Generator hours = 1.67

Dave from Sealy is supposed to pull out Pump #2 to see if anything is obstructing the pump causing the excessive run hours.

CHESTNUT AVENUE

Operator: Ed Chelius

Date: November 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Control Panel</u>		
Level Controls	3	
Backup System	3	
<u>#1 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>#2 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>Generator</u>		
Operational	3	
Generator Run Hours ____		
<u>Air Relief Valve</u>		
Operation	3	
<u>Auto Dialer</u>		
Operational	3	
<u>Wetwell</u>		
Condition	3	
<u>Building Condition</u>		
Exterior	3	
Interior	3	
Driveway	3	
Grounds, Weeds	3	

1- Immediate Priority; 2- Priority; 3 – Needs No Attention

DATE	PUMP 1		PUMP 2	
	Run Hour	Per Day	Run Hour	Per Day
11/1/2017 - 12/1/2017	61.89	2.063	130.18	4.34

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
11/1/2017 - 12/1/2017	1,739,300	57,977

Comments: Generator hours = 1.61
McGovern came to clean wet well on 11-27-17.

CHESTNUT AVENUE

Operator: Ed Chelius

Date: December 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Control Panel</u>		
Level Controls	3	
Backup System	3	
<u>#1 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>#2 Pump</u>		
Operation	3	
Check Valve	3	
Valving	3	
<u>Generator</u>		
Operational	3	
Generator Run Hours ____		
<u>Air Relief Valve</u>		
Operation	3	
<u>Auto Dialer</u>		
Operational	3	
<u>Wetwell</u>		
Condition	3	
<u>Building Condition</u>		
Exterior	3	
Interior	3	
Driveway	3	
Grounds, Weeds	3	

1- Immediate Priority; 2- Priority; 3 – Needs No Attention

DATE	PUMP 1		PUMP 2	
	Run Hour	Per Day	Run Hour	Per Day
12/1/2017 - 1/1/2018	82.90	2.67	101.09	3.26

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
12/1/2017 - 1/1/2018	1,754,200	56,587

Comments: Generator hours = 1.34

- 12/28/17 → The flow meter was calibrated at the pump station.

WHITEHALL ROAD

Operator: Ed Chelius

Date: January 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	1	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwell	3	
Comminutor	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matcher Unit	3	
Pillow Block	3	
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block		
Bearing	3	
Pump Bearings	3	
Valves	3	
<u>#3 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block	3	
Bearing	3	
Valves	3	
Pump Bearings	3	
Valves	3	

WHITEHALL ROAD

Operator: Ed Chelius

Date: January 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
Generator	3	
Plant Air		
Compressor	3	
Pumps Packing	3	
Sump Pump	3	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
<u>Electric Heaters</u>		
	3	

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

Readings:

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
1/1/2017 - 2/1/2017	1,440,140	46,456

<u>DATE</u>	<u>Pump Run Hours</u>			<u>Run Hours Per Day</u>		
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>
1/1/2017 - 2/1/2017	261.2	240.7	221.1	8.43	7.73	7.13

Comments:

Generator run hours: 2.2

WHITEHALL ROAD

Operator: Ed Chelius

Date: February 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	1	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwell	3	
Comminutor	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matcher Unit	3	
Pillow Block	3	
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block		
Bearing	3	
Pump Bearings	3	
Valves	3	
<u>#3 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block	3	
Bearing	3	
Valves	3	
Pump Bearings	3	
Valves	3	

WHITEHALL ROAD

Operator: Ed Chelius

Date: February 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
Generator	3	
Plant Air Compressor	3	
Pumps Packing	3	
Sump Pump	3	
 <u>Ventilation</u>		
Drywell	3	
Wetwell	3	
 <u>Electric Heaters</u>		
	3	

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

Readings:

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
2/1/2017 - 3/1/2017	11,178,100	399,217

<u>DATE</u>	<u>Pump Run Hours</u>			<u>Run Hours Per Day</u>		
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>
2/1/2017 - 3/1/2017	162.6	295.9	213.5	5.81	10.57	7.63

Comments:

Generator run hours: 2.2

2/7/17 – Force main found to be leaking in front of station. Bucks County water and sewer authority came out and repaired it.

2/13/17- Pump #1 air line was replaced by Sealy. Pump is now up and running.

WHITEHALL ROAD

Operator: Ed Chelius

Date: March 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	1	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwell	3	
Comminutor	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matcher Unit	3	
Pillow Block	3	
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block		
Bearing	3	
Pump Bearings	3	
Valves	3	
<u>#3 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block	3	
Bearing	3	
Valves	3	
Pump Bearings	3	
Valves	3	

WHITEHALL ROAD

Operator: Ed Chelius

Date: March 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
Generator	3	
Plant Air Compressor	3	
Pumps Packing	3	
Sump Pump	3	
 <u>Ventilation</u>		
Drywell	3	
Wetwell	3	
 <u>Electric Heaters</u>		
	3	

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

Readings:

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
3/1/2017 - 4/1/2017	16,643,200	536,877

<u>DATE</u>	<u>Pump Run Hours</u>			<u>Run Hours Per Day</u>		
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>
3/1/2017 - 4/1/2017	204.3	301.5	312	6.59	9.72	10.06

Comments:

Generator run hours: 1.8

3/16/17: Meter guys in to calibrate flow meter.

WHITEHALL ROAD

Operator: Ed Chelius

Date: April 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	1	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwell	3	
Comminutor	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matcher Unit	3	
Pillow Block	3	
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block		
Bearing	3	
Pump Bearings	3	
Valves	3	
<u>#3 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block	3	
Bearing	3	
Valves	3	
Pump Bearings	3	

Valves

3

WHITEHALL ROAD

Operator: Ed Chelius

Date: April 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
Generator	3	
Plant Air		
Compressor	3	
Pumps Packing	3	
Sump Pump	3	

Ventilation

Drywell	3
Wetwell	3

Electric Heaters 3

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

Readings:

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
4/1/2017 - 5/1/2017	17,632,600	587,753

<u>DATE</u>	<u>Pump Run Hours</u>			<u>Run Hours Per Day</u>		
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>
4/1/2017 - 5/1/2017	274.5	194.4	212.5	9.15	6.48	7.08

Comments:

Generator run hours: 2.4

WHITEHALL ROAD

Operator: Ed Chelius

Date: May 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	1	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwell	3	
Comminutor	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matcher Unit	3	
Pillow Block	3	
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block		
Bearing	3	
Pump Bearings	3	
Valves	3	
<u>#3 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block	3	
Bearing	3	
Valves	3	
Pump Bearings	3	
Valves	3	

WHITEHALL ROAD

Operator: Ed Chelius

Date: May 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
Generator	3	
Plant Air Compressor	3	
Pumps Packing	3	
Sump Pump	3	
 <u>Ventilation</u>		
Drywell	3	
Wetwell	3	
 <u>Electric Heaters</u>		
	3	

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

Readings:

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
5/1/2017 - 6/1/2017	16,228,300	523,494

<u>DATE</u>	<u>Pump Run Hours</u>			<u>Run Hours Per Day</u>		
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>
5/1/2017 - 6/1/2017	284.0	304.2	168.9	9.16	9.81	5.45

Comments:

Generator run hours: 2.4

5-13 Verizon in to fix phone line that was out by lawn mower.

WHITEHALL ROAD

Operator: Ed Chelius

Date: June 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	1	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwell	3	
Comminutor	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matcher Unit	3	
Pillow Block	3	
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block		
Bearing	3	
Pump Bearings	3	
Valves	3	
<u>#3 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block	3	
Bearing	3	
Valves	3	
Pump Bearings	3	
Valves	3	

WHITEHALL ROAD

Operator: Ed Chelius

Date: June 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
Generator	3	
Plant Air Compressor	3	
Pumps Packing	3	
Sump Pump	3	
 <u>Ventilation</u>		
Drywell	3	
Wetwell	3	
 <u>Electric Heaters</u>		
	3	

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

Readings:

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
6/1/2017 - 7/1/2017	13,906,000	463,533

<u>DATE</u>	<u>Pump Run Hours</u>			<u>Run Hours Per Day</u>		
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>
6/1/2017 - 7/1/2017	423.1	249.5	0.6	14.1	8.32	0.6

Comments:

Generator run hours: 2.1

- 6/14 – Meter guys at station to calibrate flow meter.
- The #3 pump was pulled out for repair and will be replaced as soon as it is repaired.
- The check valve on the #3 pump needs to be replaced.
- The #2 pump compressor failed. Sealy swapped #3 compressor to #2 so the pump could operate. A new compressor needs to be ordered or one needs to be repaired.
- The top bearing in the #2 pump is noisy. The pump should be pulled for repair when the #3 pump comes back and is installed.

WHITEHALL ROAD

Operator: Ed Chelius

Date: July 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	1	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwell	3	
Comminutor	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matcher Unit	3	
Pillow Block	3	
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block		
Bearing	3	
Pump Bearings	3	
Valves	3	
<u>#3 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block	3	
Bearing	3	
Valves	3	
Pump Bearings	3	

Valves

3

WHITEHALL ROAD

Operator: Ed Chelius

Date: July 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
Generator	3	
Plant Air Compressor	3	
Pumps Packing	3	
Sump Pump	3	

<u>Ventilation</u>		
Drywell	3	
Wetwell	3	

<u>Electric Heaters</u>	
	3

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

Readings:

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
7/1/2017 - 8/1/2017	15,692,400	506,206

<u>DATE</u>	<u>Pump Run Hours</u>			<u>Run Hours Per Day</u>		
	Pump #1	Pump #2	Pump #3	Pump #1	Pump #2	Pump #3
7/1/2017 - 8/1/2017	496.9	212.7	0.6	16.03	6.86	0.6

Comments:

Generator run hours: 2.0

- Pump #3 was pulled out for repair and will be replaced as soon as it is repaired.
- The check valve on pump #3 needs to be replaced.
- Pump #2 compressor failed. Sealy swapped compressor #3 to #2 so the pump could operate. A new compressor needs to be ordered or one needs to be repaired.
- The top bearing in pump #2 is noisy. The pump should be pulled for repair when pump #3 comes back and is installed.

WHITEHALL ROAD

Operator: Ed Chelius

Date: August 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	1	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwell	3	
Comminutor	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matcher Unit	3	
Pillow Block	3	
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block		
Bearing	3	
Pump Bearings	3	
Valves	3	
<u>#3 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block	3	
Bearing	3	
Valves	3	
Pump Bearings	3	
Valves	3	

WHITEHALL ROAD

Operator: Ed Chelius

Date: August 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
Generator	3	
Plant Air Compressor	3	
Pumps Packing	3	
Sump Pump	3	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
<u>Electric Heaters</u>		
	3	

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

Readings:

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
8/1/2017 - 9/1/2017	13,847,000	446,677

<u>DATE</u>	<u>Pump Run Hours</u>			<u>Run Hours Per Day</u>		
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>
8/1/2017 - 9/1/2017	384.9	361.7	Off	12.42	11.67	Off

Comments:

Generator run hours: 2.3

- The force main is starting to rust around the joint in the flange between Pump 2 and Pump 3 in the dry well and is starting to leak.
- Pump 3 is installed and waiting for the check valve to be replaced so the pump can be put online.

WHITEHALL ROAD

Operator: Ed Chelius

Date: September 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	1	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwell	3	
Comminutor	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matcher Unit	3	
Pillow Block	3	
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block		
Bearing	3	
Pump Bearings	3	
Valves	3	
<u>#3 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block	3	
Bearing	3	
Valves	3	
Pump Bearings	3	
Valves	3	

WHITEHALL ROAD

Operator: Ed Chelius

Date: September 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
Generator	3	
Plant Air Compressor	3	
Pumps Packing	3	
Sump Pump	3	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
<u>Electric Heaters</u>		
	3	

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

Readings:

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
9/1/2017 - 10/1/2017	11,227,500	374,250

<u>DATE</u>	<u>Pump Run Hours</u>			<u>Run Hours Per Day</u>		
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>
9/1/2017 - 10/1/2017	428.2	97.4	194.0	14.3	3.25	6.47

Comments:

Generator run hours: 2.5

- 9-19-17: Pump #3 check valve was installed and is now online.
- 9-20-17: Pump #2 was pulled out for repair and will be replaced as soon as it comes back from Deckmans.

WHITEHALL ROAD

Operator: Ed Chelius

Date: October 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	1	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwell	3	
Comminutor	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matcher Unit	3	
Pillow Block	3	
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block		
Bearing	3	
Pump Bearings	3	
Valves	3	
<u>#3 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block	3	
Bearing	3	
Valves	3	
Pump Bearings	3	
Valves	3	

WHITEHALL ROAD

Operator: Ed Chelius

Date: October 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
Generator	3	
Plant Air Compressor	3	
Pumps Packing	3	
Sump Pump	3	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
<u>Electric Heaters</u>		
	3	

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

Readings:

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
10/1/2017 - 11/1/2017	12,045,200	388,555

<u>DATE</u>	<u>Pump Run Hours</u>			<u>Run Hours Per Day</u>		
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>
10/1/2017 - 11/1/2017	380.8	out	341.9	12.28	out	11.03

Comments:

Generator run hours: 2.4

Pump #3 was installed and is operational. Pump #2 was then pulled out for maintenance and will be reinstalled as soon as it is repaired.

WHITEHALL ROAD

Operator: Ed Chelius

Date: November 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	1	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwell	3	
Comminutor	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matcher Unit	3	
Pillow Block	3	
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block		
Bearing	3	
Pump Bearings	3	
Valves	3	
<u>#3 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block	3	
Bearing	3	
Valves	3	
Pump Bearings	3	
Valves	3	

WHITEHALL ROAD

Operator: Ed Chelius

Date: November 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
Generator	3	
Plant Air Compressor	3	
Pumps Packing	3	
Sump Pump	3	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
<u>Electric Heaters</u>		
	3	

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

Readings:

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
11/1/2017 - 12/1/2017	13,274,700	442,490

<u>DATE</u>	<u>Pump Run Hours</u>			<u>Run Hours Per Day</u>		
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>
11/1/2017 - 12/1/2017	245.3	91.3	361.3	8.17	3.04	12.04

Comments:

Generator run hours: 2.6

11-16-17 → Pump #2 was reinstalled in the dry well and is operational.

WHITEHALL ROAD

Operator: Ed Chelius

Date: December 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	1	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwell	3	
Comminutor	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matcher Unit	3	
Pillow Block	3	
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block		
Bearing	3	
Pump Bearings	3	
Valves	3	
<u>#3 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Drive Shafts	3	
Flow Matcher	3	
U-Joints	3	
Pillow Block	3	
Bearing	3	
Valves	3	
Pump Bearings	3	

Valves

3

WHITEHALL ROAD

Operator: Ed Chelius

Date: December 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
Generator	3	
Plant Air Compressor	3	
Pumps Packing	3	
Sump Pump	3	

Ventilation

Drywell	3
Wetwell	3

Electric Heaters

3

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

Readings:

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
12/1/2017 - 1/1/2018	11,172,300	360,396

<u>DATE</u>	<u>Pump Run Hours</u>			<u>Run Hours Per Day</u>		
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>
12/1/2017 - 1/1/2018	357	174.8	235.3	11.52	5.64	7.59

Comments:

Generator run hours: 2.4

- 12/28/17 → The flow meter was calibrated at the pump station.

FOREST AVENUE

Operator: Ed Chelius

Date: January 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Grounds, Weeds	3	
Roof	3	
Driveway	3	
<u>Wetwell</u>		
Grease buildup	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Pillow Block Bearings	3	
<u>#2 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pillow Block Bearing	3	
Generator	3	
Pumps Packing	3	
Sump Pump	3	
Valves	2	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
Electric Heaters	3	

1 - Immediate Priority; 2 -Priority; 3 – Needs No Attention

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
1/1/2017 - 2/1/2017	64.0	66.0	2.06	2.13

Comments:

Generator run hours = 1.3

FOREST AVENUE

Operator: Ed Chelius

Date: February 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Grounds, Weeds	3	
Roof	3	
Driveway	3	
<u>Wetwell</u>		
Grease buildup	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Pillow Block Bearings	3	
<u>#2 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pillow Block Bearing	3	
Generator	3	
Pumps Packing	3	
Sump Pump	3	
Valves	2	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
Electric Heaters	3	

1 - Immediate Priority; 2 -Priority; 3 - Needs No Attention

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
2/1/2017 - 3/1/2017	53.6	69.5	1.91	2.48

Comments:

Generator run hours= 1.4

FOREST AVENUE

Operator: Ed Chelius

Date: March 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Grounds, Weeds	3	
Roof	3	
Driveway	3	
<u>Wetwell</u>		
Grease buildup	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Pillow Block Bearings	3	
<u>#2 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pillow Block Bearing	3	
Generator	3	
Pumps Packing	3	
Sump Pump	3	
Valves	2	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
Electric Heaters	3	

1 - Immediate Priority; 2 -Priority; 3 – Needs No Attention

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
3/1/2017 - 4/1/2017	113.6	107.2	3.66	3.46

Comments:

Generator run hours = 2.3

3/1/17: McGovern in to clean wet well.

FOREST AVENUE

Operator: Ed Chelius

Date: April 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Grounds, Weeds	3	
Roof	3	
Driveway	3	
<u>Wetwell</u>		
Grease buildup	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Pillow Block Bearings	3	
<u>#2 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pillow Block Bearing	3	
Generator	3	
Pumps Packing	3	
Sump Pump	3	
Valves	2	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
Electric Heaters	3	

1 - Immediate Priority; 2 -Priority; 3 – Needs No Attention

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
4/1/2017 - 5/1/2017	72.3	73	2.41	2.43

Comments:

Generator run hours = 0.9

4/4/17 – McGovern in to clean top off wet well. Seally in to work on transducer and set level.

FOREST AVENUE

Operator: Ed Chelius

Date: May 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Grounds, Weeds	3	
Roof	3	
Driveway	3	
<u>Wetwell</u>		
Grease buildup	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Pillow Block Bearings	3	
<u>#2 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pillow Block Bearing	3	
Generator	3	
Pumps Packing	3	
Sump Pump	3	
Valves	2	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
Electric Heaters	3	

1 - Immediate Priority; 2 -Priority; 3 – Needs No Attention

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
5/1/2017 - 6/1/2017	72.5	73.0	2.34	2.35

Comments:

Generator run hours = 1.3

FOREST AVENUE

Operator: Ed Chelius

Date: June 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Grounds, Weeds	3	
Roof	3	
Driveway	3	
<u>Wetwell</u>		
Grease buildup	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Pillow Block Bearings	3	
<u>#2 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pillow Block Bearing	3	
Generator	3	
Pumps Packing	3	
Sump Pump	3	
Valves	2	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
Electric Heaters	3	

1 - Immediate Priority; 2 -Priority; 3 - Needs No Attention

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
6/1/2017 - 7/1/2017	71.3	71.6	2.38	2.39

Comments:

Generator run hours = 1.3

6/21 – The sewer line to the pump station was jetted and cleaned.
The station was greased this month

FOREST AVENUE

Operator: Ed Chelius

Date: July 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Grounds, Weeds	3	
Roof	3	
Driveway	3	
<u>Wetwell</u>		
Grease buildup	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Pillow Block Bearings	3	
<u>#2 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pillow Block Bearing	3	
Generator	3	
Pumps Packing	3	
Sump Pump	3	
Valves	2	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
Electric Heaters	3	

1 - Immediate Priority; 2 -Priority; 3 – Needs No Attention

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
7/1/2017 - 8/1/2017	54.7	54.7	1.76	1.76

Comments:

Generator run hours = 1.3

The station was greased this month.

FOREST AVENUE

Operator: Ed Chelius

Date: August 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Grounds, Weeds	3	
Roof	3	
Driveway	3	
<u>Wetwell</u>		
Grease buildup	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Pillow Block Bearings	3	
<u>#2 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pillow Block Bearing	3	
Generator	3	
Pumps Packing	3	
Sump Pump	3	
Valves	2	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
Electric Heaters	3	

1 - Immediate Priority; 2 -Priority; 3 – Needs No Attention

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
8/1/2017 - 9/1/2017	57.4	57.7	1.85	1.86

Comments:

Generator run hours = 1.3

FOREST AVENUE

Operator: Ed Chelius

Date: September 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Grounds, Weeds	3	
Roof	3	
Driveway	3	
<u>Wetwell</u>		
Grease buildup	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Pillow Block Bearings	3	
<u>#2 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pillow Block Bearing	3	
Generator	3	
Pumps Packing	3	
Sump Pump	3	
Valves	2	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
Electric Heaters	3	

1 - Immediate Priority; 2 -Priority; 3 – Needs No Attention

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
9/1/2017 - 10/1/2017	49.0	49.7	1.63	1.65

Comments:

Generator run hours = 1.0

FOREST AVENUE

Operator: Ed Chelius

Date: October 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Grounds, Weeds	3	
Roof	3	
Driveway	3	
<u>Wetwell</u>		
Grease buildup	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Pillow Block Bearings	3	
<u>#2 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pillow Block Bearing	3	
Generator	3	
Pumps Packing	3	
Sump Pump	3	
Valves	2	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
Electric Heaters	3	

1 - Immediate Priority; 2 -Priority; 3 – Needs No Attention

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
10/1/2017 - 11/1/2017	47	47.8	1.52	1.54

Comments:

Generator run hours = 1.3

FOREST AVENUE

Operator: Ed Chelius

Date: November 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Grounds, Weeds	3	
Roof	3	
Driveway	3	
<u>Wetwell</u>		
Grease buildup	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Pillow Block Bearings	3	
<u>#2 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pillow Block Bearing	3	
Generator	3	
Pumps Packing	3	
Sump Pump	3	
Valves	2	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
Electric Heaters	3	

1 - Immediate Priority; 2 -Priority; 3 – Needs No Attention

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
11/1/2017 - 12/1/2017	50.0	50.3	1.66	1.67

Comments:

Generator run hours = 1.8

McGovern came to clean wet well on 11-27-17.

FOREST AVENUE

Operator: Ed Chelius

Date: December 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Grounds, Weeds	3	
Roof	3	
Driveway	3	
<u>Wetwell</u>		
Grease buildup	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Pillow Block Bearings	3	
<u>#2 Pump</u>		
Motor	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pillow Block Bearing	3	
Generator	3	
Pumps Packing	3	
Sump Pump	3	
Valves	2	
<u>Ventilation</u>		
Drywell	3	
Wetwell	3	
Electric Heaters	3	

1 - Immediate Priority; 2 -Priority; 3 – Needs No Attention

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
12/1/2017 - 1/1/2018	79.4	30.1	2.56	0.97

Comments:

Generator run hours = 1.6

- Pump #2 was taken out for repair on 12/20/17. It will be re-installed as soon as it is ready.

PORT INDIAN P.S.

Operator: Ed Chelius

Date: January 2017

Equipment:

	<u>OPERATIONAL</u>	
	<u>YES</u>	<u>NO</u>
Pump #1	x	
Pump #2	x	
Controls	x	
Check Valves	x	
Diversion Chamber	x	

Alarm System

Operational YES X NO ___

Emergency Generator

Run Hrs/Month hr. YES X NO ___

Wetwell

Debris Buildup Good X Needs Cleaning ___

Exterior

General Condition

Fascia and Cornice	Good <u>X</u>	Poor ___
Roof	Good <u>X</u>	Poor ___
Grounds, Weeds	Good <u>X</u>	Poor ___
Driveway	Good <u>X</u>	Poor ___

Flows

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
1/1/2017 - 2/1/2017	9,821,200	316,812

<u>DATE</u>	<u>Run Hours</u>		<u>Per Day</u>	
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #1</u>	<u>Pump #2</u>
1/1/2017 - 2/1/2017	98.72	94.31	3.18	3.04

Comments:

Generator run hours = 2.5

PORT INDIAN P.S.

Operator: Ed Chelius

Date: February 2017

Equipment:

	<u>OPERATIONAL</u>	
	<u>YES</u>	<u>NO</u>
Pump #1	x	
Pump #2	x	
Controls	x	
Check Valves	x	
Diversion Chamber	x	

Alarm System

Operational YES X NO ___

Emergency Generator

Run Hrs/Month hr. YES X NO ___

Wetwell

Debris Buildup Good X Needs Cleaning ___

Exterior

General Condition

Fascia and Cornice Good X Poor ___
Roof Good X Poor ___
Grounds, Weeds Good X Poor ___
Driveway Good X Poor ___

Flows

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
2/1/2017 - 3/1/2017	7,703,300	275,118

<u>DATE</u>	<u>Run Hours</u>		<u>Per Day</u>	
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #1</u>	<u>Pump #2</u>
2/1/2017 - 3/1/2017	76.81	73.1	2.74	2.61

Comments:

Generator run hours = 2.1

PORT INDIAN P.S.

Operator: Ed Chelius

Date: March 2017

Equipment:

	<u>OPERATIONAL</u>	
	<u>YES</u>	<u>NO</u>
Pump #1	x	
Pump #2	x	
Controls	x	
Check Valves	x	
Diversion Chamber	x	

Alarm System

Operational YES X NO ___

Emergency Generator

Run Hrs/Month hr. YES X NO ___

Wetwell

Debris Buildup Good X Needs Cleaning ___

Exterior

General Condition

Fascia and Cornice	Good <u>X</u> Poor ___
Roof	Good <u>X</u> Poor ___
Grounds, Weeds	Good <u>X</u> Poor ___
Driveway	Good <u>X</u> Poor ___

Flows

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
3/1/2017 - 4/1/2017	13,080,100	421,938

<u>DATE</u>	<u>Run Hours</u>		<u>Per Day</u>	
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #1</u>	<u>Pump #2</u>
3/1/2017 - 4/1/2017	133.15	124.46	4.29	4.01

Comments:

Generator run hours = 2.1

3/16/17: Flow meters calibrated by meter guys.

PORT INDIAN P.S.

Operator: Ed Chelius

Date: April 2017

Equipment:

	<u>OPERATIONAL</u>	
	<u>YES</u>	<u>NO</u>
Pump #1	x	
Pump #2	x	
Controls	x	
Check Valves	x	
Diversion Chamber	x	

Alarm System

Operational YES X NO ___

Emergency Generator

Run Hrs/Month hr. YES X NO ___

Wetwell

Debris Buildup Good X Needs Cleaning ___

Exterior

General Condition

Fascia and Cornice Good X Poor ___
Roof Good X Poor ___
Grounds, Weeds Good X Poor ___
Driveway Good X Poor ___

Flows

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
4/1/2017 - 5/1/2017	12,518,300	417,276

<u>DATE</u>	<u>RUN HOURS</u>		<u>PER DAY</u>	
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #1</u>	<u>Pump #2</u>
4/1/2017 - 5/1/2017	128.05	120.27	4.27	4.00

Comments:

Generator run hours = 1.5

PORT INDIAN P.S.

Operator: Ed Chelius

Date: May 2017

Equipment:

	<u>OPERATIONAL</u>	
	<u>YES</u>	<u>NO</u>
Pump #1	x	
Pump #2	x	
Controls	x	
Check Valves	x	
Diversion Chamber	x	

Alarm System

Operational YES X NO ___

Emergency Generator

Run Hrs/Month hr. YES X NO ___

Wetwell

Debris Buildup Good X Needs Cleaning ___

Exterior

General Condition

Fascia and Cornice Good X Poor ___
Roof Good X Poor ___
Grounds, Weeds Good X Poor ___
Driveway Good X Poor ___

Flows

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
5/1/2017 - 6/1/2017	12,100,200	390,329

<u>DATE</u>	<u>RUN HOURS</u>		<u>PER DAY</u>	
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #1</u>	<u>Pump #2</u>
5/1/2017 - 6/1/2017	118.32	111.61	3.82	3.60

Comments:

Generator run hours = 2.0

PORT INDIAN P.S.

Operator: Ed Chelius

Date: June 2017

Equipment:

	<u>OPERATIONAL</u>	
	<u>YES</u>	<u>NO</u>
Pump #1	x	
Pump #2	x	
Controls	x	
Check Valves	x	
Diversion Chamber	x	

Alarm System

Operational YES X NO ___

Emergency Generator

Run Hrs/Month hr. YES X NO ___

Wetwell

Debris Buildup Good X Needs Cleaning ___

Exterior

General Condition

Fascia and Cornice	Good <u>X</u> Poor ___
Roof	Good <u>X</u> Poor ___
Grounds, Weeds	Good <u>X</u> Poor ___
Driveway	Good <u>X</u> Poor ___

Flows

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
6/1/2017 - 7/1/2017	11,640,100	388,003

<u>DATE</u>	<u>RUN HOURS</u>		<u>PER DAY</u>	
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #1</u>	<u>Pump #2</u>
6/1/2017 - 7/1/2017	103.65	102.01	3.46	3.40

Comments:

Generator run hours = 2.0

- 6/14 – Meter guys in to calibrate flow meter
- 6/23 – The air relief valve on golf course that is on the force main is leaking and needs to be replaced.
- Transducer needs to be installed in wet well and the control box in wet well needs to be moved out of wet well and to a more accessible location.
- Doors on wet well need to be fixed or replaced.

PORT INDIAN P.S.

Operator: Ed Chelius

Date: July 2017

Equipment:

	<u>OPERATIONAL</u>	
	<u>YES</u>	<u>NO</u>
Pump #1	x	
Pump #2	x	
Controls	x	
Check Valves	x	
Diversion Chamber	x	

Alarm System

Operational YES X NO ___

Emergency Generator

Run Hrs/Month hr. YES X NO ___

Wetwell

Debris Buildup Good X Needs Cleaning ___

Exterior

General Condition

Fascia and Cornice	Good <u>X</u>	Poor ___
Roof	Good <u>X</u>	Poor ___
Grounds, Weeds	Good <u>X</u>	Poor ___
Driveway	Good <u>X</u>	Poor ___

Flows

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
7/1/2017 - 8/1/2017		

<u>DATE</u>	<u>RUN HOURS</u>		<u>PER DAY</u>	
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #1</u>	<u>Pump #2</u>
7/1/2017 - 8/1/2017	91.38	89.71	2.95	2.89

Comments:

Generator run hours = 2.0

- The air relief valve on golf course that is on the force main is leaking and needs to be replaced.
- Transducer needs to be installed in wet well and the control in wet well needs to be moved out of wet well and to a more accessible location.
- Doors on wet well need to be fixed or replaced.
- Meter guys need to fix the flow meter because it is not working properly.

PORT INDIAN P.S.

Operator: Ed Chelius

Date: August 2017

Equipment:

	<u>OPERATIONAL</u>	
	<u>YES</u>	<u>NO</u>
Pump #1	x	
Pump #2	x	
Controls	x	
Check Valves	x	
Diversion Chamber	x	

Alarm System

Operational YES X NO ___

Emergency Generator

Run Hrs/Month hr. YES X NO ___

Wetwell

Debris Buildup Good X Needs Cleaning ___

Exterior

General Condition

Fascia and Cornice Good X Poor ___
Roof Good X Poor ___
Grounds, Weeds Good X Poor ___
Driveway Good X Poor ___

Flows

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
8/1/2017 - 9/1/2017	3,711,100	119,713

<u>DATE</u>	<u>RUN HOURS</u>		<u>PER DAY</u>	
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #1</u>	<u>Pump #2</u>
8/1/2017 - 9/1/2017	90.92	87.0	2.93	2.80

Comments:

Generator run hours = 2.1

8/18/2017: Meter guys came to fix the flow meter at the station.

PORT INDIAN P.S.

Operator: Ed Chelius

Date: September 2017

Equipment:

	<u>OPERATIONAL</u>	
	<u>YES</u>	<u>NO</u>
Pump #1	x	
Pump #2	x	
Controls	x	
Check Valves	x	
Diversion Chamber	x	

Alarm System

Operational YES X NO ___

Emergency Generator

Run Hrs/Month hr. YES X NO ___

Wetwell

Debris Buildup Good X Needs Cleaning ___

Exterior

General Condition

Fascia and Cornice Good X Poor ___
Roof Good X Poor ___
Grounds, Weeds Good X Poor ___
Driveway Good X Poor ___

Flows

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
9/1/2017 - 10/1/2017	7,244,300	241,477

<u>DATE</u>	<u>RUN HOURS</u>		<u>PER DAY</u>	
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #1</u>	<u>Pump #2</u>
9/1/2017 - 10/1/2017	67.9	65.42	2.26	2.18

Comments:

Generator run hours = 2.0

- We are still waiting for the air relief valve to be delivered. As soon as it arrives it will be installed.

PORT INDIAN P.S.

Operator: Ed Chelius

Date: October 2017

Equipment:

	<u>OPERATIONAL</u>	
	<u>YES</u>	<u>NO</u>
Pump #1	x	
Pump #2	x	
Controls	x	
Check Valves	x	
Diversion Chamber	x	

Alarm System

Operational YES X NO ___

Emergency Generator

Run Hrs/Month hr. YES X NO ___

Wetwell

Debris Buildup Good X Needs Cleaning ___

Exterior

General Condition

Fascia and Cornice Good X Poor ___
Roof Good X Poor ___
Grounds, Weeds Good X Poor ___
Driveway Good X Poor ___

Flows

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
10/1/2017 - 11/1/2017	6,348,500	204,790

<u>DATE</u>	<u>RUN HOURS</u>		<u>PER DAY</u>	
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #1</u>	<u>Pump #2</u>
10/1/2017 - 11/1/2017	59.49	57.54	1.92	1.86

Comments:

Generator run hours = 2.5

PORT INDIAN P.S.

Operator: Ed Chelius

Date: November 2017

Equipment:

	<u>OPERATIONAL</u>	
	<u>YES</u>	<u>NO</u>
Pump #1	x	
Pump #2	x	
Controls	x	
Check Valves	x	
Diversion Chamber	x	

Alarm System

Operational YES X NO ___

Emergency Generator

Run Hrs/Month hr. YES X NO ___

Wetwell

Debris Buildup Good X Needs Cleaning ___

Exterior

General Condition

Fascia and Cornice Good X Poor ___
Roof Good X Poor ___
Grounds, Weeds Good X Poor ___
Driveway Good X Poor ___

Flows

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
11/1/2017 - 12/1/2017	7,233,200	241,106

<u>DATE</u>	<u>RUN HOURS</u>		<u>PER DAY</u>	
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #1</u>	<u>Pump #2</u>
11/1/2017 - 12/1/2017	69.58	67.69	2.32	2.26

Comments:

Generator run hours = 3.6

PORT INDIAN P.S.

Operator: Ed Chelius

Date: December 2017

Equipment:

	<u>OPERATIONAL</u>	
	<u>YES</u>	<u>NO</u>
Pump #1	x	
Pump #2	x	
Controls	x	
Check Valves	x	
Diversion Chamber	x	

Alarm System

Operational YES X NO ___

Emergency Generator

Run Hrs/Month hr. YES X NO ___

Wetwell

Debris Buildup Good X Needs Cleaning ___

Exterior

General Condition

Fascia and Cornice Good X Poor ___
Roof Good X Poor ___
Grounds, Weeds Good X Poor ___
Driveway Good X Poor ___

Flows

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
12/1/2017 - 1/1/2018	7,119,600	229,664

<u>DATE</u>	<u>RUN HOURS</u>		<u>PER DAY</u>	
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #1</u>	<u>Pump #2</u>
12/1/2017 - 1/1/2018	48.4	82.64	1.56	2.67

Comments:

Generator run hours = 1.5

- Seally was at the pump station to replace the contacts in the control panel of Pump #1.
- 12/28/17 → The flow meter was calibrated at the pump station.

HALFORD HILLS ESTATES

Operator: Ed Chelius

Date: January 2017

Equipment:

	<u>Operational</u>	
	<u>Yes</u>	<u>No</u>
Pump #1	X	
Pump #2	X	
Controls	X	
Check Valves	X	

Alarm System:

Operational

Wetwell Debris Buildup
Grounds, weeds

<u>Good</u>	<u>Poor</u>
X	

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
1/1/2017 - 2/1/2017	33.62	28.24	1.08	0.91

Comments:

HALFORD HILLS ESTATES

Operator: Ed Chelius

Date: February 2017

Equipment:

	<u>Operational</u>	
	<u>Yes</u>	<u>No</u>
Pump #1	X	
Pump #2	X	
Controls	X	
Check Valves	X	

Alarm System:

Operational	<u>Good</u>	<u>Poor</u>
Wetwell Debris Buildup	X	
Grounds, weeds		

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
2/1/2017 - 3/1/2017	29.84	26.12	1.07	0.93

Comments:

HALFORD HILLS ESTATES

Operator: Ed Chelius

Date: March 2017

Equipment:

	<u>Operational</u>	
	<u>Yes</u>	<u>No</u>
Pump #1	X	
Pump #2	X	
Controls	X	
Check Valves	X	

Alarm System:

	<u>Good</u>	<u>Poor</u>
Operational		
Wetwell Debris Buildup Grounds, weeds	X	

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
3/1/2017 - 4/1/2017	37.43	29.82	1.20	0.96

Comments:

HALFORD HILLS ESTATES

Operator: Ed Chelius

Date: April 2017

Equipment:

	<u>Operational</u>	
	<u>Yes</u>	<u>No</u>
Pump #1	X	
Pump #2	X	
Controls	X	
Check Valves	X	

Alarm System:

	<u>Good</u>	<u>Poor</u>
Operational		
Wetwell Debris Buildup	X	
Grounds, weeds		

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
4/1/2017 - 5/1/2017	29.83	23.07	0.994	0.769

Comments:

HALFORD HILLS ESTATES

Operator: Ed Chelius

Date: May 2017

Equipment:

	<u>Operational</u>	
	<u>Yes</u>	<u>No</u>
Pump #1	X	
Pump #2	X	
Controls	X	
Check Valves	X	

Alarm System:

Operational	<u>Good</u>	<u>Poor</u>
Wetwell Debris Buildup	X	
Grounds, weeds		

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
5/1/2017 - 6/1/2017	37.64	29.3	1.21	0.95

Comments:

HALFORD HILLS ESTATES

Operator: Ed Chelius

Date: June 2017

Equipment:

	<u>Operational</u>	
	<u>Yes</u>	<u>No</u>
Pump #1	X	
Pump #2	X	
Controls	X	
Check Valves	X	

Alarm System:

	<u>Good</u>	<u>Poor</u>
Operational		
Wetwell Debris Buildup	X	
Grounds, weeds		

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
6/1/2017 - 7/1/2017	34.88	28.65	1.162	0.955

Comments:

- Cleaned wet well at station this month
- New guide rails need to be installed in wet well to pull and install pumps.

HALFORD HILLS ESTATES

Operator: Ed Chelius

Date: July 2017

Equipment:

	<u>Operational</u>	
	<u>Yes</u>	<u>No</u>
Pump #1	X	
Pump #2	X	
Controls	X	
Check Valves	X	

Alarm System:

<u>Operational</u>	<u>Good</u>	<u>Poor</u>
Wetwell Debris Buildup	X	
Grounds, weeds		

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
7/1/2017 - 8/1/2017	32.2	26.53	1.04	0.86

Comments:

New guide rails need to be installed in wet well to pull and install pumps.

HALFORD HILLS ESTATES

Operator: Ed Chelius

Date: August 2017

Equipment:

	<u>Operational</u>	
	<u>Yes</u>	<u>No</u>
Pump #1	X	
Pump #2	X	
Controls	X	
Check Valves	X	

Alarm System:

<u>Operational</u>	<u>Good</u>	<u>Poor</u>
Wetwell Debris Buildup	X	
Grounds, weeds		

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
8/1/2017 - 9/1/2017	34.12	28.36	1.10	0.91

Comments:

HALFORD HILLS ESTATES

Operator: Ed Chelius

Date: September 2017

Equipment:

	<u>Operational</u>	
	<u>Yes</u>	<u>No</u>
Pump #1	X	
Pump #2	X	
Controls	X	
Check Valves	X	

Alarm System:

<u>Operational</u>	<u>Good</u>	<u>Poor</u>
Wetwell Debris Buildup	X	
Grounds, weeds		

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
9/1/2017 - 10/1/2017	31.31	26.57	1.04	0.89

Comments:

HALFORD HILLS ESTATES

Operator: Ed Chelius

Date: October 2017

Equipment:

	<u>Operational</u>	
	<u>Yes</u>	<u>No</u>
Pump #1	X	
Pump #2	X	
Controls	X	
Check Valves	X	

Alarm System:

<u>Operational</u>	<u>Good</u>	<u>Poor</u>
Wetwell Debris Buildup	X	
Grounds, weeds		

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
10/1/2017 - 11/1/2017	30.87	27.04	0.99	0.87

Comments:

HALFORD HILLS ESTATES

Operator: Ed Chelius

Date: November 2017

Equipment:

	<u>Operational</u>	
	<u>Yes</u>	<u>No</u>
Pump #1	X	
Pump #2	X	
Controls	X	
Check Valves	X	

Alarm System:

Operational	<u>Good</u>	<u>Poor</u>
Wetwell Debris Buildup	X	
Grounds, weeds		

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
11/1/2017 - 12/1/2017	32.69	27.01	1.089	0.90

Comments:

HALFORD HILLS ESTATES

Operator: Ed Chelius

Date: December 2017

Equipment:

	<u>Operational</u>	
	<u>Yes</u>	<u>No</u>
Pump #1	X	
Pump #2	X	
Controls	X	
Check Valves	X	

Alarm System:

<u>Operational</u>	<u>Good</u>	<u>Poor</u>
Wetwell Debris Buildup	X	
Grounds, weeds		

DATE	RUN HOURS		PER DAY	
	Pump #1	Pump #2	Pump #1	Pump #2
12/1/2017 - 1/1/2018	37.24	31.91	1.20	1.03

Comments:

RITTENHOUSE

Operator: Ed Chelius

Date: January 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	3	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwells	3	
Comminutor	3	
Valves	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matchers	3	
Pillow Block		
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	2	
Flow Matcher	3	
Pillow Block	2	
Bearing	3	
Generator	3	
<u>Plant Air</u>		
Compressor	3	
Pumps Packing	3	
Sump Pump	3	
Pump Bearing	3	

RITTENHOUSE

Operator: Ed Chelius

Date: February 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	3	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwells	3	
Comminutor	3	
Valves	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matchers	3	
Pillow Block		
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	2	
Flow Matcher	3	
Pillow Block	2	
Bearing	3	
Generator	3	
<u>Plant Air</u>		
Compressor	3	
Pumps Packing	3	
Sump Pump	3	
Pump Bearing	3	

RITTENHOUSE

Operator: Ed Chelius

Date: March 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	3	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwells	3	
Comminutor	3	
Valves	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matchers	3	
Pillow Block		
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	2	
Flow Matcher	3	
Pillow Block	2	
Bearing	3	
Generator	3	
<u>Plant Air</u>		
Compressor	3	
Pumps Packing	3	
Sump Pump	3	
Pump Bearing	3	

RITTENHOUSE

Operator: Ed Chelius

Date: March 2017

Audio Dialer **2**

Ventilation **Priority** **Remarks**

Dry well 3
 Wetwell 3
 Electric Heaters 3

#3 Pump

Motor 3
 Rings 3
 Brushes 3
 Drive Shafts 3
 U-Joints 3
 Pump Bearings 3
 Valves 3
 Flow Matcher 3
 Pillow Block
 Bearing 3
 Pump Bearings 3

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
3/1/2017 - 4/1/2017	56,710,000	1,829,354

<u>DATE</u>	<u>Pump Run Hours</u>			<u>Run Hours Per Day</u>		
	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>	<u>Pump #1</u>	<u>Pump #2</u>	<u>Pump #3</u>
3/1/2017 - 4/1/2017	229.4	227.5	233	7.40	7.33	7.53

Comments: **Generator Run Hours** = Generator is not testing on its own.

3/13/17: Seally in to change pump runtime to 4 hours between alternation.

3/16/17: Meter guys in to calibrate flow meter.

RITTENHOUSE

Operator: Ed Chelius

Date: April 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	3	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwells	3	
Comminutor	3	
Valves	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matchers	3	
Pillow Block		
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	2	
Flow Matcher	3	
Pillow Block	2	
Bearing	3	
Generator	3	
<u>Plant Air</u>		
Compressor	3	
Pumps Packing	3	
Sump Pump	3	
Pump Bearing	3	

RITTENHOUSE

Operator: Ed Chelius

Date: May 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	3	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwells	3	
Comminutor	3	
Valves	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matchers	3	
Pillow Block		
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	2	
Flow Matcher	3	
Pillow Block	2	
Bearing	3	
Generator	3	
<u>Plant Air</u>		
Compressor	3	
Pumps Packing	3	
Sump Pump	3	
Pump Bearing	3	

RITTENHOUSE

Operator: Ed Chelius

Date: May 2017

Audio Dialer 2

Ventilation Priority Remarks

Dry well 3
Wetwell 3
Electric Heaters 3

#3 Pump

Motor 3
Rings 3
Brushes 3
Drive Shafts 3
U-Joints 3
Pump Bearings 3
Valves 3
Flow Matcher 3
Pillow Block
Bearing 3
Pump Bearings 3

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
5/1/2017 - 6/1/2017	51,172,000	1,650,709

DATE	Pump Run Hours			Run Hours Per Day		
	Pump #1	Pump #2	Pump #3	Pump #1	Pump #2	Pump #3
5/1/2017 - 6/1/2017	198.6	197.4	201.7	6.41	6.51	

Comments: Generator Run Hours = Gen not testing.

RITTENHOUSE

Operator: Ed Chelius

Date: June 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	3	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwells	3	
Comminutor	3	
Valves	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matchers	3	
Pillow Block		
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	2	
Flow Matcher	3	
Pillow Block	2	
Bearing	3	
Generator	3	
<u>Plant Air</u>		
Compressor	3	
Pumps Packing	3	
Sump Pump	3	
Pump Bearing	3	

RITTENHOUSE

Operator: Ed Chelius

Date: June 2017

Audio Dialer **2**

Ventilation **Priority** **Remarks**

Dry well 3
Wetwell 3
Electric Heaters 3

#3 Pump

Motor 3
Rings 3
Brushes 3
Drive Shafts 3
U-Joints 3
Pump Bearings 3
Valves 3
Flow Matcher 3
Pillow Block
Bearing 3
Pump Bearings 3

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
6/1/2017 - 7/1/2017	52,459,000	1,748,633

DATE	Pump Run Hours			Run Hours Per Day		
	Pump #1	Pump #2	Pump #3	Pump #1	Pump #2	Pump #3
6/1/2017 - 7/1/2017	206.2	197.6	204.5	6.87	6.59	6.82

Comments: **Generator Run Hours** = generator is not testing. Only run by hand when at station

6/14 – Meter guys at station to calibrate flow meter.

RITTENHOUSE

Operator: Ed Chelius

Date: July 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	3	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwells	3	
Comminutor	3	
Valves	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matchers	3	
Pillow Block		
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	2	
Flow Matcher	3	
Pillow Block	2	
Bearing	3	
Generator	3	
<u>Plant Air</u>		
Compressor	3	
Pumps Packing	3	
Sump Pump	3	
Pump Bearing	3	

RITTENHOUSE

Operator: Ed Chelius

Date: July 2017

Audio Dialer **2**

Ventilation **Priority** **Remarks**

Dry well 3
Wetwell 3
Electric Heaters 3

#3 Pump

Motor 3
Rings 3
Brushes 3
Drive Shafts 3
U-Joints 3
Pump Bearings 3
Valves 3
Flow Matcher 3
Pillow Block
Bearing 3
Pump Bearings 3

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
7/1/2017 - 8/1/2017	54,878,000	1,770,258

DATE	Pump Run Hours			Run Hours Per Day		
	Pump #1	Pump #2	Pump #3	Pump #1	Pump #2	Pump #3
7/1/2017 - 8/1/2017	190.7	185.4	186.5	6.15	5.98	6.02

Comments: **Generator Run Hours** = Generator is not testing. Only run by hand when at station.

7-22: Transducer was replaced in wet well along with the backup float stick by Sealy. This controls the pumps at the station.

RITTENHOUSE

Operator: Ed Chelius

Date: August 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	3	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwells	3	
Comminutor	3	
Valves	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matchers	3	
Pillow Block		
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	2	
Flow Matcher	3	
Pillow Block	2	
Bearing	3	
Generator	3	
<u>Plant Air</u>		
Compressor	3	
Pumps Packing	3	
Sump Pump	3	
Pump Bearing	3	

RITTENHOUSE

Operator: Ed Chelius

Date: August 2017

Audio Dialer **2**

Ventilation **Priority** **Remarks**

Dry well 3
Wetwell 3
Electric Heaters 3

#3 Pump

Motor 3
Rings 3
Brushes 3
Drive Shafts 3
U-Joints 3
Pump Bearings 3
Valves 3
Flow Matcher 3
Pillow Block
Bearing 3
Pump Bearings 3

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
8/1/2017 - 9/1/2017	53,309,000	1,719,645

DATE	Pump Run Hours			Run Hours Per Day		
	Pump #1	Pump #2	Pump #3	Pump #1	Pump #2	Pump #3
8/1/2017 - 9/1/2017	204.4	204.1	204	6.59	6.58	6.58

Comments: Generator Run Hours = Generator not testing.

RITTENHOUSE

Operator: Ed Chelius

Date: September 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	3	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwells	3	
Comminutor	3	
Valves	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matchers	3	
Pillow Block		
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	2	
Flow Matcher	3	
Pillow Block	2	
Bearing	3	
Generator	3	
<u>Plant Air</u>		
Compressor	3	
Pumps Packing	3	
Sump Pump	3	
Pump Bearing	3	

RITTENHOUSE

Operator: Ed Chelius

Date: September 2017

Audio Dialer **2**

Ventilation **Priority** **Remarks**

Dry well 3
Wetwell 3
Electric Heaters 3

#3 Pump

Motor 3
Rings 3
Brushes 3
Drive Shafts 3
U-Joints 3
Pump Bearings 3
Valves 3
Flow Matcher 3
Pillow Block
Bearing 3
Pump Bearings 3

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
9/1/2017 - 10/1/2017	41,996,000	1,399,866

DATE	Pump Run Hours			Run Hours Per Day		
	Pump #1	Pump #2	Pump #3	Pump #1	Pump #2	Pump #3
9/1/2017 - 10/1/2017	171.4	168.4	172	5.71	5.61	5.73

Comments: **Generator Run Hours** = The generator is still not running tests on its own so the tests are being run manually while at the station. On 9-18-17 Penn Power was at the station to inspect the generator and transfer the switch.

RITTENHOUSE

Operator: Ed Chelius

Date: October 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	3	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwells	3	
Comminutor	3	
Valves	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matchers	3	
Pillow Block		
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	2	
Flow Matcher	3	
Pillow Block	2	
Bearing	3	
Generator	3	
<u>Plant Air</u>		
Compressor	3	
Pumps Packing	3	
Sump Pump	3	
Pump Bearing	3	

RITTENHOUSE

Operator: Ed Chelius

Date: November 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	3	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwells	3	
Comminutor	3	
Valves	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matchers	3	
Pillow Block		
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	2	
Flow Matcher	3	
Pillow Block	2	
Bearing	3	
Generator	3	
<u>Plant Air</u>		
Compressor	3	
Pumps Packing	3	
Sump Pump	3	
Pump Bearing	3	

RITTENHOUSE

Operator: Ed Chelius

Date: December 2017

<u>Item</u>	<u>Priority</u>	<u>Remarks</u>
<u>Exterior</u>		
Fascia & Cornice	3	
Roof	3	
Grounds, Weeds	3	
Driveway	3	
<u>Wetwell</u>		
Grease Buildup	3	
Stairwells	3	
Comminutor	3	
Valves	3	
<u>Station Interior</u>		
<u>#1 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	3	
Pump Bearings	3	
Valves	3	
Flow Matchers	3	
Pillow Block		
Bearing	3	
<u>#2 Pump</u>		
Motor	3	
Rings	3	
Brushes	3	
Bearings	3	
Drive Shafts	3	
U-Joints	2	
Flow Matcher	3	
Pillow Block	2	
Bearing	3	
Generator	3	
<u>Plant Air</u>		
Compressor	3	
Pumps Packing	3	
Sump Pump	3	
Pump Bearing	3	

RITTENHOUSE

Operator: Ed Chelius

Date: December 2017

Audio Dialer **2**

Ventilation **Priority** **Remarks**

Dry well 3
Wetwell 3
Electric Heaters 3

#3 Pump

Motor 3
Rings 3
Brushes 3
Drive Shafts 3
U-Joints 3
Pump Bearings 3
Valves 3
Flow Matcher 3
Pillow Block
Bearing 3
Pump Bearings 3

1 - Immediate Priority; 2 - Priority; 3 - Needs No Attention

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
12/1/2017 - 1/1/2018	46,096,000	1,486,967

DATE	Pump Run Hours			Run Hours Per Day		
	Pump #1	Pump #2	Pump #3	Pump #1	Pump #2	Pump #3
12/1/2017 - 1/1/2018	202	195.1	186.9	6.51	6.29	6.02

Comments: Generator Run Hours = 1.3

- 12/28/17 → The meter was calibrated at the pump station.

JACKSON STREET METERING PIT

Operator: Ed Chelius

Date: January 2017

Flow Jackson Street Pit

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
1/1/2017 - 2/1/2017	14,445,000	465,968

Montgomery Avenue Metering Pit to the Rittenhouse P.S.

<u>DATE</u>	<u>Total Flow</u>	<u>Average flow/day</u>
1/1/2017 - 2/1/2017	20,281,600	654,245

Flow to Norristown

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
1/1/2017 - 2/1/2017		

JACKSON STREET METERING PIT

Operator: Ed Chelius

Date: February 2017

Flow Jackson Street Pit

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
2/1/2017 - 3/1/2017	9,996,800	357,029

Montgomery Avenue Metering Pit to the Rittenhouse P.S.

<u>DATE</u>	<u>Total Flow</u>	<u>Average flow/day</u>
2/1/2017 - 3/1/2017	18,031,200	463,971

Flow to Norristown

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
2/1/2017 - 3/1/2017		

JACKSON STREET METERING PIT

Operator: Ed Chelius

Date: March 2017

Flow Jackson Street Pit

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
3/1/2017 - 4/1/2017	12,828,300	413,816

Montgomery Avenue Metering Pit to the Rittenhouse P.S.

<u>DATE</u>	<u>Total Flow</u>	<u>Average flow/day</u>
3/1/2017 - 4/1/2017	28,379,700	915,474

Flow to Norristown

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
3/1/2017 - 4/1/2017		

JACKSON STREET METERING PIT

Operator: Ed Chelius

Date: April 2017

Flow Jackson Street Pit

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
4/1/2017 - 5/1/2017	12,550,100	418,336

Montgomery Avenue Metering Pit to the Rittenhouse P.S.

<u>DATE</u>	<u>Total Flow</u>	<u>Average flow/day</u>
4/1/2017 - 5/1/2017	26,288,300	876,276

Flow to Norristown

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
4/1/2017 - 5/1/2017		

JACKSON STREET METERING PIT

Operator: Ed Chelius

Date: May 2017

Flow Jackson Street Pit

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
5/1/2017 - 6/1/2017	12,447,300	401,526

Montgomery Avenue Metering Pit to the Rittenhouse P.S.

<u>DATE</u>	<u>Total Flow</u>	<u>Average flow/day</u>
5/1/2017 - 6/1/2017	26,838,100	865,745

Flow to Norristown

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
5/1/2017 - 6/1/2017		

JACKSON STREET METERING PIT

Operator: Ed Chelius

Date: June 2017

Flow Jackson Street Pit

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
6/1/2017 - 7/1/2017	11,220,200	374,006

Montgomery Avenue Metering Pit to the Rittenhouse P.S.

<u>DATE</u>	<u>Total Flow</u>	<u>Average flow/day</u>
6/1/2017 - 7/1/2017	25,606,200	853,540

Flow to Norristown

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
6/1/2017 - 7/1/2017		

JACKSON STREET METERING PIT

Operator: Ed Chelius

Date: July 2017

Flow Jackson Street Pit

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
7/1/2017 - 8/1/2017	11,848,000	382,194

Montgomery Avenue Metering Pit to the Rittenhouse P.S.

<u>DATE</u>	<u>Total Flow</u>	<u>Average flow/day</u>
7/1/2017 - 8/1/2017	21,522,500	694,274

Flow to Norristown

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
7/1/2017 - 8/1/2017		

JACKSON STREET METERING PIT

Operator: Ed Chelius

Date: August 2017

Flow Jackson Street Pit

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
8/1/2017 - 9/1/2017		

Montgomery Avenue Metering Pit to the Rittenhouse P.S.

<u>DATE</u>	<u>Total Flow</u>	<u>Average flow/day</u>
8/1/2017 - 9/1/2017	21,110,700	680,990

Flow to Norristown

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
8/1/2017 - 9/1/2017	12,167,800	392,509

JACKSON STREET METERING PIT

Operator: Ed Chelius

Date: September 2017

Flow Jackson Street Pit

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
9/1/2017 - 10/1/2017	12,167,800	405,593

Montgomery Avenue Metering Pit to the Rittenhouse P.S.

<u>DATE</u>	<u>Total Flow</u>	<u>Average flow/day</u>
9/1/2017 - 10/1/2017	15,671,700	522,390

Flow to Norristown

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
9/1/2017 - 10/1/2017		

JACKSON STREET METERING PIT

Operator: Ed Chelius

Date: October 2017

Flow Jackson Street Pit

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
10/1/2017 - 11/1/2017	9,079,800	292,897

Montgomery Avenue Metering Pit to the Rittenhouse P.S.

<u>DATE</u>	<u>Total Flow</u>	<u>Average flow/day</u>
10/1/2017 - 11/1/2017	16,807,100	542,165

Flow to Norristown

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
10/1/2017 - 11/1/2017		

JACKSON STREET METERING PIT

Operator: Ed Chelius

Date: November 2017

Flow Jackson Street Pit

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
11/1/2017 - 12/1/2017	9,632,100	321,070

Montgomery Avenue Metering Pit to the Rittenhouse P.S.

<u>DATE</u>	<u>Total Flow</u>	<u>Average flow/day</u>
11/1/2017 - 12/1/2017	19,267,900	642,263

Flow to Norristown

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
11/1/2017 - 12/1/2017		

JACKSON STREET METERING PIT

Operator: Ed Chelius

Date: December 2017

Flow Jackson Street Pit

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
12/1/2017 - 1/1/2018	8,911,600	287,471

Montgomery Avenue Metering Pit to the Rittenhouse P.S.

<u>DATE</u>	<u>Total Flow</u>	<u>Average flow/day</u>
12/1/2017 - 1/1/2018	17,875,100	576,616

Flow to Norristown

<u>DATE</u>	<u>TOTAL GALLONS</u>	<u>GALLONS/DAY</u>
12/1/2017 - 1/1/2018		

ATTACHMENT E
MONTHLY ADF TO NMWA

Table 6
2017 TOTAL FLOW TO NORRISTOWN
WEST NORRITON TOWNSHIP

Average Daily Flow	Rittenhouse Blvd Pump Station (gpd)	Jackson Street Pit (gpd)	Total Flow to Norristown (gpd)
January	1,316,032	465,968	1,782,000
February	1,270,321	357,029	1,627,350
March	1,829,354	413,816	2,243,170
April	1,710,233	418,336	2,128,569
May	1,650,709	401,526	2,052,235
June	1,748,633	374,006	2,122,639
July	1,770,258	382,194	2,152,452
August	1,719,645	392,509	2,112,154
September	1,399,866	405,593	1,805,459
October	1,380,613	292,897	1,673,510
November	1,607,500	321,070	1,928,570
December	1,486,967	287,471	1,774,438

Average total flow (gpd)	18,890,131	4,512,415	23,402,546
Average Daily Flow (gpd)	1,574,178	376,035	1,950,212

Table 7
Average Daily Flow to NMWA (2008 to 2017)
West Norriton Township

Rittenhouse Pump Station										
Month	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
January	1,140,058	1,456,990	1,463,313	829,881	1,631,760	1,708,296	1,847,377	1,765,629	1,418,064	1,316,032
February	1,766,872	559,437	1,722,096	1,505,254	1,204,106	1,603,490	3,119,342	1,649,457	2,902,034	1,270,321
March	1,846,990	515,907	2,755,964	2,072,793	1,304,838	1,684,645	233,590	2,617,167	1,724,129	1,829,354
April	977,496	544,155	1,361,187	1,515,407	1,724,400	1,310,723	2,577,086	3,009,310	1,401,366	1,710,233
May	1,196,496	540,160	778,958	1,063,490	1,660,581	1,212,654	2,603,622	1,071,816	1,766,419	1,650,709
June	858,186	576,791	637,826	551,286	1,411,733	2,491,360	1,517,076	1,598,126	1,128,400	1,748,633
July	1,008,148	571,476	806,335	503,868	1,160,841	1,681,932	1,037,000	1,751,812	1,043,032	1,770,258
August	611,941	1,197,658	764,652	1,320,574	1,297,906	1,549,880	931,329	1,026,774	887,709	1,719,645
September	1,086,073	1,130,403	696,443	2,465,300	1,538,583	980,463	966,586	1,425,910	986,100	1,399,866
October	953,025	1,310,132	955,535	1,613,858	1,481,161	1,054,687	971,709	1,240,903	897,483	1,380,613
November	1,012,316	1,013,466	753,803	1,322,593	1,372,833	1,012,422	1,245,956	953,266	1,054,833	1,607,500
December	1,922,929	2,076,363	896,903	2,257,632	1,686,839	1,855,090	1,643,680	1,680,290	1,350,677	1,486,967
Total flow (gpd)	14,380,530	11,492,938	13,593,015	17,021,936	17,475,581	18,145,642	18,694,353	19,790,460	16,560,246	18,890,131
Average daily (gpd)	1,198,378	957,745	1,132,751	1,418,495	1,456,298	1,512,137	1,557,863	1,649,205	1,380,021	1,574,178

Jackson Street										
Month	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
January	790,335	769,226	957,096	926,654	774,271	501,065	549,006	465,968	321,458	465,968
February	778,410	702,625	984,242	1,181,932	627,951	324,078	381,053	357,029	370,917	357,029
March	939,700	634,481	1,199,387	1,382,040	441,216	293,412	455,265	413,816	357,858	413,816
April	891,593	787,590	1,057,330	1,107,757	404,566	293,516	363,277	418,336	391,640	418,336
May	976,874	799,035	844,048	821,629	315,281	422,419	333,000	401,526	366,465	401,526
June	737,986	818,420	810,590	910,306	42,916	422,650	402,150	374,006	422,190	374,006
July	572,561	711,158	721,716	780,844	359,752	314,109	427,270	382,194	299,829	382,194
August	730,770	919,719	604,587	965,958	318,684	509,303	437,970	392,509	427,322	392,509
September	519,453	841,158	749,493	921,690	198,200	494,650	368,222	405,593	399,580	405,593
October	605,374	914,658	944,132	629,923	264,568	387,968	393,510	292,897	311,125	292,897
November	723,646	865,060	899,283	1,031,928	356,193	348,340	336,196	321,070	314,900	321,070
December	839,361	1,062,719	962,383	599,409	381,393	405,984	416,813	287,471	405,265	287,471
Total flow (gpd)	9,106,063	9,825,849	10,734,287	11,260,070	4,484,991	4,717,494	4,863,732	4,512,415	4,388,549	4,512,415
Average daily (gpd)	758,839	818,821	894,524	938,339	373,749	393,125	405,311	376,035	365,712	376,035

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average daily to NMWA (gpd)	1,957,216	1,776,566	2,027,275	2,356,834	1,830,048	1,905,261	1,963,174	2,025,240	1,745,733	1,950,212
Total precipitation (inch)	41.78	48.17	44.06	54.19	44.56	49.64	39.99	23.59	38.12	39.12

* 2015 Precipitation from www.accuweather.com for 19403
 **2016-2017 precipitation from NMWA

ATTACHMENT F
INDUSTRIAL WASTES

INDUSTRIAL WASTES

All industrial wastes is required to meet the Industrial Pretreatment Standards of NWMA.

ATTACHMENT G
FLOW METER CALIBRATION REPORTS

The Meter Guy, LLC

5758 Glen Oaks Drive
 Narvon, PA 17555
 Phone 717-768-0028
 Fax: 866-323-5142

Invoice

DATE	INVOICE #
4/6/2017	3852

BILL TO
WEST NORRITON 1634 WEST MARSHALL STREET JEFFERSONVILLE, PA 19403 ATTN: ACCOUNTS PAYABLE

SHIP TO
WEST NORRITON 1634 WEST MARSHALL STREET JEFFERSONVILLE, PA 19403 ATTN: Tony Tuski

P.O. NUMBER	TERMS	REP	SHIP	VIA	F.O.B.	PROJECT
	Net 30	JCC	3/16/2017	Our Truck		

QUANTITY	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
10	LABOR-Q	QUARTERLY SERVICE TO CHECK FLOW METERS	85.00	850.00
65	MILES	MILEAGE	0.65	42.25
		ITEMS BELOW WERE SHIPPED TO ED CHELLIS, FOR WEST NORRITON		
12	PENS-CHESS...	TWELVE PACKS OF CHESSEL PENS BLUE #1-200-502	30.55	366.60
8	PENS-UNIV 39	EIGHT PACKS OF PENS- UNIVERSAL 39 SERIES .37"	31.96	255.68
4	PENS-UNIV 39	FOUR PACKS OF PENS- UNIVERSAL 39 SERIES .14"	31.96	127.84
4	CHART-CHESS...	FOUR BOXES OF CHESSELL CHARTS -GDSV0100U100; 0-100; 7DAY	42.70	170.80
6	CHART-FISHER	SIX BOXES OF FISHER & PORTER CHARTS- FRPC#211G021	44.60	267.60
1	CHART-CHESS...	ONE BOX OF CHESSELL CHARTS- GDSV0050U050; 0-50; 7DAY	42.70	42.70
1	SHIPPING	SHIPPING	16.82	16.82

APR 17 2017

POSTED

APPROVED FOR PAYMENT	
DEPT CHRMN.	FINANCE CHRMN.
DISTRIBUTION	
80 429-372	2140-29
WARRANT NO.	
DATE	5/5

Total	\$2,140.29
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TheMeterGuy, LLC.

5758 GLEN OAKS DRIVE NARVON, PA 17555
PHONE: (717) 940-1987

*****SERVICE REPORT*****

WEST NORRITON
1630 WEST MARSHALL
JEFFERSONVILLE, PA 19403

SERVICE DATE: 3/16/2017
METER#: C2000 AA
LOCATION: JACKSON STREET
SERIAL #: 9902E3010E6/US21707-001
MANUFACTURER: E & H/CHESELL
RECORDER: 392
TRANSMITTER: FMU90
PRIMARY: 9" PARSHALL FLUME
MAXIMUM CAPACITY: 3.5 MGD
SERVICE CONTRACT: QUARTERLY

WORK PERFORMED

CLEANED EQUIPMENT: X **PRIMARY:** X

RECORDER CALIBRATION **CHECKED AT:** 0, 25, 50 & 100%
ERROR: 0% **CORRECTED ACCURACY:** ±1%

TOTALIZER CALIBRATION **CHECKED AT:** 0, 25, 50 & 100%
ERROR: 0% **CORRECTED ACCURACY:** ±1%

TRANSMITTER CALIBRATION
FLOW MEASUREMENTS
ERROR: 0% **CORRECTED ACCURACY:** ±1%

COMMENTS: LEFT EQUIPMENT OPERATING PROPERLY.

SERVICE REPRESENTATIVE: J CHRIS CALLAHAN
copies:

PERSON SEEN: ED CHELLIS

TheMeterGuy, LLC.

5758 GLEN OAKS DRIVE NARVON, PA 17555
PHONE: (717) 940-1987

*****SERVICE REPORT*****

WEST NORRITON
1630 WEST MARSHALL
JEFFERSONVILLE, PA 19403

SERVICE DATE: 3/16/2017
METER#: C2000 AB
LOCATION: RITTENHOUSE PUMP STATION
SERIAL #: 356807
MANUFACTURER: SPARLING/CHESELL
RECORDER: 392
TRANSMITTER: FM656-185-1A3-0
PRIMARY: MAG
MAXIMUM CAPACITY: 10,000 GPM
SERVICE CONTRACT: QUARTERLY

WORK PERFORMED

CLEANED EQUIPMENT: X **PRIMARY:** X

RECORDER CALIBRATION **CHECKED AT:** 0, 25, 50 & 100%
ERROR: +1% **CORRECTED ACCURACY:** ±1%

TOTALIZER CALIBRATION **CHECKED AT:** OPERATING RATE
ERROR: 0% **CORRECTED ACCURACY:** ±1%

TRANSMITTER CALIBRATION
INTERNAL SIMULATION
ERROR: 0% **CORRECTED ACCURACY:** ±1%

COMMENTS: LEFT EQUIPMENT OPERATING PROPERLY.

SERVICE REPRESENTATIVE: J CHRIS CALLAHAN
copies:

PERSON SEEN: ED CHELLIS

TheMeterGuy, LLC.

5758 GLEN OAKS DRIVE NARVON, PA 17555
PHONE: (717) 940-1987

*****SERVICE REPORT*****

WEST NORRITON
1630 WEST MARSHALL
JEFFERSONVILLE, PA 19403

SERVICE DATE: 3/16/2017
METER#: C2000 AC
LOCATION: WHITEHALL ROAD
SERIAL #: 8503A0455
MANUFACTURER: FISCHER & PORTER
RECORDER: 51C1102DZ
TRANSMITTER: 50PZ1112
PRIMARY: MAG X
MAXIMUM CAPACITY: 3,000 GPM
SERVICE CONTRACT: QUARTERLY

WORK PERFORMED

CLEANED EQUIPMENT: X **PRIMARY:** X

RECORDER CALIBRATION **CHECKED AT:** 0, 15, 50 & 80%
ERROR: 0% **CORRECTED ACCURACY:** ±1%

TOTALIZER CALIBRATION **CHECKED AT:** 0, 15, 50 & 80%
ERROR: 0% **CORRECTED ACCURACY:** ±1%

TRANSMITTER CALIBRATION
0, 15, 50 & 80%
ERROR: 0% **CORRECTED ACCURACY:** ±1%

COMMENTS: LEFT EQUIPMENT OPERATING PROPERLY.

SERVICE REPRESENTATIVE: J CHRIS CALLAHAN
copies:

PERSON SEEN: ED CHELLIS

TheMeterGuy, LLC.

5758 GLEN OAKS DRIVE NARVON, PA 17555
PHONE: (717) 940-1987

*****SERVICE REPORT*****

WEST NORRITON
1630 WEST MARSHALL
JEFFERSONVILLE, PA 19403

SERVICE DATE: 3/16/2017
METER#: C2000 AD
LOCATION: PORT INDIAN
SERIAL #: 160612-FA-18621692
MANUFACTURER: F&P / OMEGA
RECORDER: 1392
TRANSMITTER: FDT-21W
PRIMARY: 8 INCH
MAXIMUM CAPACITY: 1500 GPM
SERVICE CONTRACT: QUARTERLY

WORK PERFORMED

CLEANED EQUIPMENT: X **PRIMARY:** X

RECORDER CALIBRATION **CHECKED AT:** 0, 25, 50 & 100%
ERROR: -1% **CORRECTED ACCURACY:** ±1%

TOTALIZER CALIBRATION **CHECKED AT:** 0, 50 & 100%
ERROR: 0% **CORRECTED ACCURACY:** ±1%

TRANSMITTER CALIBRATION
CHECKED OUTPUT AT ZERO FLOW
ERROR: 0% **CORRECTED ACCURACY:** ±1%

COMMENTS: LEFT EQUIPMENT OPERATING PROPERLY.

SERVICE REPRESENTATIVE: J CHRIS CALLAHAN
copies:

PERSON SEEN: ED CHELLIS

TheMeterGuy, LLC.

5758 GLEN OAKS DRIVE NARVON, PA 17555
PHONE: (717) 940-1987

*****SERVICE REPORT*****

WEST NORRITON
1630 WEST MARSHALL
JEFFERSONVILLE, PA 19403

SERVICE DATE: 3/16/2017
METER#: C2000 AE
LOCATION: CHESTNUT STREET
SERIAL #: N28401/20/4
MANUFACTURER: ABB
RECORDER: 1900 COMMANDER
TRANSMITTER: MAGMASTER
PRIMARY: 4 INCH
MAXIMUM CAPACITY: 500 GPM
SERVICE CONTRACT: QUARTERLY

WORK PERFORMED

CLEANED EQUIPMENT: X **PRIMARY:** X

RECORDER CALIBRATION **CHECKED AT:** 0, 25, 50 & 100%
ERROR: 0% **CORRECTED ACCURACY:** ±1%

TOTALIZER CALIBRATION **CHECKED AT:** ZERO & FLOW RATE
ERROR: 0% **CORRECTED ACCURACY:** ±1%

TRANSMITTER CALIBRATION
CHECKED OUTPUT AT ZERO & FLOW RATE
ERROR: 0% **CORRECTED ACCURACY:** ±1%

COMMENTS: LEFT EQUIPMENT OPERATING PROPERLY.

SERVICE REPRESENTATIVE: J CHRIS CALLAHAN
copies:

PERSON SEEN: ED CHELLIS

TheMeterGuy, LLC.

5758 GLEN OAKS DRIVE NARVON, PA 17555
PHONE: (717) 940-1987

*****SERVICE REPORT*****

WEST NORRITON
1630 WEST MARSHALL
JEFFERSONVILLE, PA 19403

SERVICE DATE: 3/16/2017
METER#: C2000 AF
LOCATION: MONTGOMERY STREET
SERIAL #: US21223-001-01-01-37-07
MANUFACTURER: E & H/ CHESSELL
RECORDER: 392
TRANSMITTER: FMU 90
PRIMARY: 90° V-NOTCH
MAXIMUM CAPACITY: 1,000 GPM
SERVICE CONTRACT: QUARTERLY

WORK PERFORMED

CLEANED EQUIPMENT: X **PRIMARY:** X

RECORDER CALIBRATION **CHECKED AT:** 0,25,50,75,& 100%
ERROR: 0% **CORRECTED ACCURACY:** ±1%

TOTALIZER CALIBRATION **CHECKED AT:** 0,25,50,75, & 100%
ERROR: 0% **CORRECTED ACCURACY:** ± 1%

TRANSMITTER CALIBRATION
FLOW MEASUREMENTS
ERROR: 0% **CORRECTED ACCURACY:** ± 1%

COMMENTS: LEFT EQUIPMENT OPERATING PROPERLY.

SERVICE REPRESENTATIVE: J CHRIS CALLAHAN
copies:

PERSON SEEN: ED CHELLIS