DMR Copy of Record

Permit					
Permit #:	**MD0024333**	**Permittee:**	MARYLAND MOBILE ESTATES, LLC	**Facility:**	MARYLAND MANOR WWTP
Major:	No	**Permittee Address:**	4922 FAIRMONT AVENUE, SUITE 280 BETHESDA (0811--AA), MD 20814	**Facility Location:**	4600 SANDS ROAD HARWOOD, MD 20776
Permitted Feature:	001 External Outfall	**Discharge:**	**001-A** 12-DP-0811		
Report Dates & Status					
Monitoring Period:	**From 12/01/19 to 12/31/19**	**DMR Due Date:**	**01/28/20**	**Status:**	**NetDMR Validated**
Considerations for Form Completion					
DISCHARGE SHALL BE LIMITED AT ALL TIMES. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM OTHER THAN TRACE AMOUNT. FLOW USED IN WASTE ALLOCATION CALCULATIONS, NOT TO BE CONSIDERED A LIMITATION.					
Principal Executive Officer					
First Name:	Jack	**Title:**	Vice President, Operations	**Telephone:**	443-903-4758
Last Name:	Bradshaw				
No Data Indicator (NODI)					
Form NODI:	--				

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample						=	6.4	=	8.6			19 - mg/L		01/01 - Daily	GR - GRAB
					Permit Req.						>=	5.0 INST MIN	>=	5.5 MO AV MN			19 - mg/L		01/01 - Daily	GR - GRAB
					Value NODI															
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	--	Sample	=	2.36	=	2.86	26 - lb/d			=	6.3	=	7.62	19 - mg/L		01/07 - Weekly	08 - COMP-8
					Permit Req.	<=	23.0 MX MO AV	<=	34.0 MX WK AV	26 - lb/d			<=	30.0 MX MO AV	<=	45.0 MX WK AV	19 - mg/L		01/07 - Weekly	08 - COMP-8
					Value NODI															
00400	pH	1 - Effluent Gross	0	--	Sample						=	6.5			=	7.6	12 - SU		01/01 - Daily	GR - GRAB
					Permit Req.						>=	6.5 MINIMUM			<=	8.5 MAXIMUM	12 - SU		01/01 - Daily	GR - GRAB
					Value NODI															
X 00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample	=	34.81	=	115.22	26 - lb/d			=	92.75	=	307 0	19 - mg/L		01/07 - Weekly	08 - COMP-8
					Permit Req.	<=	23.0 MX MO AV	<=	34.0 MX WK AV	26 - lb/d			<=	30.0 MX MO AV	<=	45.0 MX WK AV	19 - mg/L	1	01/07 - Weekly	08 - COMP-8
					Value NODI															
00600	Nitrogen, total [as N]	1 - Effluent Gross	0	--	Sample								=	23.2			19 - mg/L		01/30 - Monthly	08 - COMP-8
					Permit Req.									Req Mon MO AVG			19 - mg/L		01/30 - Monthly	08 - COMP-8
					Value NODI															
00600	Nitrogen, total [as N]	1 - Effluent Gross	1	--	Sample			=	270.01	76 - lb/mo									01/30 - Monthly	CA - CALCTD
					Permit Req.				Req Mon MO TOTAL	76 - lb/mo									01/30 - Monthly	CA - CALCTD
					Value NODI															
00600	Nitrogen, total [as N]	1 - Effluent Gross	2	--	Sample			=	3684.62	50 - lb/yr									01/30 - Monthly	CA - CALCTD
					Permit Req.				Req Mon CUM TOTL	50 - lb/yr									01/30 - Monthly	CA - CALCTD
					Value NODI															
00605	Nitrogen, organic total [as N]	1 - Effluent Gross	0	--	Sample								=	1.54			19 - mg/L		01/30 - Monthly	08 - COMP-8
					Permit Req.									Req Mon MO AVG			19 - mg/L		01/30 - Monthly	08 - COMP-8
					Value NODI															
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0	--	Sample								=	0.21			19 - mg/L		01/30 - Monthly	08 - COMP-8
					Permit Req.									Req Mon MO AVG			19 - mg/L		01/30 - Monthly	08 - COMP-8
					Value NODI															
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	0	--	Sample								=	21.45			19 - mg/L		01/30 - Monthly	08 - COMP-8
					Permit Req.									Req Mon MO AVG			19 - mg/L		01/30 - Monthly	08 - COMP-8
					Value NODI															
00665	Phosphorus, total [as P]	1 - Effluent Gross	0	--	Sample								=	2.57			19 - mg/L		01/30 - Monthly	08 - COMP-8
					Permit Req.									Req Mon MO AVG			19 - mg/L		01/30 - Monthly	08 - COMP-8
					Value NODI															
00665	Phosphorus, total [as P]	1 - Effluent Gross	1	--	Sample			=	29.76	76 - lb/mo									01/30 - Monthly	CA - CALCTD
					Permit Req.				Req Mon MO TOTAL	76 - lb/mo									01/30 - Monthly	CA - CALCTD
					Value NODI															
00665	Phosphorus, total [as P]	1 - Effluent Gross	2	--	Sample			=	405.78	50 - lb/yr									01/30 - Monthly	CA - CALCTD
					Permit Req.				Req Mon CUM TOTL	50 - lb/yr									01/30 - Monthly	CA - CALCTD
					Value NODI															
04175	Phosphate, ortho [as P]	1 - Effluent Gross	0	--	Sample								=	1.7			19 - mg/L		01/30 - Monthly	08 - COMP-8
					Permit Req.									Req Mon MO AVG			19 - mg/L		01/30 - Monthly	08 - COMP-8
					Value NODI															
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample	=	0.045	=	0.062	03 - MGD									99/99 - Continuous	RC - Recorder (auto)
					Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD									99/99 - Continuous	RC - Recorder (auto)
					Value NODI															
50060	Chlorine, total residual	1 - Effluent Gross	0	--	Sample										=	0.0	19 - mg/L		01/01 - Daily	GR - GRAB
					Permit Req.										<=	0.1 DAILY MX	19 - mg/L		01/01 - Daily	GR - GRAB
					Value NODI															

51040	E. coli	1 - Effluent Gross	0	--	Sample										=	2.044	30 - MPN/100mL		01/07 - Weekly	GR - GRAB
					Permit Req.										<=	126 0 MX MO GMN	30 - MPN/100mL		01/07 - Weekly	GR - GRAB
					Value NODI															
82220	Flow, total	1 - Effluent Gross	0	--	Sample			=	1.409	80 - Mgal/mo									01/30 - Monthly	CA - CALCTD
					Permit Req.				Req Mon TOTAL	80 - Mgal/mo									01/30 - Monthly	CA - CALCTD
					Value NODI															

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

Parameter		Monitoring Location	Field	Type	Description	Acknowledge
Code	Name					
00530	Solids, total suspended	1 - Effluent Gross	Quantity or Loading Sample Value 1	Soft	The provided sample value is outside the permit limit. (Error Code: 1)	Yes
00530	Solids, total suspended	1 - Effluent Gross	Quantity or Loading Sample Value 2	Soft	The provided sample value is outside the permit limit. (Error Code: 1)	Yes
00530	Solids, total suspended	1 - Effluent Gross	Quality or Concentration Sample Value 2	Soft	The provided sample value is outside the permit limit. (Error Code: 1)	Yes
00530	Solids, total suspended	1 - Effluent Gross	Quality or Concentration Sample Value 3	Soft	The provided sample value is outside the permit limit. (Error Code: 1)	Yes

Comments

Please see attached noncompliance letter

Attachments

Name	Type	Size
MDM-MOR-DEC-2019.xlsx	xlsx	95378.0
12-3-19.pdf	pdf	1232357.0
MDM-MHC-NC-DECEMBER-2019.docx	docx	208970.0
12-10-19.pdf	pdf	602694.0
12-17-19.pdf	pdf	1006507.0
12-23-19.pdf	pdf	602150.0

Report Last Saved By

MARYLAND MOBILE ESTATES, LLC

User: [redacted] (b) (6)

Name: jack bradshaw

E-Mail: [redacted] (b) (6)

Date/Time: 2020-02-12 23:22 (Time Zone: -05:00)

Report Last Signed By

User: [redacted] (b) (6)

Name: jack bradshaw

E-Mail: [redacted] (b) (6)

Date/Time: 2020-02-12 23:23 (Time Zone: -05:00)

Chesapeake Environmental Lab, Inc.

P. O. Box 946
Stevensville, MD 21666

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1991 - 2016

Bill To

Horizon Land Company
2138 Espey Court
Crofton, MD 21114

Invoice

Invoice Date	Invoice #	P.O. No.	Vender ID #:	Project
12/11/2019	120951			Maryland Manor WWTP

Quantity	Date	Description	Rate	Amount
	12-03-19	BOD Analysis Bacteria - Ecoli Analysis Total Suspended Solids Analysis MLSS Analysis	(b) (4) [redacted]	(b) (4) [redacted]

	Total	(b) (4) [redacted]
	Payments/Credits	[redacted]
	Balance Due	[redacted]

Any account having an outstanding balance for more than 30 days will be charged a rebilling fee on that outstanding balance of $5.00 per month.

Terms - On Receipt

Phone: 410-643-0800 Fax: 410-643-0801 info@celinc.net www.chesapeakeenvironmentallab.net

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Fax 410-643-0801
St. #181

WASTE WATER ANALYSIS REPORT

CASE #: 120951
REQUESTED BY: Horizon Land Co. LLC
1091 Mt. Zion – Marlboro Rd
Lothian, Md 20711

SAMPLE SITE: Maryland Manor WWTP

MATRIX: Waste Water
SOURCE: Maryland Manor Effluent Composite / Grab (E coli)
DATE/TIME COLLECTED: 12-03-19 / 11:00am
COLLECTED BY: [redacted] (b) (4)
DATE RECEIVED BY LAB: 12-03-19
REPORT DATE: 12-11-19

Parameter	Results	Units	Detection Limit	Date/Time Analyzed	Method	Analyst
BOD	6.70	mg/L	1.0	12-04-19 / 7:45am	SM5210B	CD
Escherichia Coli	<1.0	MPN	1.0	12-03-19 / 2:48pm	SM 9223B	MW
TSS	7.0	mg/L	0.5	12-05-19 / 12:30pm	SM2540D	CD
MLSS	5,910	mg/L	0.5	12-05-19 / 1:00pm	SM2540D	CD

Comments:

- SM - Standard Methods 22nd ed.
- This report relates only to the samples as received by the laboratory and may only be reproduced in full.

Dominic DiGiovine

Dominic DiGiovine
Laboratory Director

CHAIN OF CUSTODY RECORD

PROJECT NAME Maryland Manor
COMPANY Pro-Start / Horizon Properties
ADDRESS 1091 Mt. Zion - Marlboro Rd Lothian
PHONE ( )

[redacted]

120951

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info@celinc.net
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PRINT NAME

SAMPLE NO.	DATE	TIME	SAMPLE LOCATION	CONTAINER SIZE	CONTAINER G/P	NO. OF CONTAINERS	SAMPLE MATRIX	PRESERVATIVE	BOD-TSS	F-Col	MLSS	~~NH3~~							COMMENTS
1	12/3/19	11A	Final Eff	1L	P	1	WW	None	/										Grab
2	12/3/19		Final Eff	100ml	P	1	WW	None		/									Grab
3	12/3/19		Aeration Reactor	250	P	1	WW	None			/								Grab
~~4~~	~~11~~			~~250~~	~~P~~	~~1~~	~~WW~~	~~H2SO4~~				V							Comp

Relinquished by:	Date / Time	Received by:	Relinquished by:	Date / Time	Received by:
[redacted]	12/3/19 1135	Boones Refrig			12-3-19 [redacted]
Relinquished by: [redacted]	Date / Time 12-3-19 1:30	Received by:	Relinquished by:	Date / Time	Received for Laboratory By:

Method of Shipment

Remarks: * NO NH3 BOTTLE MIS LABLED per [redacted]

	YES	NO
Samples Iced	✓	
Samples Preserved	✓	✓

Chesapeake Environmental Lab, Inc.

P. O. Box 946
Stevensville, MD 21666

Celebrating 25 Years of Excellence!
1991 - 2016

Bill To

Horizon Land Company
2138 Espey Court
Crofton, MD 21114

Invoice

Invoice Date	Invoice #	P.O. No.	Vender ID #:	Project
12/17/2019	121089			Maryland Manor WWTP

Quantity	Date	Description	Rate	Amount
	12-10-19	BOD Analysis Bacteria - Ecoli Analysis Total Suspended Solids Analysis MLSS Analysis	(b) (4) [redacted]	(b) (4) [redacted]

	Total	(b) (4) [redacted]
	Payments/Credits	[redacted]
	Balance Due	[redacted]

Any account having an outstanding balance for more than 30 days will be charged a rebilling fee on that outstanding balance of $5.00 per month.

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Fax 410-643-0801
St. #181

WASTE WATER ANALYSIS REPORT

CASE #: 121089
REQUESTED BY: Horizon Land Co. LLC
1091 Mt. Zion – Marlboro Rd
Lothian, Md 20711

SAMPLE SITE: Maryland Manor WWTP

MATRIX: Waste Water
SOURCE: Maryland Manor Effluent Composite / Grab / Aeration Reactor
DATE/TIME COLLECTED: 12-10-19 / 8:05am
COLLECTED BY: [redacted] (b) (4)
DATE RECEIVED BY LAB: 12-10-19
REPORT DATE: 12-17-19

Parameter	Results	Units	Detection Limit	Date/Time Analyzed	Method	Analyst
BOD	3.68	mg/L	1.0	12-11-19 / 8:05am	SM5210B	CD
Escherichia Coli	<1.0	MPN	1.0	12-10-19 / 3:34 pm	SM 9223B	MW
TSS	16.0	mg/L	0.5	12-12-19 / 1:02 pm	SM2540D	DD
MLSS	6,020	mg/L	0.5	12-12-19 / 10:30am	SM2540D	CD

Comments:

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Dominic DiGiovine

Dominic DiGiovine
Laboratory Director

CHAIN OF CUSTODY RECORD

PROJECT NAME Maryland Manor WWTP
COMPANY Pro-Start / Horizon Properties
ADDRESS 1091 Mt. Zion Marboro Rd Lothian Md
PHONE ( )

[redacted]

121089

PRINT NAME

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SAMPLE NO.	DATE	TIME	SAMPLE LOCATION	CONTAINER SIZE	CONTAINER G/P	NO. OF CONTAINERS	SAMPLE MATRIX	PRESERVATIVE	TSS-BOD	E-Coli	MLSS								COMMENTS
1	12-10-19	0950	Final Eff	1L	P	1	WW	None	1										Grab
2	" "	0950	Final Eff	100	P	1	WW	H_2SO_4		1									Grab
3	" "	0950	Aeration Reactor	250	P	1	WW	None			1								Grab

Relinquished by:	Date / Time	Received by:	Relinquished by:	Date / Time	Received by:
[redacted]	12/10/19 1110				12-10-19 12:30 [redacted]
[redacted]	12-10-19 12:30				[redacted] 12/10/19

Method of Shipment: CEL Tech

Remarks:

	YES	NO
Samples Iced	✓	
Samples Preserved	✓	

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WASTE WATER ANALYSIS REPORT

CASE #: 121225
REQUESTED BY: Horizon Land Co. LLC
1091 Mt. Zion – Marlboro Rd
Lothian, Md 20711

SAMPLE SITE: Maryland Manor WWTP

MATRIX: Waste Water
SOURCE: Final Effluent / Aeration Reactor / Grab
DATE/TIME COLLECTED: 12-17-19 / 9:45am
COLLECTED BY: [redacted] (b) (4)
DATE RECEIVED BY LAB: 12-17-19
REPORT DATE: 01-07-2020

Parameter	Results	Units	Detection Limit	Date/Time Analyzed	Method	Analyst
Ammonia	0.108	mg/L	0.1	12-27-19 / 1:30pm	SM4500NH3-D	DD
BOD	7.62	mg/L	1.0	12-18-19 / 8:10am	SM5210B	CD
Escherichia Coli	8.7	MPN	1.0	12-17-19 / 2:54pm	SM 9223B	TD
Nitrate/Nitrite	21.45	mg/L	0.0998	12-30-19 / 3:16pm	EPA300.0	BDW*
Ortho Phosphorous	1.70	mg/L	0.1	12-17-19 / 4:00pm	SM4500-P-E	CD
Total Phosphorous	2.57	mg/L	0.1	1-1-2020 / 11:00am	SM4500-P B+E	CD
TKN	1.750	mg/L	0.50	12-31-19 / 7:03pm	SM4500NorgC	PRA*
TSS	41.0	mg/L	0.5	12-19-19 / 1:40pm	SM2540D	DD
MLSS	6,325	mg/L	0.5	12-23-19 / 10:25am	SM2540D	CD

Comments:

- SM - Standard Methods 22nd ed.
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Dominic DiGiovine

Dominic DiGiovine
Laboratory Director

CHAIN OF CUSTODY RECORD

PROJECT NAME Maryland Manor
COMPANY Prostart / Horizon Properties
ADDRESS 1091 Mt Zion Marlboro Rd Lothian Md
PHONE ( )

[redacted]

PRINT NAME

121225

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SAMPLE NO.	DATE	TIME	SAMPLE LOCATION	CONTAINER SIZE	CONTAINER G/P	NO. OF CONTAINERS	SAMPLE MATRIX	PRESERVATIVE	BOD-TSS	E-Coli	MLSS	NO2 NO3 TKN TP	NH3	ORTHO-P					COMMENTS
1	12/17/19	0945	Final Eff	1L	P	1	WW	None	1										~~Composite~~ Grab
1	" "	0945	Final Eff	100ml	P	1	WW	None		1									Grab
1	" "	0945	Aeration Reactor	250ml	P	1	WW	None			1								Grab
1	" "	0945	Final Eff	250	P	1	WW	H_2SO_4				1							~~Composite~~ Grab
1	" "	0945	Final Eff	250	P	1	WW	None					1						~~Composite~~ Grab

Relinquished by:	Date / Time	Received by:	Relinquished by:	Date / Time	Received by:
[redacted]	12/17/19 1030	Boones refrig.			12-17-19 11:55 [redacted]
Relinquished by: [redacted]	12-17-19 1:40	Received by:	Relinquished by:	Date / Time	12/17/19 2pm [redacted]

Method of Shipment: CEL Tech

Remarks: CEL to Filter ortho Phos

	YES	NO
Samples Iced	✓	
Samples Preserved	/	

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WASTE WATER ANALYSIS REPORT

CASE #: 121281
REQUESTED BY: Horizon Land Co. LLC
1091 Mt. Zion – Marlboro Rd
Lothian, Md 20711

SAMPLE SITE: Maryland Manor WWTP

MATRIX: Waste Water
SOURCE: Maryland Manor Composite / Final Eff / Grab / Aeration Reactor
DATE/TIME COLLECTED: 12-23-19 / 8:45am
COLLECTED BY: [redacted] (b) (4)
DATE RECEIVED BY LAB: 12-23-19
REPORT DATE: 01-02-20

Parameter	Results	Units	Detection Limit	Date/Time Analyzed	Method	Analyst
Ammonia	0.303	mg/L	0.1	12-31-19 / 3:00pm	SM4500NH3-D	CD
BOD	7.10	mg/L	1.0	12-24-19 / 8:20am	SM5210B	CD
Escherichia Coli	>200.5	MPN	1.0	12-23-19 / 1:35pm	SM 9223B	MW
TSS	307	mg/L	0.5	12-27-19 / 3:05pm	SM2540D	DD
MLSS	3,000	mg/L	0.5	12-26-19 / 8:30am	SM2540D	CD

Comments:

- SM - Standard Methods 22nd ed.
- This report relates only to the samples as received by the laboratory and may only be reproduced in full.
- * MD 275

Dominic DiGiovine

Dominic DiGiovine
Laboratory Director

Weekly

CHAIN OF CUSTODY RECORD

PROJECT NAME Maryland Manor
COMPANY ProStaff/Horizon Properties
ADDRESS 1091 Mt. Zion Marlboro Rd Lothian Md
PHONE ( )
[redacted]
PRINT NAME

121281

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SAMPLE NO.	DATE	TIME	SAMPLE LOCATION	CONTAINER SIZE	CONTAINER G/P	NO. OF CONTAINERS	SAMPLE MATRIX	PRESERVATIVE	BOD-TSS	E-Coli	NH_3	MLSS	COMMENTS
1	12/23/19	0845	Final Eff	1L	P	1	WW	None	1				Composite Grab
2	" "	0845	Final Eff	100ml	P	1	WW	None		1			Grab
3	" "	0845	Final Eff	250ml	P	1	WW	H_2SO_4			1		Composite Grab
4	" "	0845	Aeration Reactor	250ml	P	1	WW	None				1	Composite Grab
													Sampler o/s

Relinquished by:	Date / Time	Received by:	Relinquished by:	Date / Time	Received by:
[redacted]	12-23-19 0845	Boones Beefrig			12-23-19 [redacted]
Relinquished by: [redacted]	Date / Time 12-23-19 11:50A	Received by:	Relinquished by:	Date / Time	Received for Laboratory by: [redacted] 12-23-19 1750

Method of Shipment: CEL TECH

Remarks:

	YES	NO
Samples Iced	✓	
Samples Preserved	✓	

Maryland Manors package plant
1500 Berkley Ct Harwood
Daily operational log sheet

Month DECEMBER Date ###### Submitted by (b) (4) Operator # _____

operator	Date	day of week	Time	Weather	Temp Deg F	Rain inches	odor	raw pH	BOD	Color	MLSS	30 min set	SVI	reactor temp	DO mg/l	blanket feet	NH4 mg/l	ALK mg/l	NOx mg/l	waste min	Final temp C	pH	D O mg/l	UVI
JB/CH	1	S	1600	RAIN	43	0.75	NO	7.5		BRN	5910	600	102	15.7	7.1	10				0	15.5	7.1	7.0	0.1
JB/CH	2	**M**	1515	RAIN	42	0.5	NO	7.4		BRN	5910	590	100	15.4	7	10				30	15.1	7.0	6.9	0.0
JB/CH	3	T	150	CLR	47	0	NO	7.5		BRN	5910	600	102	15 2	7	10	0.5	6	100	30	15.2	7.0	6.8	0.1
JB/CH	4	W	1515	CLR	48	0	NO	7.2		BRN	6020	600	100	15.7	7.1	10				0	15.1	6.9	7.0	0.0
TH/DB	5	T	**1035**	CLR	42	0	NO	7.4		BRN	6020	550	91	14 8	8.4	8.5	0.25	6	100	0	14.5	7.1	8.0	0.1
TH/DB	6	F	1045	CLR	44	0	NO	7.3		BRN	6020	590	98	14.7	8.4	6				0	14.8	7.0	7.8	0.2
LN	7	S	950	CLR	37	0	NO	7.1		BRN	6020	550	91	14 9	8.5	6				0	14.3	7.0	7.7	0.0
DB	8	S	1200	CLR	46	0	NO	7.2		BRN	6020	500	83	14 6	8.3	8				0	14.1	6.7	6.9	0.0
JB/CH	9	**M**	1515	RAIN	49	0.25	NO	7.1		BRN	6020	600	100	14.4	8.4	10				30	14.1	6.8	6.9	0.0
JB/CH	10	T	1515	RAIN	52	0.25	NO	6.6		BRN	6020	590	98	16.1	4.2	10	0.5	6	100	0	17.9	6.6	7.4	0.0
LN/DB	11	W	1200	CLR	40	0	NO	7.1		BRN	6325	460	73	14.7	9.5	8				0	14.5	6.9	7.5	0.1
LN/DB	12	T	**1130**	CLR	37	0	NO	6.9		BRN	6325	500	79	14 2	8.9	8	0.25	6	100	0	13.9	6.9	7.4	0.0
TH/DB	13	F	1030	CLR	34	0.15	NO	7.1		BRN	6325	540	85	14	9	9				0	13.6	6.9	7.5	0.0
TH/DB	14	S	1030	RAIN	40	0	NO	7.1		BRN	6325	550	87	14.7	8.8	10				30	14.7	6.6	6.8	0.0
JB/CH	15	S	845	CLR	40	0	NO	7		BRN	6325	580	92	14	7.9	10				30	14.1	6.7	6.9	0.0
JB/CH	16	**M**	1500	RAIN	38	0.1	NO	7		BRN	6325	580	92	13 9	7.6	10				0	13.9	6.9	6.8	0.0
JB/CH	17	T	1400	RAIN	38	0.1	NO	6.9		BRN	6325	600	95	14 3	6.9	10	0.25	6	100	0	14.2	6.9	7.0	0.1
JB/CH	18	W	1515	CLR	40	0	NO	6.9		BRN	3000	600	200	14.1	6.8	10				15	13.8	6.8	6.9	0.1
DB/LN	19	T	**1140**	CLR	26	0	NO	6.9		BRN	3000	600	200	12.5	7.9	10	0.25	3	100	0	12.7	7.1	8.0	0.2
DB	20	F	1530	CLR	36	0	NO	7.1		BRN	3000	600	200	12.7	7.4	10				0	12.6	6.7	8.6	0.2
LN	21	S	1040	CLR	35	0	NO	7.1		BRN	3000	600	200	12.1	7.5	10				0	12.8	6.8	8.0	0.2
JB/CH	22	S	940	CLR	29	0	NO	6.9		BRN	3000	620	207	12.1	6.9	10				30	12.1	6.9	7.9	0.0
JB/CH	23	**M**	1510	CLR	58	0	NO	6.8		BRN	3000	500	167	12.7	7.1	10				30	13.1	6.9	7.0	0.0
JB/CH	24	T	1045	CLR	47	0	NO	6.8		BRN	3000	500	167	12 9	7	9	5	3	100	30	13.9	6.8	7.1	0.1
LN	25	W	1245	CLR	45	0	NO	6.7		BRN	3000	500	167	12.1	7	9				0	13.8	6.8	7.4	
LN/TH	26	T	**1015**	CLR	36	0	NO	6.9		BRN	3000	600	200	13.1	9.7	5	0.25	3	100	30	12.2	7.2	8.4	0.2
TH	27	F	1100	CLR	46	0	NO	6.4		BRN	3000	450	150	12.4	9.8	6				0	12.6	6.5	7.5	0.2
LN/TH	28	S	1000	CLR	58	0	NO	6.6		BRN	3000	500	167	14 3	7.8	7.5				0	14.6	7.6	6.9	0.1
JB/CH	29	S	1030	CLDY	48	0	NO	6.7		BRN	3000	580	193	14 6	7.8	10				30	14.2	6.9	6.8	0.0
JB/CH	30	**M**	1515	CLR	58	0.1	NO	6.8		BRN	3000	570	190	14 9	7.1	8.5				30	14.8	6.8	7.0	0.2
JB/CH	31	**T**	1415	CLR	45	0	NO	7.1		BRN	3000	550	183	15.1	7	9	9	6	100	0	15.7	6.9	6.4	0.1
																							7.3	

Maryland Manor Totalizer readings

Date	Final Flow	GPD	MG	Pump 1	total	Pump 2	total	UV	total	
12/01/2019	42740699	42397	0.042		0	52614.3	3	1291	30	
12/02/2019	42783096	44347	0.044		0	52617.3	0.3	1321	24	
12/03/2019	42827443	48454	0.048		0	52617.6	2.9	1345	24	
12/04/2019	42875897	38791	0.039		0	52620.5	2.3	1369	20	
12/05/2019	42914688	40453	0.040		0	52622.8	2.6	1389	24	
12/06/2019	42955141	39247	0.039		0	52625.4	2.5	1413	23	
12/07/2019	42994388	49303	0.049		0	52627.9	3.1	1436	25	
12/08/2019	43043691	50386	0.050		0	52631	3.1	1461	28	
12/09/2019	43094077	44724	0.045		0	52634.1	2.5	1489	24	
12/10/2019	43138801	39245	0.039		0	52636.6	2.2	1513	21	
12/11/2019	43178046	42070	0.042		0	52638.8	2.7	1534	23	
12/12/2019	43220116	42146	0.042		0	52641.5	2.6	1557	23	
12/13/2019	43262262	41499	0.041		0	52644.1	2.5	1580	25	
12/14/2019	43303761	41073	0.041		0	52646.6	2.3	1605	21	
12/15/2019	43344834	60900	0.061		0	52648.9	3.6	1626	31	
12/16/2019	43405734	44236	0.044		0	52652.5	2.6	1657	12	
12/17/2019	43449970	44232	0.044		0	52655.1	2.8	1669	36	
12/18/2019	43494202	37898	0.038		0	52657.9	2.5	1705	21	
12/19/2019	43532100	50896	0.051		0	52660.4	3.4	1726	29	
12/20/2019	43582996	31103	0.031		0	52663.8	2	1755	17	
12/21/2019	43614099	44027	0.044		0	52665.8	2.6	1772	23	
12/22/2019	43658126	61639	0.062		0	52668.4	3.8	1795	30	
12/23/2019	43719765	35952	0.036		0	52672.2	2.1	1825	19	
12/24/2019	43755717	53415	0.053		0	52674.3	3.1	1844	26	
12/25/2019	43809132	35550	0.036		0	52677.4	2.2	1870	22	
12/26/2019	43844682	46008	0.046		0	52679.6	2.9	1892	25	
12/27/2019	43890690	41126	0.041		0	52682.5	2.6	1917	24	
12/28/2019	43931816	41906	0.042		0	52685.1	2.5	1941	23	
12/29/2019	43973722	57291	0.057		0	52687.6	3.4	1964	29	
12/30/2019	44031013	53806	0.054		0	52691	3	1993	23	
12/31/2019	44084819	45863	0.046		0	52694	2.6	2016	21	
	44130682				0	52696.6		2037		
AVG	**43401791**	**44838**	**0.045**	#DIV/0!	0	**52652.7**	**2.7**	**1654**	**24**	#DIV/0!
MAX	**44084819**	**61639**	**0.062**		0		**3.6**		**36**	
MIN	**42740699**	**31103**	**0.031**	0	0	**52614.3**	**0.3**	**1291**	**12**	0

Date	Raw pH	Rain	reactor DO	30 min. SET.	Blanket	reactor temp	Final pH	Final Flow	Final Temp	Final DO	UV Intensity	BOD	TSS	NH3	NO2	NO3	TOTAL P	TOTAL OP	E Coli	TKN	P+H Volume
12/01/2019	7.50	0.75	7.10	600	10.00	15.7	7.10	42397	15.50	7.00	0.10										
12/02/2019	7.40	0.50	7.00	590	10.00	15.4	7.00	44347	15.10	6.90	0.00										
12/03/2019	7.50	0.00	7.00	600	10.00	15.2	7.00	48454	15.20	6.80	0.10	**6.7**	**7.00**						**0.10**		
12/04/2019	7.20	0.00	7.10	600	10.00	15.7	6.90	38791	15.10	7.00	0.00										
12/05/2019	7.40	0.00	8.40	550	8.50	14.8	7.10	40453	14.50	8.00	0.10										
12/06/2019	7.30	0.00	8.40	590	6.00	14.7	7.00	39247	14.80	7.80	0.20										
12/07/2019	7.10	0.00	8.50	550	6.00	14.9	7.00	49303	14.30	7.70	0.00										
12/08/2019	7.20	0.00	8.30	500	8.00	14.6	6.70	50386	14.10	6.90	0.00										
12/09/2019	7.10	0.25	8.40	600	10.00	14.4	6.80	44724	14.10	6.90	0.00										
12/10/2019	6.60	0.25	4.20	590	10.00	16.1	6.60	39245	17.90	7.40	0.00	**3.7**	**16.00**						**0.10**		
12/11/2019	7.10	0.00	9.50	460	8.00	14.7	6.90	42070	14.50	7.50	0.10										
12/12/2019	6.90	0.00	8.90	500	8.00	14.2	6.90	42146	13.90	7.40	0.00										
12/13/2019	7.10	0.15	9.00	540	9.00	14	6.90	41499	13.60	7.50	0.00										2200
12/14/2019	7.10	0.00	8.80	550	10.00	14.7	6.60	41073	14.70	6.80	0.00										
12/15/2019	7.00	0.00	7.90	580	10.00	14	6.70	**60900**	14.10	6.90	0.00										
12/16/2019	7.00	0.10	7.60	580	10.00	13.9	6.90	44236	13.90	6.80	0.00										
12/17/2019	6.90	0.10	6.90	600	10.00	14.3	6.90	44232	14.20	7.00	0.10	**7.62**	**41**	**0.11**		**21.45**	**2.57**	**1.7**	**8.7**	**1.75**	
12/18/2019	6.90	0.00	6.80	600	10.00	14.1	6.80	37898	13.80	6.90	0.10										
12/19/2019	6.90	0.00	7.90	600	10.00	12.5	7.10	50896	12.70	8.00	0.20										2200
12/20/2019	7.10	0.00	7.40	600	10.00	12.7	6.70	31103	12.60	8.60	0.20										
12/21/2019	7.10	0.00	7.50	600	10.00	12.1	6.80	44027	12.80	8.00	0.20										
12/22/2019	6.90	0.00	6.90	620	10.00	12.1	6.90	61639	12.10	7.90	0.00										
12/23/2019	6.80	0.00	7.10	500	10.00	12.7	6.90	35952	13.10	7.00	0.00	**7.1**	**307**	**0.3**					**200.5**		
12/24/2019	6.80	0.00	7.00	500	9.00	12.9	6.80	53415	13.90	7.10	0.10										
12/25/2019	6.70	0.00	7.00	500	9.00	12.1	6.80	35550	13.80	7.40	0.00										
12/26/2019	6.90	0.00	9.70	600	5.00	13.1	7.20	46008	12.20	8.40	0.20										
12/27/2019	6.40	0.00	9.80	450	6.00	12.4	6.50	41126	12.60	7.50	0.20										
12/28/2019	6.60	0.00	7.80	500	7.50	14.3	7.60	41906	14.60	6.90	0.10										
12/29/2019	6.70	0.00	7.80	580	10.00	14.6	6.90	**57291**	14.20	6.80	0.00										
12/30/2019	6.80	0.10	7.10	570	8.50	14.9	6.80	53806	14.80	7.00	0.20										
12/31/2019	7.10	0.00	7.00	550	9.00	15.1	6.90	45863	15.70	6.40	0.10										
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.30	0.00										

AVG	7.00	0.07	7.74	559.68	8.95	14.09	**6.89**	44838	14.14	**7.30**	0.07	**6.3**	**92.75**	**0.204**		**21.45**	**2.57**	**1.7**	**2.0437**		
MAX	7.50	0.75	9.80	620.00	10.00	16.10	**7.60**	61639	17.90	**8.60**	0.20	**7.62**	**307.0**	**0.30**							
MIN	6.40	0.00	4.20	450.00	5.00	12.10	**6.50**	31103	12.10	**6.40**	0.00	**3.68**	**7.00**	**0.108**							
																			Geo Mean		4400