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 10/01/19 to 10/31/19**	**DMR Due Date:**	**11/28/19**	**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:		**Title:**		**Telephone:**	
Last Name:					

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						=	5.3	=	6.42			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	=	2.42	=	6.57	26 - lb/d			=	6.05	=	16.4	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															
X 00400	pH	1 - Effluent Gross	0	--	Sample						=	6.3			=	7.7	12 - SU		01/01 - Daily	GR - GRAB
					Permit Req.						>=	6.5 MINIMUM			<=	8.5 MAXIMUM	12 - SU	1	01/01 - Daily	GR - GRAB
					Value NODI															
X 00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample	=	7 93	=	24.42	26 - lb/d			=	19.8	=	61.0	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								=	19.52			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			=	242.24	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			=	3175.74	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								=	0.42			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								=	1.64			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								=	17.46			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								=	2.27			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			=	28.17	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			=	346.0	50 - lb/yr									01/30 - Monthly	CA - CALCTD
					Permit Req.				Req Mon CUM TOTL	50 - lb/yr									01/30 - Monthly	CA - CALCTD
					Value NODI															
X 04175	Phosphate, ortho [as P]	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon MO AVG			19 - mg/L		01/30 - Monthly	08 - COMP-8
					Value NODI									E - Analysis Not Conducted/No Sample						
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample	=	0 048	=	0.077	03 - MGD									99/99 - Con inuous	RC - Recorder (auto)
					Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD									99/99 - Con inuous	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										=	9.779	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			=	1.486	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	Quality or Concentration Sample Value 3	Soft	The provided sample value is outside the permit limit. (Error Code: 1)	Yes
00400	pH	1 - Effluent Gross	Quality or Concentration Sample Value 1	Soft	The provided sample value is outside the permit limit. (Error Code: 1)	Yes
04175	Phosphate, ortho [as P]	1 - Effluent Gross	Quality or Concentration Sample Value 2	Soft	EPA's NPDES national data system recognizes the selected No Data Indicator (NODI) code as a reporting violation. NPDES permittees are respons ble for ensuring full compliance with their permits, the Clean Water Act, and state law. (Error Code: 5)	Yes

Comments

See attached non compliance report for exceedance explanation:

Attachments

Name	Type	Size
10-8-19.pdf	pdf	2230762.0
MDM-MOR-OCT-2019.xlsx	xlsx	88285.0
10-15-19.pdf	pdf	1022240.0
10-4-19.pdf	pdf	53088.0
10-22-19.pdf	pdf	537725.0
10-24-19-EC.pdf	pdf	521444.0
10-29-19.pdf	pdf	909090.0
MDM-MHC-NC-OCTOBER-2019.docx	docx	20798.0

Report Last Saved By

MARYLAND MOBILE ESTATES, LLC

User: [redacted] (b) (6)

Name: jack bradshaw

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

Date/Time: 2020-01-23 09:59 (Time Zone: -05:00)

Report Last Signed By

User: [redacted] (b) (6)

Name: jack bradshaw

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

Date/Time: 2020-01-23 09:59 (Time Zone: -05:00)

Professional Startup Services
3414 Baywood Rd.
Forest Hill, MD 21050
Attention: Bill Farrell

Report for Lab No: 45287.
Samples received by Martel
Project Identification: Maryland Manor MHP WWTP - 10/4/19

Wednesday, October 16, 2019

Certificate of Analysis

FINAL

MARTEL NO.		CLIENT SAMPLE IDENTIFICATION	Sample Date/Time
45287	000001	PLANT EFFLUENT COMP	10/03/2019 14:00

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Biochemical Oxygen Demand	<2	mg/l	SM 5210 B-01	2	10/04/2019 14:50 IO
Solids (Suspended)	<1	mg/l	SM 2540 D-97	1	10/09/2019 14:10 IO

MARTEL NO.		CLIENT SAMPLE IDENTIFICATION	Sample Date/Time
45287	000002	PLANT EFFLUENT GRAB	10/04/2019 09:00

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Escherichia Coli, Quantitray	<1	mpn/100ml	SM Coliler MPN	1	10/04/2019 13:22 MA

1025 Cromwell Bridge Road - Baltimore, Maryland 21286
PH 410-825-7790 FAX 410-821-1054 EMAIL: martel@martellabs.com

stddlxxy.frx

Notes and references:

40CFR136=U.S. "Code of Federal Regulations", Title 40, Protection of the Environment, Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act. SM="Standard Methods for the Examination of Water and Wastewater", American Public Health Association, American Water Works Association, and Water Environment Federation.

All samples tested were in acceptable condition, unless otherwise noted.
The results presented herein relate only to the samples or items tested.

[redacted] (b) (4)
Project Manager

CHAIN OF CUSTODY / SAMPLE INFORMATION FORM

Martel Laboratories JDS Inc. • 1025 Cromwell Bridge Road • Baltimore, MD 21286 • (410) 825-7790 • FAX (410) 821-1054

Martel Log # 45287 Client Code PROFES

Client Name/Phone/FAX: MD Manor WWTP

Client Address:

Email Address: Prostart

Sampler [redacted] (b) (4)

Project Name/#

Contract/P.O Number Prostart

Sample Turnaround Time routine

Station No./ Sample ID	Station Location	Matrix	Container Description/Preservation Status	# of Containers	Date	Time	Analyses Required/Comments
1	PLANT EFFLUENT COMP.	WAW	950 mL Plastic- None	2	10-3-19	14:00	BOD, SS
	~~PLANT EFFLUENT COMP.~~	~~WAW~~	~~500 mL- H2SO4~~	~~1~~			~~NH3, TKN, AP~~
2	PLANT EFFLUENT	WAW	120 mL- Sterile Thio	1	10-4-19	9:00am	ECOLIQ

[redacted] (b) (4)

Received [redacted] (b) (4)	Date 10-4-19	Time 12:30	
Received by:	Date	Time	
Received by:	Date	Time	

Cooler Receipt Information (LAB USE ONLY)

Received on ice/ice packs? - Yes/No temp.= 23.02

Sample containers pres'd? - Yes/No If No, explain

Custody Seal present/intact? - Yes/No N/A

Initials: AT Date: 10-4-19

Chesapeake Environmental Lab, Inc.

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Stevensville, MD 21666

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Bill To

Horizon Land Company
2138 Espey Court
Crofton, MD 21114

Invoice

Invoice Date	Invoice #	P.O. No.	Vender ID #:	Project
10/16/2019	119865			Maryland Manor WWTP

Quantity	Date	Description	Rate	Amount
	10-08-19	BOD Analysis Bacteria - Ecoli Analysis Total Suspended Solids 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

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Fax 410-643-0801
St. #181

WASTE WATER ANALYSIS REPORT

CASE #: 119865
REQUESTED BY: Pro Start / Horizon Properties
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: 10-08-19 / 9:00am
COLLECTED BY: [redacted] (b) (4)
DATE RECEIVED BY LAB: 10-08-19
REPORT DATE: 10-15-19

Parameter	Results	Units	Detection Limit	Date/Time Analyzed	Method	Analyst
BOD	1.56	mg/L	1.0	10-09-19 / 12:20pm	SM5210B	CD
Escherichia Coli	<1.0	MPN	1.0	10-08-19 / 1:54pm	SM 9223B	MW
TSS	3.0	mg/L	0.5	10-10-19 / 1:30pm	SM2540D	CD

Comments:

- SM - Standard Methods 22nd ed.
- *MD 275
- 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 WWTP
COMPANY Pro Start / Horizon Properties
ADDRESS 1091 Mt-Zion-Marlboro Rd Lothian, Md
PHONE ( )

[redacted]

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119865

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info@celinc.net
www.ChesapeakeEnvironmentalLab.com

SAMPLE NO.	DATE	TIME	SAMPLE LOCATION	CONTAINER SIZE	CONTAINER G/P	NO. OF CONTAINERS	SAMPLE MATRIX	PRESERVATIVE	ANALYSES: BOD5-TSS	ANALYSES: Ecoli	COMMENTS
1	10-8-19	9AM	Maryland Manor EFF	1L	P	1	WW	—	1		Composite
2	10-8-19	9AM	Maryland Manor EFF	100ML	P	1	WW	Sodium T		1	Grab
											TIME ON BOTTLE 9AM

Relinquished by:	Date / Time	Received by:	Relinquished by:	Date / Time
[redacted]	10/8/19 0950	Boones Refrig.		[redacted] 10-8-19 1:20
[redacted]	10-8-19 12p			[redacted] 10/8/19 1300

Method [redacted]

Remarks:

	YES	NO
Samples Iced	✓	
Samples Preserved		

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St. #181

WASTE WATER ANALYSIS REPORT

CASE #: 119999
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 / E coli
DATE/TIME COLLECTED: 10-15-19 / 9:25am
COLLECTED BY: (b) (4)
DATE RECEIVED BY LAB: 10-15-19
REPORT DATE: 11-08-19

Parameter	Results	Units	Detection Limit	Date/Time Analyzed	Method	Analyst
Ammonia	2.06	mg/L	0.1	10-24-19 / 4:10pm	SM4500NH3-D	DD
BOD	16.4	mg/L	1.0	10-16-19 / 12:20pm	SM5210B	CD
Escherichia Coli	2.0	MPN	1.0	10-15-19 / 3:03pm	SM 9223B	MW
Nitrate/Nitrite	17.46	mg/L	0.0998	10-28-19 / 8:17pm	EPA300.0	BDW*
Total Phosphorous	2.27	mg/L	0.1	10-21-19 / 1:05pm	SM4500-P B+E	CD
TKN	1.640	mg/L	1.00	10-29-19 / 2:41am	SM4500NorgC	PRA*
TSS	61.0	mg/L	0.5	10-16-19 / 3:00pm	SM2540D	CD

Comments:

- SM - Standard Methods 22nd ed.
- * MD 275
- 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 WWTP
COMPANY Prostart / Horizon Properties
ADDRESS 1691 Mt-Zion-Marlboro Rd Lothian, Md.
PHONE ( )

[redacted]

119999

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SAMPLE NO.	DATE	TIME	SAMPLE LOCATION	CONTAINER SIZE	CONTAINER G/P	NO. OF CONTAINERS	SAMPLE MATRIX	PRESERVATIVE	ANALYSES: BOD5-TSS	ANALYSES: NH3-N, NO2-N, NO3-N, TP	ANALYSES: E.coli	COMMENTS
1	10-15-19	925	Maryland Manor EFF	1L	P	1	WW	—	1			composite
2	10-15-19	925	Maryland Manor EFF	1L	P	1	WW	H_2SO_4		1		samples
3	10-15-19	925	Maryland Manor EFF	100ml	P	1	WW	Sodium			1	JG 10-15-19

Relinquished by:	Date / Time	Received by:	Relinquished by:	Date / Time	Received by:
[redacted]	10-15-19 1026	10-15-19 [redacted]	[redacted]	10-15-19 2p	
Relinquished by:	Date / Time	Received by:	Relinquished by:	Date / Time	[redacted]

Method of Shipment

Remarks:

	YES	NO
Samples Iced	✓	
Samples Preserved	✓	

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Bill To

Horizon Land Company
2138 Espey Court
Crofton, MD 21114

Invoice

Invoice Date	Invoice #	P.O. No.	Vender ID #:	Project
10/31/2019	120142			Maryland Manor

Quantity	Date	Description	Rate	Amount
	10-22-19	BOD Analysis Total Suspended Solids 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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WASTE WATER ANALYSIS REPORT

CASE #: 120142
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
DATE/TIME COLLECTED: 10-22-19 / 10:15am
COLLECTED BY: [redacted] (b) (4)
DATE RECEIVED BY LAB: 10-22-19
REPORT DATE: 10-29-19

Parameter	Results	Units	Detection Limit	Date/Time Analyzed	Method	Analyst
BOD	7.0	mg/L	1.0	10-23-19 / 11:35am	SM5210B	CD
TSS	25.0	mg/L	0.5	10-24-19 / 11:00am	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 WWTP
COMPANY Pro-Start Horion Properties
ADDRESS 1018 Mt. Zion Marlboro Rd Lothian Md
PHONE ( )

(b) (4)

PRINT NAME

120142

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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	COMMENTS
1	10-22-19	1015	Maryland Manor EFF	1L	P	1	WW	—	1		Composit
2	10-22-19		Maryland Manor EFF	100ml	P	1	WW	—		1	~~Composit~~ Grab

Relinquished by:	Date / Time	Received by:	Relinquished by:	Date / Time	Received by:
(b) (4)	10-22-19 1010	Boones refrig.			(b) (4) 10 22 19 1220
	10-22-19				(b) (4) 10/22/19 2pm

Method of Shipment

Remarks: * Recollect E-coli

	YES	NO
Samples Iced	✓	
Samples Preserved		

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Horizon Land Company
2138 Espey Court
Crofton, MD 21114

Invoice

Invoice Date	Invoice #	P.O. No.	Vender ID #:	Project
10/31/2019	120206			Marlyland Manor

Quantity	Date	Description	Rate	Amount
	10-24-19	Bacteria - Ecoli Analysis	(b) (4)	(b) (4)

	Total	(b) (4)
	Payments/Credits	
	Balance Due	

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WASTE WATER ANALYSIS REPORT

CASE #: 120206
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: 10-24-19 / 8:30am
COLLECTED BY: [redacted] (b) (4)
DATE RECEIVED BY LAB: 10-24-19
REPORT DATE: 10-29-19

Parameter	Results	Units	Detection Limit	Date/Time Analyzed	Method	Analyst
Escherichia Coli	>200.5	MPN	1.0	10-24-19 / 3:27pm	SM 9223B	TD

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

120206

CHAIN OF CUSTODY RECORD

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

[redacted]

PRINT NAME

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SAMPLE NO.	DATE	TIME	SAMPLE LOCATION	CONTAINER SIZE	CONTAINER G/P	NO. OF CONTAINERS	SAMPLE MATRIX	PRESERVATIVE	ANALYSES: E coli										COMMENTS
2	10-24-19	8:30	Maryland Manor Eff	100ML	P	1	WW	None	1										

Relinquished by:	Date / Time	Received by:	Relinquished by:	Date / Time	Received by:
[redacted]	10-24-18 0915	Bonnes refrig			[redacted] 10-24-19 1302
[redacted]	10-24-19				Received for Laboratory by: 10-24-19 [redacted]

Method of Shipment

Remarks:

	YES	NO
Samples Iced	✓	
Samples Preserved		

Chesapeake Environmental Lab, Inc.

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Crofton, MD 21114

Invoice

Invoice Date	Invoice #	P.O. No.	Vender ID #:	Project
11/5/2019	120277			Maryland Manor WWTP

Quantity	Date	Description	Rate	Amount
	10-29-19	BOD Analysis Bacteria - Ecoli Analysis Total Suspended Solids Analysis	(b) (4) [redacted]	(b) (4) [redacted]

	Total	(b) (4) [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**	**Payments/Credits**
		Balance Due

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

Chesapeake Environmental Lab Inc.

A Water Quality Laboratory

Water Analysis . Well & Septic Inspection
P.O. Box 946 . Stevensville, MD 21666
www.ChesapeakeEnvironmentalLab.com
1-800-300-TEST . 410-643-0800
Fax 410-643-0801
St. #181

WASTE WATER ANALYSIS REPORT

CASE #: 120277
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: 10-29-19 / Not Listed
COLLECTED BY: [redacted] (b) (4)
DATE RECEIVED BY LAB: 10-29-19
REPORT DATE: 11-05-19

Parameter	Results	Units	Detection Limit	Date/Time Analyzed	Method	Analyst
BOD	3.85	mg/L	1.0	10-30-19 / 9:45am	SM5210B	CD
Escherichia Coli	4.2	MPN	1.0	10-29-19 / 3:32pm	SM 9223B	MW
TSS	11.0	mg/L	0.5	10-30-19 / 12:21pm	SM2540D	DD

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

120277

CHAIN OF CUSTODY RECORD

PROJECT NAME: Maryland Manor
COMPANY: Pro-Stadt / Housing Properties
ADDRESS: 1091 Mt Zion - Marlboro Rd
PHONE: ( )

[redacted]

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SAMPLE NO.	DATE	TIME	SAMPLE LOCATION	CONTAINER SIZE	CONTAINER G/P	NO. OF CONTAINERS	SAMPLE MATRIX	PRESERVATIVE	ANALYSES: BOD-TSS	ANALYSES: E. Coli	COMMENTS
1	10/29/19		Maryland Manor	1L	P	1	WW	None	1		Composite
2	" "		" "	250ml	P	1	WW	None		1	Grab

Relinquished by:	Date / Time	Received by:	Relinquished by:	Date / Time
[redacted]	10/29/19 10:17	Bonnie 10/29/19	[redacted]	10/29/19 1p
	10/29/19 210p			

Method of Shipment

Remarks: * E-Coli Collected in 120ml Bottle NOT STERIL

	YES	NO
Samples Iced		✓
Samples Preserved		

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

operator	Date	day of week	Time	Weather	temp	rain	odor	raw ALK	Raw NH4	raw pH	BOD	Color	MLSS	30 min set.	SVI	reactor temp	DO	blanket	ALK	NOx	waste	Final temp	pH	D.O	UVI
CH/JB	1	T	1500	CLR	78	0	NO			6.9		BRN		280		29	7.7	2.5			0.5	29.1	6.9	5.3	0
DB/LN	2	**W**	1100	CLR	80	0	NO			7.3		BRN		200		24.4	7.4	2.5			0.5	25.9	7.2	5.6	0
DB/LN	3	T	1200	CLR	76	0	NO			7.4		BRN		200		22.7	3.2	3			0	24.8	7.4	6.2	0
CH/JB	4	F	1500	CLR	78	0	NO			6.9		BRN		240		23.8	1.4	3.5			0.5	28.9	7.1	5.7	0
CH/JB	5	S	**930**	CLR	56	0	NO			6.9		BRN		200		21.5	2.9	4.5			0.5	17.4	6.6	6.2	0
CH/JB	6	S	800	CLR	64	0	NO			6.7		BRN		240		21.8	3.2	4			1	18.1	6.7	6.3	0
CH/JB	7	M	1500	CLR	74	0	NO			6.7		BRN		250		23.2	2.2	4.5			0	22.3	6.7	6.3	0
DB	8	T	1030	CLR	64	0	NO			6.4		BRN		200		22.4	2.1	3			0	22	7.3	6.6	0
DB/LN	9	**W**	1200	CLR	61	0	NO			7.3		BRN		250		22.1	1.5	4			0	22.2	7.3	7.3	0
DB	10	T	1400	CLR	69	0	NO			7.1		BRN		250		22.6	2.8	4			0	22.5	7.1	6.7	0
DB/LN	11	F	1300	CLR	70	0	NO			7.1		BRN		240		22.3	2.2	4			0	21	7.2	6.7	0
DB	12	S	**1100**	CLR	65	0	NO			7.2		BRN		240		21.5	3.4	4			0	21.7	7.1	6.8	0
CH	13	S	830	CLR	59	0	NO			7.1		BRN		250		21.5	3.4	3			0.5	15.8	7.2	6.9	0
CH	14	M	1515	CLR	70	0	NO			6.7		BRN		200		22.7	1.3	6.5			0.5	27.1	**6.3**	6.7	0
CH/JB	15	T	1500	CLR	70	0	NO			6.6		BRN		250		22.5	1.3	5			0.45	24.7	6.6	6.8	0 5
DB/LN	16	**W**	1230	RAIN	65	1.93	NO			6.7		BRN		100		20.9	3.6	4			0	20.5	7.4	6.9	0 3
DB/LN	17	T	1320	CLR	59	0	NO			7.1		BRN		0		19.8	9.2	8.5			0	19.5	7.7	6.6	0 3
DB/LN	18	F	1120	CLR	53	0	NO			7.4		BRN		350		20.3	8.5	2			0	19.6	7.3	6.2	0 3
	19	S																							
CH/JB	20	S	1345	RAIN	52	0.1	NO			7		BRN		300		20.5	4.4	1.5			0.5	17.9	7	6.4	0 3
CH/JB	21	M	1505	CLR	63	0	NO			6.6		BRN		240		21.4	4.8	6			0	24	6.6	6.4	0.1
CH/JB	22	T	1430	CLR	61	0	NO			6.6		BRN		450		20.9	1.3	2.5			0.5	19.5	6.5	5.3	0.1
CH/JB	23	**W**	1500	CLR	64	0	NO			6.9		BRN		300		21.4	4.2	3			0.5	20.1	6.9	6.2	0 3
DB/LN	24	T	1045	CLR	65	0	NO			6.8		BRN		300		20	6.3	3			0	19.2	7	6.9	
JB	25	F	1400	CLR	66	0	NO			6.9		BRN		325		20.4	5.5	3			0	19.9	7.1	6.6	0.4
JB	26	S	**730**	CLR	56	0	NO			7.1		BRN		350		19.7	6.2	4			0.5	19.5	7.2	6.4	0 5
JB	27	S	1000	RAIN	64	2"	NO			7.1		BRN		400		20.7	5.5	3			0.5	20.5	7.1	6	0 3
DB/TH	28	M	1100	CLR	58	0	NO			7		BRN		320		20.2	6.6	2			0	20.1	7	6.5	0.1
DB/TH	29	T	1030	CLR	64	0	NO			7.4		BRN		360		20.4	8.3	2			0	20.1	7.1	6.5	0 2
DB/LN	30	**W**	1100	CLR	60	0	NO			7.4		BRN		390		20.3	8.6	4			0	20.2	7.1	6.9	0 2
DB/LN	31	**T**	1100	CLR	70	0	NO			7.3		BRN		390		20.9	5.2	3			0	21	7	6.6	0 2

192.5

Maryland Manor Totalizer readings

	Date	Final Flow	GPD	Pump 1	total	Pump 2	total	UV	total	
	10/01/2019	39793213	37943		0		0	26120	20	
	10/02/2019	39831156	53585		0		0	26140	25	
	10/03/2019	39884741	4377		0		0	26165	30	
	10/04/2019	39889118	67969		0		52420.4	26195	15	
	10/05/2019	39957087	26021		0	52420.4	5.1	26210	23	
	10/06/2019	39983108	70473		0	52425.5	7.6	26233	31	
	10/07/2019	40053581	41959		0	52433.1	4.5	26264	20	
	10/08/2019	40095540	51038		0	52437.6	5.7	26284		
	10/09/2019	40146578	52240		0	52443.3	5.8	22	25	
	10/10/2019	40198818	39485		0	52449.1	4	47	23	
	10/11/2019	40238303	46397		0	52453.1	5	70	22	
	10/12/2019	40284700	46159		0	52458.1	4.5	92	21	
	10/13/2019	40330859	76514		0	52462.6	6.7	113	31	
	10/14/2019	40407373	45361		0	52469.3	4.7	144	24	
	10/15/2019	40452734	41409		0	52474	4.7	168	22	
	10/16/2019	40494143	54533		0	52478.7	4.8	190	24	
	10/17/2019	40548676	44572		0	52483.5	4.4	214	22	
	10/18/2019	40593248	43000		0	52487.9	-52487.9	236	24	
	10/19/2019	40636248	53420		0		52498.1	260	26	
	10/20/2019	40689668	64223		0	52498.1	5.6	286	26	
	10/21/2019	40753891	45788		0	52503.7	2.3	312	23	
	10/22/2019	40799679	48532		0	52506	2.5	335	25	
	10/23/2019	40848211	36524		0	52508.5	2.2	360	20	
	10/24/2019	40884735	51558		0	52510.7	2.7	380	19	
	10/25/2019	40936293	31939		0	52513.4	2.8	399	20	
	10/26/2019	40968232	63737		0	52516.2	3	419	21	
	10/27/2019	41031969	49839		0	52519.2	2.9	440	36	
	10/28/2019	41081808	51342		0	52522.1	2.4	476	23	
	10/29/2019	41133150	46079		0	52524.5	2.9	499	25	
	10/30/2019	41179229	46932		0	52527.4	-52527.4	524	24	
	10/31/2019	41226161	56145		0		0	548	25	
		41282306	-41282306		0		0	573	-573	
AVG		40519829.88	48,035.26		0		2625.185		24	
MAX			76514		0		52498.1			
MIN			4377		0		-52487.9			

Dat	Raw	Rai	reac	30	Bla	reac	Fina	Fina	Fina	Fina	UV	BO	SS	NH	E C
10/01/2019	6.9	0	7.7	280	2.5	29	6.9	37943	29.1	5	0	0			
10/02/2019	7.3	0	7.4	200	2.5	24.4	7.2	53585	25.9	5.6	0	0			
10/03/2019	7.4	0	3.2	200	3	22.7	7.4	4377	24.8	6.2	0	0			
10/04/2019	6.9	0	1.4	240	3.5	23.8	7.1	67969	28.9	5.7	0	0			
10/05/2019	6.9	0	2.9	200	4.5	21.5	6.6	26021	17.4	6.2	0	0			
10/06/2019	6.7	0	3.2	240	4	21.8	6.7	70473	18.1	6.3	0	0			
10/07/2019	6.7	0	2.2	250	4.5	23.2	6.7	41959	22.3	6.3	0	1.56	3		<1.0
10/08/2019	6.4	0	2.1	200	3	22.4	7.3	51038	22	6.6	0	0			
10/09/2019	7.3	0	1.5	250	4	22.1	7.3	52240	22.2	7.3	0	0			
10/10/2019	7.1	0	2.8	250	4	22.6	7.1	39485	22.5	6.7	0	0			
10/11/2019	7.1	0	2.2	240	4	22.3	7.2	46397	21	6.7	0	0			
10/12/2019	7.2	0	3.4	240	4	21.5	7.1	46159	21.7	6.8	0	0			
10/13/2019	7.1	0	3.4	250	3	21.5	7.2	76514	15.8	6.9	0	0			
10/14/2019	6.7	0	1.3	200	6.5	22.7	6.3	45361	27.1	6.7	0	0			
10/15/2019	6.6	0	1.3	250	5	22.5	6.6	41409	24.7	6.8	0.5	16.4	61	2.06	2
10/16/2019	6.7	1.93	3.6	100	4	20.9	7.4	54533	20.5	6.9	0.3	0			
10/17/2019	7.1	0	9.2		8.5	19.8	7.7	44572	19.5	6.6	0.3	0			
10/18/2019	7.4	0	8.5	350	2	20.3	7.3	43000	19.6	6.2	0.3	0			
10/19/2019	0	0	0	0	0	0	0	53420	0	0	0	0			
10/20/2019	7	0.1	4.4	300	1.5	20.5	7	64223	17.9	6.4	0.3	0			
10/21/2019	6.6	0	4.8	240	6	21.4	6.6	45788	24	6.4	0.1	0			
10/22/2019	6.6	0	1.3	450	2.5	20.9	6.5	48532	19.5	5.3	0.1	7	25		
10/23/2019	6.9	0	4.2	300	3	21.4	6.9	36524	20.1	6.2	0.3	0			
10/24/2019	6.8	0	6.3	300	3	20	7	51558	19.2	6.9	0	0			>200
10/25/2019	6.9	0	5.5	325	3	20.4	7.1	31939	19.9	6.6	0.4	0			
10/26/2019	7.1	0	6.2	350	4	19.7	7.2	63737	19.5	6.4	0.5	0			
10/27/2019	7.1	2"	5.5	400	3	20.7	7.1	49839	20.5	6	0.3	0			
10/28/2019	7	0	6.6	320	2	20.2	7	51342	20.1	6.5	0.1	0			
10/29/2019	7.4	0	8.3	360	2	20.4	7.1	46079	20.1	6.5	0.2	3.85	11		4.2
10/30/2019	7.4	0	8.6	390	4	20.3	7.1	46932	20.2	6.9	0.2	0			
10/31/2019	7.3	0	5.2	390	3	20.9	7	56145	21	6.6	0.2	0			
0	0	0	0	0	0	0	0		0	192.5	0	0			

AVG	6.8		4.3	269	3.5323		6.8	48035	20.8	6.2		0.93	25		
MAX	7.4		9.2	450	8.5		7.7	76514	29.1	7.3		16.4	61		
MIN	0		0	0	0		0	4377	0	0		0	3		