## **Profile/Photo Observation Report**

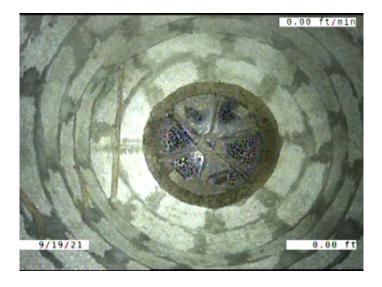
-		-			ROBOTIC
Date:	09/19/2021	Weather:		Coding:	PACP 7.0
Pipe Length (ft)	: <b>194.3</b>	Owner:	City of Hobart	Pre Clean:	Light Cleaning
P.O.#:	YES502259	Surveyor:	S. Bucklin	PSR:	P-503-011-010
Customer:	City of Hobart	Clean Date:	09/06/2021	Shape:	С
Street:	West 39th Place		Flow Control:	Not Controlled	
City:	Hobart, IN		Year Renewed:		
Location:	Alley		Tape/Media #:		
Purpose:	Routine Assessme	nt	Dia/Height:	10"	
Use:	Sanitary Sewage P	ipe	Material:	VCP	
Drain Area:			Lining:	None	
Category:	NA				
Comment:					
Location Details	5:		Direction of Survey:	Downstream	
US MH:	M-503-010	DS MH: N	И-503-011	Total Length Surveyed (ft):	194.3
0&M Index:	1.93	O&M Quick:	312F	O&M Rating:	85.00
Structural Index:	2.31	Structural Quic	k: 4236	Structural Rating:	74.00
Overall Index:	2.09	Overall Quick:	4237	Overall Rating:	159.00

	Position	Code	Observation	Video (sec)	Grade
M(503	-010				
$\square$	.0	AMH	Manhole	1	NA
- 11	.0	MWL	Miscellaneous Water Level	73	NA
	6.9	MMC	Miscellaneous Material Change	144	NA
	<b></b> 6.9	MWLS(S01)	Miscellaneous Water Level Sag	157	S 2
	6.9	JOM	Joint Offset Medium	176	S 3
	8.6	TF	Tap Factory	203	NA
	11.3	MMC	Miscellaneous Material Change	255	NA
	11.3	CL	Crack Longitudinal	281	S 2
	12.5	MWLS(F01)	Miscellaneous Water Level Sag	306	S 2
5	15.9	TFC	Tap Factory Capped	335	NA
Lamera Direction	15.9	DSF(S02)	Deposits Settled Fine	350	M 2
	17.8	TFC	Tap Factory Capped	374	NA
	19.0	MMC	Miscellaneous Material Change	420	NA
3	23.4	MMC	Miscellaneous Material Change	487	NA
	25.1	SSS	Surface Damage Surface Spalling	516	S 2
	27.0	MMC	Miscellaneous Material Change	566	NA
	27.0	JOM	Joint Offset Medium	586	S 3
	<b>-</b>     <mark> </mark> 44.5	MWLS(S03)	Miscellaneous Water Level Sag	712	S 2
	49.4	TFC	Tap Factory Capped	750	NA

Tuesday, April 25, 2023

**RedZone**<sup>®</sup>

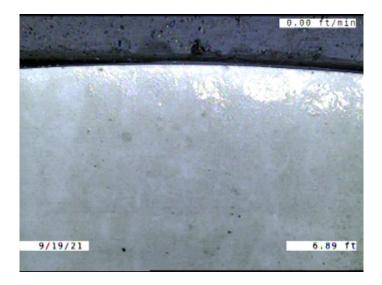
	53.5	MMC	Miscellaneous Material Change	834	NA
	53.5	JAM	Joint Angular Medium	856	S 3
	1 53.5	MWLS(F03)	Miscellaneous Water Level Sag	867	S 2
	58.1	В	Broken	921	S 4
	58.4	TBI	Tap Break-in Intruding	939	M 2
	63.4	FS	Fracture Spiral	1007	S 3
	72.8	MWLS(S04)	Miscellaneous Water Level Sag	1086	S 2
÷	1 74.6	SSS	Surface Damage Surface Spalling	1112	S 2
	74.6	SSS	Surface Damage Surface Spalling	1132	S 2
	80.5	TFC	Tap Factory Capped	1183	NA
	82.5	TFD	Tap Factory Defective	1228	M 3
	85.3	MWLS(F04)	Miscellaneous Water Level Sag	1276	S 2
	89.5	SZ	Surface Damage Other	1322	NA
	96.8	SSS	Surface Damage Surface Spalling	1404	S 2
	<u>97.4</u>	MWLS(S05)	Miscellaneous Water Level Sag	1429	S 2
	113.9	SSS	Surface Damage Surface Spalling	1533	S 2
	116.5	TFC	Tap Factory Capped	1571	NA
	117.8	FM	Fracture Multiple	1632	S 4
	1118.5	TFC	Tap Factory Capped	1714	NA
	1 123.1	MWLS(F05)	Miscellaneous Water Level Sag	1683	S 2
	127.9	MMC	Miscellaneous Material Change	1792	NA
	127.9	JAM	Joint Angular Medium	1808	S 3
	130.4	MWLS(S06)	Miscellaneous Water Level Sag	1850	S 2
	150.9	TF	Tap Factory	1958	NA
	/ 154.6	MMC	Miscellaneous Material Change	2018	NA
	//154.6	CL	Crack Longitudinal	2036	S 2
	158.9	MWLS(F06)	Miscellaneous Water Level Sag	2077	S 2
	161.7	DAE	Deposits Attached Encrustation	2127	M 2
	161.7	RFJ	Roots Fine Joint	2147	M 1
	163.7	RFJ	Roots Fine Joint	2203	M 1
	165.7	RFJ	Roots Fine Joint	2264	M 1
	165.7	CL	Crack Longitudinal	2289	S 2
	165.7	DAE	Deposits Attached Encrustation	2307	M 2
	167.3	MMC	Miscellaneous Material Change	2365	NA
	167.3	RFJ	Roots Fine Joint	2382	M 1
	167.3	JOM	Joint Offset Medium	2402	S 3
	193.9	DSF(F02)	Deposits Settled Fine	2569	M 2
	/ 194.3	AMH	Manhole	2650	NA



Code:	AMH
Description:	Manhole
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	M-503-010



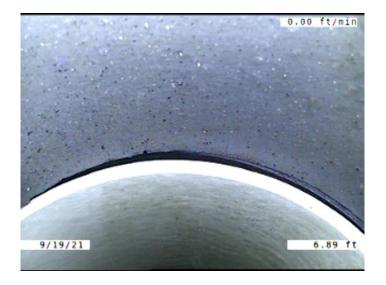
Code: Description:	MWL Miscellaneous Water Level
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value:	.0 0 0
Value Percent: Continuous Index: Within 8" of Joint: Remarks:	5.000 NO



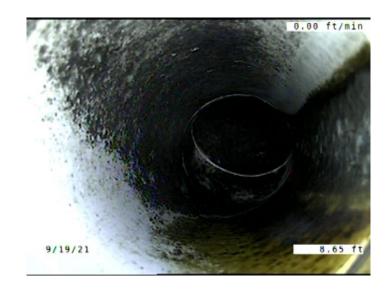
Code: Description:	MMC Miscellaneous Material Change
Distance (ft):	6.9
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	VCP TO PVC



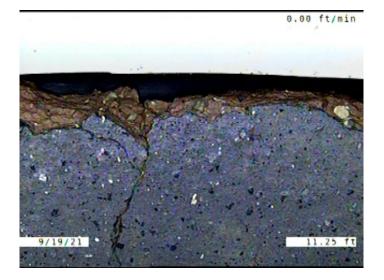
MWLS Miscellaneous Water Level Sag
6.9
2
0
5.000
S01
NO



Code: Description:	JOM Joint Offset Medium
Dictored (ft):	6.9
Distance (ft):	
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	

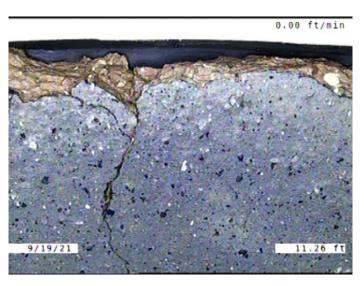


Code: Description:	TF Tap Factory
Distance (ft):	8.6
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	1
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: MMC Description: Miscellaneous Material Change Distance (ft): 11.3 Structural Grade: 0 O&M Grade: 0

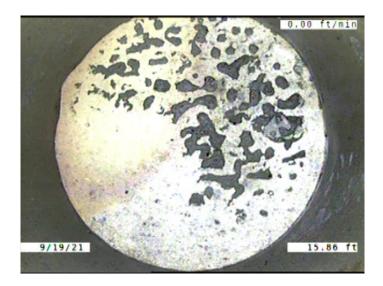
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	ΡVC ΤΟ VCP



Code:	CL
Description:	Crack Longitudinal
Distance (ft):	11.3
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	12.5
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F01
Within 8" of Joint:	NO
Remarks:	



Code: Description:	TFC Tap Factory Capped
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	15.9 0 1 4.000 YES



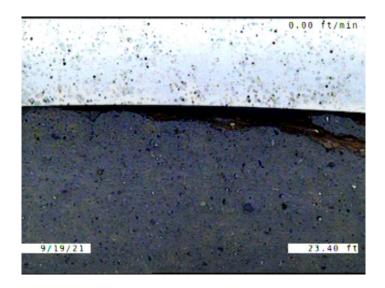
Code: Description:	DSF Deposits Settled Fine
Distance (ft):	15.9
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	5
Clock To:	7
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S02
Within 8" of Joint:	YES
Remarks:	



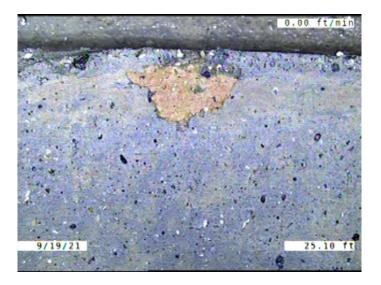
Code: Description:	TFC Tap Factory Capped
Distance (ft):	17.8
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	11
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



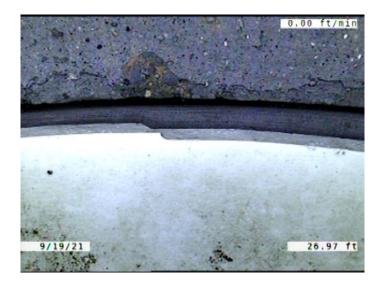
Code: Description:	MMC Miscellaneous Material Change
Distance (ft):	19.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	<b>VCP TO PVC</b>



Code: Description:	MMC Miscellaneous Material Change
Distance (ft):	23.4
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	ΡVC ΤΟ VCP



Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft):	25.1
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	MMC Miscellaneous Material Change
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	27.0 0 0
Remarks:	VCP TO PVC



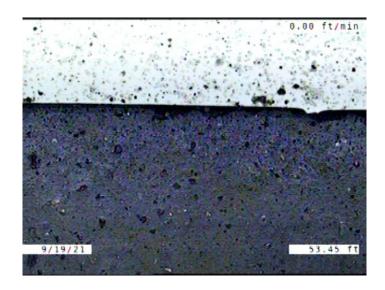
JOM Joint Offset Medium
27.0
3
0
NO



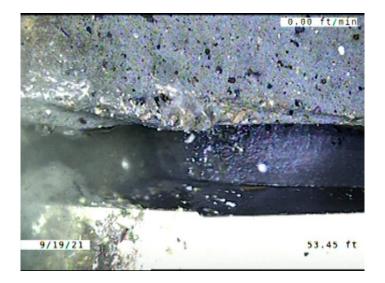
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	44.5
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S03
Within 8" of Joint:	NO
Remarks:	



Code: Description:	TFC Tap Factory Capped
Distance (ft):	49.4
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	1
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	MMC Miscellaneous Material Change
Distance (ft):	53.5
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	ΡVC ΤΟ VCP



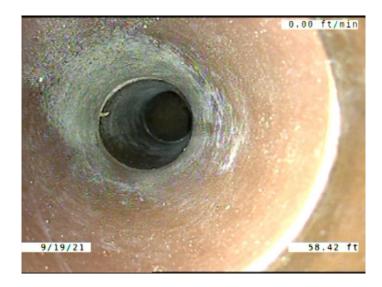
JAM Joint Angular Medium
53.5
3
0
NO



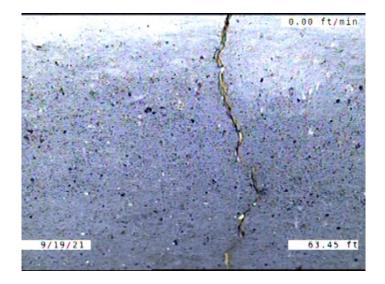
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	53.5
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F03
Within 8" of Joint:	NO
Remarks:	



Code:	В
Description:	Broken
Distance (ft):	58.1
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	11
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



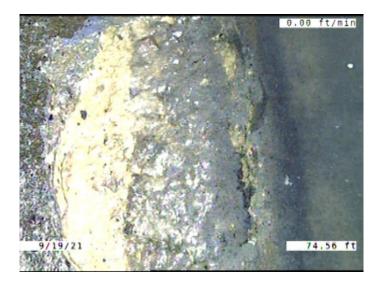
Code: Description:	TBI Tap Break-in Intruding
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	58.4 0 2 1 4.000 1.000 YES
Remarks:	



Code:	FS
Description:	Fracture Spiral
	62 A
Distance (ft):	63.4
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	11
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	

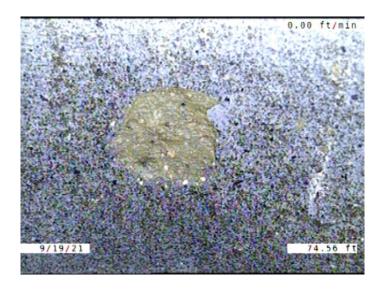


Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	72.8
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S04
Within 8" of Joint:	NO
Remarks:	

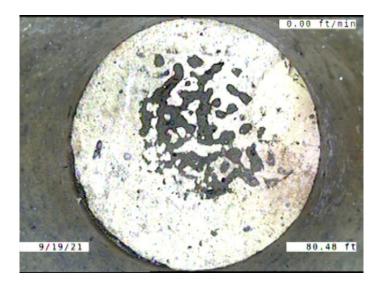


Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft):	74.6
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	7
Clock To:	8
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES

Remarks:



Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	74.6 2 0 2



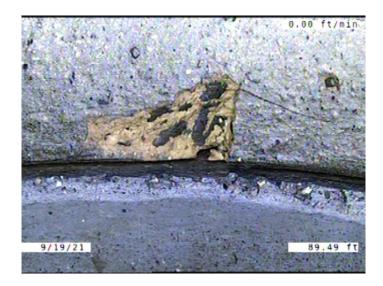
Code: Description:	TFC Tap Factory Capped
Distance (ft):	80.5
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	1
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



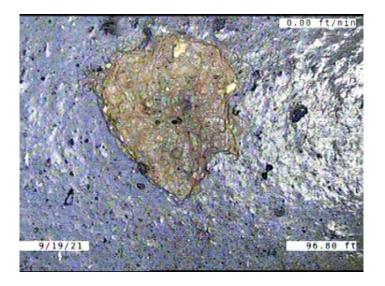
Code: Description:	TFD Tap Factory Defective
Distance (ft): Structural Grade: O&M Grade:	82.5 0 3
Clock Start/From: Clock To:	11
1st Value: 2nd Value: Value Percent:	4.000
Continuous Index: Within 8" of Joint: Remarks:	YES CONSTANTLY RUNNING WATER



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	85.3
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F04
Within 8" of Joint:	NO
Remarks:	



Code:	SZ
Description:	Surface Damage Other
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	89.5 0 12 1 YES A PIECE CHIPPED AWAY FROM THE JOINT



Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft):	96.8
Structural Grade:	2
O&M Grade:	0
	•
Clock Start/From:	8
Clock To:	9
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



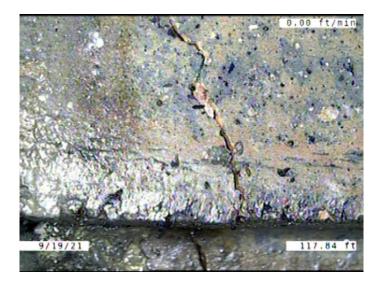
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	97.4
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S05
Within 8" of Joint:	NO
Remarks:	



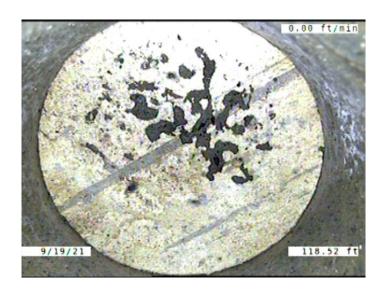
Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft):	113.9
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	10
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	TFC Tap Factory Capped
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	116.5 0 0 1 4.000 YES



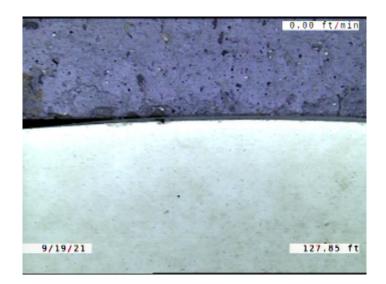
Code: Description:	FM Fracture Multiple
Distance (ft):	117.8
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	4
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



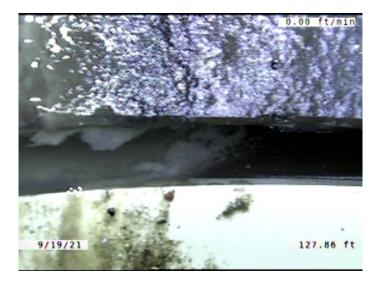
Code: Description:	TFC Tap Factory Capped
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent:	118.5 0 0 11 4.000
Continuous Index: Within 8" of Joint: Remarks:	YES



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	123.1
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F05
Within 8" of Joint:	NO
Remarks:	



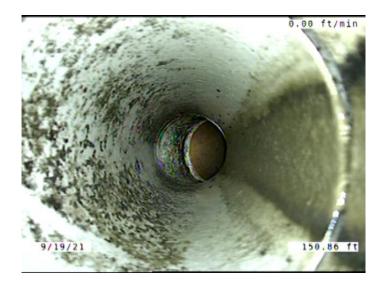
Code: Description:	MMC Miscellaneous Material Change
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent:	127.9 0 0
Continuous Index: Within 8" of Joint: Remarks:	NO VCP TO PVC



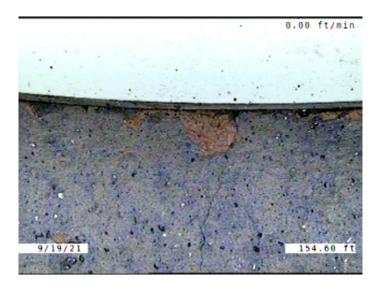
Code: Description:	JAM Joint Angular Medium
Distance (ft):	127.9
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



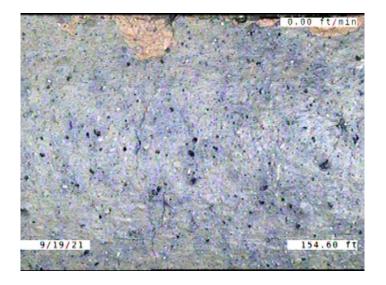
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	130.4
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S06
Within 8" of Joint:	NO
Remarks:	



Code:	TF
Description:	Tap Factory
(4)	
Distance (ft):	150.9
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	1
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	CONSTANTLY RUNNING WATER



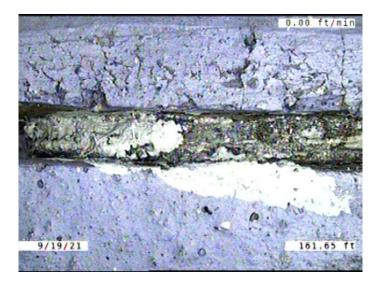
Code: Description:	MMC Miscellaneous Material Change
Distance (ft):	154.6
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	ΡVC ΤΟ VCP



Code:	CL
Description:	Crack Longitudinal
Distance (ft):	154.6
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



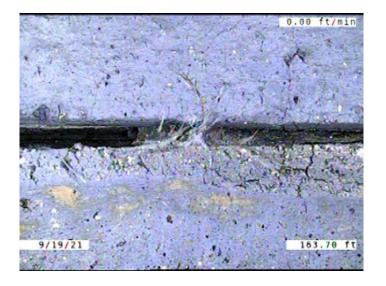
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	158.9
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F06
Within 8" of Joint:	NO
Remarks:	



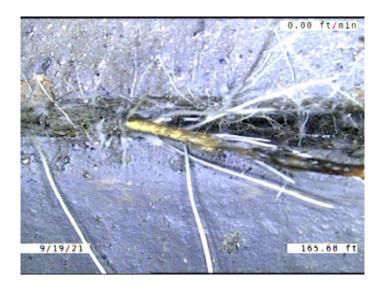
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	161.7
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	3
Clock To:	8
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



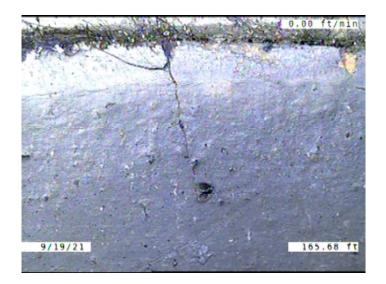
Code: Description:	RFJ Roots Fine Joint
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value:	161.7 0 1 3 8
Value Percent: Continuous Index: Within 8" of Joint: Remarks:	YES



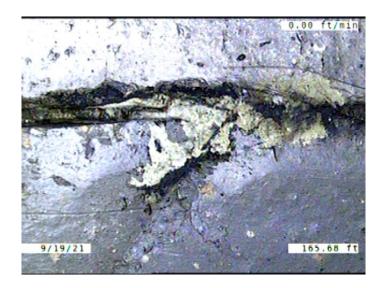
RFJ
<b>Roots Fine Joint</b>
163.7
0
1
9
11
YES



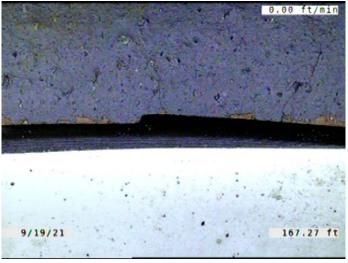
Code: Description:	RFJ Roots Fine Joint
Distance (ft):	165.7
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	9
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



CL Crack Longitudinal
165.7
2
0
10
YES



Code: Description:	DAE Deposits Attached Encrustation
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	165.7 0 2 7 9 5.000 YES



Code: MMC Description: **Miscellaneous Material Change** Distance (ft): 167.3 Structural Grade: 0 O&M Grade: 0 Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: NO VCP TO PVC Remarks:



Code:	RFJ
Description:	Roots Fine Joint
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	167.3 0 1 3 9



Code: Description:	JOM Joint Offset Medium
Distance (ft):	167.3
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	1.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code: Description:	DSF Deposits Settled Fine
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	193.9 0 2 5 7 5.000 F02 YES
Remarks:	



Code: Description:	AMH Manhole
Distance (ft):	194.3
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	M-503-011