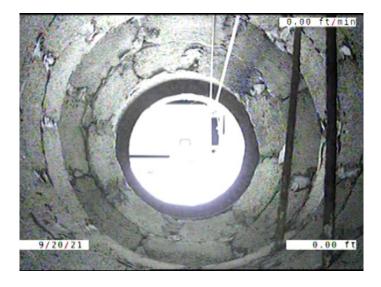
## **Profile/Photo Observation Report**

-		-				ROBOTIC
Date:	09/20/2021	Weather:			Coding:	PACP 7.0
Pipe Length (ft)	: <b>175.6</b>	Owner:	City of Hoba	art	Pre Clean:	Heavy Cleaning
P.O.#:	YES502259	Surveyor:	S. Bucklin		PSR:	P-503-024-023
Customer:	City of Hobart	Clean Date:	09/04/2021		Shape:	с
Street:	West 39th Avenue		Flow Control:		Not Controlled	
City:	Hobart, IN		Year Renewe	d:		
Location:	Alley		Tape/Media	<b>#</b> :		
Purpose:	Routine Assessmen	t	Dia/Height:		10"	
Use:	Sanitary Sewage Pi	pe	Material:		VCP	
Drain Area:			Lining:		None	
Category:	NA					
Comment:						
Location Details	s:		Direction of S	urvey:	Upstream	
US MH:	M-503-023	DS MH:	M-503-024	Tota	I Length Surveyed (ft):	175.6
O&M Index:	1.62	O&M Quick:		5131	O&M Rating:	115.00
Structural Index:	2.76	Structural Q	uick:	IA38	Structural Rating:	102.00
Overall Index:	2.01	Overall Quic	La E	514A	Overall Rating:	217.00

	Position	Code	Observation	Video (sec)	Grade
503-	024				
$\mathbf{H}$	0.	AMH	Manhole	1	NA
	.0	MWL	Miscellaneous Water Level	56	NA
	0	DSF(S01)	Deposits Settled Fine	64	M 2
	3.1	В	Broken	145	S 4
	3.1	SSS	Surface Damage Surface Spalling	158	S 2
	3.1	RFJ	Roots Fine Joint	170	M 1
	3.3	SSS	Surface Damage Surface Spalling	204	S 2
	5.2	В	Broken	287	S 4
	7.3	FM	Fracture Multiple	340	S 4
	7.3	RFJ(SO4)	Roots Fine Joint	370	M 1
	]   11.2	SSS	Surface Damage Surface Spalling	405	S 2
	25.1	TFC	Tap Factory Capped	480	NA
	27.1	TFC	Tap Factory Capped	507	NA
	31.9	CM	Crack Multiple	558	S 3
	33.9	SSS	Surface Damage Surface Spalling	594	S 2
	35.0	SSS	Surface Damage Surface Spalling	644	S 2
	35.3	TBI	Tap Break-in Intruding	666	M 2
		FM	Fracture Multiple	825	S 4
	56.4	MWLS(S03)	Miscellaneous Water Level Sag	842	S 2

**RedZone**<sup>®</sup>

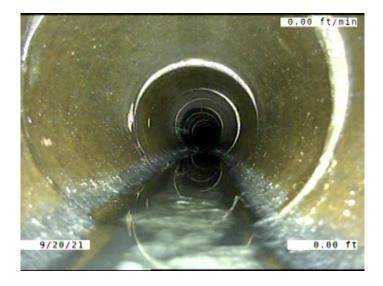
66.2	TFC	Tap Factory Capped	898	NA
68.3	TFC	Tap Factory Capped	925	NA
77.1	FM(S05)	Fracture Multiple	1007	S 4
80.8	JOM	Joint Offset Medium	1039	S 3
//83.9	SSS	Surface Damage Surface Spalling	1071	S 2
// 88.2	RML	Roots Medium Lateral	1223	M 3
//88.8	ТВІ	Tap Break-in Intruding	1246	M 2
/// 90.4	RFL	Roots Fine Lateral	1291	M 1
/ 90.6	ТВІ	Tap Break-in Intruding	1314	M 2
93.2	В	Broken	1365	S 4
99.0	JOM	Joint Offset Medium	1431	S 3
99.0	FM(F05)	Fracture Multiple	1440	S 4
99.0	MWLS(F03)	Miscellaneous Water Level Sag	1448	S 2
101.1	JOM	Joint Offset Medium	1474	S 3
104.8	TFC	Tap Factory Capped	1512	NA
106.8	TFC	Tap Factory Capped	1539	NA
119.7	JOM	Joint Offset Medium	1604	S 3
/ 124.1	SZ	Surface Damage Other	1657	NA
/ / 129.4	RFJ(F04)	Roots Fine Joint	1700	M 1
//130.0	MMC	Miscellaneous Material Change	1739	NA
140.5	MMC	Miscellaneous Material Change	1817	NA
/ 141.7	TFC	Tap Factory Capped	1847	NA
142.2	SSS	Surface Damage Surface Spalling	1881	S 2
// 143.7	TFC	Tap Factory Capped	1904	NA
// 144.6	CM(S07)	Crack Multiple	1949	S 3
150.2	RFJ(S08)	Roots Fine Joint	2010	M 1
/ 150.4	В	Broken	2050	S 4
150.4	RBB	Roots Ball Barrel	2081	M 5
153.2	CM(F07)	Crack Multiple	2159	S 3
156.1	MWLS(S09)	Miscellaneous Water Level Sag	2184	S 2
163.9	MWLS(F09)	Miscellaneous Water Level Sag	2241	S 2
/ 170.4	JOM	Joint Offset Medium	2282	S 3
/ 170.4	SSS	Surface Damage Surface Spalling	2294	S 2
// 173.8	DSF(F01)	Deposits Settled Fine	2325	M 2
/ 173.8	RFJ(F08)	Roots Fine Joint	2333	M 1
175.6	AMH	Manhole	2417	NA
603-023				



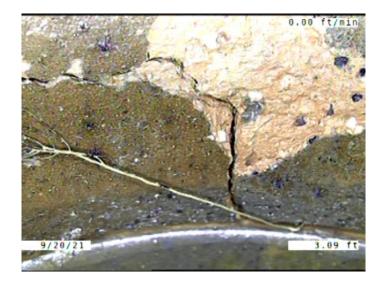
Code:	AMH
Description:	Manhole
Distance (ft):	•
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	M-503-024



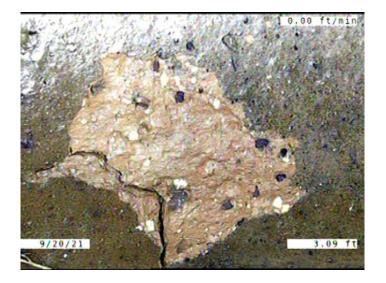
Code: Description:	MWL Miscellaneous Water Level
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



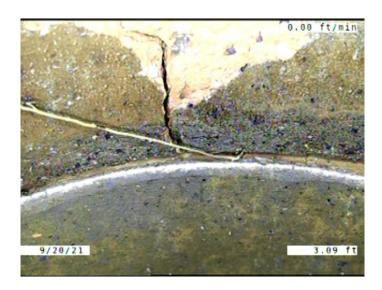
Code:	DSF
Description:	<b>Deposits Settled Fine</b>
Distance (ft):	0
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	5
Clock To:	7
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S01
Within 8" of Joint:	YES
Remarks:	



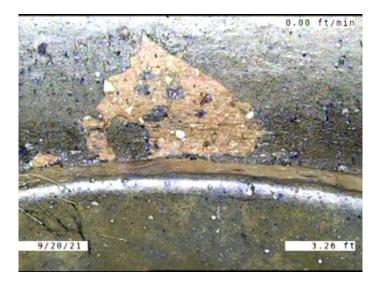
Code: Description:	B Broken
Distance (ft):	3.1
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	5
Clock To:	10
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft):	3.1
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	9
Clock To:	10
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



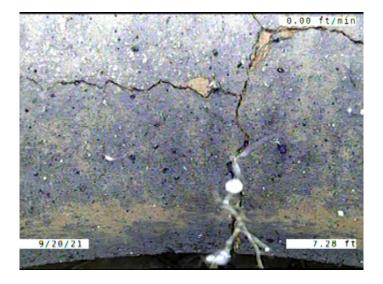
Code: Description:	RFJ Roots Fine Joint
Distance (ft):	3.1
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	10
Clock To:	11
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



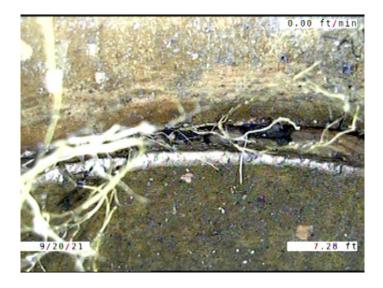
Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft):	3.3
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



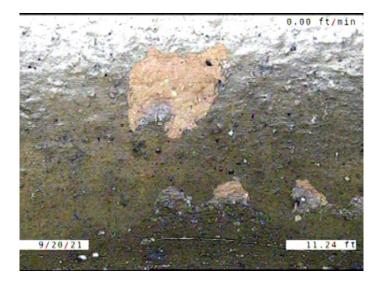
Code: Description:	B Broken
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	5.2 4 0 4 8
Remarks:	BOTH SIDES OF THE JOINT



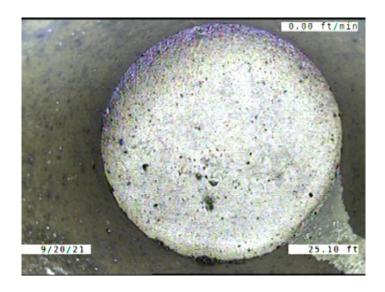
Code:	FM
Description:	Fracture Multiple
Distance (ft):	7.3
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	10
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	RFJ Roots Fine Joint
Distance (ft):	7.3
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	8
Clock To:	3
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S04
Within 8" of Joint:	YES
Remarks:	



Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft):	11.2
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	11
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:	25.1 0 0 1 4.000 YES



Code: Description:	TFC Tap Factory Capped
Distance (ft):	27.1
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:	



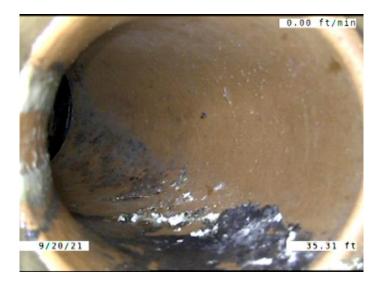
Code: Description:	CM Crack Multiple
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent:	31.9 3 0 2 4
Continuous Index: Within 8" of Joint: Remarks:	YES



Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft):	33.9
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	3
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



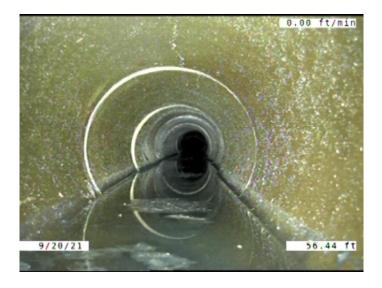
Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	35.0 2 0 10 1



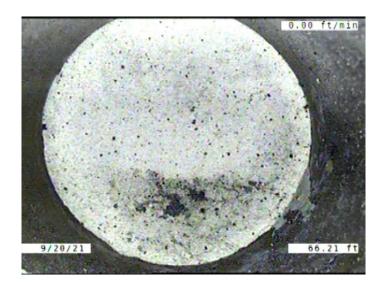
Code:	ТВІ
Description:	Tap Break-in Intruding
	25.2
Distance (ft):	35.3
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	11
Clock To:	
1st Value:	4.000
2nd Value:	1.000
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	CONSTANTLY RUNNING WATER



Distance (ft):55.5Structural Grade:4O&M Grade:0Clock Start/From:6Clock To:121st Value:	Code: Description:	FM Fracture Multiple
Remarks:	Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	4 0 6



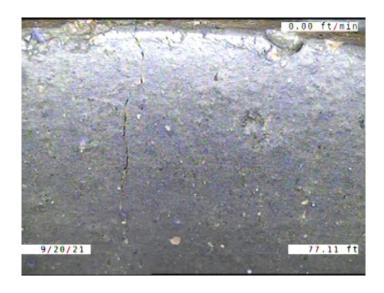
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	56.4
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	S03
Within 8" of Joint:	NO
Remarks:	



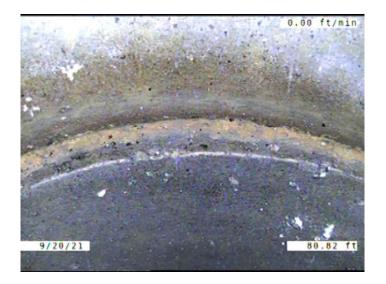
Code: Description:	TFC Tap Factory Capped
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	66.2 0 0 1 4.000
Within 8" of Joint: Remarks:	YES



Code: Description:	TFC Tap Factory Capped
Distance (ft):	68.3
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:	



	™ Fracture Multiple
Structural Grade:4O&M Grade:0Clock Start/From:7Clock To:51st Value:22nd Value:2Value Percent:2Continuous Index:5	7



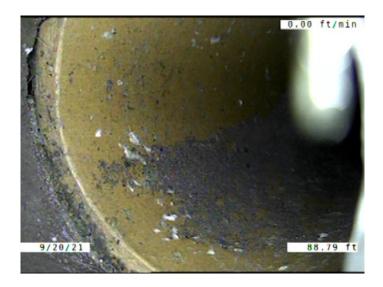
Code: Description:	JOM Joint Offset Medium
Distance (ft):	80.8
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code:	SSS
Description:	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:	83.9 2 0 1



RML Roots Medium Lateral
88.2
0
3
11
2
10.000
NO



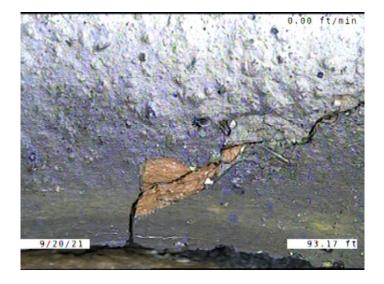
Code: Description:	TBI Tap Break-in Intruding
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	88.8 0 2 1 4.000 1.000 YES



Code:	RFL
Description:	<b>Roots Fine Lateral</b>
Distance (ft):	90.4
Distance (ft):	90.4
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	9
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



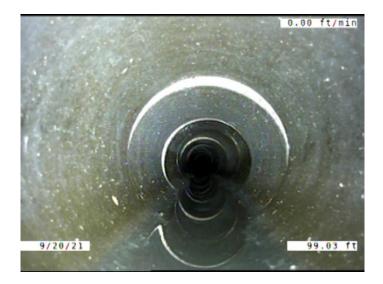
Code: Description:	TBI Tap Break-in Intruding
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	90.6 0 2 10 4.000 1.000 YES
Hernanko.	



Code:	В
Description:	Broken
Distance (ft):	93.2
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	3
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



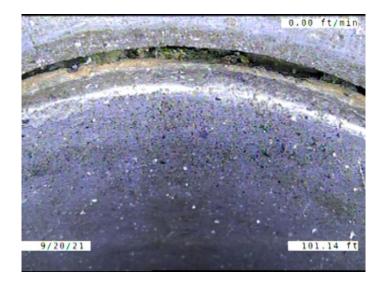
Code: Description:	JOM Joint Offset Medium
Distance (ft):	99.0
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code:	FM
Description:	Fracture Multiple
Distance (ft):	99.0
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	7
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F05
Within 8" of Joint:	YES
Remarks:	



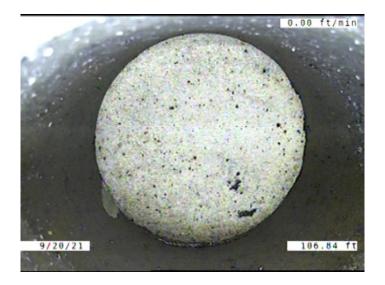
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	99.0
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	F03
Within 8" of Joint:	NO
Remarks:	



Code: Description:	JOM Joint Offset Medium
Distance (ft):	101.1
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:	



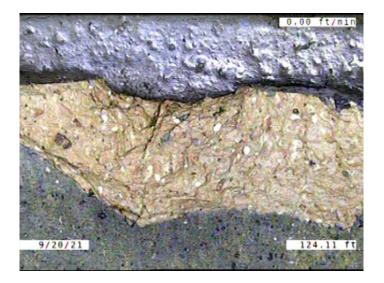
Code: Description:	TFC Tap Factory Capped
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	104.8 0 0 1 4.000 YES



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:	106.8 0 0 11 4.000
Within 8" of Joint: Remarks:	YES



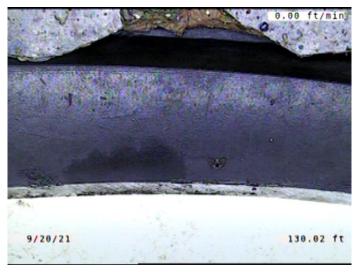
Code: Description:	JOM Joint Offset Medium
Distance (ft):	119.7
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



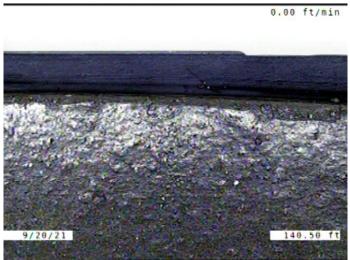
Code:	SZ
Description:	Surface Damage Other
Distance (ft):	124.1
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	2
Clock To:	3
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	A PIECE CHIPPED AWAY FROM THE
	JOINT
Remarks:	



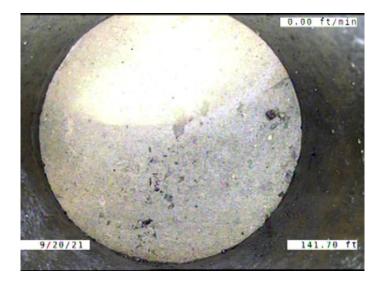
Code: Description:	RFJ Roots Fine Joint
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value:	129.4 0 1 8 3
Value Percent: Continuous Index: Within 8" of Joint: Remarks:	F04 YES



Code: MMC Description: **Miscellaneous Material Change** Distance (ft): 130.0 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 VCP TO PVC Remarks:



_	Code:	ММС
	Description:	Miscellaneous Material Change
(DAS)	Distance (ft):	140.5
	Structural Grade:	0
	O&M Grade:	0
	Clock Start/From:	
	Clock To:	
	1st Value:	
	2nd Value:	
	Value Percent:	
	Continuous Index:	
10 M	Within 8" of Joint:	NO
	Remarks:	ΡVC ΤΟ VCP



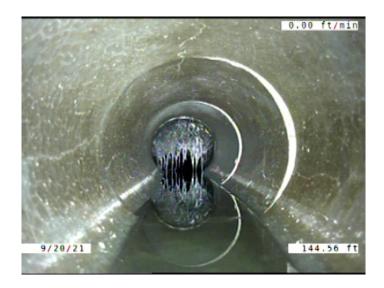
Code:	TFC
Description:	Tap Factory Capped
Distance (ft):	141.7
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	2
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



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:	142.2 2 0 4 7



Code: Description:	TFC Tap Factory Capped
Distance (ft):	143.7
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:	



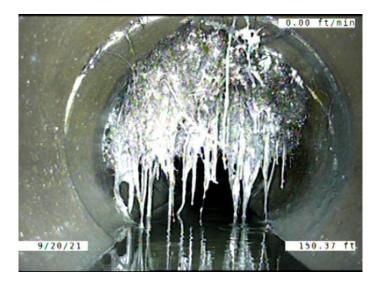
Code:	CM
Description:	Crack Multiple
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	144.6 3 0 9 4 S07 YES



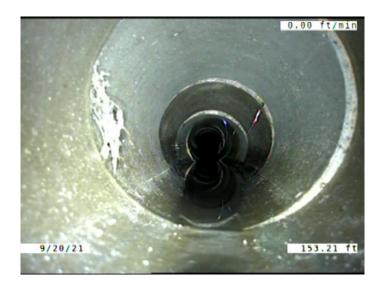
Code:	RFJ
Description:	<b>Roots Fine Joint</b>
Distance (ft):	150.2
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	8
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S08
Within 8" of Joint:	YES
Remarks:	



Code: Description:	B Broken
Distance (ft):	150.4
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	11
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



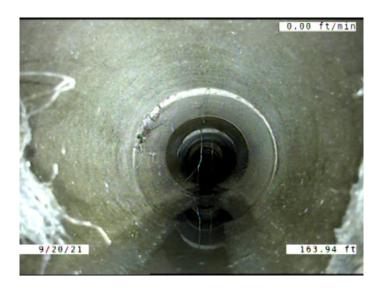
Code:	RBB
Description:	<b>Roots Ball Barrel</b>
Distance (ft):	150.4
Distance (ft):	150.4
Structural Grade:	0
O&M Grade:	5
Clock Start/From:	9
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	60.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



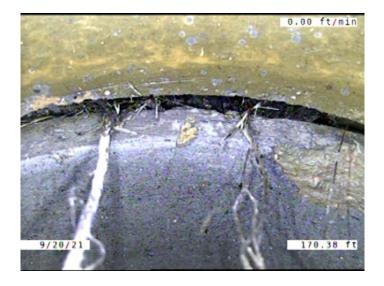
Code: Description:	CM Crack Multiple
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent:	153.2 3 0 9 4
Continuous Index: Within 8" of Joint: Remarks:	F07 YES



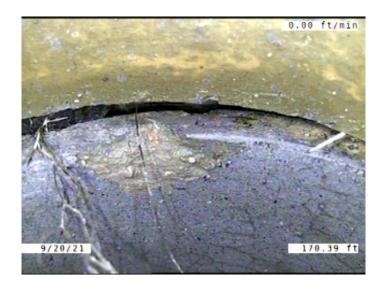
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	156.1
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	S09
Within 8" of Joint:	NO
Remarks:	



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	163.9
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	F09
Within 8" of Joint:	NO
Remarks:	



Code: Description:	JOM Joint Offset Medium
Distance (ft):	170.4
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:	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:	170.4 2 0 1



Code:	DSF
Description:	<b>Deposits Settled Fine</b>
Distance (ft):	173.0
Distance (ft):	173.8
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	5
Clock To:	7
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F01
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: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	173.8 0 1 8 2 F08 YES



Code: Description:	AMH Manhole
Distance (ft):	175.6
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:	M-503-023