## **Profile/Photo Observation Report**

					ROBOTICS
Date:	10/23/2021	Weather:		Coding:	PACP 7.0
Pipe Length (ft)	: <b>351.0</b>	Owner:	City of Hobart	Pre Clean:	Heavy Cleaning
P.O.#:	YES502259	Surveyor:	S. Bucklin	PSR:	P-804-020-015
Customer:	City of Hobart	Clean Date:	09/15/2021	Shape:	с
Street:	North Illinois Stree	t	Flow Control:	Not Controlled	
City:	Hobart, IN		Year Renewed:		
Location:	Alley		Tape/Media #:		
Purpose:	Routine Assessmen	t	Dia/Height:	8"	
Use:	Sanitary Sewage Pi	pe	Material:	VCP	
Drain Area:			Lining:	None	
Category:	NA				
Comment:					
Location Details	5:		Direction of Survey	y: Downstream	
US MH:	M-804-020	DS MH:	M-804-015	Total Length Surveyed (ft):	109.4
O&M Index:	1.47	O&M Quick:	3328	O&M Rating:	44.00
Structural Index:	2.87	Structural Qui	ck: 5143	Structural Rating:	43.00
Overall Index:	1.93	Overall Quick:	54.40	Overall Rating:	87.00

	Position	Code	Observation	Video (sec)	Grade
M(804)	020				
$\mathbf{H}$	0. //	AMH	Manhole	1	NA
- 11	.0	MWL	Miscellaneous Water Level	11	NA
- 11	1.5	MGO	Miscellaneous General Observation	19	NA
- 11	9.9	DAE	Deposits Attached Encrustation	99	M 2
	12.1	DAE	Deposits Attached Encrustation	133	M 2
	14.0	CL	Crack Longitudinal	171	S 2
	14.0	DAE	Deposits Attached Encrustation	194	M 2
- 11	22.7	SSS	Surface Damage Surface Spalling	268	S 2
- 11	22.7	RFC	Roots Fine Connection	280	M 1
	23.0	ТВ	Tap Break-in/Hammer	295	NA
Camera Direction	25.1	СМ	Crack Multiple	336	S 3
ā	33.4	TFD	Tap Factory Defective	392	M 3
mer	<u>35.4</u>	TFD	Tap Factory Defective	426	M 3
Ca	//_35.8	SSS	Surface Damage Surface Spalling	464	S 2
	36.0	TF	Tap Factory	485	NA
	36.5	FL	Fracture Longitudinal	515	S 3
+	36.5	RFJ	Roots Fine Joint	558	M 1
	40.8	SSS	Surface Damage Surface Spalling	594	S 2
	43.3	RFJ	Roots Fine Joint	654	M 1

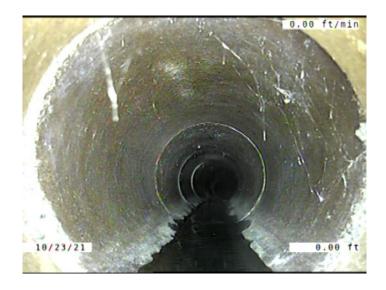
Thursday, December 30, 2021

**RedZone**<sup>®</sup>

45.5	RFJ	Roots Fine Joint	690	M 1
45.5	CL	Crack Longitudinal	706	S 2
51.5	FM	Fracture Multiple	769	S 4
55.4	RFJ	Roots Fine Joint	817	M 1
56.7	FM	Fracture Multiple	854	S 4
59.8	RFJ	Roots Fine Joint	906	M 1
59.8	RFJ	Roots Fine Joint	922	M 1
66.0	DAE	Deposits Attached Encrustation	979	M 2
66.0	RFJ	Roots Fine Joint	994	M 1
72.2	RFJ	Roots Fine Joint	1052	M 1
72.2	CL	Crack Longitudinal	1074	S 2
72.2	DAE	Deposits Attached Encrustation	1099	M 2
74.5	RFJ(SO1)	Roots Fine Joint	1144	M 1
74.5	HSV	Hole Soil Visible	1185	S 5
74.6	TFD	Tap Factory Defective	1227	МЗ
78.8	TF	Tap Factory	1263	NA
78.8	СМ	Crack Multiple	1341	S 3
83.8	RFJ	Roots Fine Joint	1392	M 1
83.8	DAE	Deposits Attached Encrustation	1427	M 2
90.0	RFJ	Roots Fine Joint	1485	M 1
90.0	СМ	Crack Multiple	1513	S 3
101.9	RFJ	Roots Fine Joint	1611	M 1
107.9	SSS	Surface Damage Surface Spalling	1692	S 2
//107.9	В	Broken	1703	S 4
//107.9	RFB	Roots Fine Barrel	1714	M 2
108.5	TBI	Tap Break-in Intruding	1735	M 2
109.4	RFJ(F01)	Roots Fine Joint	1757	M 1
109.4	MSA	Miscellaneous Survey Abandoned	1768	NA



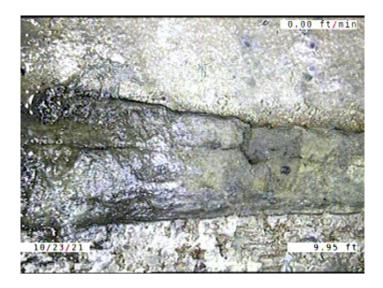
Code:	AMH
Description:	Manhole
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	M-804-020



Distance (ft): .0	
Structural Grade: 0	
O&M Grade: <b>0</b>	
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent: 5.000	
Continuous Index:	
Within 8" of Joint: NO	
Remarks:	



Code:	MGO
Description:	Miscellaneous General Observation
Distance (ft):	1.5
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:	DROP INTO THE MANHOLE. HAD TO
	START IN THE PIPE.



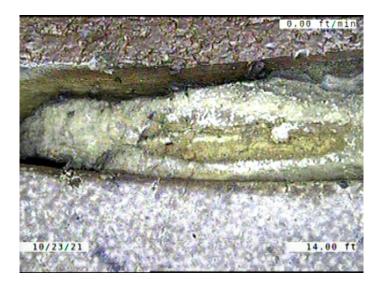
Code:	DAE
Description:	Deposits Attached Encrustation
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	9.9 0 2 2 9 5.000 YES



Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	12.1
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	7
Clock To:	8
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



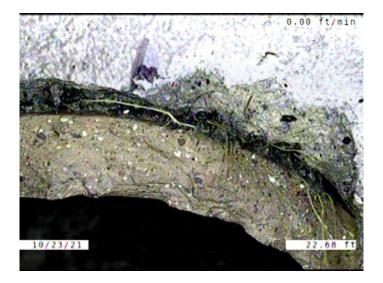
Code: Description:	CL Crack Longitudinal
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	14.0 2 0 2
Within 8" of Joint: Remarks:	YES



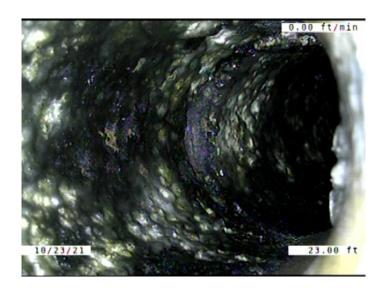
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	14.0
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	3
Clock To:	9
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



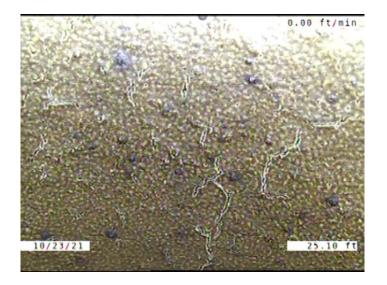
Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	22.7 2 0 12 3
Remarks:	15



RFC Roots Fine Connection
22.7
0
1
12
3
NO



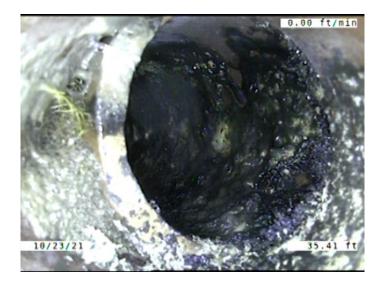
Code: Description:	TB Tap Break-in/Hammer
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	23.0 0 2 6.000 YES



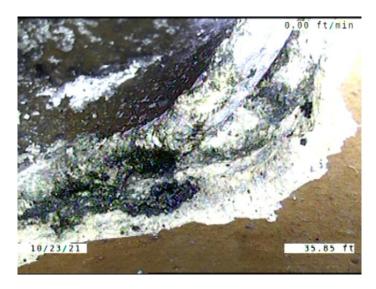
Code: Description:	CM Crack Multiple
Distance (ft):	25.1
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	1
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



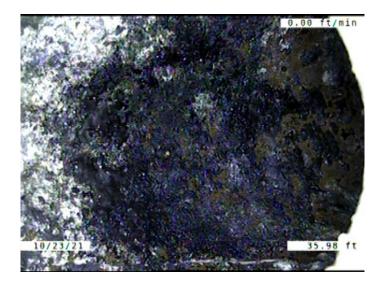
Code: Description:	TFD Tap Factory Defective
Distance (ft):	33.4
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	2
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	CAP BROKEN. SOIL VISIBLE



Code:	TFD
Description:	Tap Factory Defective
-	
Distance (ft):	35.4
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	11
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	LARGE OFFSET. ROOTS GROWING IN THE JOINT



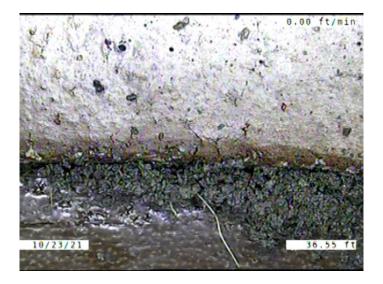
Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	35.8 2 0 11 1 YES



Code:	TF
Description:	Tap Factory
Distance (ft):	26.0
Distance (ft):	36.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	12
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	LOOKS TO COME IN FROM THE RIGHT (WEST)



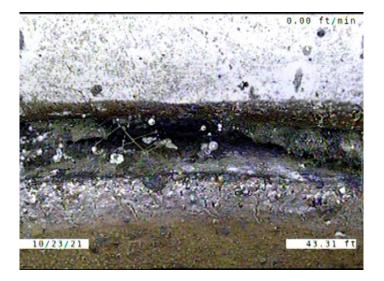
-	ode: escription:	FL Fracture Longitudinal
S C C C 1 2 V C V V V	vistance (ft): tructural Grade: 0&M Grade: lock Start/From: lock To: st Value: nd Value: falue Percent: fontinuous Index: Vithin 8" of Joint: emarks:	36.5 3 0 12 YES



Code:	RFJ
Description:	<b>Roots Fine Joint</b>
Distance (ft):	26 5
Distance (ft):	36.5
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Distance (ft):40.8Structural Grade:2O&M Grade:0Clock Start/From:4Clock To:	Code: Description:	SSS Surface Damage Surface Spalling
Rellidiks.	Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	2 0 4



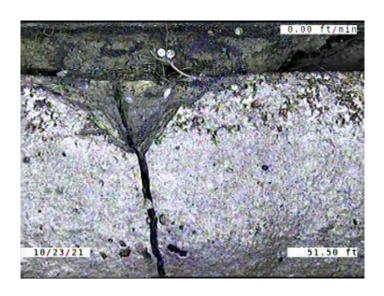
RFJ
<b>Roots Fine Joint</b>
43.3
45.5
0
1
12
5
YES



Code: Description:	RFJ Roots Fine Joint
Distance (ft):	45.5
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	3
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



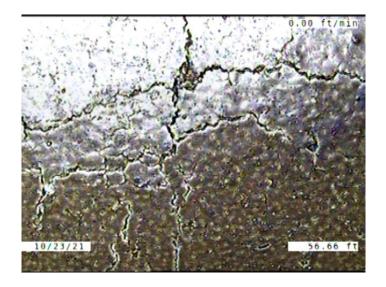
Code: Description:	CL Crack Longitudinal
Distance (ft):	45.5
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	4
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	FM Fracture Multiple
Distance (ft):	51.5
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	12
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



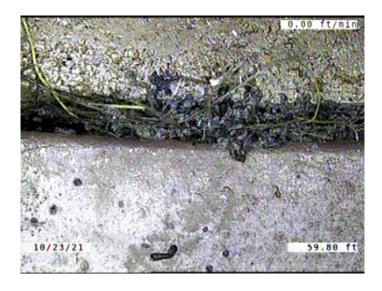
RFJ Roots Fine Joint
55.4
0
1
7
10
YES



Code: Description:	FM Fracture Multiple
Distance (ft):	56.7
Structural Grade:	4
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:	



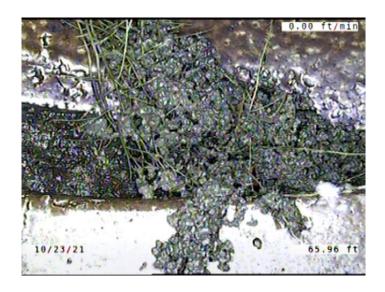
Code:	RFJ
Description:	<b>Roots Fine Joint</b>
Distance (ft):	59.8
Distance (ft):	55.0
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	8
Clock To:	9
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



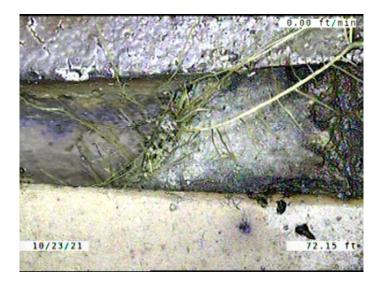
Code: Description:	RFJ Roots Fine Joint
Distance (ft):	59.8
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	3
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



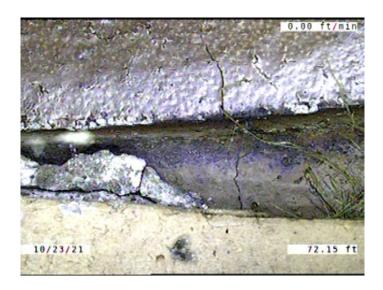
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	66.0
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	4
Clock To:	8
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



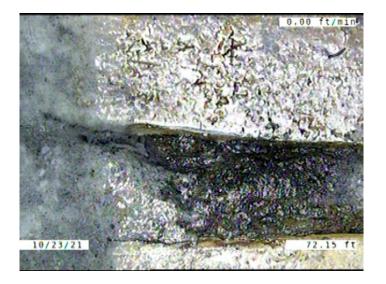
Code: Description:	RFJ Roots Fine Joint
Distance (ft):	66.0
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	12
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



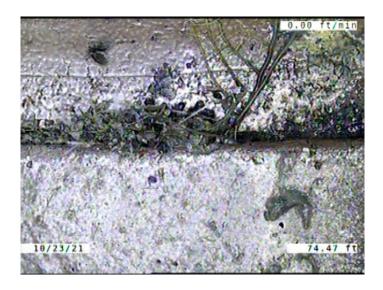
Code:	RFJ
Description:	<b>Roots Fine Joint</b>
Distance (ft):	72.2
Distance (ft):	72.2
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	8
Clock To:	9
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



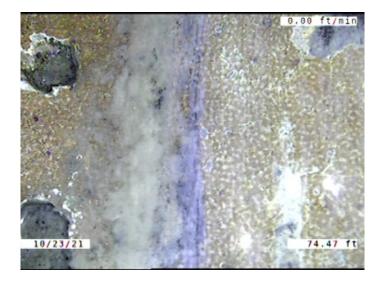
Code: Description:	CL Crack Longitudinal
Distance (ft):	72.2
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	10
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



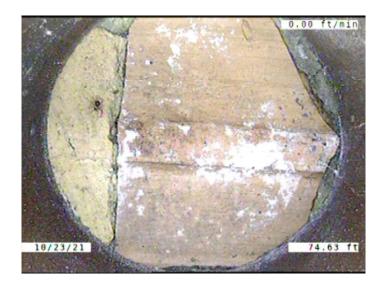
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	72.2
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	3
Clock To:	9
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



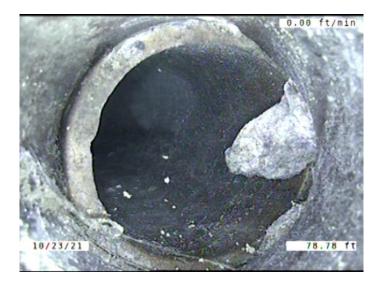
Code: Description:	RFJ Roots Fine Joint
Distance (ft):	74.5
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	8
Clock To:	11
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S01
Within 8" of Joint:	YES
Remarks:	



Code:	HSV
Description:	Hole Soil Visible
	74 5
Distance (ft):	74.5
Structural Grade:	5
O&M Grade:	0
Clock Start/From:	6
Clock To:	8
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	(3) HOLES



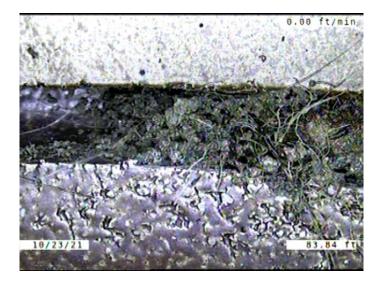
Code:	TFD
Description:	Tap Factory Defective
Distance (ft):	74.6
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	2
Clock To: 1st Value: 2nd Value:	4.000
Value Percent: Continuous Index: Within 8" of Joint: Remarks:	YES CAP BROKEN



Code:	TF
Description:	Tap Factory
(0)	
Distance (ft):	78.8
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:	



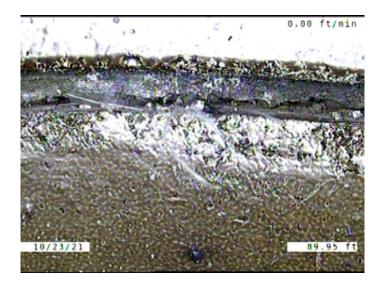
Code: Description:	CM Crack Multiple
Distance (ft):	78.8
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	12
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:	RFJ
Description:	<b>Roots Fine Joint</b>
Distance (ft):	83.8
Structural Grade:	0
	•
O&M Grade:	1
Clock Start/From:	2
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



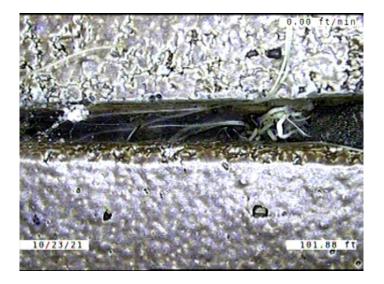
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	83.8
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	5
Clock To:	9
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



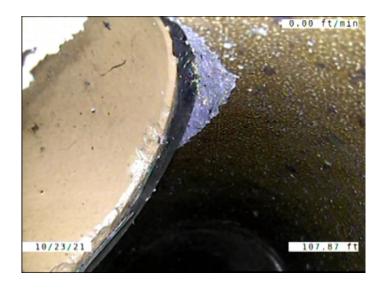
Code:	RFJ
Description:	<b>Roots Fine Joint</b>
Distance (ft):	90.0
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	1
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	CM Crack Multiple
Distance (ft):	90.0
Structural Grade:	3
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:	



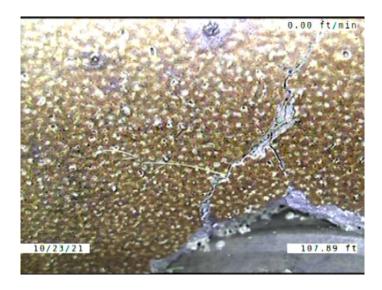
Code: Description:	RFJ Roots Fine Joint
Distance (ft): Structural Grade: Q&M Grade:	101.9 0 1
Clock Start/From:	8
Clock To: 1st Value:	4
2nd Value:	
Value Percent: Continuous Index:	
Within 8" of Joint: Remarks:	YES



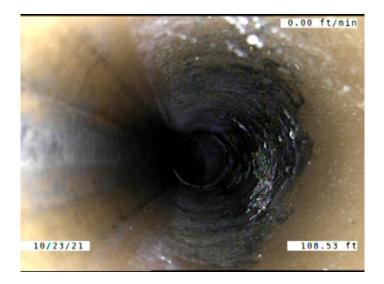
Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	107.9 2 0 8 11



Code:	В
Description:	Broken
Distance (ft):	107.9
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	10
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



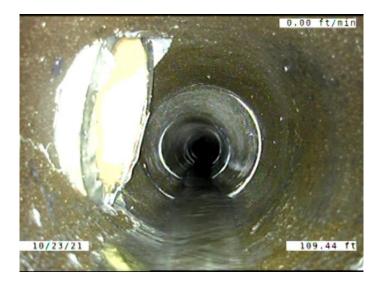
Code: Description:	RFB Roots Fine Barrel
Distance (ft):	107.9
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code: Description:	TBI Tap Break-in Intruding
Distance (ft):	108.5
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	9
Clock To:	
1st Value:	6.000
2nd Value:	2.000
Value Percent:	
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: Value Percent: Continuous Index: Within 8" of Joint:	109.4 0 1 8 11 F01 YES
Remarks:	



Code: MSA Description: **Miscellaneous Survey Abandoned** Distance (ft): 109.4 Structural Grade: 0 0 O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: NO Remarks: **CAMERA CANT MAKE IT PAST PROTRUDING TAP**