Profile/Photo Observation Report

					RUBUTICS
Date: Pipe Length (ft):	09/04/2021 189.5	Weather: Owner:	City of Hobart	Coding: Pre Clean:	PACP 7.0 Heavy Cleaning
P.O.#:	YES502259	Surveyor:	S. Bucklin	PSR:	P-504-078-077
Customer:	City of Hobart	Clean Date:	09/02/2021	Shape:	с
Street:	North Cavender St	reet	Flow Control:	Not Controlled	
City:	Hobart, IN		Year Renewed:		
Location:	Alley		Tape/Media #:		
Purpose:	Routine Assessmer	nt	Dia/Height:	12"	
Use:	Sanitary Sewage Pi	ipe	Material:	VCP	
Drain Area:			Lining:		
Category:	NA				
Comment:					
Location Details	:		Direction of Surv	ey: Downstream	
US MH:	M-504-078	DS MH:	M-504-077	Total Length Surveyed (ft):	189.5
0&M Index:	2.10	O&M Quick:	413	6 O&M Rating:	101.00
tructural Index:	3.70	Structural Qu	iick: 5141	D Structural Rating:	122.00
Overall Index:	2.75	Overall Quick	E4 41		223.00

	Position	Code	Observation	Video (sec)	Grade
M(504-	078				
\mathbb{H}	0.	AMH	Manhole	1	NA
	.0	MWL	Miscellaneous Water Level	55	NA
	.0	OBN	Obstruction Construction Debris	92	M 2
	1.1	DAE	Deposits Attached Encrustation	139	M 2
	3.3	DAE	Deposits Attached Encrustation	197	M 2
	1 4.4	TFD	Tap Factory Defective	236	M 3
	4.4	СМ	Crack Multiple	284	S 3
	14.1	DAE	Deposits Attached Encrustation	348	M 2
	14.1	FM	Fracture Multiple	379	S 4
5	16.1	DAE	Deposits Attached Encrustation	425	M 2
Camera Direction	16.4	CL	Crack Longitudinal	459	S 2
	20.6	CL	Crack Longitudinal	497	S 2
Jer.	20.6	DAE	Deposits Attached Encrustation	513	M 2
	26.9	FM(S01)	Fracture Multiple	596	S 4
	44.1	В	Broken	748	S 4
	44.3	DAE	Deposits Attached Encrustation	786	M 2
	44.9	TBI	Tap Break-in Intruding	808	M 2
	54.8	DAE	Deposits Attached Encrustation	900	M 2
	58.0	TFD	Tap Factory Defective	938	M 3

Tuesday, April 25, 2023

RedZone[®]

69.6	В	Broken	1060	S 4
82.4	FM(F01)	Fracture Multiple	1141	S 4
82.4	DAE	Deposits Attached Encrustation	1181	M
87.9	TFD	Tap Factory Defective	1241	MS
97.5	CS	Crack Spiral	1338	S 2
104.0	DAE	Deposits Attached Encrustation	1435	M
104.0	FM	Fracture Multiple	1446	S 4
106.9	DAR	Deposits Attached Ragging	1483	Μ
108.3	FM	Fracture Multiple	1543	S 4
112.5	DAE	Deposits Attached Encrustation	1623	М
112.5	CM	Crack Multiple	1650	S 3
113.4	TFC	Tap Factory Capped	1675	NA
116.9	DAE	Deposits Attached Encrustation	1723	М
116.9	CM	Crack Multiple	1761	S 3
119.3	DSF(S02)	Deposits Settled Fine	1794	М
121.0	DAE	Deposits Attached Encrustation	1860	М
121.0	FM(S03)	Fracture Multiple	1888	S 4
126.7	DAE	Deposits Attached Encrustation	1942	М
129.5	В	Broken	2050	S 4
129.5	DAE	Deposits Attached Encrustation	2081	М
129.9	IRB	Infiltration Runner Barrel	2106	М
130.6	TFD	Tap Factory Defective	2149	М
139.6	ТВІ	Tap Break-in Intruding	2231	M
142.6	DAE	Deposits Attached Encrustation	2276	М
142.6	SMW	Surface Damage Missing Wall	2298	S 5
144.6	FM(F03)	Fracture Multiple	2335	S 4
144.6	DAE	Deposits Attached Encrustation	2346	М
159.5	CL	Crack Longitudinal	2432	S 2
159.5	DAE	Deposits Attached Encrustation	2462	М
161.4	OBB	Obstruction Brick or Masonry	2493	М
165.9	DAE	Deposits Attached Encrustation	2573	М
165.9	FM	Fracture Multiple	2605	S 4
167.1	TFD	Tap Factory Defective	2631	М
176.7	DAE	Deposits Attached Encrustation	2731	М
176.8	FM	Fracture Multiple	2703	S 4
180.8	RFJ	Roots Fine Joint	2779	М
183.1	RFJ	Roots Fine Joint	2820	М
185.2	FM	Fracture Multiple	2855	S 4
185.2	RFJ	Roots Fine Joint	2857	М
188.0	RMJ	Roots Medium Joint	2920	M
188.0	DSF(F02)	Deposits Settled Fine	2933	М
189.5	AMH	Manhole	3029	NA

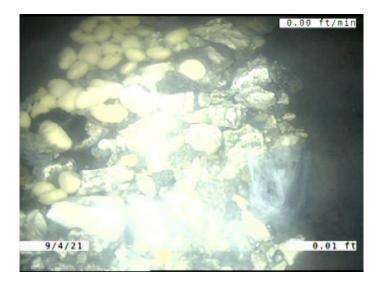
Tuesday, April 25, 2023



Code: Description:	AMH 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-504-078



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:	5.000
Within 8" of Joint: Remarks:	NO



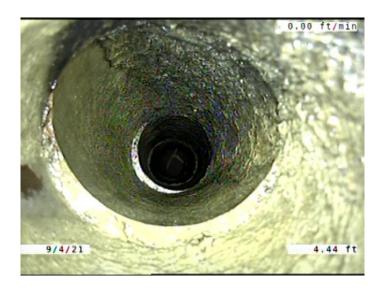
Code: Description:	OBN Obstruction Construction Debris
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	5
Clock To:	7
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



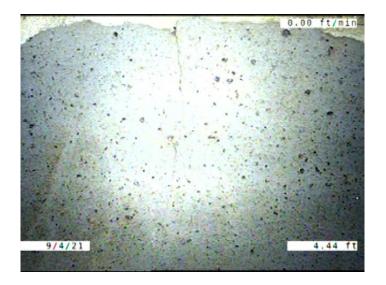
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	1.1 0 2 4 7 5.000 YES



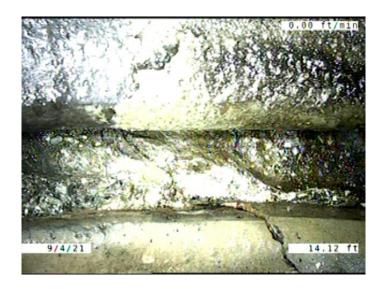
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	3.3
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



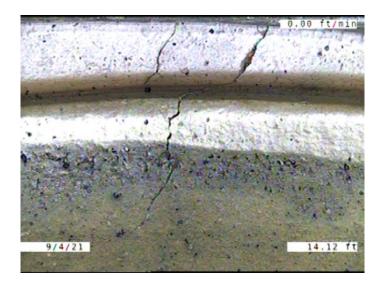
Code:	TFD
Description:	Tap Factory Defective
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent:	4.4 0 3 1 6.000
Continuous Index:	YES
Within 8" of Joint:	ENCRUSTATION ALL THE WAY
Remarks:	AROUND THE TAP



Code:	СМ
Description:	Crack Multiple
Distance (ft):	4.4
Distance (ft):	4.4
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



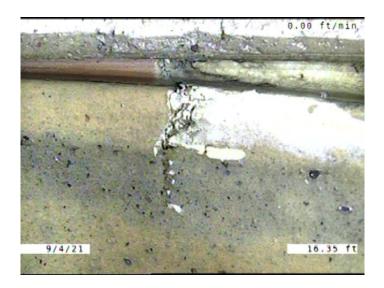
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	14.1
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
Clock To:	11
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



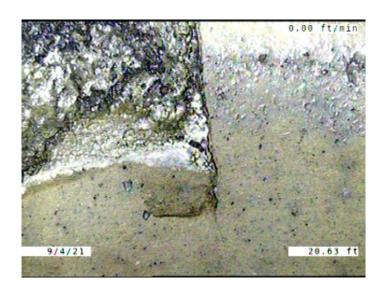
Code:	FM
Description:	Fracture Multiple
Distance (ft):	14.1
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	9
Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	1
Within 8" of Joint: Remarks:	YES



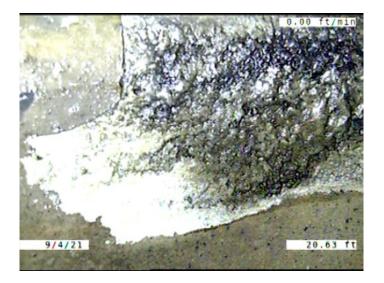
	DAE Deposits Attached Encrustation
Structural Grade: 0 O&M Grade: 2	16.1) 2 3
1st Value: 2nd Value:	10
Continuous Index:	5.000 /ES



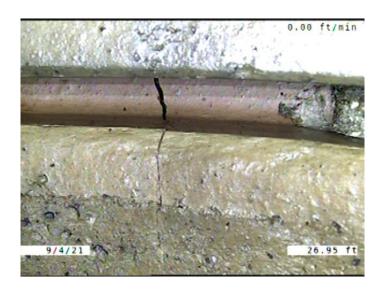
Code:	CL
Description:	Crack Longitudinal
Distance (ft):	16.4
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	2
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



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:	20.6 2 0 11
Within 8" of Joint: Remarks:	YES



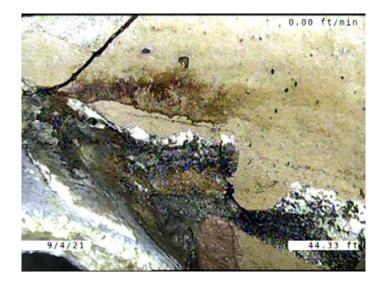
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	20.6
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	9
Clock To:	11
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



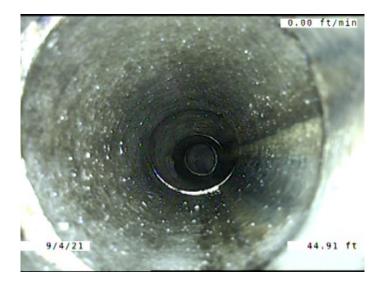
Code: Description:	FM Fracture Multiple
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	26.9 4 0 7 5 5 801 YES



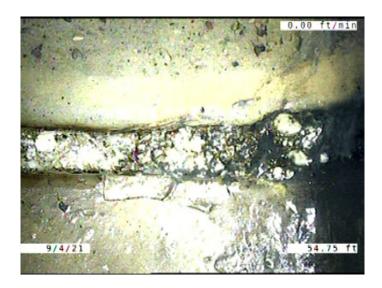
Code:	В
Description:	Broken
Distance (ft):	44.1
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	10
Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



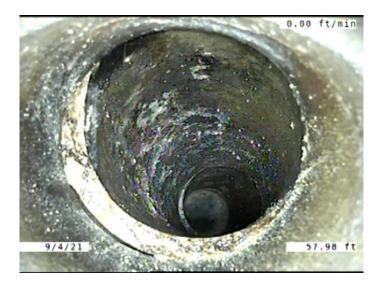
DAE Deposits Attached Encrustation
44.3
0
2
9
3
5.000
YES



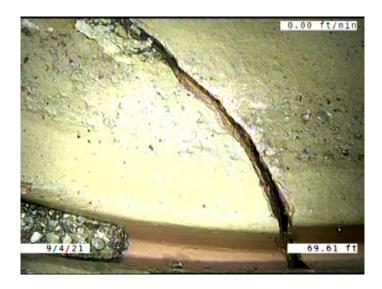
Code: Description:	TBI Tap Break-in Intruding
Distance (ft):	44.9
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	12
Clock To:	
1st Value:	6.000
2nd Value:	3.000
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



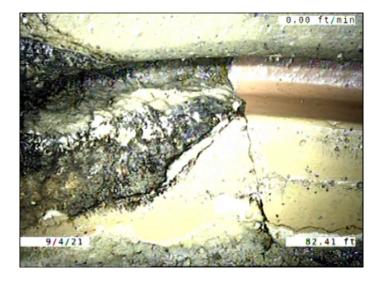
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	54.8 0 2 3 9 5.000
Within 8" of Joint: Remarks:	YES



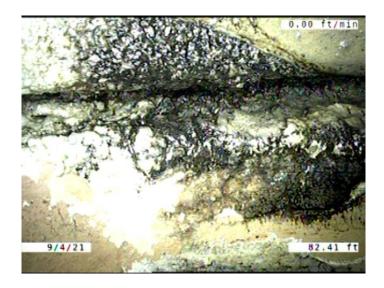
Code:	TFD
Description:	Tap Factory Defective
Distance (ft):	58.0
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	1
Clock To:	
1st Value:	6.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	FIRST JOINT BACK OFFSET



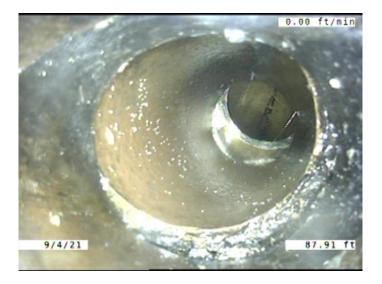
Code: Description:	B Broken
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	69.6 4 0 4 6
Within 8" of Joint: Remarks:	YES



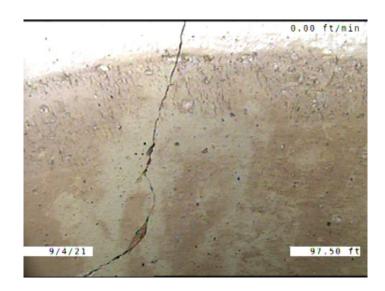
Code:	FM
Description:	Fracture Multiple
D (1)	
Distance (ft):	82.4
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	7
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F01
Within 8" of Joint:	YES
Remarks:	



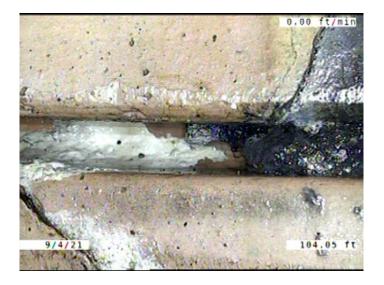
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	82.4
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	12
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



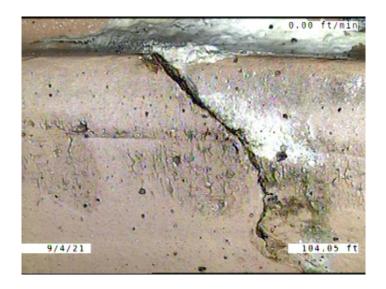
Code:	TFD
Description:	Tap Factory Defective
Distance (ft)	97.0
Distance (ft):	87.9
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	12
Clock To:	
1st Value:	6.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	CONSTANTLY RUNNING WATER.
	JOINTS ARE ALL OFFSET THAT I CAN



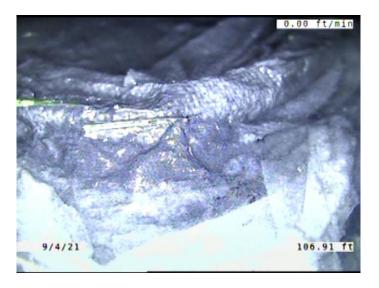
Code:	CS
Description:	Crack Spiral
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	97.5 2 0 9 11 YES



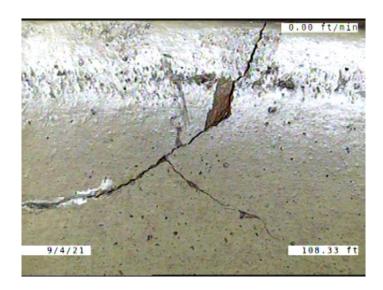
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	104.0
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	FM Fracture Multiple
Distance (ft): Structural Grade:	104.0 4
O&M Grade:	0
Clock Start/From:	8
Clock To: 1st Value:	4
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



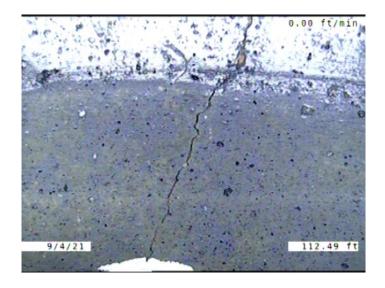
Code: Description:	DAR Deposits Attached Ragging
Distance (ft):	106.9
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	6
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



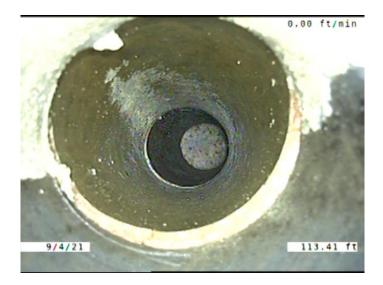
Code: Description:	FM Fracture Multiple
Distance (ft):	108.3
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	8
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	112.5
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	10
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	5.000
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: Continuous Index:	112.5 3 0 12 4
Within 8" of Joint: Remarks:	YES



Code: Description:	TFC Tap Factory Capped
Distance (ft):	113.4
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	12
Clock To:	
1st Value:	6.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



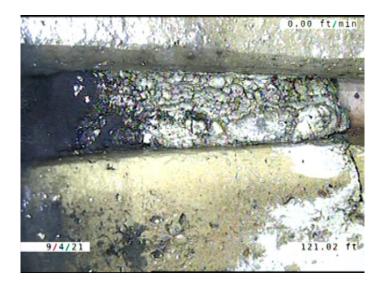
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	116.9 0 2 3 9 5.000 YES



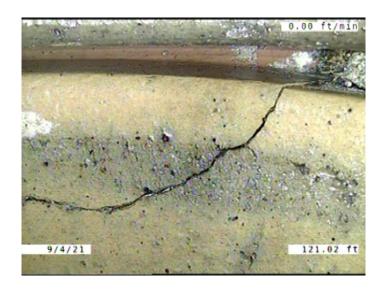
Code:	СМ
Description:	Crack Multiple
	110.0
Distance (ft):	116.9
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	9
Clock To:	3
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



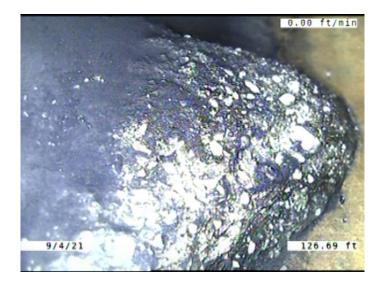
Code:	DSF
Description:	Deposits Settled Fine
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	119.3 0 2 5 7 5.000 \$02 YES



Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	121.0
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	12
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	

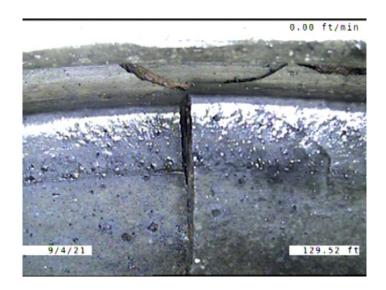


Code: Description:	FM Fracture Multiple
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	121.0 4 0 8 4 503 YES
Remarks:	

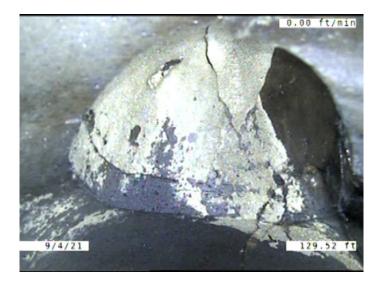


Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	126.7
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	4
Clock To:	6
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	NO

Remarks:

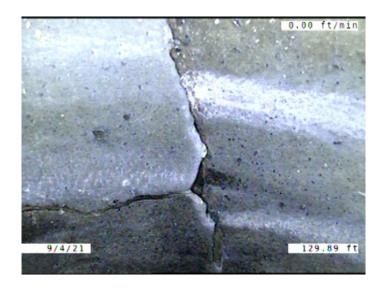


Code: Description:	B Broken
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent:	129.5 4 0 12 2
Continuous Index: Within 8" of Joint: Remarks:	YES

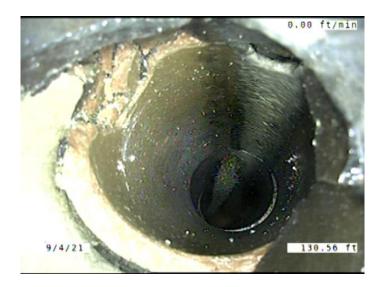


Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	129.5
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES

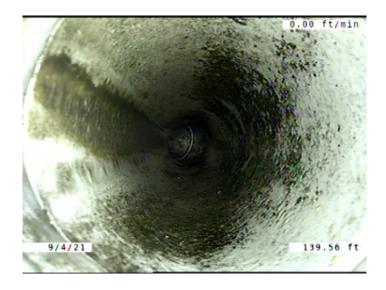
Remarks:



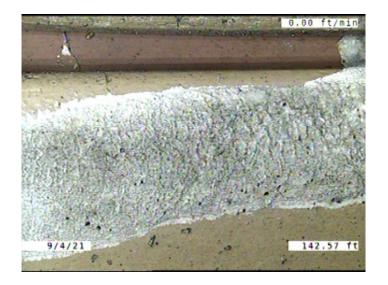
Code: Description:	IRB Infiltration Runner Barrel
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	129.9 0 4 2



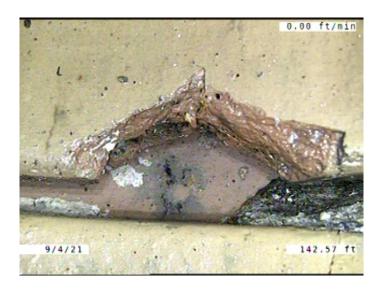
Code:	TFD
Description:	Tap Factory Defective
Distance (ft):	120 0
Distance (ft):	130.6
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	1
Clock To:	
1st Value:	6.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	BROKEN AND OFFSET



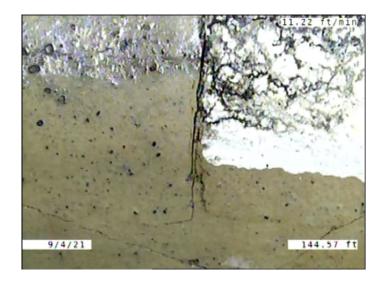
Code: Description:	TBI Tap Break-in Intruding
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	139.6 0 2 11 6.000 3.000
Within 8" of Joint: Remarks:	YES



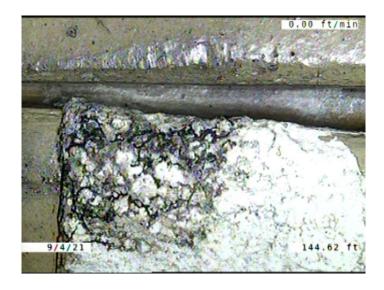
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	142.6
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	9
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



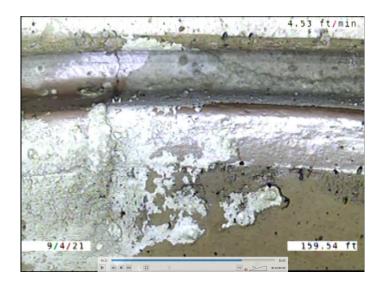
Code: Description:	SMW Surface Damage Missing Wall
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	142.6 5 0 2 3 YES



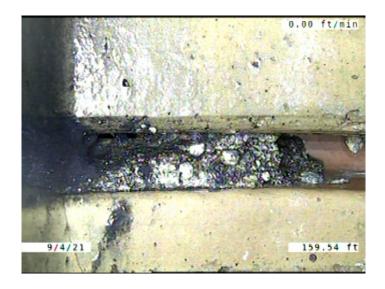
Code:	FM
Description:	Fracture Multiple
Distance (ft):	144.6
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F03
Within 8" of Joint:	YES
Remarks:	



Code: Description:	DAE Deposits Attached Encrustation
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value:	144.6 0 2 1 3
2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	5.000 YES



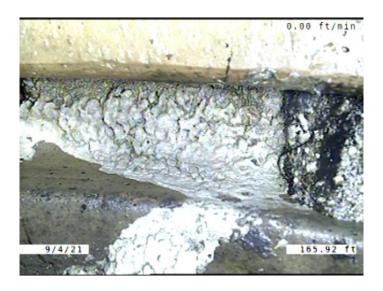
CL Crack Longitudinal
159.5
2
0
12
YES



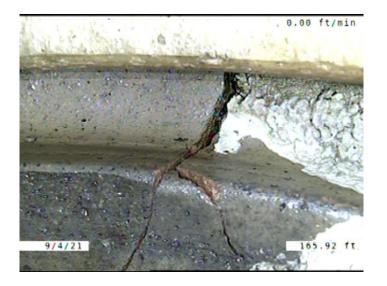
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	159.5 0 2 8 4 5.000 YES



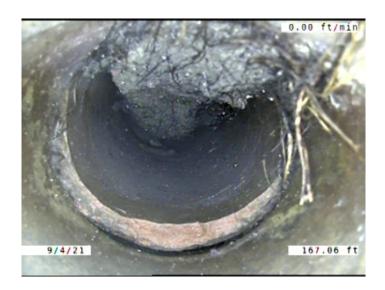
Code: Description:	OBB Obstruction Brick or Masonry
Distance (ft):	161.4
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	5
Clock To:	7
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



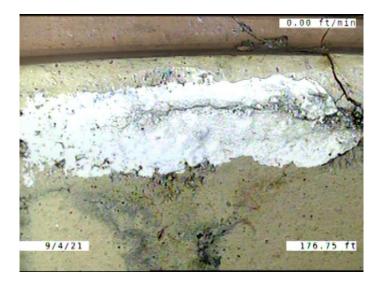
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft): Structural Grade: O&M Grade:	165.9 0 2
Clock Start/From: Clock To: 1st Value: 2nd Value:	8 4
Value Percent: Continuous Index:	5.000
Within 8" of Joint: Remarks:	YES



Code: Description:	FM Fracture Multiple
Distance (ft):	165.9
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	11
Clock To:	3
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



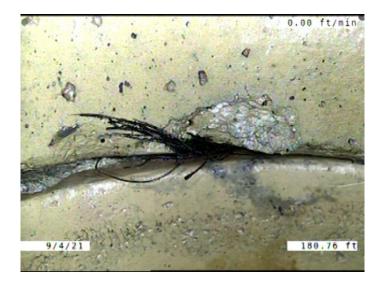
Code: Description:	TFD Tap Factory Defective
Distance (ft):	167.1
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	1
Clock To:	
1st Value:	6.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	LOOKS TO BE 80+% PLUGGED WITH ROOTS



Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	176.7
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	10
Clock To:	11
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



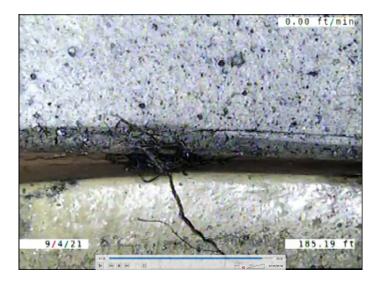
Code: Description:	FM Fracture Multiple
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	176.8 4 0 11 1
Within 8" of Joint: Remarks:	YES



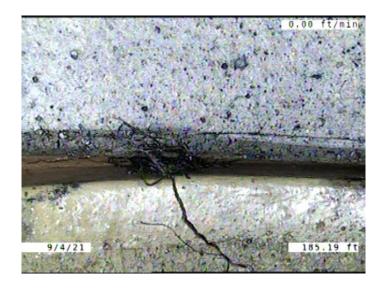
Code:	RFJ
Description:	Roots Fine Joint
Distance (ft):	180.8
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	10
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	RFJ Roots Fine Joint
Distance (ft): Structural Grade:	183.1 0
O&M Grade:	1
Clock Start/From: Clock To:	11
1st Value:	
2nd Value: Value Percent:	
Continuous Index:	
Within 8" of Joint: Remarks:	YES



Code:	FM
Description:	Fracture Multiple
Distance (ft):	185.2
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	11
Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



RFJ Roots Fine Joint
185.2
0
1
11
YES



Code:	RMJ
Description:	Roots Medium Joint
Distance (ft):	188.0
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	9
Clock To:	3
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:	DSF
Description:	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: Remarks:	188.0 0 2 5 7 5.000 F02 YES



Code:	AMH
Description:	Manhole
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:	189.5 0 0 NO M-504-077