

RedZone  
ROBOTICS

Street:	42nd Avenue	Flow Control:	Not Controlled
City:	Hobart, IN	Year Renewed:	
Location:	Alley	Tape/Media #:	
Purpose:	Routine Assessment	Dia/Height:	12"
Use:	Sanitary Sewage Pipe	Material:	VCP
Drain Area:		Lining:	
Category:	NA		
Comment:			
Location Details:		Direction of Survey:	Upstream
US MH:	M-504-079	DS MH:	M-504-078
			Total Length Surveyed (ft)

Position	Code	Observation	Video (sec)	Grade
0	AMH	Manhole	1	NA
0	MWL	Miscellaneous Water Level	63	NA
1.5	DAE	Deposits Attached Encrustation	129	M 2
7.2	TFC	Tap Factory Capped	185	NA
7.7	CL	Crack Longitudinal	214	S 2
7.7	DAE	Deposits Attached Encrustation	230	M 2
9.2	TFC	Tap Factory Capped	262	NA
14.3	DAE	Deposits Attached Encrustation	314	M 2
14.3	FM	Fracture Multiple	344	S 4
18.6	DAE(S01)	Deposits Attached Encrustation	410	M 2
18.6	CM	Crack Multiple	462	S 3
22.6	JOM	Joint Offset Medium	499	S 3
29.2	JAM	Joint Angular Medium	560	S 3
29.2	CM	Crack Multiple	596	S 3
31.3	OBZ	Obstruction Other	626	M 2
33.1	JOM	Joint Offset Medium	648	S 3
35.0	DAE	Deposits Attached Encrustation	724	M 2
35.3	TBI	Tap Break-in Intruding	744	M 2
42.4	OBZ	Obstruction Other	788	M 2

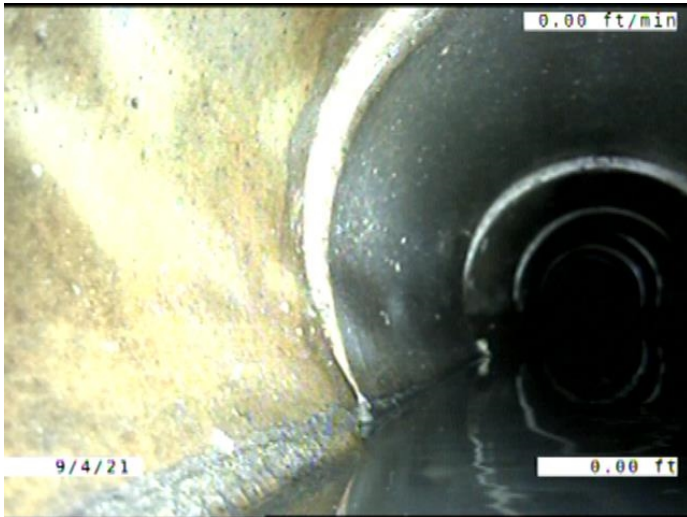
45.7	TFC	Tap Factory Capped	820	NA
45.7	DAE	Deposits Attached Encrustation	840	M 2
46.4	FM	Fracture Multiple	889	S 4
48.0	TFC	Tap Factory Capped	917	NA
52.9	DAE	Deposits Attached Encrustation	984	M 2
54.9	CC	Crack Circumferential	1008	S 1
54.9	DAE	Deposits Attached Encrustation	1025	M 2
71.9	DAE	Deposits Attached Encrustation	1132	M 2
74.2	DAE	Deposits Attached Encrustation	1167	M 2
78.5	DAE	Deposits Attached Encrustation	1226	M 2
80.6	DAE	Deposits Attached Encrustation	1265	M 2
87.7	ISB	Infiltration Stain Barrel	1334	M 1
88.0	TBI	Tap Break-in Intruding	1367	M 2
90.8	DAE(F01)	Deposits Attached Encrustation	1411	M 2
96.5	TFC	Tap Factory Capped	1446	NA
98.8	TFD	Tap Factory Defective	1475	M 3
98.9	B	Broken	1503	S 4
101.8	RFJ	Roots Fine Joint	1534	M 1
103.8	RFJ	Roots Fine Joint	1582	M 1
114.3	JOM	Joint Offset Medium	1640	S 3
125.3	DAE	Deposits Attached Encrustation	1702	M 2
138.2	CM	Crack Multiple	1782	S 3
140.3	AMH	Manhole	1874	NA

**M-504-079**



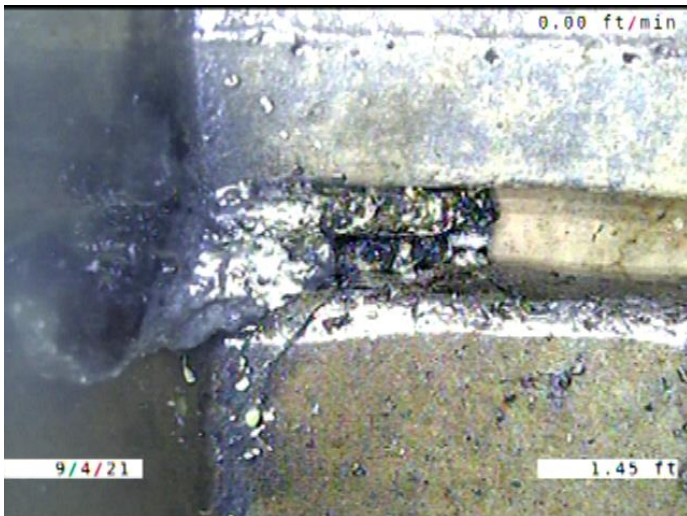
Code: **AMH**  
Description: **Manhole**

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-504-078**



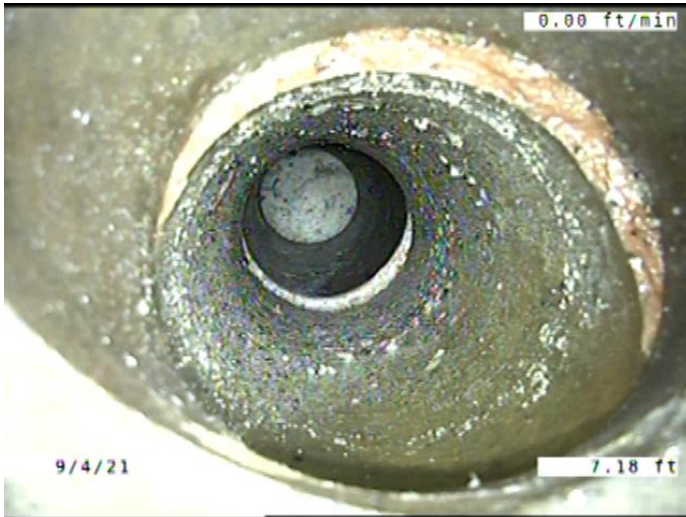
Code: **MWL**  
 Description: **Miscellaneous Water Level**

Distance (ft): **.0**  
 Structural Grade: **0**  
 O&M Grade: **0**  
 Clock Start/From:  
 Clock To:  
 1st Value:  
 2nd Value:  
 Value Percent: **10.000**  
 Continuous Index:  
 Within 8" of Joint: **NO**  
 Remarks:



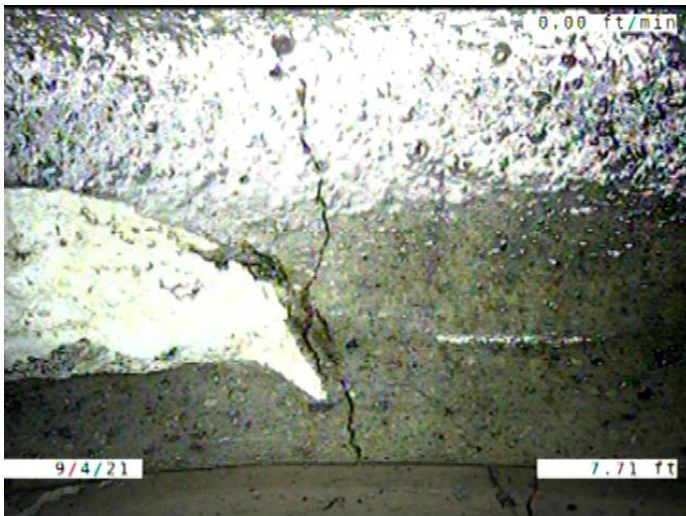
Code: **DAE**  
 Description: **Deposits Attached Encrustation**

Distance (ft): **1.5**  
 Structural Grade: **0**  
 O&M Grade: **2**  
 Clock Start/From: **8**  
 Clock To: **9**  
 1st Value:  
 2nd Value:  
 Value Percent: **5.000**  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:



Code: **TFC**  
 Description: **Tap Factory Capped**

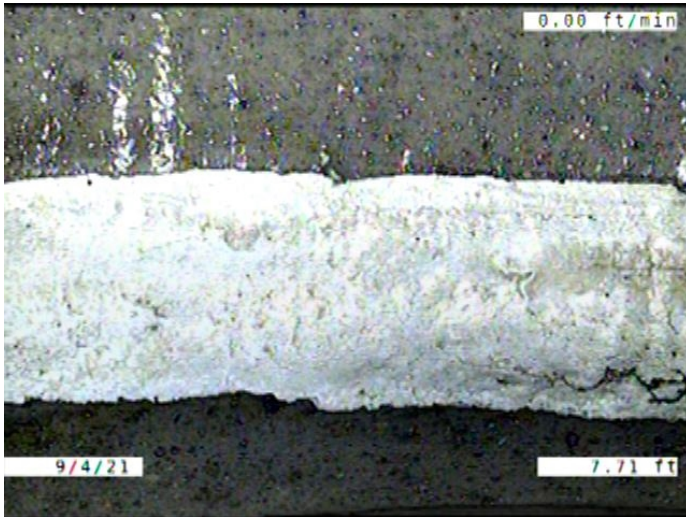
Distance (ft): **7.2**  
 Structural Grade: **0**  
 O&M Grade: **0**  
 Clock Start/From: **11**  
 Clock To:  
 1st Value: **6.000**  
 2nd Value:  
 Value Percent:  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks: **FIRST JOINT BACK OFFSET**



Code: **CL**  
 Description: **Crack Longitudinal**

Distance (ft): **7.7**  
 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:

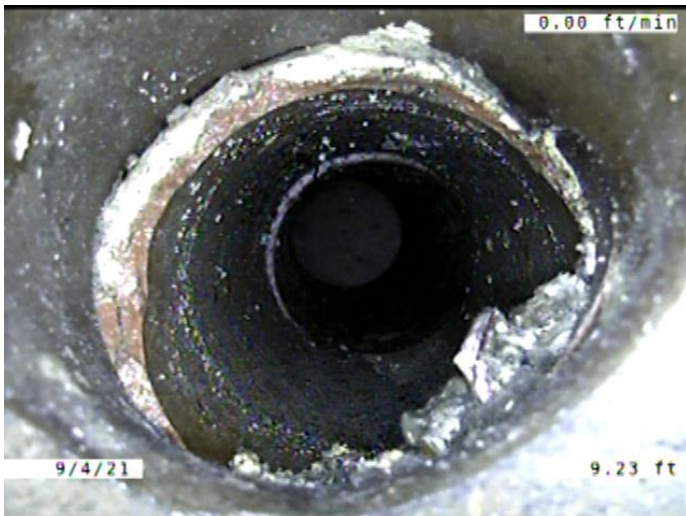




Code: **DAE**  
 Description: **Deposits Attached Encrustation**

Distance (ft): **7.7**  
 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:

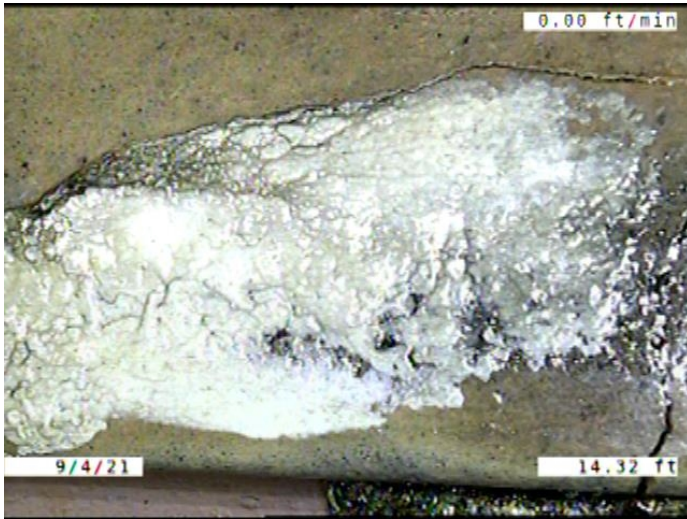
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Code: **TFC**  
 Description: **Tap Factory Capped**

Distance (ft): **9.2**  
 Structural Grade: **0**  
 O&M Grade: **0**  
 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**

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Code: **DAE**  
 Description: **Deposits Attached Encrustation**

Distance (ft): **14.3**  
 Structural Grade: **0**  
 O&M Grade: **2**  
 Clock Start/From: **2**  
 Clock To: **4**  
 1st Value:  
 2nd Value:  
 Value Percent: **5.000**  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:

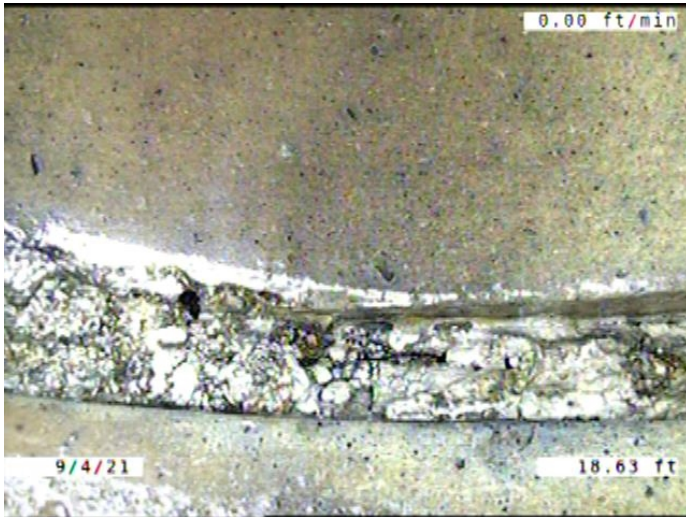
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Code: **FM**  
 Description: **Fracture Multiple**

Distance (ft): **14.3**  
 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:

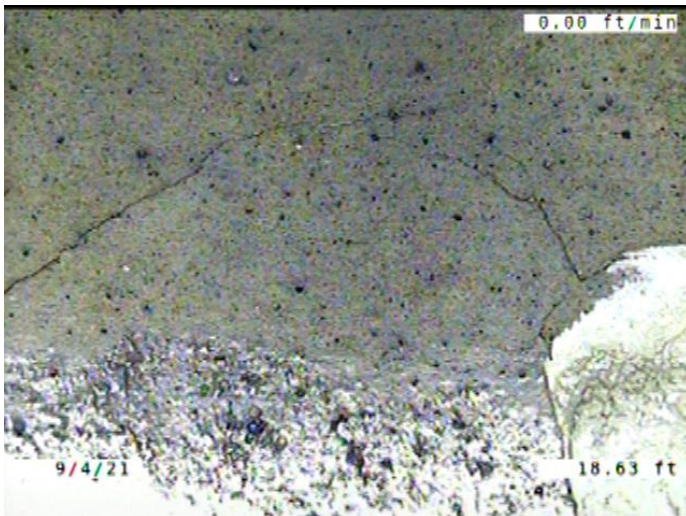
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Code: **DAE**  
Description: **Deposits Attached Encrustation**

Distance (ft): **18.6**  
Structural Grade: **0**  
O&M Grade: **2**  
Clock Start/From: **2**  
Clock To: **9**  
1st Value:  
2nd Value:  
Value Percent: **5.000**  
Continuous Index: **S01**  
Within 8" of Joint: **YES**  
Remarks:

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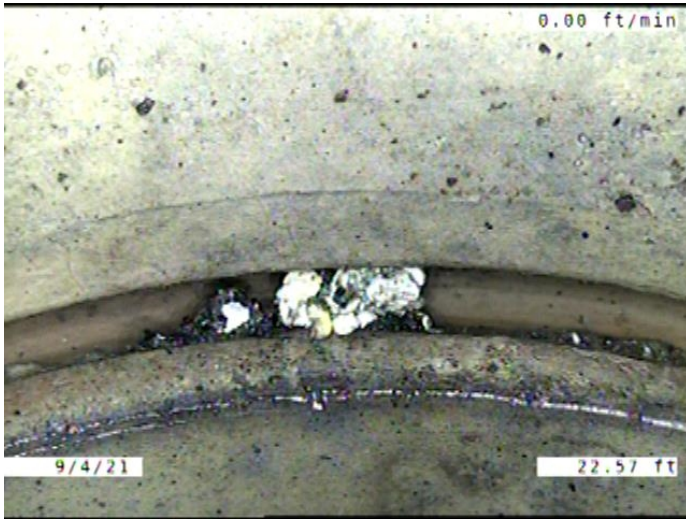


Code: **CM**  
Description: **Crack Multiple**

Distance (ft): **18.6**  
Structural Grade: **3**  
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:

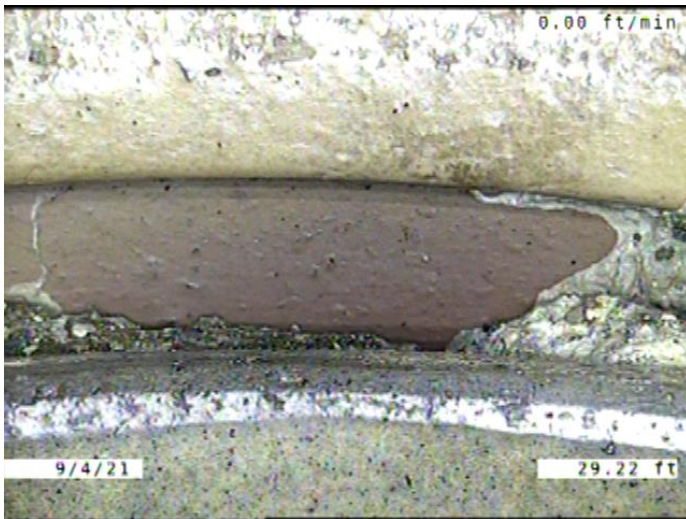
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Code: **JOM**  
Description: **Joint Offset Medium**

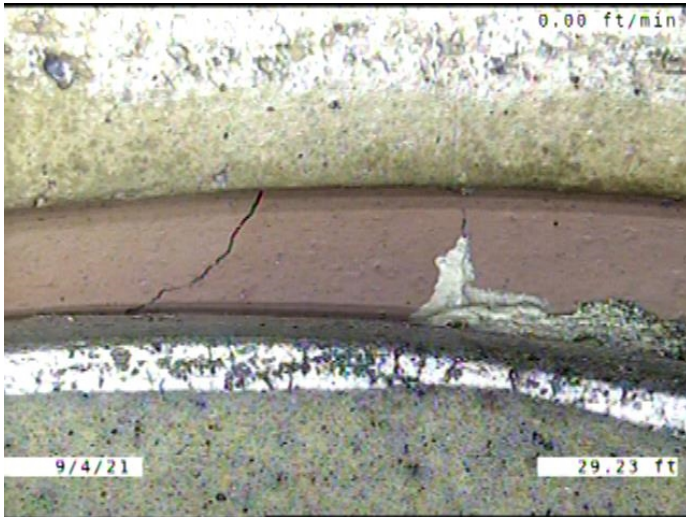
Distance (ft): **22.6**  
Structural Grade: **3**  
O&M Grade: **0**  
Clock Start/From:  
Clock To:  
1st Value:  
2nd Value:  
Value Percent:  
Continuous Index:  
Within 8" of Joint: **NO**  
Remarks:



Code: **JAM**  
Description: **Joint Angular Medium**

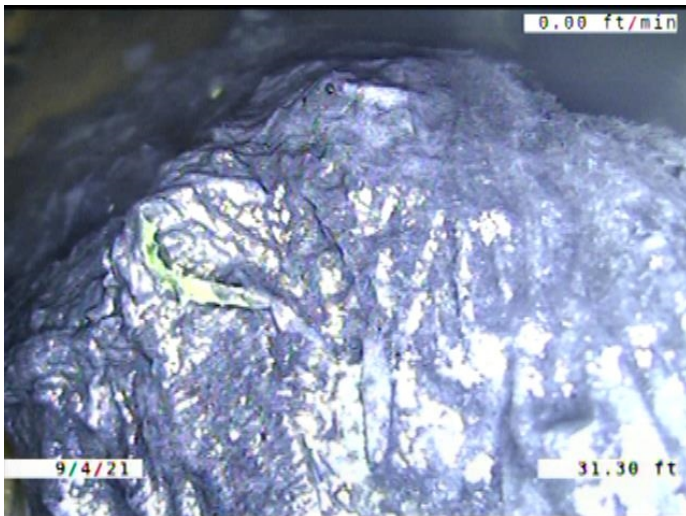
Distance (ft): **29.2**  
Structural Grade: **3**  
O&M Grade: **0**  
Clock Start/From:  
Clock To:  
1st Value:  
2nd Value:  
Value Percent:  
Continuous Index:  
Within 8" of Joint: **NO**  
Remarks:





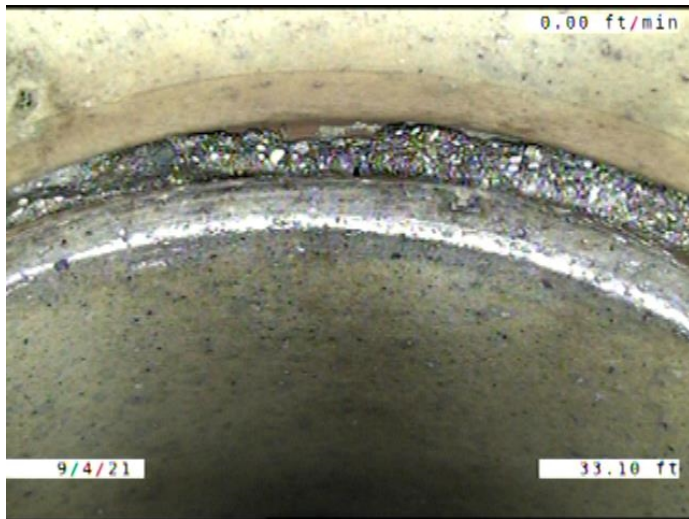
Code: **CM**  
 Description: **Crack Multiple**

Distance (ft): **29.2**  
 Structural Grade: **3**  
 O&M Grade: **0**  
 Clock Start/From: **10**  
 Clock To: **12**  
 1st Value:  
 2nd Value:  
 Value Percent:  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:



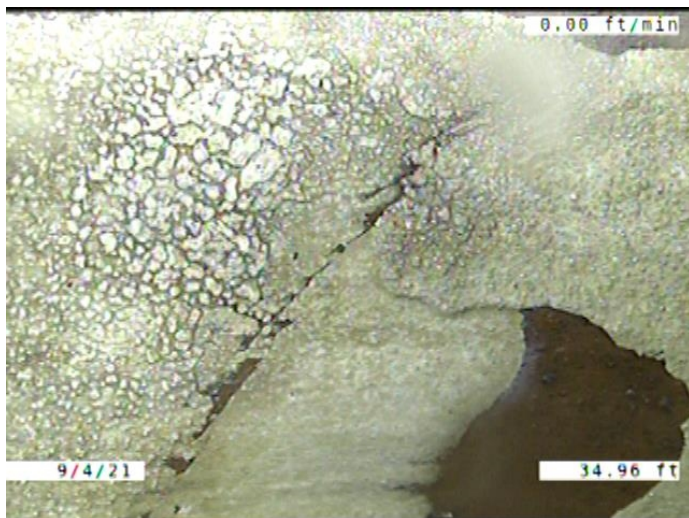
Code: **OBZ**  
 Description: **Obstruction Other**

Distance (ft): **31.3**  
 Structural Grade: **0**  
 O&M Grade: **2**  
 Clock Start/From: **6**  
 Clock To: **8**  
 1st Value:  
 2nd Value:  
 Value Percent: **5.000**  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks: **TP AND RAGS**



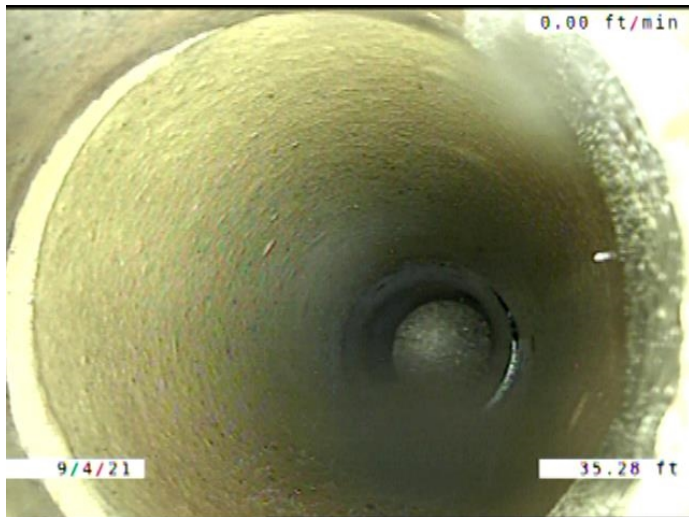
Code: **JOM**  
 Description: **Joint Offset Medium**

Distance (ft): **33.1**  
 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: **DAE**  
 Description: **Deposits Attached Encrustation**

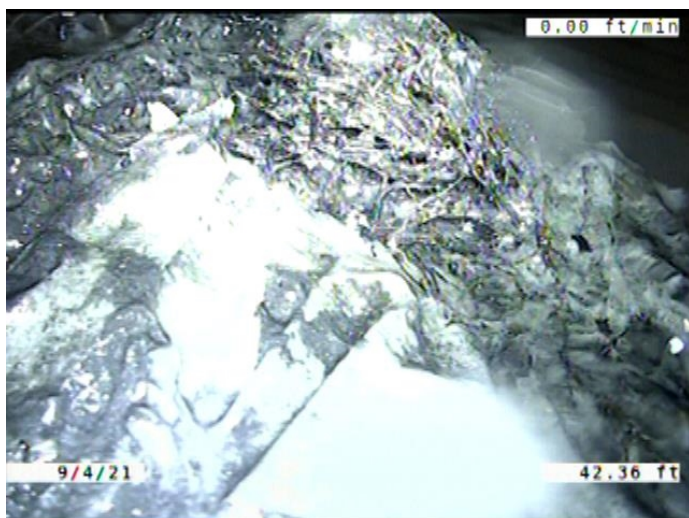
Distance (ft): **35.0**  
 Structural Grade: **0**  
 O&M Grade: **2**  
 Clock Start/From: **9**  
 Clock To: **3**  
 1st Value:  
 2nd Value:  
 Value Percent: **5.000**  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:



Code: **TBI**  
 Description: **Tap Break-in Intruding**

Distance (ft): **35.3**  
 Structural Grade: **0**  
 O&M Grade: **2**  
 Clock Start/From: **12**  
 Clock To:  
 1st Value: **6.000**  
 2nd Value: **2.000**

Value Percent:  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks: **CONSTANTLY RUNNING WATER. LOOKS TO BE CAPPED**

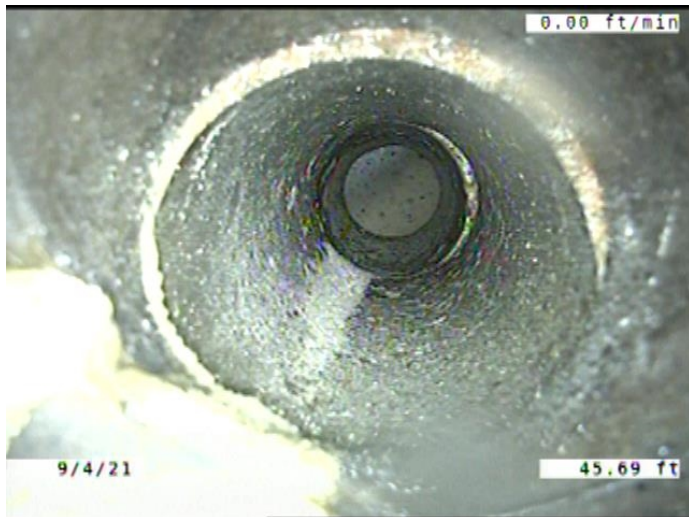


Code: **OBZ**  
 Description: **Obstruction Other**

Distance (ft): **42.4**  
 Structural Grade: **0**  
 O&M Grade: **2**  
 Clock Start/From: **5**  
 Clock To: **7**  
 1st Value:  
 2nd Value:  
 Value Percent: **5.000**

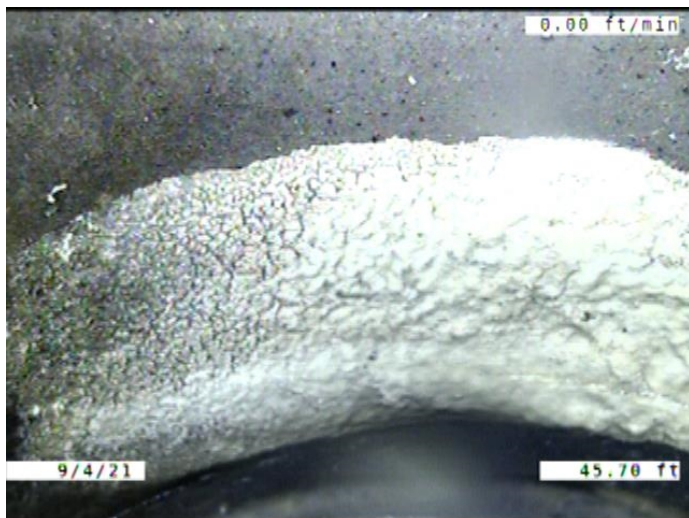
Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks: **ROOTS THAT FLOATED DOWN THE LINE**





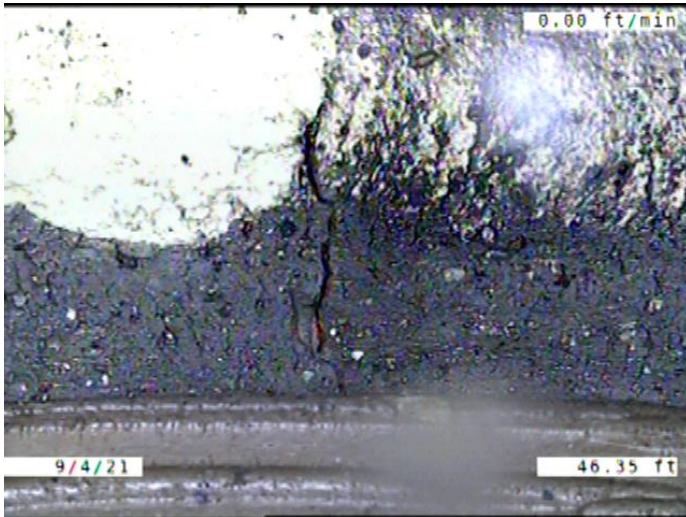
Code: **TFC**  
 Description: **Tap Factory Capped**

Distance (ft): **45.7**  
 Structural Grade: **0**  
 O&M Grade: **0**  
 Clock Start/From: **11**  
 Clock To:  
 1st Value: **6.000**  
 2nd Value:  
 Value Percent:  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:



Code: **DAE**  
 Description: **Deposits Attached Encrustation**

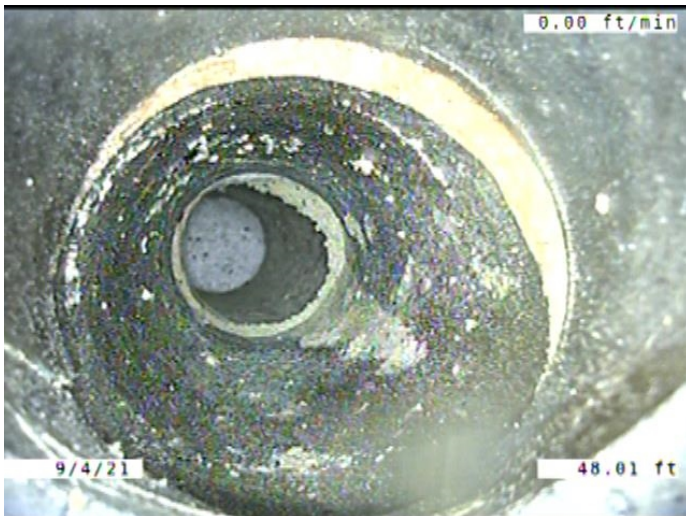
Distance (ft): **45.7**  
 Structural Grade: **0**  
 O&M Grade: **2**  
 Clock Start/From: **8**  
 Clock To: **11**  
 1st Value:  
 2nd Value:  
 Value Percent: **5.000**  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:



Code: **FM**  
Description: **Fracture Multiple**

Distance (ft): **46.4**  
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:

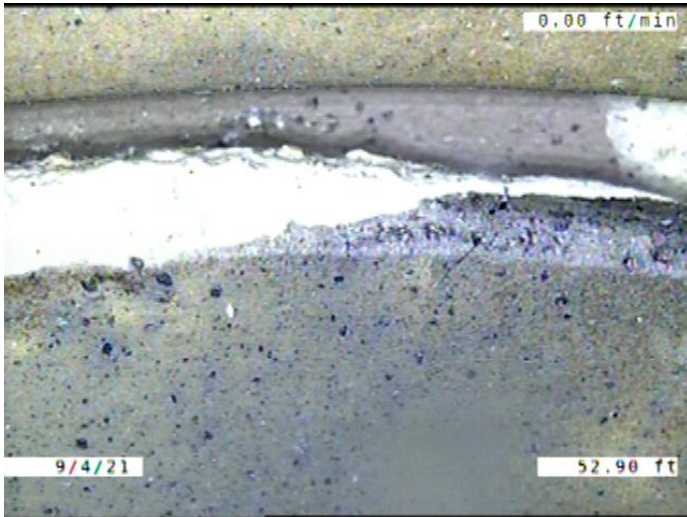
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Code: **TFC**  
Description: **Tap Factory Capped**

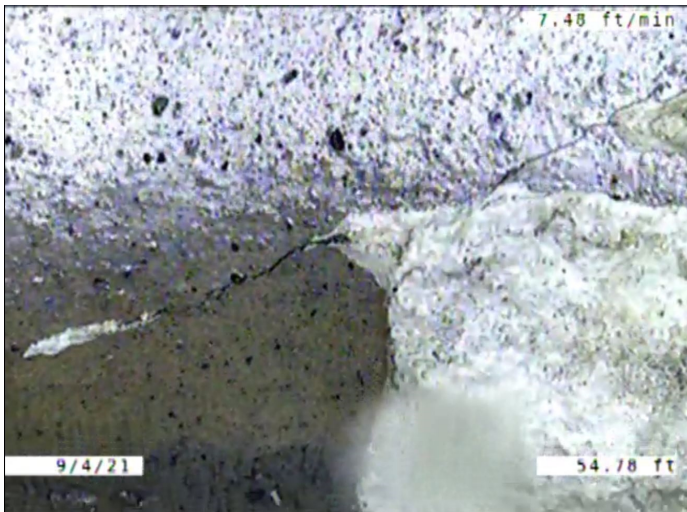
Distance (ft): **48.0**  
Structural Grade: **0**  
O&M Grade: **0**  
Clock Start/From: **1**  
Clock To:  
1st Value: **6.000**  
2nd Value:  
Value Percent:  
Continuous Index:  
Within 8" of Joint: **YES**  
Remarks: **FIRST JOINT BACK OFFSET**

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Code: **DAE**  
 Description: **Deposits Attached Encrustation**

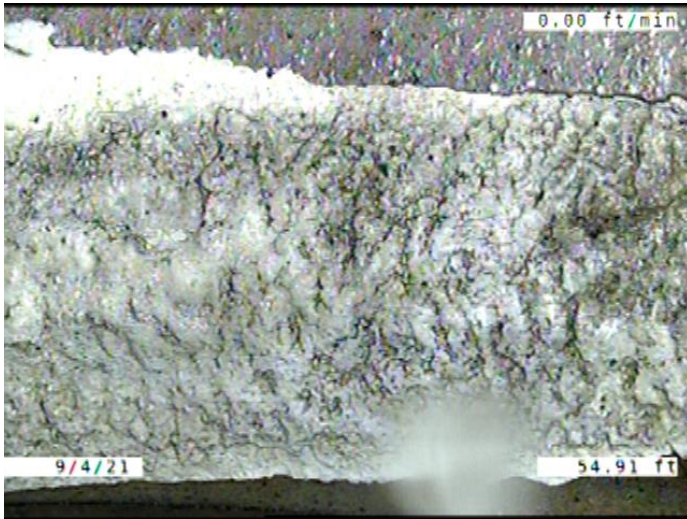
Distance (ft): **52.9**  
 Structural Grade: **0**  
 O&M Grade: **2**  
 Clock Start/From: **8**  
 Clock To: **4**  
 1st Value:  
 2nd Value:  
 Value Percent: **5.000**  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:



Code: **CC**  
 Description: **Crack Circumferential**

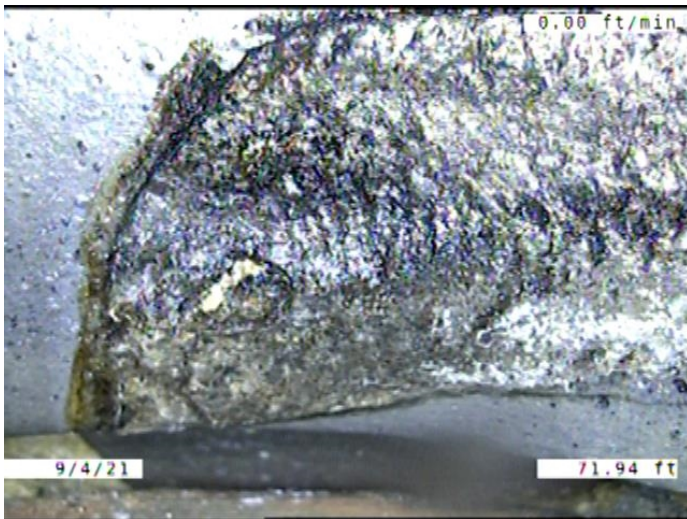
Distance (ft): **54.9**  
 Structural Grade: **1**  
 O&M Grade: **0**  
 Clock Start/From: **11**  
 Clock To: **1**  
 1st Value:  
 2nd Value:  
 Value Percent:  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:





Code: **DAE**  
 Description: **Deposits Attached Encrustation**

Distance (ft): **54.9**  
 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:



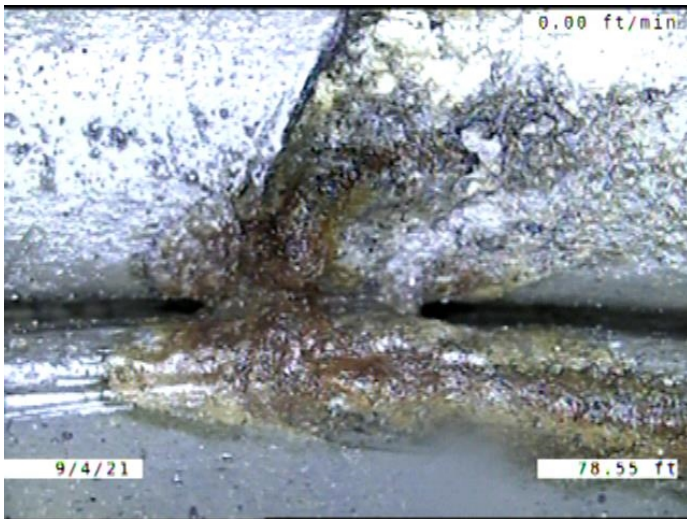
Code: **DAE**  
 Description: **Deposits Attached Encrustation**

Distance (ft): **71.9**  
 Structural Grade: **0**  
 O&M Grade: **2**  
 Clock Start/From: **2**  
 Clock To: **4**  
 1st Value:  
 2nd Value:  
 Value Percent: **5.000**  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:



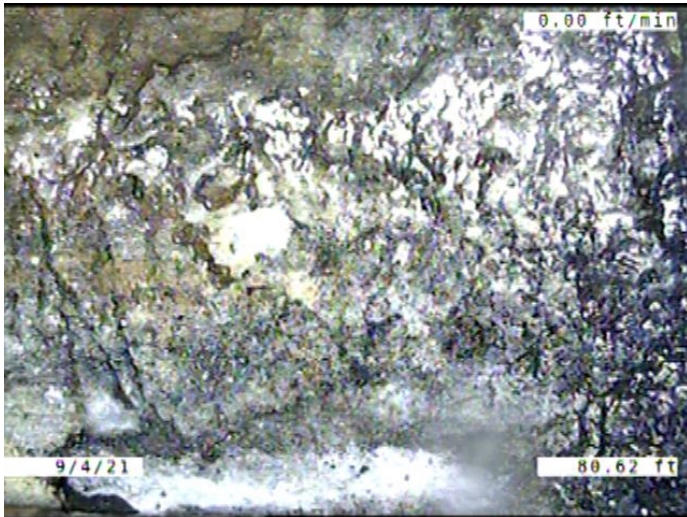
Code: **DAE**  
 Description: **Deposits Attached Encrustation**

Distance (ft): **74.2**  
 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: **DAE**  
 Description: **Deposits Attached Encrustation**

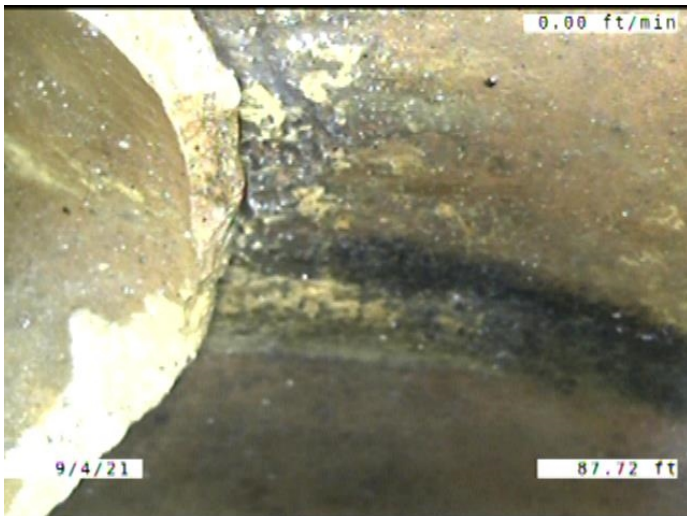
Distance (ft): **78.5**  
 Structural Grade: **0**  
 O&M Grade: **2**  
 Clock Start/From: **12**  
 Clock To: **4**  
 1st Value:  
 2nd Value:  
 Value Percent: **5.000**  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:



Code: **DAE**  
 Description: **Deposits Attached Encrustation**

Distance (ft): **80.6**  
 Structural Grade: **0**  
 O&M Grade: **2**  
 Clock Start/From: **12**  
 Clock To: **4**  
 1st Value:  
 2nd Value:  
 Value Percent: **5.000**  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:

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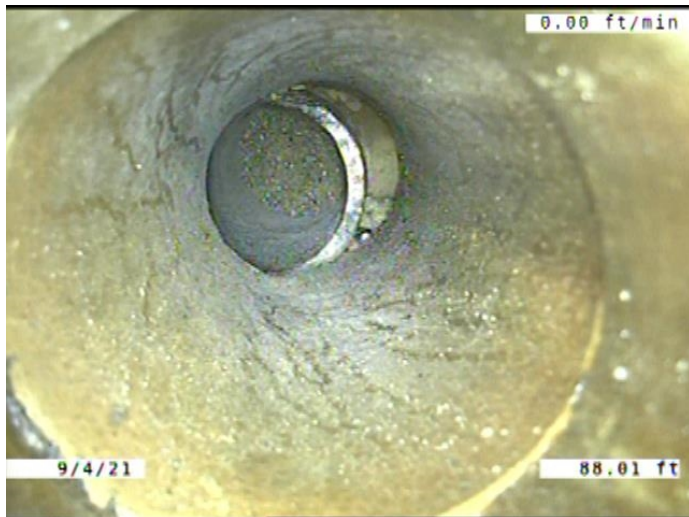


Code: **ISB**  
 Description: **Infiltration Stain Barrel**

Distance (ft): **87.7**  
 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:

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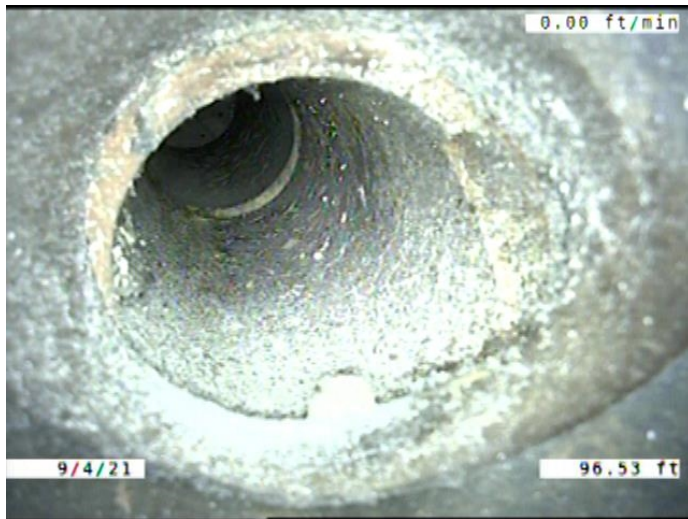




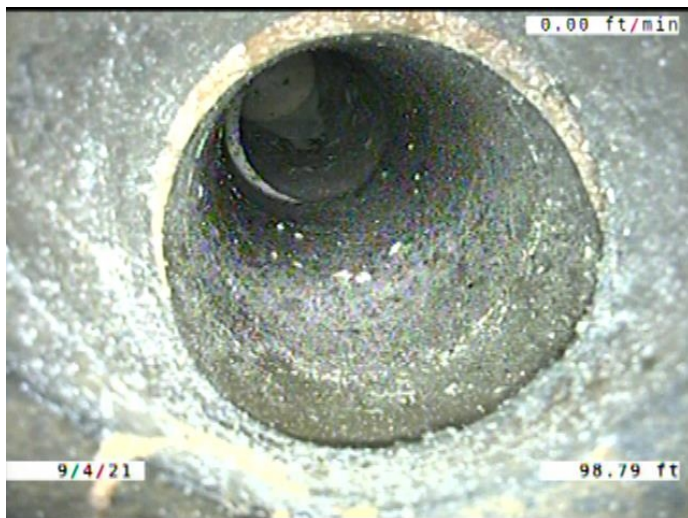
Code:	<b>TBI</b>
Description:	<b>Tap Break-in Intruding</b>
Distance (ft):	<b>88.0</b>
Structural Grade:	<b>0</b>
O&M Grade:	<b>2</b>
Clock Start/From:	<b>1</b>
Clock To:	
1st Value:	<b>6.000</b>
2nd Value:	<b>3.000</b>
Value Percent:	
Continuous Index:	
Within 8" of Joint:	<b>YES</b>
Remarks:	<b>SECOND JOINT BACK OFFSET. CONSTANTLY RUNNING WATER. LO</b>



Code:	<b>DAE</b>
Description:	<b>Deposits Attached Encrustation</b>
Distance (ft):	<b>90.8</b>
Structural Grade:	<b>0</b>
O&M Grade:	<b>2</b>
Clock Start/From:	<b>2</b>
Clock To:	<b>9</b>
1st Value:	
2nd Value:	
Value Percent:	<b>5.000</b>
Continuous Index:	<b>F01</b>
Within 8" of Joint:	<b>YES</b>
Remarks:	



Code:	<b>TFC</b>
Description:	<b>Tap Factory Capped</b>
Distance (ft):	<b>96.5</b>
Structural Grade:	<b>0</b>
O&M Grade:	<b>0</b>
Clock Start/From:	<b>12</b>
Clock To:	
1st Value:	<b>6.000</b>
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	<b>YES</b>
Remarks:	<b>FIRST JOINT BACK OFFSET. LOOKS TO BE CAPPED</b>

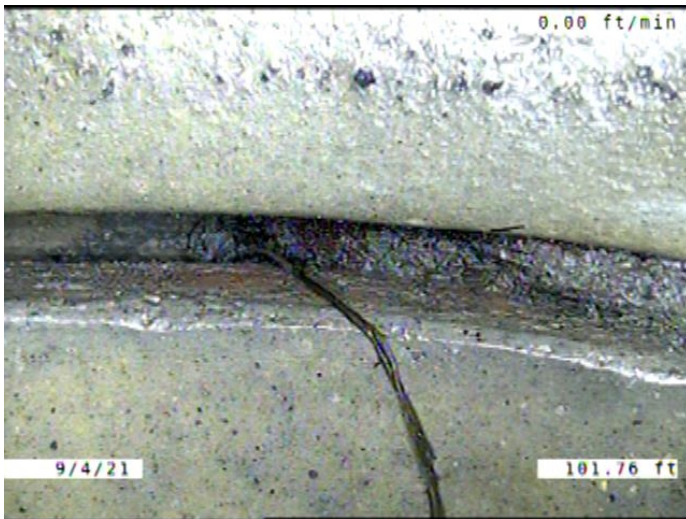


Code:	<b>TFD</b>
Description:	<b>Tap Factory Defective</b>
Distance (ft):	<b>98.8</b>
Structural Grade:	<b>0</b>
O&M Grade:	<b>3</b>
Clock Start/From:	<b>1</b>
Clock To:	
1st Value:	<b>6.000</b>
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	<b>YES</b>
Remarks:	<b>FIRST JOINT BACK OFFSET. LOOKS TO BE CAPPED</b>



Code: **B**  
 Description: **Broken**

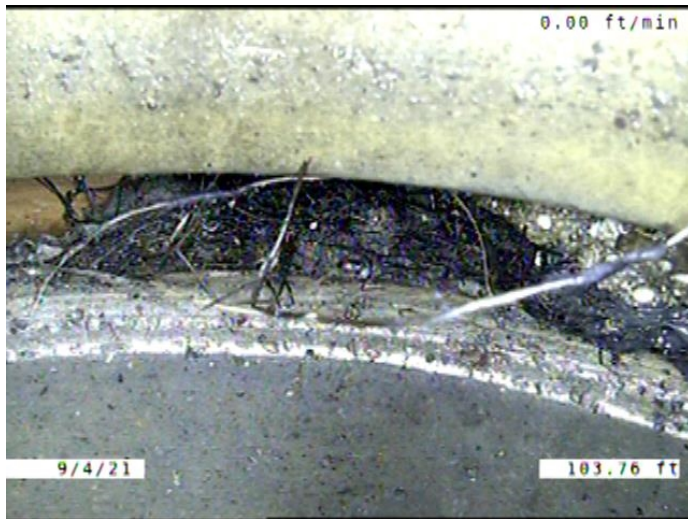
Distance (ft): **98.9**  
 Structural Grade: **4**  
 O&M Grade: **0**  
 Clock Start/From: **12**  
 Clock To: **1**  
 1st Value:  
 2nd Value:  
 Value Percent:  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:



Code: **RFJ**  
 Description: **Roots Fine Joint**

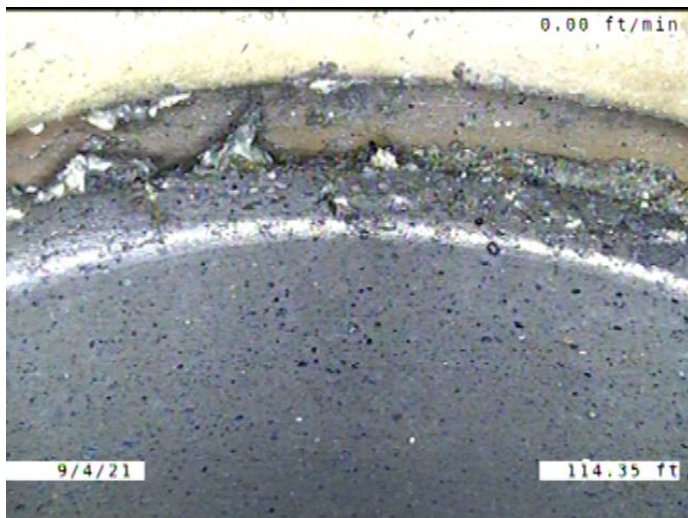
Distance (ft): **101.8**  
 Structural Grade: **0**  
 O&M Grade: **1**  
 Clock Start/From: **3**  
 Clock To:  
 1st Value:  
 2nd Value:  
 Value Percent:  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:





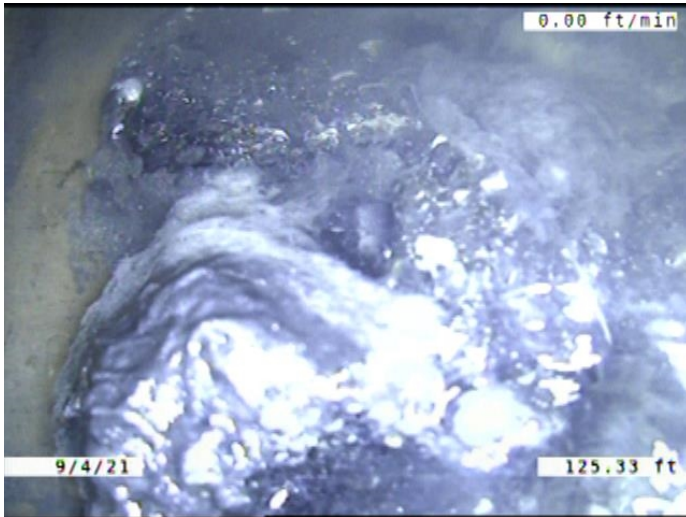
Code: **RFJ**  
 Description: **Roots Fine Joint**

Distance (ft): **103.8**  
 Structural Grade: **0**  
 O&M Grade: **1**  
 Clock Start/From: **2**  
 Clock To: **3**  
 1st Value:  
 2nd Value:  
 Value Percent:  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:



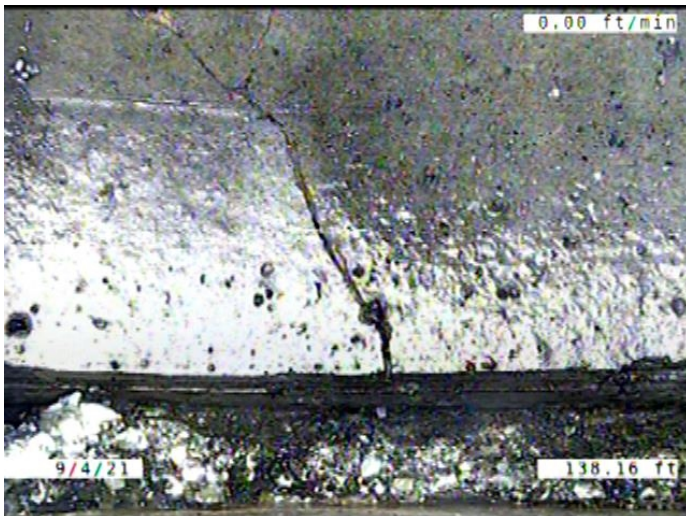
Code: **JOM**  
 Description: **Joint Offset Medium**

Distance (ft): **114.3**  
 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:



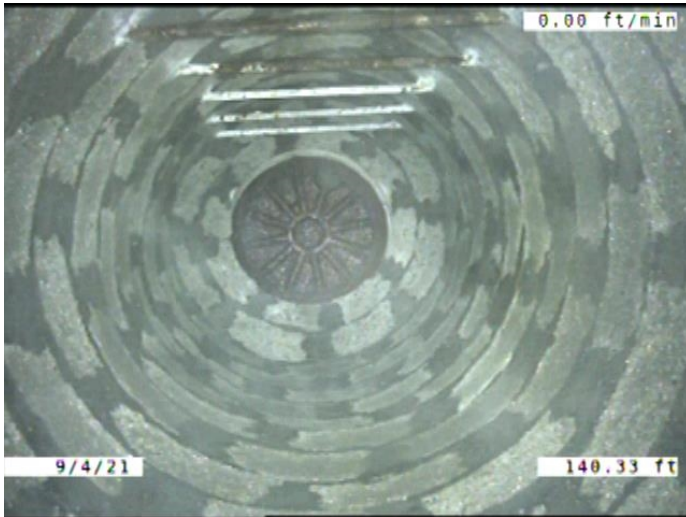
Code: **DAE**  
 Description: **Deposits Attached Encrustation**

Distance (ft): **125.3**  
 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: **CM**  
 Description: **Crack Multiple**

Distance (ft): **138.2**  
 Structural Grade: **3**  
 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:	<b>AMH</b>
Description:	<b>Manhole</b>
Distance (ft):	<b>140.3</b>
Structural Grade:	<b>0</b>
O&M Grade:	<b>0</b>
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	<b>NO</b>
Remarks:	<b>M-504-079</b>