

RedZone
ROBOTICS

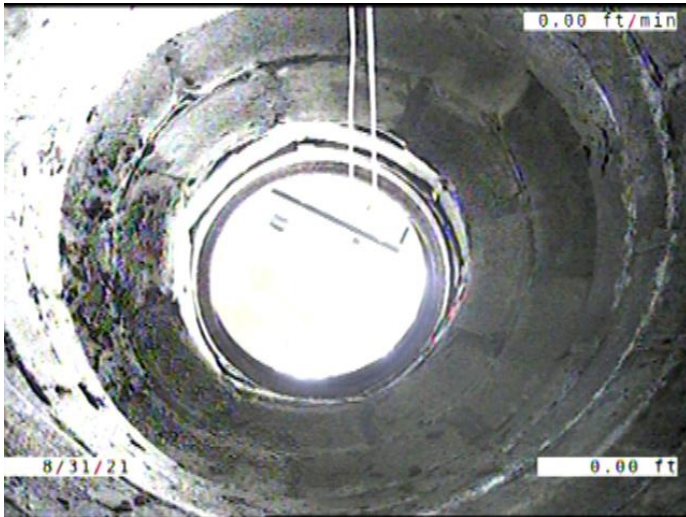
Street:	North Virginia Street		Flow Control:	Not Controlled	
City:	Hobart, IN		Year Renewed:		
Location:	Alley		Tape/Media #:		
Purpose:	Routine Assessment		Dia/Height:	12"	
Use:	Sanitary Sewage Pipe		Material:	CP	
Drain Area:			Lining:		
Category:	NA				
Comment:					
Location Details:			Direction of Survey:	Upstream	
US MH:	M-504-106	DS MH:	M-504-108	Total Length Surveyed (ft):	202.7

O&M Index:	2.07	O&M Quick:	4139	O&M Rating:	126.00
Structural Index:	2.24	Structural Quick:	4135	Structural Rating:	65.00
Overall Index:	2.12	Overall Quick:	423A	Overall Rating:	191.00

Wednesday, October 13, 2021

105.2	TBD	Tap Break-in/Hammer Defective	1310	M 3
105.2	MWLS(F03)	Miscellaneous Water Level Sag	1336	S 2
115.8	DSC	Deposits Settled Hard/Compacted	1419	M 2
115.8	RFJ	Roots Fine Joint	1431	M 1
123.4	MWLS(S04)	Miscellaneous Water Level Sag	1472	S 2
126.2	MMC	Miscellaneous Material Change	1528	NA
127.9	TFC	Tap Factory Capped	1583	NA
129.6	MMC	Miscellaneous Material Change	1642	NA
132.6	MMC	Miscellaneous Material Change	1698	NA
134.5	TBI	Tap Break-in Intruding	1752	M 2
136.1	MMC	Miscellaneous Material Change	1808	NA
142.3	MWLS(F04)	Miscellaneous Water Level Sag	1858	S 2
161.1	MWLS(S05)	Miscellaneous Water Level Sag	2008	S 2
168.6	MWLS(F05)	Miscellaneous Water Level Sag	2051	S 2
181.2	RMJ	Roots Medium Joint	2160	M 3
181.2	RFJ	Roots Fine Joint	2184	M 1
184.3	RFJ	Roots Fine Joint	2260	M 1
188.1	FL	Fracture Longitudinal	2313	S 3
188.2	RFJ	Roots Fine Joint	2355	M 1
188.2	RMJ	Roots Medium Joint	2378	M 3
189.3	RMJ	Roots Medium Joint	2576	M 3
192.3	RMJ	Roots Medium Joint	2739	M 3
195.7	RMJ	Roots Medium Joint	2774	M 3
198.7	RFJ	Roots Fine Joint	2809	M 1
201.9	RMJ	Roots Medium Joint	2865	M 3
202.7	DSF(F01)	Deposits Settled Fine	3135	M 2
202.7	MSA	Miscellaneous Survey Abandoned	3143	NA

M-504-106



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-504-108**



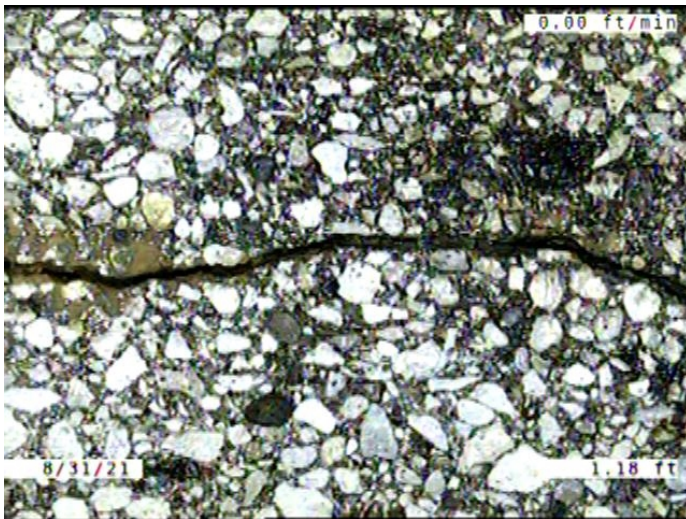
Code: **MWL**
 Description: **Miscellaneous Water Level**

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



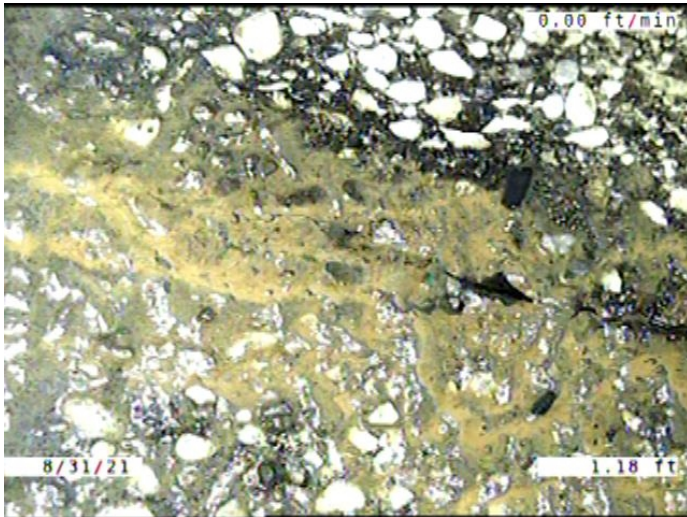
Code: **DSF**
 Description: **Deposits Settled Fine**

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:



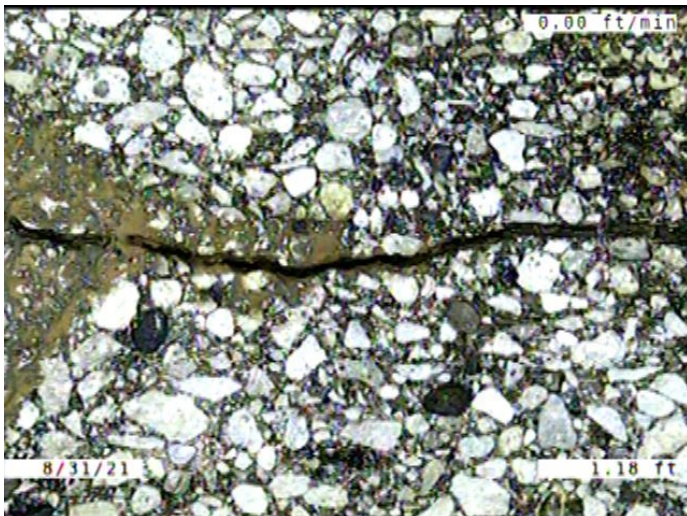
Code: **FS**
 Description: **Fracture Spiral**

Distance (ft): **1.2**
 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: **NO**
 Remarks:



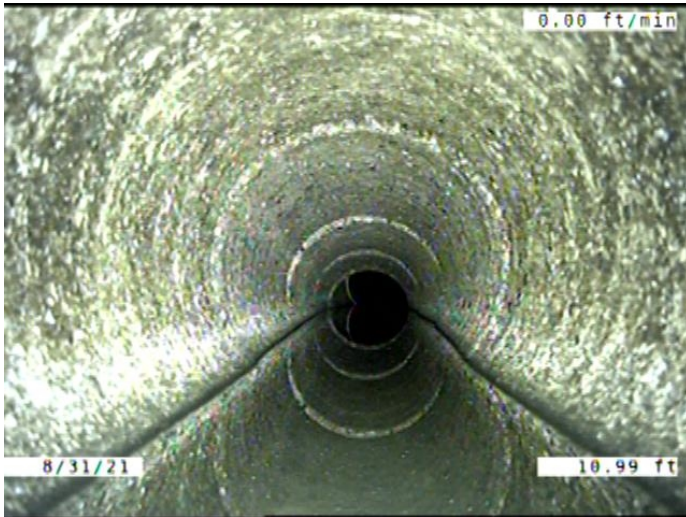
Code: **ISJ**
 Description: **Infiltration Stain Joint**

Distance (ft): **1.2**
 Structural Grade: **0**
 O&M Grade: **1**
 Clock Start/From: **8**
 Clock To: **11**
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



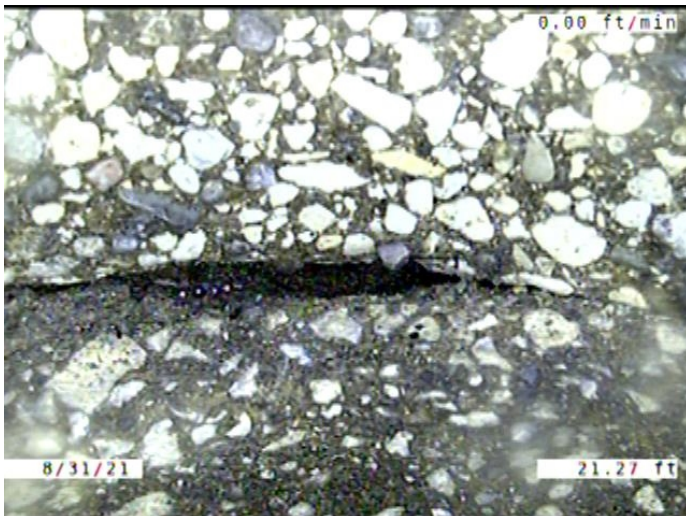
Code: **IWB**
 Description: **Infiltration Weeper Barrel**

Distance (ft): **1.2**
 Structural Grade: **0**
 O&M Grade: **2**
 Clock Start/From: **11**
 Clock To:
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **NO**
 Remarks:



Code: **MWLS**
 Description: **Miscellaneous Water Level Sag**

Distance (ft): **11.0**
 Structural Grade: **2**
 O&M Grade: **0**
 Clock Start/From:
 Clock To:
 1st Value:
 2nd Value:
 Value Percent: **10.000**
 Continuous Index: **S02**
 Within 8" of Joint: **NO**
 Remarks:

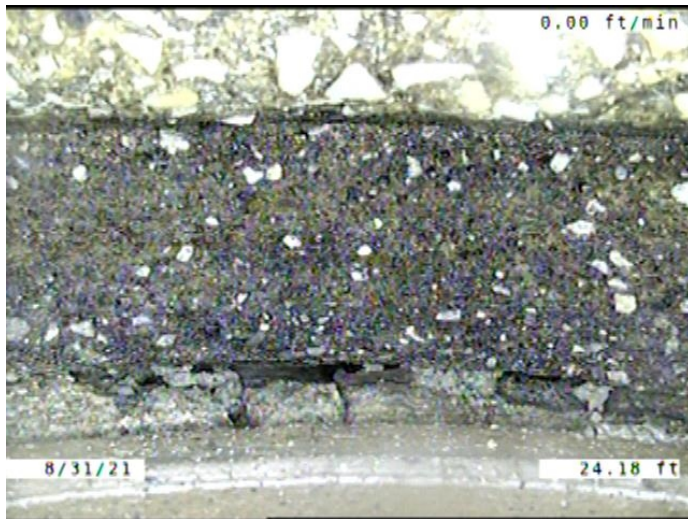


Code: **JOM**
 Description: **Joint Offset Medium**

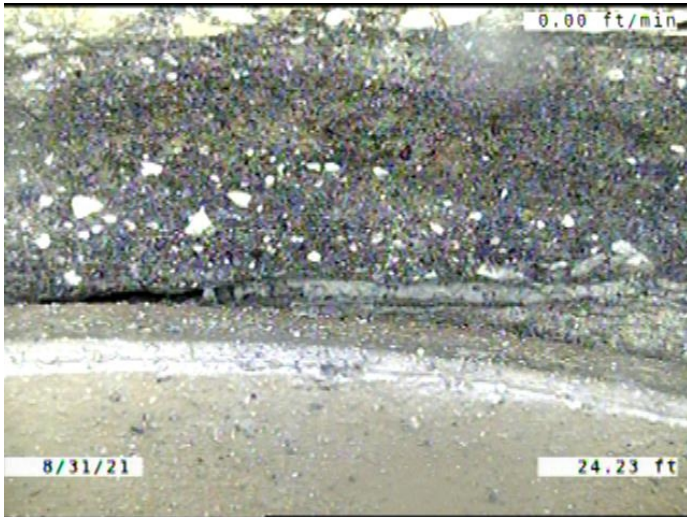
Distance (ft): **21.3**
 Structural Grade: **3**
 O&M Grade: **0**
 Clock Start/From:
 Clock To:
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **NO**
 Remarks:



Code:	MCU
Description:	Miscellaneous Camera Underwater
Distance (ft):	21.8
Structural Grade:	0
O&M Grade:	4
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	Out at 22.4

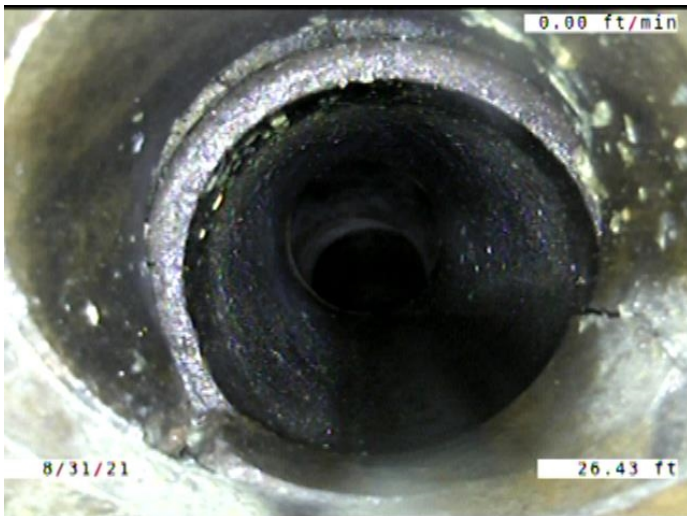


Code:	JAL
Description:	Joint Angular Large
Distance (ft):	24.2
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	SOIL VISIBLE



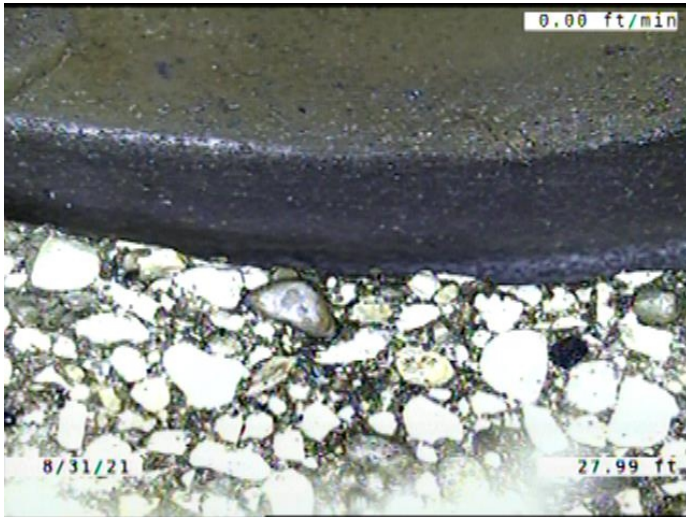
Code: **MMC**
 Description: **Miscellaneous Material Change**

Distance (ft): **24.2**
 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: **CONCRETE TO VCP**



Code: **TFD**
 Description: **Tap Factory Defective**

Distance (ft): **26.4**
 Structural Grade: **0**
 O&M Grade: **3**
 Clock Start/From: **1**
 Clock To:
 1st Value: **4.000**
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks: **Debris**



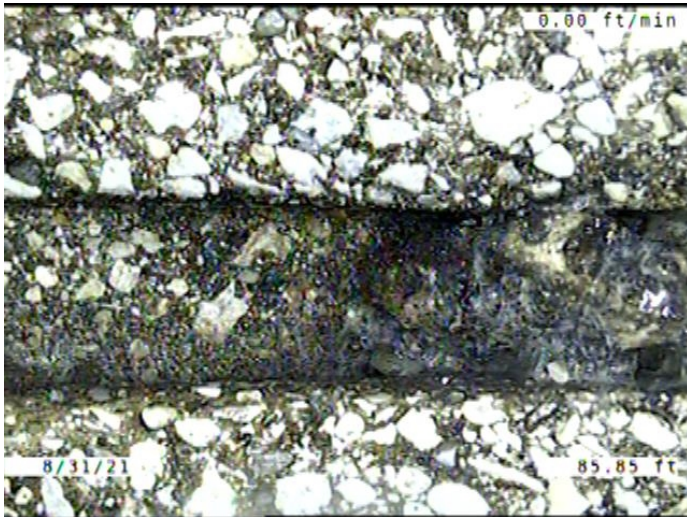
Code: **MMC**
 Description: **Miscellaneous Material Change**

Distance (ft): **28.0**
 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: **VCP TO CONCRETE**



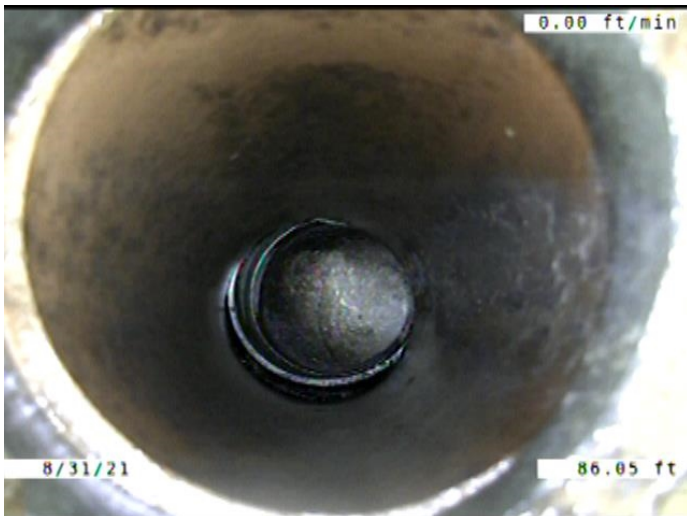
Code: **MWLS**
 Description: **Miscellaneous Water Level Sag**

Distance (ft): **74.7**
 Structural Grade: **2**
 O&M Grade: **0**
 Clock Start/From:
 Clock To:
 1st Value:
 2nd Value:
 Value Percent: **10.000**
 Continuous Index: **F02**
 Within 8" of Joint: **NO**
 Remarks:



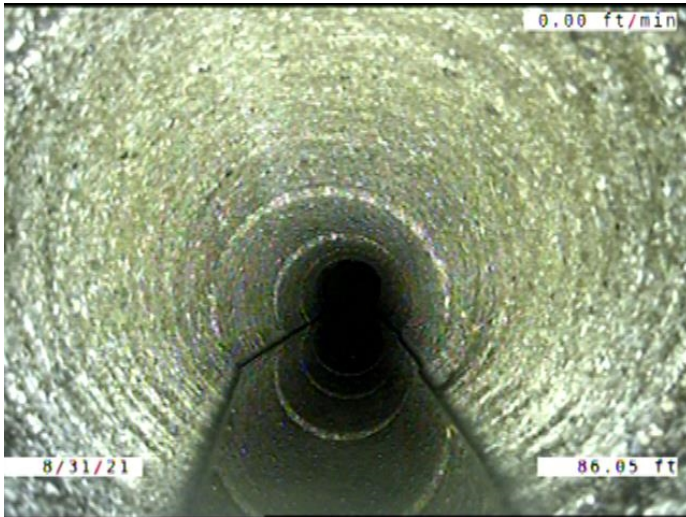
Code: **JAM**
 Description: **Joint Angular Medium**

Distance (ft): **85.8**
 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:



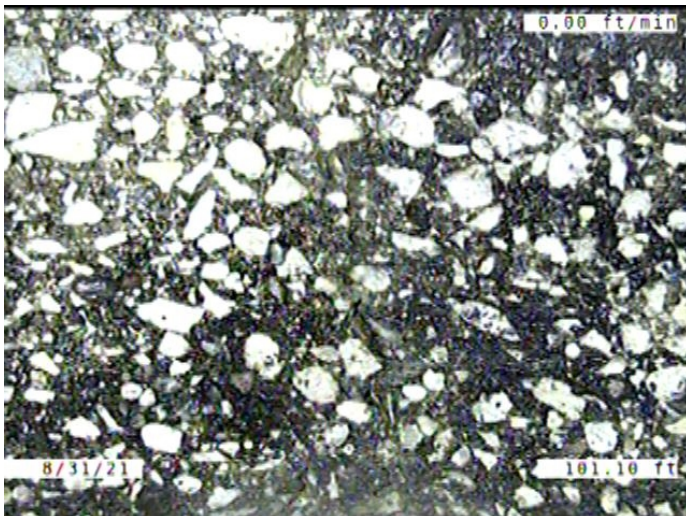
Code: **TBD**
 Description: **Tap Break-in/Hammer Defective**

Distance (ft): **86.0**
 Structural Grade: **0**
 O&M Grade: **3**
 Clock Start/From: **12**
 Clock To:
 1st Value: **4.000**
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **NO**
 Remarks: **Debris**



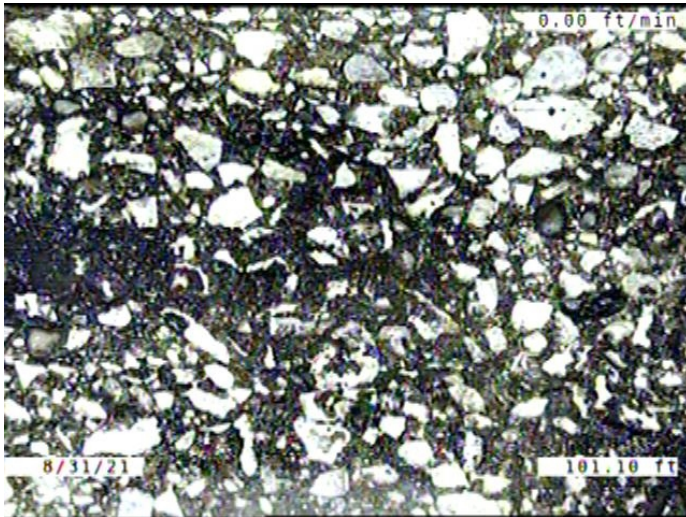
Code: **MWLS**
 Description: **Miscellaneous Water Level Sag**

Distance (ft): **86.0**
 Structural Grade: **2**
 O&M Grade: **0**
 Clock Start/From:
 Clock To:
 1st Value:
 2nd Value:
 Value Percent: **5.000**
 Continuous Index: **S03**
 Within 8" of Joint: **NO**
 Remarks:



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

Distance (ft): **101.1**
 Structural Grade: **3**
 O&M Grade: **0**
 Clock Start/From: **11**
 Clock To: **12**
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



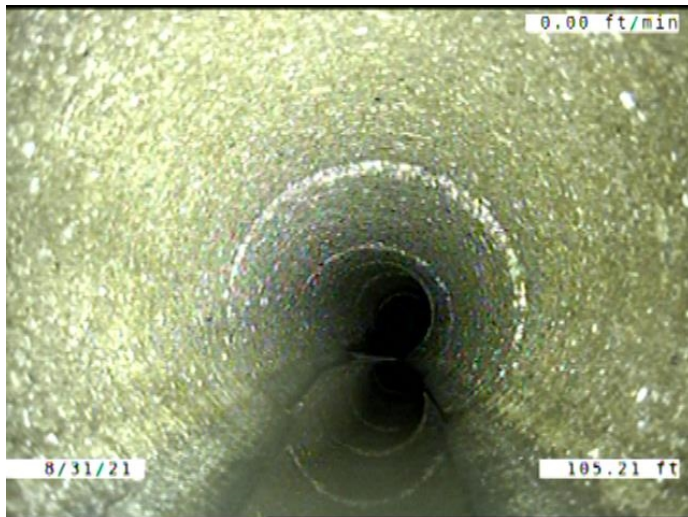
Code: **ISB**
 Description: **Infiltration Stain Barrel**

Distance (ft): **101.1**
 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:



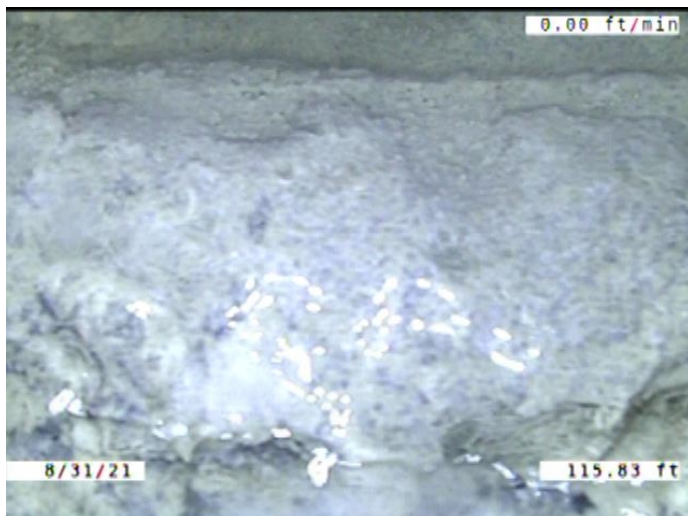
Code: **TBD**
 Description: **Tap Break-in/Hammer Defective**

Distance (ft): **105.2**
 Structural Grade: **0**
 O&M Grade: **3**
 Clock Start/From: **12**
 Clock To:
 1st Value: **4.000**
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **NO**
 Remarks: **Debris**



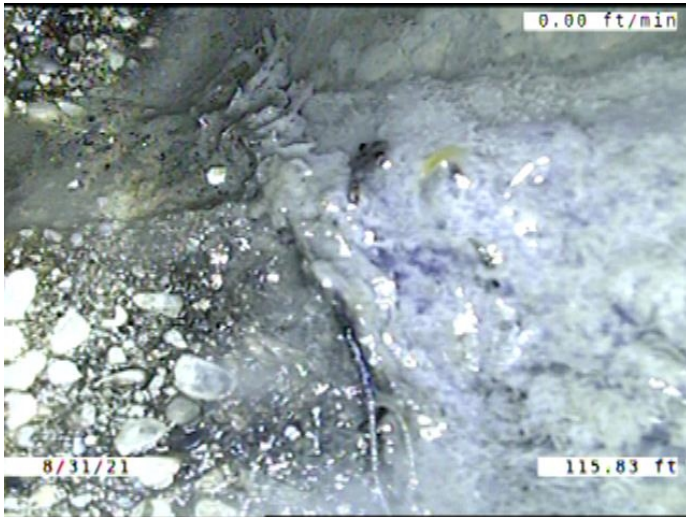
Code: **MWLS**
 Description: **Miscellaneous Water Level Sag**

Distance (ft): **105.2**
 Structural Grade: **2**
 O&M Grade: **0**
 Clock Start/From:
 Clock To:
 1st Value:
 2nd Value:
 Value Percent: **5.000**
 Continuous Index: **F03**
 Within 8" of Joint: **NO**
 Remarks:



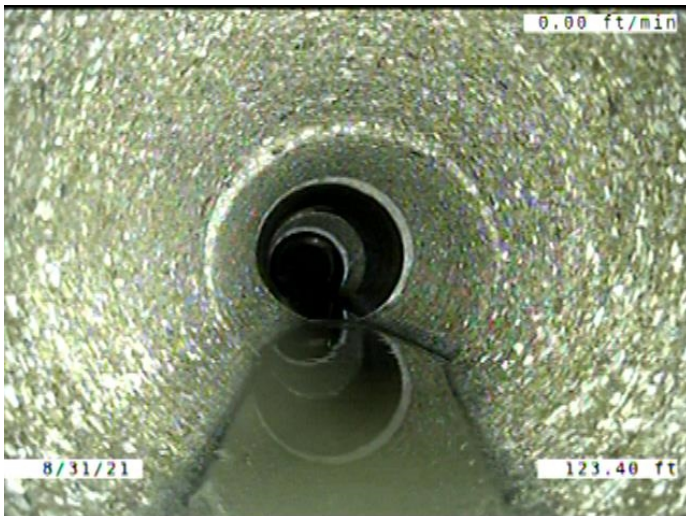
Code: **DSC**
 Description: **Deposits Settled Hard/Compacted**

Distance (ft): **115.8**
 Structural Grade: **0**
 O&M Grade: **2**
 Clock Start/From: **5**
 Clock To: **7**
 1st Value:
 2nd Value:
 Value Percent: **5.000**
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



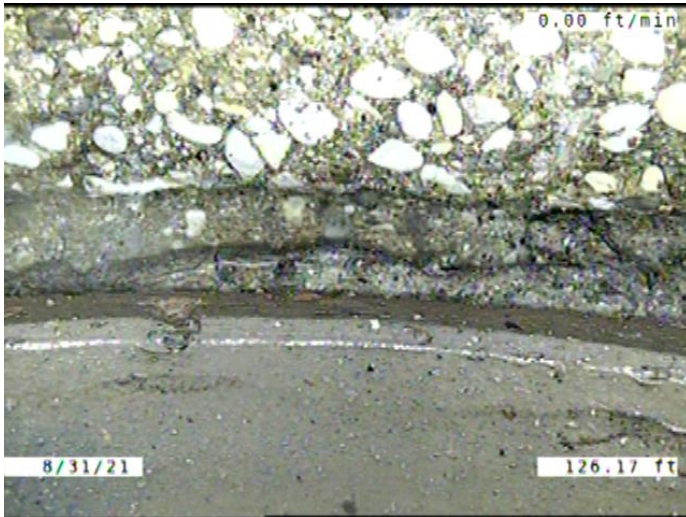
Code: **RFJ**
 Description: **Roots Fine Joint**

Distance (ft): **115.8**
 Structural Grade: **0**
 O&M Grade: **1**
 Clock Start/From: **7**
 Clock To:
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



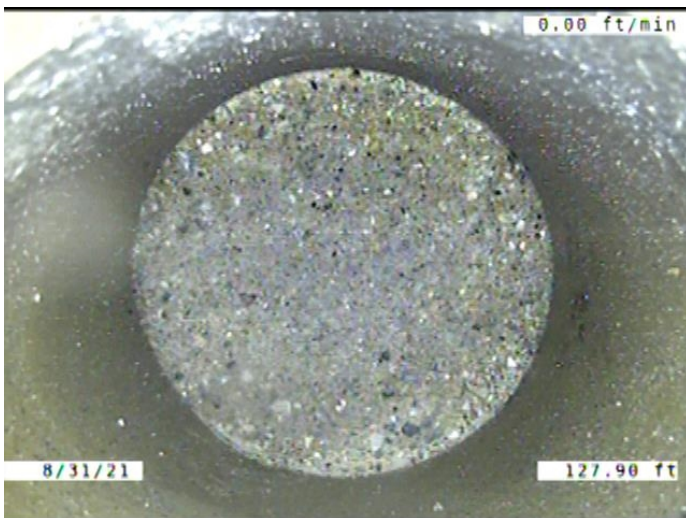
Code: **MWLS**
 Description: **Miscellaneous Water Level Sag**

Distance (ft): **123.4**
 Structural Grade: **2**
 O&M Grade: **0**
 Clock Start/From:
 Clock To:
 1st Value:
 2nd Value:
 Value Percent: **5.000**
 Continuous Index: **S04**
 Within 8" of Joint: **NO**
 Remarks:



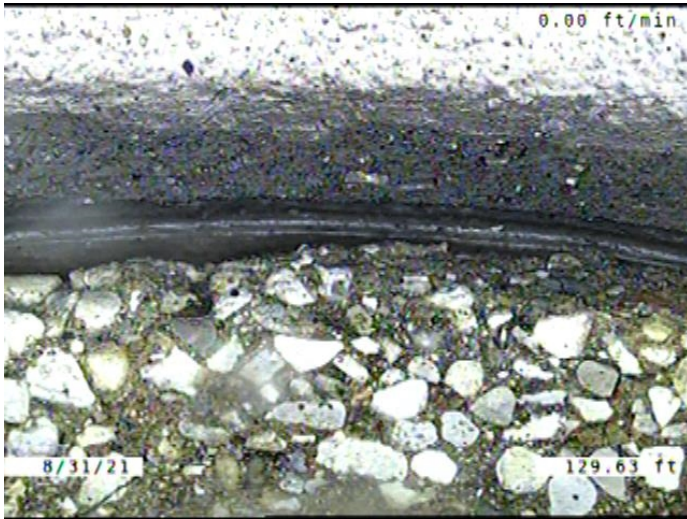
Code: **MMC**
 Description: **Miscellaneous Material Change**

Distance (ft): **126.2**
 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: **CONCRETE TO VCP**



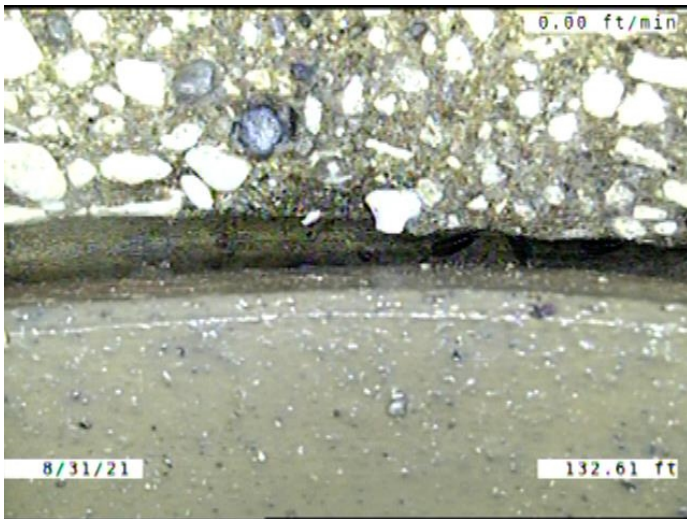
Code: **TFC**
 Description: **Tap Factory Capped**

Distance (ft): **127.9**
 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:



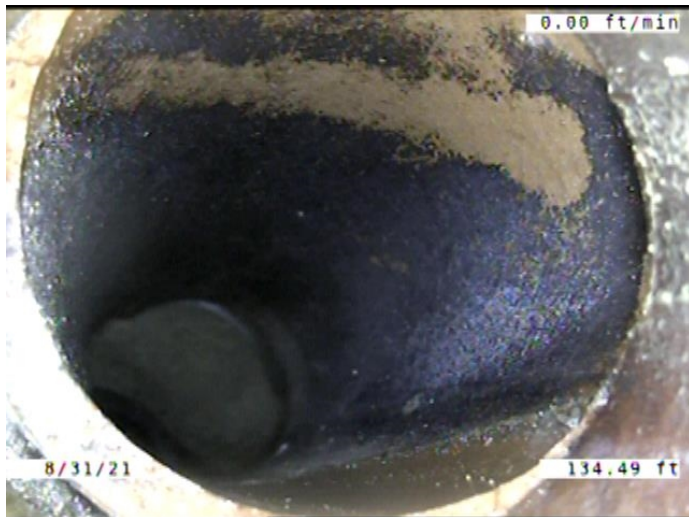
Code: **MMC**
 Description: **Miscellaneous Material Change**

Distance (ft): **129.6**
 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: **VCP TO CONCRETE**



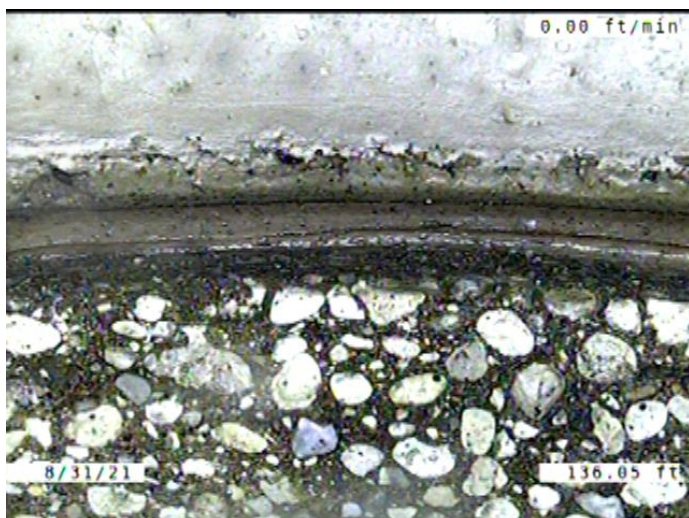
Code: **MMC**
 Description: **Miscellaneous Material Change**

Distance (ft): **132.6**
 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: **CONCRETE TO VCP**



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

Distance (ft): **134.5**
 Structural Grade: **0**
 O&M Grade: **2**
 Clock Start/From: **1**
 Clock To:
 1st Value: **4.000**
 2nd Value: **1.000**
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



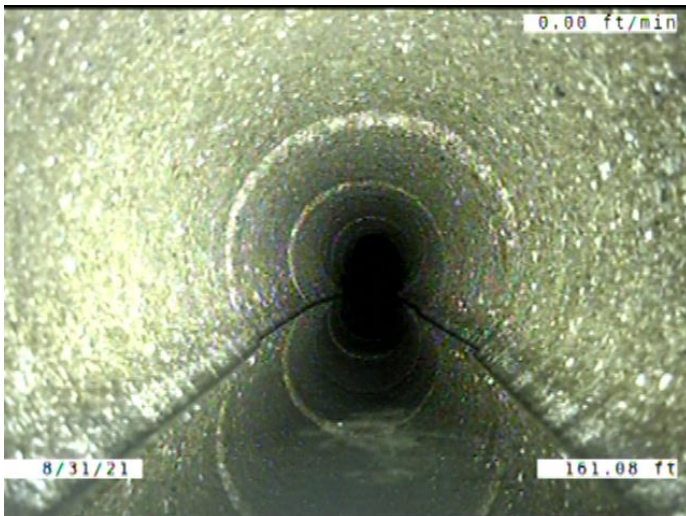
Code: **MMC**
 Description: **Miscellaneous Material Change**

Distance (ft): **136.1**
 Structural Grade: **0**
 O&M Grade: **0**
 Clock Start/From:
 Clock To:
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **NO**
 Remarks: **VCP TO CONCRETE**



Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **142.3**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index: **F04**
Within 8" of Joint: **NO**
Remarks:



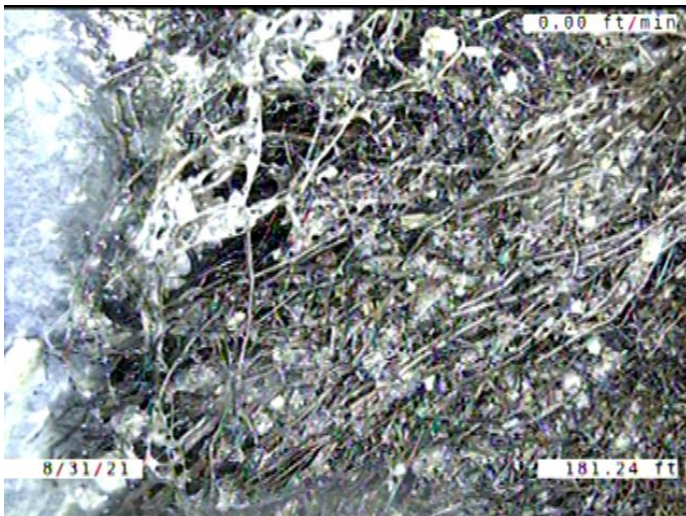
Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **161.1**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index: **S05**
Within 8" of Joint: **NO**
Remarks:



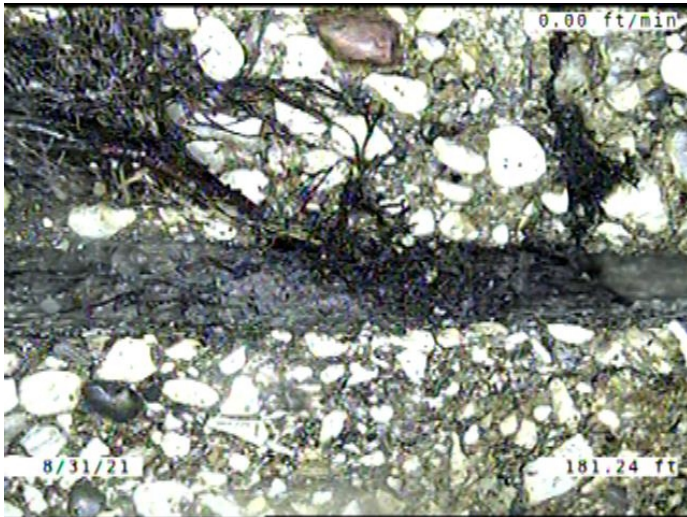
Code: **MWLS**
 Description: **Miscellaneous Water Level Sag**

Distance (ft): **168.6**
 Structural Grade: **2**
 O&M Grade: **0**
 Clock Start/From:
 Clock To:
 1st Value:
 2nd Value:
 Value Percent: **5.000**
 Continuous Index: **F05**
 Within 8" of Joint: **NO**
 Remarks:



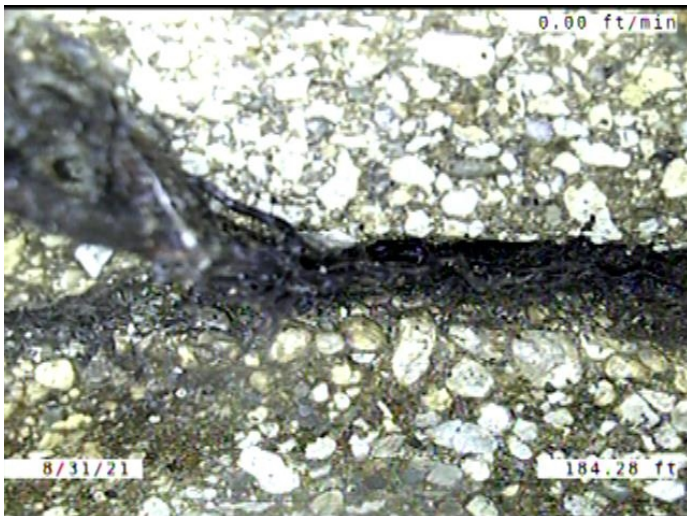
Code: **RMJ**
 Description: **Roots Medium Joint**

Distance (ft): **181.2**
 Structural Grade: **0**
 O&M Grade: **3**
 Clock Start/From: **3**
 Clock To: **4**
 1st Value:
 2nd Value:
 Value Percent: **5.000**
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



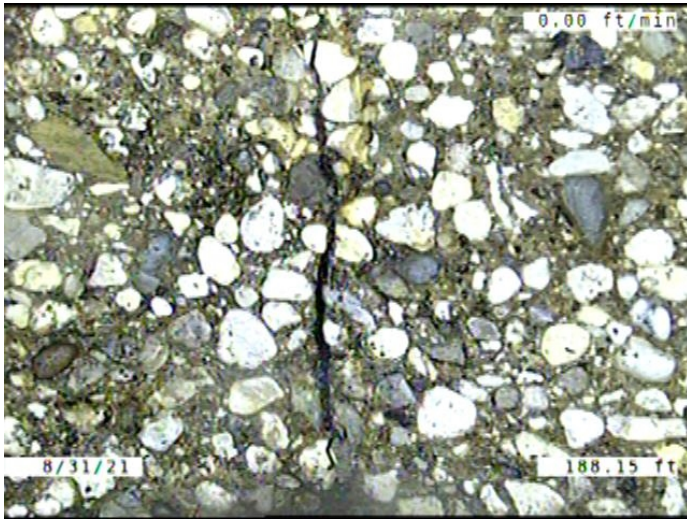
Code: **RFJ**
 Description: **Roots Fine Joint**

Distance (ft): **181.2**
 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:



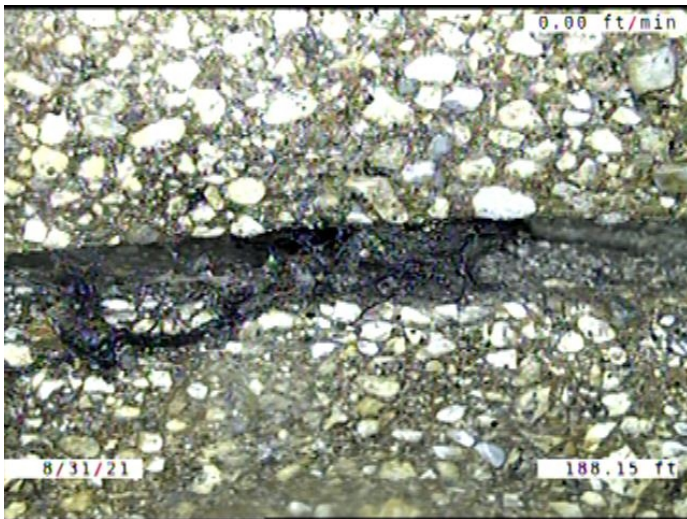
Code: **RFJ**
 Description: **Roots Fine Joint**

Distance (ft): **184.3**
 Structural Grade: **0**
 O&M Grade: **1**
 Clock Start/From: **9**
 Clock To: **3**
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



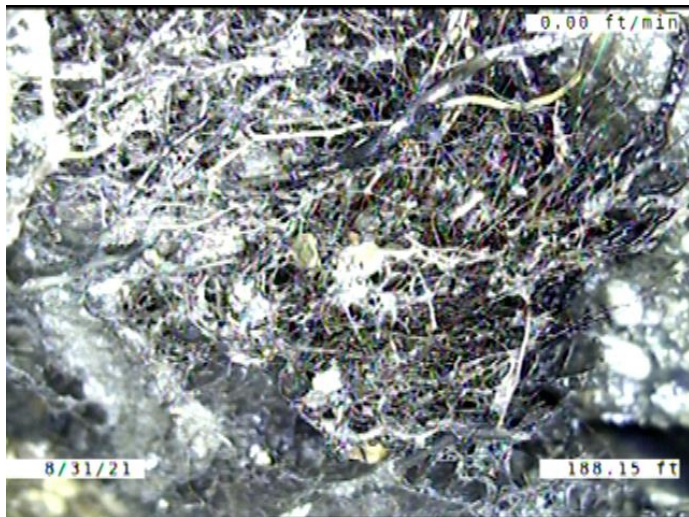
Code: **FL**
 Description: **Fracture Longitudinal**

Distance (ft): **188.1**
 Structural Grade: **3**
 O&M Grade: **0**
 Clock Start/From: **2**
 Clock To:
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



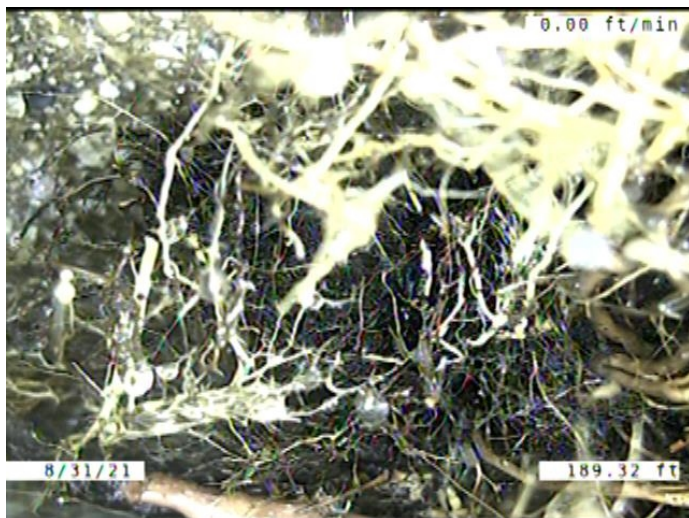
Code: **RFJ**
 Description: **Roots Fine Joint**

Distance (ft): **188.2**
 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: **RMJ**
 Description: **Roots Medium Joint**

Distance (ft): **188.2**
 Structural Grade: **0**
 O&M Grade: **3**
 Clock Start/From: **2**
 Clock To: **5**
 1st Value:
 2nd Value:
 Value Percent: **5.000**
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



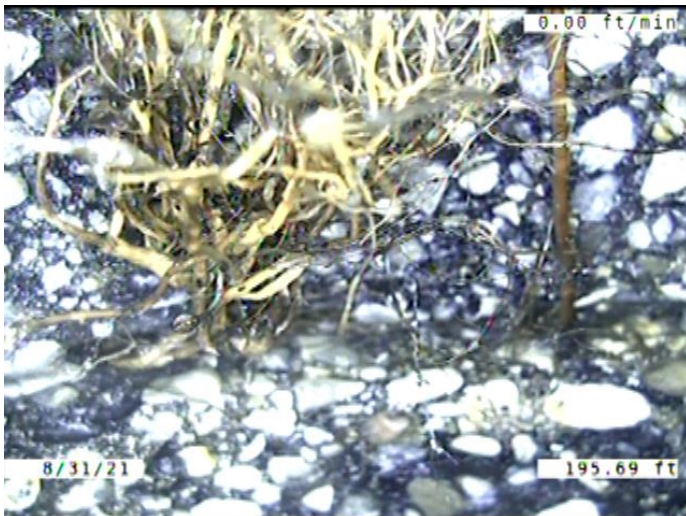
Code: **RMJ**
 Description: **Roots Medium Joint**

Distance (ft): **189.3**
 Structural Grade: **0**
 O&M Grade: **3**
 Clock Start/From: **7**
 Clock To: **5**
 1st Value:
 2nd Value:
 Value Percent: **40.000**
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



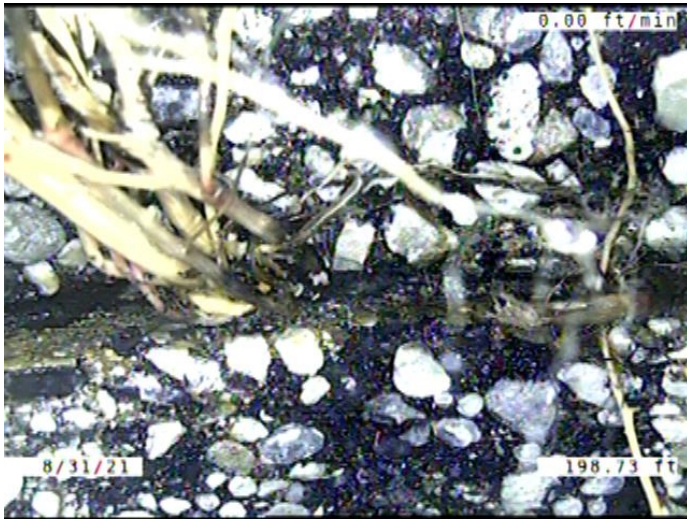
Code: **RMJ**
 Description: **Roots Medium Joint**

Distance (ft): **192.3**
 Structural Grade: **0**
 O&M Grade: **3**
 Clock Start/From: **2**
 Clock To: **10**
 1st Value:
 2nd Value:
 Value Percent: **20.000**
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



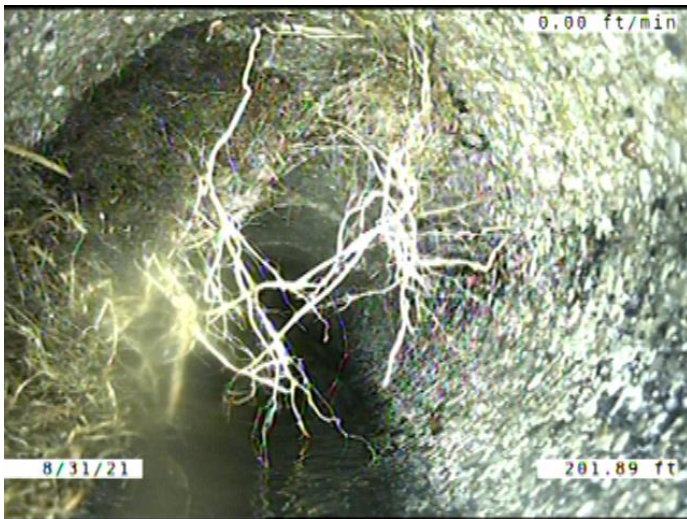
Code: **RMJ**
 Description: **Roots Medium Joint**

Distance (ft): **195.7**
 Structural Grade: **0**
 O&M Grade: **3**
 Clock Start/From: **9**
 Clock To:
 1st Value:
 2nd Value:
 Value Percent: **5.000**
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



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

Distance (ft): **198.7**
 Structural Grade: **0**
 O&M Grade: **1**
 Clock Start/From: **9**
 Clock To:
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



Code: **RMJ**
 Description: **Roots Medium Joint**

Distance (ft): **201.9**
 Structural Grade: **0**
 O&M Grade: **3**
 Clock Start/From: **7**
 Clock To: **3**
 1st Value:
 2nd Value:
 Value Percent: **40.000**
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



Code: **DSF**
 Description: **Deposits Settled Fine**

Distance (ft): **202.7**
 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: **MSA**
 Description: **Miscellaneous Survey Abandoned**

Distance (ft): **202.7**
 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: **CAMERA CANT MAKE IT PAST ROOTS**