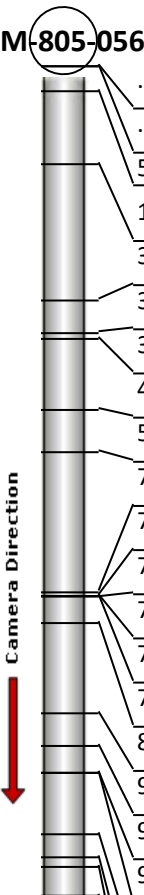


RedZone
ROBOTICS

Shape: **C**

Total Length Surveyed (ft): **302.9**

O&M Index:	<u>1.72</u>	O&M Quick:	4131	O&M Rating:	<u>55.00</u>
Structural Index:	<u>2.74</u>	Structural Quick:	4636	Structural Rating:	<u>52.00</u>
Overall Index:	<u>2.10</u>	Overall Quick:	4737	Overall Rating:	<u>107.00</u>

Position	Code	Observation	Video (sec)	Grade
				
.0	AMH	Manhole	10	NA
.0	MWL	Water Level	21	NA
5.0	CM	Crack Multiple	43	S 3
13.2	TF	Tap Factory	73	NA
31.6	TF	Tap Factory	125	NA
35.8	FS	Fracture Spiral	147	S 3
36.7	SSS	Surface Spalling	163	S 2
46.1	CS	Crack Spiral	195	S 2
52.0	FL	Fracture Longitudinal	218	S 3
70.8	RFJ	Roots Fine Joint	267	M 1
71.2	FL	Fracture Longitudinal	280	S 3
71.2	RFL	Roots Fine Lateral	291	M 1
71.2	RFB	Roots Fine Barrel	302	M 2
71.2	TFD	Tap Factory Defective	313	M 2
75.0	FM	Fracture Multiple	333	S 4
87.0	RFJ	Roots Fine Joint	368	M 1
91.3	FM	Fracture Multiple	387	S 4
95.0	CM	Crack Multiple	406	S 3
95.0	RFJ	Roots Fine Joint	417	M 1

103.2	RFJ	Roots Fine Joint	445	M 1
106.3	TF	Tap Factory	463	NA
107.7	FM	Fracture Multiple	478	S 4
111.6	FM	Fracture Multiple	498	S 4
150.4	FS	Fracture Spiral	587	S 3
165.4	TF	Tap Factory	629	NA
187.2	CC	Crack Circumferential	684	S 1
189.1	CC	Crack Circumferential	700	S 1
193.5	FM	Fracture Multiple	720	S 4
207.7	RFJ	Roots Fine Joint	760	M 1
213.7	FC	Fracture Circumferential	784	S 2
220.8	TF	Tap Factory	809	NA
226.3	RFJ	Roots Fine Joint	832	M 1
230.7	FM	Fracture Multiple	852	S 4
232.6	CC	Crack Circumferential	867	S 1
233.7	DAGS(S01)	Deposits Attached Grease	881	M 2
242.3	RFJ	Roots Fine Joint	910	M 1
252.7	TFD	Tap Factory Defective	944	M 2
252.7	RFL	Roots Fine Lateral	955	M 1
257.4	CC	Crack Circumferential	977	S 1
260.5	MWL	Water Level	995	NA
269.6	RFJ	Roots Fine Joint	1024	M 1
272.6	MGO	General Observation	1041	NA
282.7	RFJ	Roots Fine Joint	1075	M 1
289.1	RFJ	Roots Fine Joint	1098	M 1
294.7	RML	Roots Medium Lateral	1120	M 3
294.7	TFD	Tap Factory Defective	1131	M 2
295.5	MCU	Camera Underwater	1145	M 4
296.6	TBI	Tap Break-in Intruding	1158	M 2
298.6	TF	Tap Factory	1174	NA
299.5	DAGS(F01)	Deposits Attached Grease	1187	M 2
302.9	MSA	Abandoned Survey	1208	NA

M-805-055

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-805-056**

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



Distance (ft): **.0**
Structural Grade: **0**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **15.000**
Continuous Index:
Within 8" of Joint: **NO**
Remarks:

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



Distance (ft): **5.0**
Structural Grade: **3**
O&M Grade: **0**
Clock Start/From: **8**
Clock To: **11**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

Code: **TF**
Description: **Tap Factory**



Distance (ft): **13.2**
Structural Grade: **0**
O&M Grade: **0**
Clock Start/From: **10**
Clock To:
1st Value: **4.000**
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint:
Remarks:

Code: **TF**
Description: **Tap Factory**



Distance (ft): **31.6**
Structural Grade: **0**
O&M Grade: **0**
Clock Start/From: **2**
Clock To:
1st Value: **4.000**
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint:
Remarks:

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



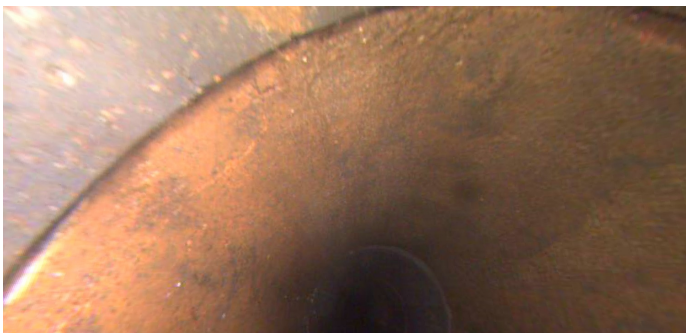
Distance (ft): **35.8**
Structural Grade: **3**
O&M Grade: **0**
Clock Start/From: **7**
Clock To: **9**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

Code: **SSS**
Description: **Surface Spalling**



Distance (ft): **36.7**
Structural Grade: **2**
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: **CS**
Description: **Crack Spiral**



Distance (ft): **46.1**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From: **9**
Clock To: **11**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

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



Distance (ft): **52.0**
Structural Grade: **3**
O&M Grade: **0**
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): **70.8**
Structural Grade: **0**
O&M Grade: **1**
Clock Start/From: **2**
Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

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



Distance (ft): **71.2**
Structural Grade: **3**
O&M Grade: **0**
Clock Start/From: **12**
Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint:
Remarks:

Code: **RFL**
Description: **Roots Fine Lateral**



Distance (ft): **71.2**
Structural Grade: **0**
O&M Grade: **1**
Clock Start/From: **12**
Clock To: **1**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **NO**
Remarks:

Code: **RFB**
Description: **Roots Fine Barrel**



Distance (ft): **71.2**
Structural Grade: **0**
O&M Grade: **2**
Clock Start/From: **12**
Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **NO**
Remarks:

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



Distance (ft): **71.2**
Structural Grade: **0**
O&M Grade: **2**
Clock Start/From: **1**
Clock To:
1st Value: **4.000**
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint:
Remarks: **ROOTS COMING FROM TAP**

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



Distance (ft): **75.0**
Structural Grade: **4**
O&M Grade: **0**
Clock Start/From: **3**
Clock To: **4**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

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



Distance (ft): **87.0**
Structural Grade: **0**
O&M Grade: **1**
Clock Start/From: **9**
Clock To: **12**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

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



Distance (ft): **91.3**
Structural Grade: **4**
O&M Grade: **0**
Clock Start/From: **9**
Clock To: **11**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

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



Distance (ft): **95.0**
Structural Grade: **3**
O&M Grade: **0**
Clock Start/From: **8**
Clock To: **1**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint:
Remarks:

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



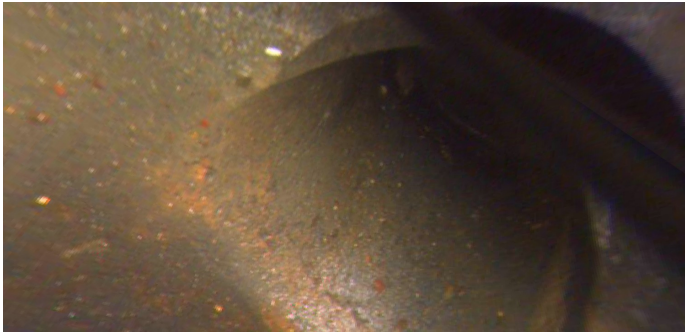
Distance (ft): **95.0**
Structural Grade: **0**
O&M Grade: **1**
Clock Start/From: **1**
Clock To: **3**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

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



Distance (ft): **103.2**
Structural Grade: **0**
O&M Grade: **1**
Clock Start/From: **11**
Clock To: **1**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

Code: **TF**
Description: **Tap Factory**



Distance (ft): **106.3**
Structural Grade: **0**
O&M Grade: **0**
Clock Start/From: **2**
Clock To:
1st Value: **4.000**
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint:
Remarks:

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



Distance (ft): **107.7**
Structural Grade: **4**
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: **FM**
Description: **Fracture Multiple**



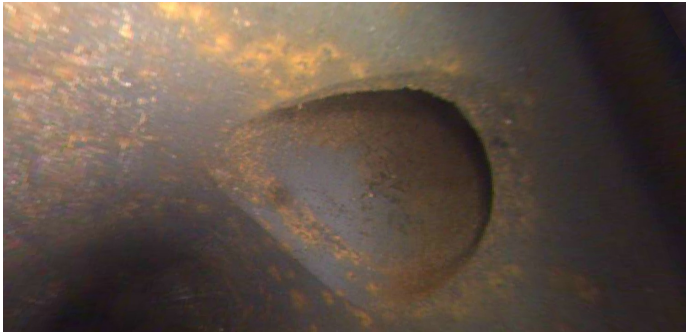
Distance (ft): **111.6**
Structural Grade: **4**
O&M Grade: **0**
Clock Start/From: **11**
Clock To: **1**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

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



Distance (ft): **150.4**
Structural Grade: **3**
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: **TF**
Description: **Tap Factory**



Distance (ft): **165.4**
Structural Grade: **0**
O&M Grade: **0**
Clock Start/From: **1**
Clock To:
1st Value: **4.000**
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint:
Remarks:

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



Distance (ft): **187.2**
Structural Grade: **1**
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: **CC**
Description: **Crack Circumferential**



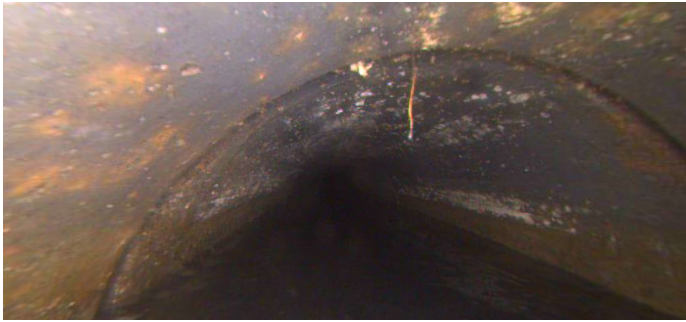
Distance (ft): **189.1**
Structural Grade: **1**
O&M Grade: **0**
Clock Start/From: **9**
Clock To: **1**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

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



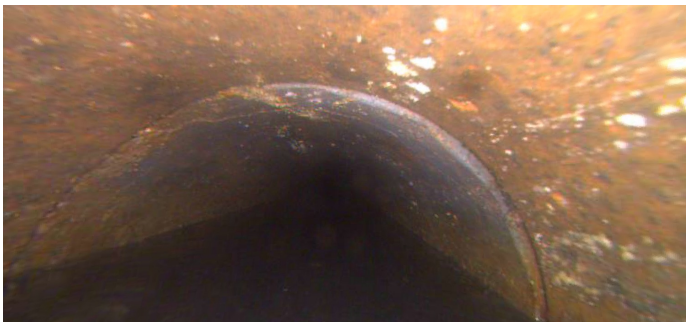
Distance (ft): **193.5**
Structural Grade: **4**
O&M Grade: **0**
Clock Start/From: **10**
Clock To: **1**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

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



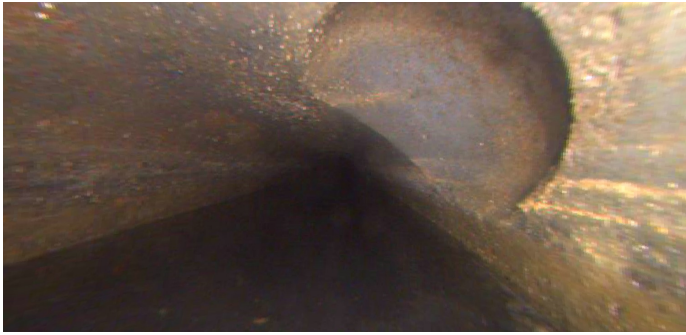
Distance (ft): **207.7**
Structural Grade: **0**
O&M Grade: **1**
Clock Start/From: **12**
Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

Code: **FC**
Description: **Fracture Circumferential**



Distance (ft): **213.7**
Structural Grade: **2**
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:

Code: **TF**
Description: **Tap Factory**



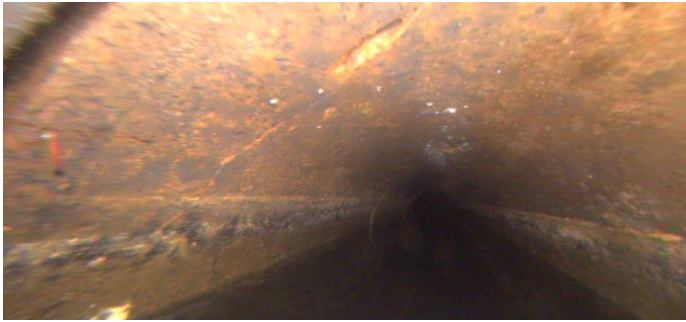
Distance (ft): **220.8**
Structural Grade: **0**
O&M Grade: **0**
Clock Start/From: **2**
Clock To:
1st Value: **4.000**
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint:
Remarks:

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



Distance (ft): **226.3**
Structural Grade: **0**
O&M Grade: **1**
Clock Start/From: **1**
Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

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



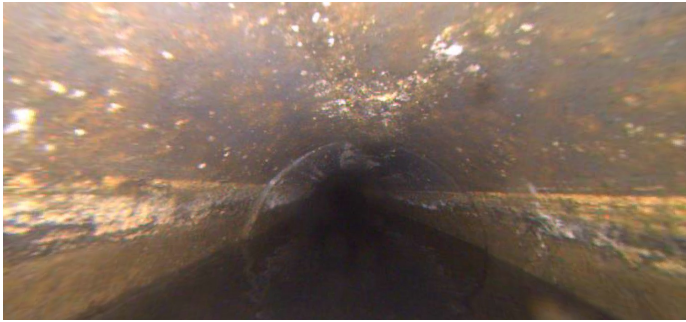
Distance (ft): **230.7**
Structural Grade: **4**
O&M Grade: **0**
Clock Start/From: **8**
Clock To: **12**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

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



Distance (ft): **232.6**
Structural Grade: **1**
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: **DAGS**
Description: **Deposits Attached Grease**



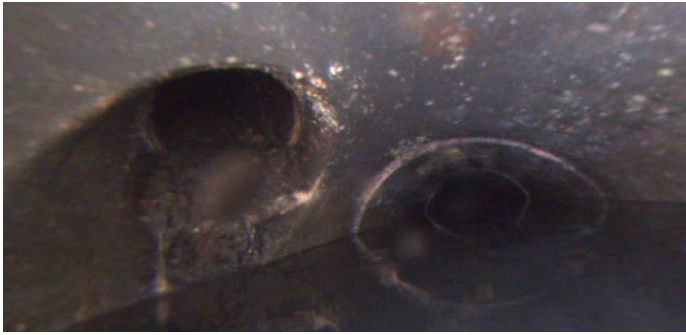
Distance (ft): **233.7**
Structural Grade: **0**
O&M Grade: **2**
Clock Start/From: **8**
Clock To: **4**
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index: **S01**
Within 8" of Joint: **NO**
Remarks:

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



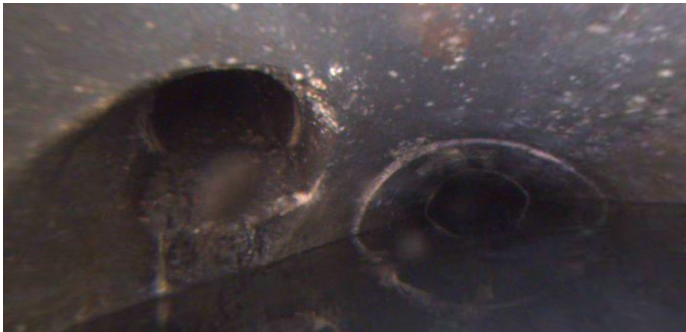
Distance (ft): **242.3**
Structural Grade: **0**
O&M Grade: **1**
Clock Start/From: **1**
Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

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



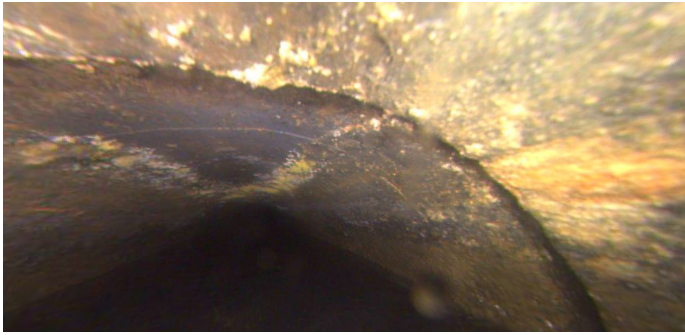
Distance (ft): **252.7**
Structural Grade: **0**
O&M Grade: **2**
Clock Start/From: **2**
Clock To:
1st Value: **4.000**
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint:
Remarks: **rfl**

Code: **RFL**
Description: **Roots Fine Lateral**



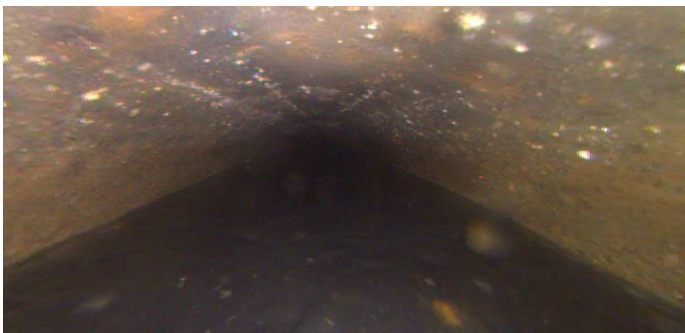
Distance (ft): **252.7**
Structural Grade: **0**
O&M Grade: **1**
Clock Start/From: **3**
Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **NO**
Remarks:

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



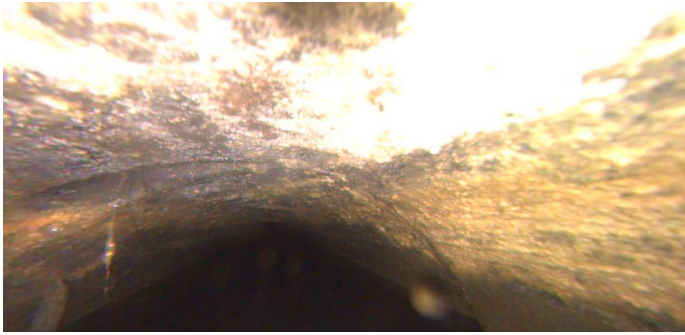
Distance (ft): **257.4**
Structural Grade: **1**
O&M Grade: **0**
Clock Start/From: **11**
Clock To: **3**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint:
Remarks:

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



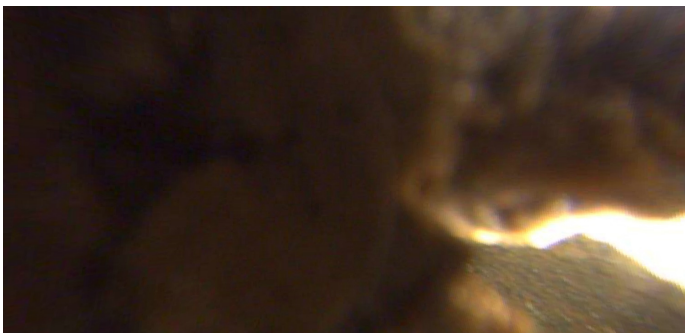
Distance (ft): **260.5**
Structural Grade: **0**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **15.000**
Continuous Index:
Within 8" of Joint: **NO**
Remarks:

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



Distance (ft): **269.6**
Structural Grade: **0**
O&M Grade: **1**
Clock Start/From: **11**
Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

Code: **MGO**
Description: **General Observation**



Distance (ft): **272.6**
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: **FRONT LENS OBSTRUCTED**

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



Distance (ft): **282.7**
Structural Grade: **0**
O&M Grade: **1**
Clock Start/From: **1**
Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

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



Distance (ft): **289.1**
Structural Grade: **0**
O&M Grade: **1**
Clock Start/From: **12**
Clock To: **1**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:

Code: **RML**
Description: **Roots Medium Lateral**



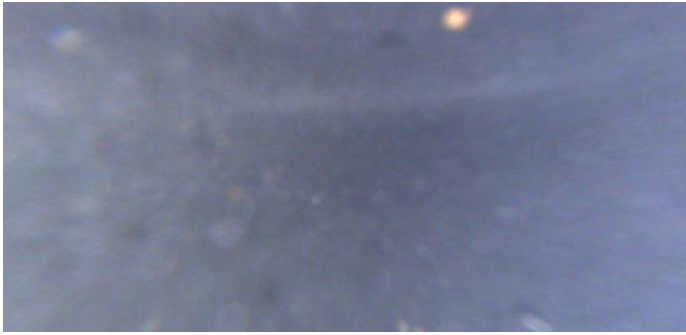
Distance (ft): **294.7**
Structural Grade: **0**
O&M Grade: **3**
Clock Start/From: **2**
Clock To:
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index:
Within 8" of Joint: **NO**
Remarks:

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



Distance (ft): **294.7**
Structural Grade: **0**
O&M Grade: **2**
Clock Start/From: **2**
Clock To:
1st Value: **4.000**
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint:
Remarks: **ROOTS BLOCKING MOUTH OF TAP**

Code: **MCU**
Description: **Camera Underwater**



Distance (ft): **295.5**
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:

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



Distance (ft): **296.6**
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:
Remarks:

Code: **TF**
Description: **Tap Factory**



Distance (ft): **298.6**
Structural Grade: **0**
O&M Grade: **0**
Clock Start/From: **2**
Clock To:
1st Value: **4.000**
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint:
Remarks:

Code: **DAGS**
Description: **Deposits Attached Grease**



Distance (ft): **299.5**
Structural Grade: **0**
O&M Grade: **2**
Clock Start/From: **8**
Clock To: **4**
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index: **F01**
Within 8" of Joint: **NO**
Remarks:



Code:	MSA
Description:	Abandoned Survey
Distance (ft):	302.9
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:	MCU