


RedZone  
ROBOTICS

Street:	South Delaware Street		Flow Control:	Not Controlled	
City:	Hobart, IN		Year Renewed:		
Location:	Easement/Right of Way		Tape/Media #:		
Purpose:	Sewer System Evaluation Survey (SS		Dia/Height:	12"	
Use:	Sanitary Sewage Pipe		Material:	VCP	
Drain Area:			Lining:	None	
Category:	NA				
Comment:					
Location Details:			Direction of Survey:	Upstream	
US MH:	M-507-011	DS MH:	M-507-004	Total Length Surveyed (ft):	218.1

	Position	Code	Observation	Video (sec)	Grade
	.0	AMH	Manhole	0	NA
	.0	MWL	Miscellaneous Water Level	85	NA
	2.6	DAR	Deposits Attached Ragging	135	M 2
	3.2	JOMD	Joint Offset Medium Defective	169	S 3
	3.2	MWLS(S02)	Miscellaneous Water Level Sag	185	S 2
	9.0	JOMD	Joint Offset Medium Defective	261	S 3
	9.0	RPR(S01)	Point Repair Replacement	275	NA
	16.7	RPR(F01)	Point Repair Replacement	408	NA
	19.0	DAE	Deposits Attached Encrustation	510	M 2
	34.0	DAE	Deposits Attached Encrustation	696	M 2
	72.9	TFD	Tap Factory Defective	882	M 3
	74.2	RMJ(S03)	Roots Medium Joint	930	M 3
	75.8	TFD	Tap Factory Defective	958	M 3
	95.7	DAE	Deposits Attached Encrustation	1111	M 2
	96.1	JOMD	Joint Offset Medium Defective	1138	S 3
	100.4	MWLS(F02)	Miscellaneous Water Level Sag	1175	S 2
	104.2	MWLS(S04)	Miscellaneous Water Level Sag	1207	S 2
	114.2	IDJ	Infiltration Dripper Joint	1291	M 3
	114.2	DAE	Deposits Attached Encrustation	1305	M 2



126.4	DAE	Deposits Attached Encrustation	1379	M 2
126.4	LR	Line Right	1419	M 1
137.1	TFD	Tap Factory Defective	1479	M 3
139.8	MWLS(F04)	Miscellaneous Water Level Sag	1519	S 2
140.3	TFD	Tap Factory Defective	1544	M 3
143.8	MWLS(S05)	Miscellaneous Water Level Sag	1575	S 2
147.6	DAE	Deposits Attached Encrustation	1633	M 2
147.6	JAM	Joint Angular Medium	1646	S 3
163.2	DAE(S06)	Deposits Attached Encrustation	1749	M 2
163.2	RMJ(F03)	Roots Medium Joint	1763	M 3
190.6	MWLS(F05)	Miscellaneous Water Level Sag	1861	S 2
190.6	LR	Line Right	1874	M 1
195.4	LR	Line Right	1898	M 1
201.6	TFD	Tap Factory Defective	1938	M 3
202.5	MWLS(S07)	Miscellaneous Water Level Sag	1960	S 2
204.5	TFD	Tap Factory Defective	1994	M 3
215.8	MWLS(F07)	Miscellaneous Water Level Sag	2083	S 2
215.8	DAE(F06)	Deposits Attached Encrustation	2091	M 2
218.1	AMH	Manhole	2204	NA

**M-507-011**



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-507-004**





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: **DAR**  
 Description: **Deposits Attached Ragging**

Distance (ft): **2.6**  
 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:





Code: **JOMD**  
Description: **Joint Offset Medium Defective**

Distance (ft): **3.2**  
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:

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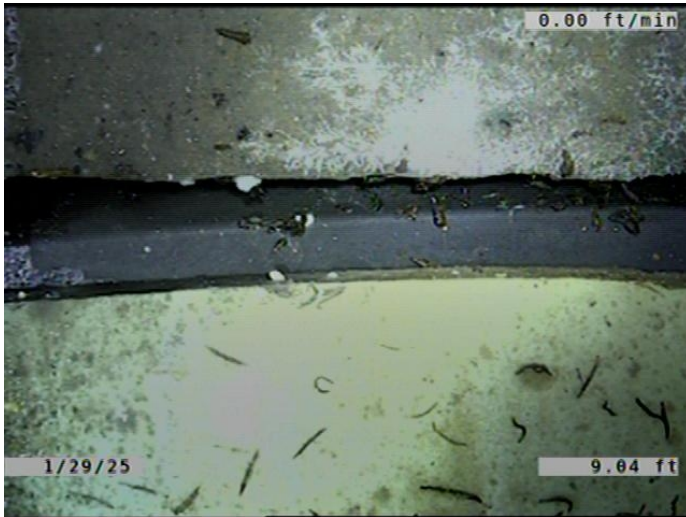


Code: **MWLS**  
Description: **Miscellaneous Water Level Sag**

Distance (ft): **3.2**  
Structural Grade: **2**  
O&M Grade: **0**  
Clock Start/From:  
Clock To:  
1st Value:  
2nd Value:  
Value Percent: **30.000**  
Continuous Index: **S02**  
Within 8" of Joint: **NO**  
Remarks:

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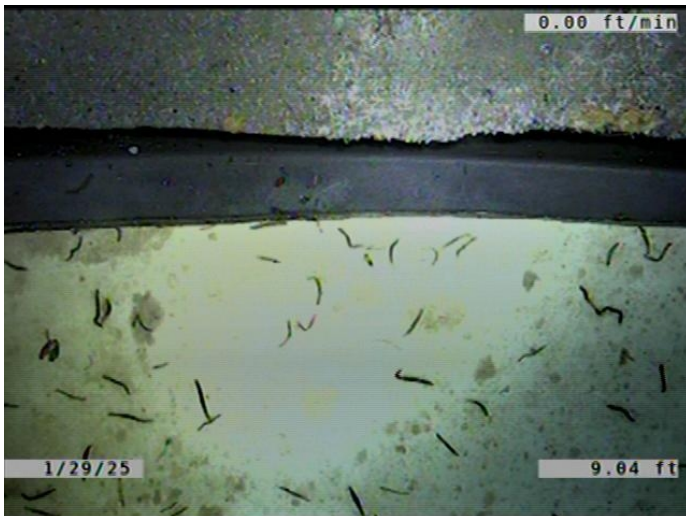




Code: **JOMD**  
Description: **Joint Offset Medium Defective**

Distance (ft): **9.0**  
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:

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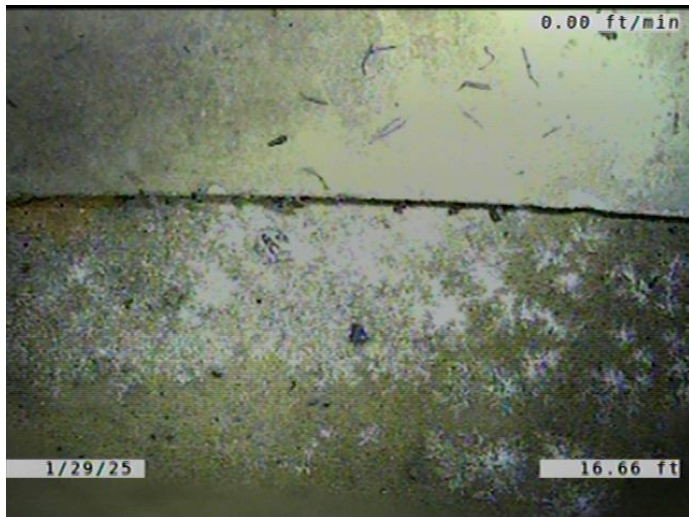


Code: **RPR**  
Description: **Point Repair Replacement**

Distance (ft): **9.0**  
Structural Grade: **0**  
O&M Grade: **0**  
Clock Start/From:  
Clock To:  
1st Value:  
2nd Value:  
Value Percent:  
Continuous Index: **S01**  
Within 8" of Joint: **YES**  
Remarks: **REPLACED WITH PVC.**

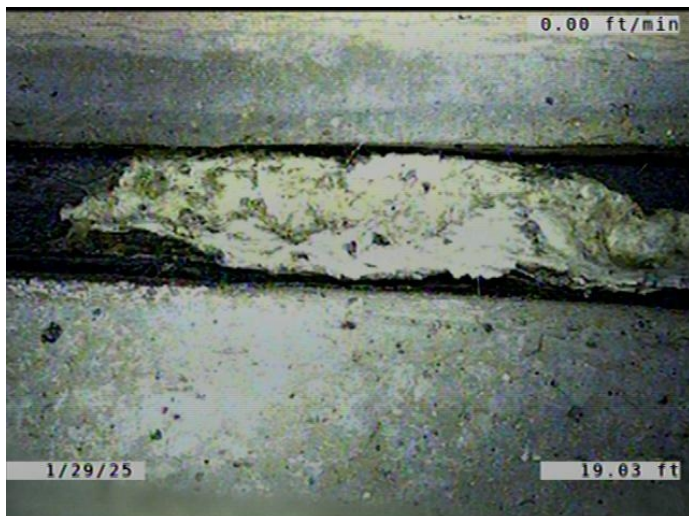
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Code: **RPR**  
 Description: **Point Repair Replacement**

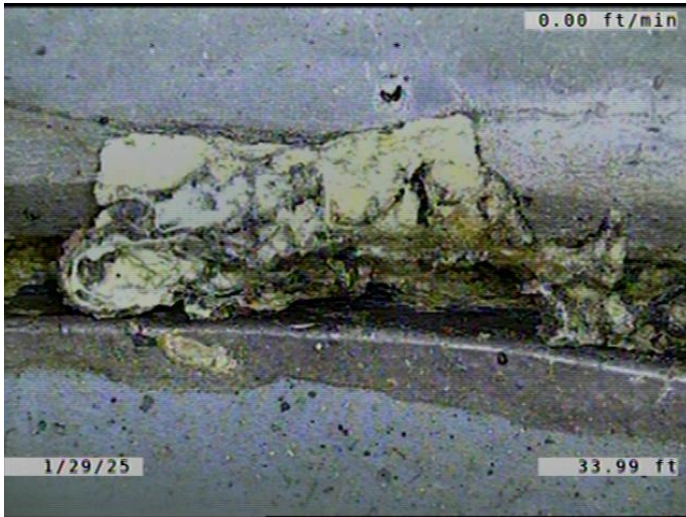
Distance (ft): **16.7**  
 Structural Grade: **0**  
 O&M Grade: **0**  
 Clock Start/From:  
 Clock To:  
 1st Value:  
 2nd Value:  
 Value Percent:  
 Continuous Index: **F01**  
 Within 8" of Joint: **YES**  
 Remarks: **REPLACED WITH PVC.**



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

Distance (ft): **19.0**  
 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:

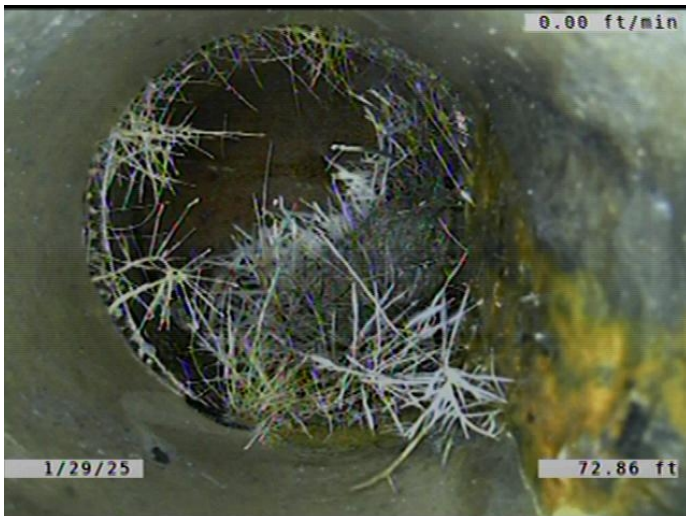




Code: **DAE**  
Description: **Deposits Attached Encrustation**

Distance (ft): **34.0**  
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:

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

Distance (ft): **72.9**  
Structural Grade: **0**  
O&M Grade: **3**  
Clock Start/From: **3**  
Clock To:  
1st Value: **6.000**  
2nd Value:  
Value Percent:  
Continuous Index:  
Within 8" of Joint: **YES**  
Remarks: **CAPPED. ROOTS GROWING AROUND THE CAP. ENCRUSTATION COMING A**

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

Distance (ft): **74.2**  
Structural Grade: **0**  
O&M Grade: **3**  
Clock Start/From: **8**  
Clock To: **4**  
1st Value:  
2nd Value:  
Value Percent: **5.000**  
Continuous Index: **S03**  
Within 8" of Joint: **YES**  
Remarks:

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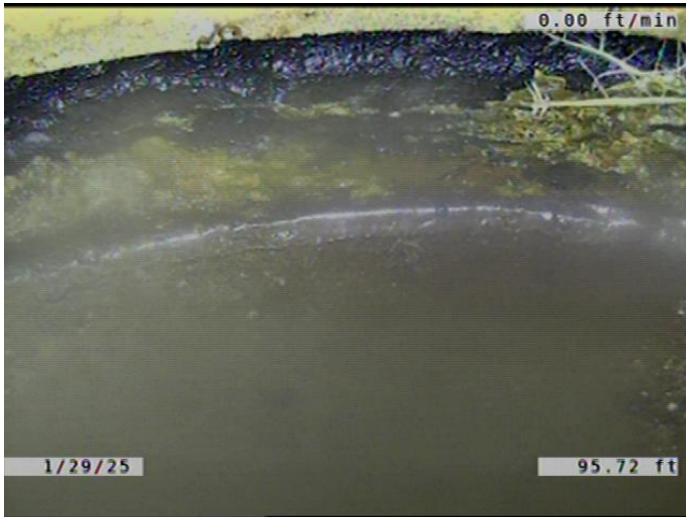


Code: **TFD**  
Description: **Tap Factory Defective**

Distance (ft): **75.8**  
Structural Grade: **0**  
O&M Grade: **3**  
Clock Start/From: **9**  
Clock To:  
1st Value: **6.000**  
2nd Value:  
Value Percent:  
Continuous Index:  
Within 8" of Joint: **YES**  
Remarks: **95% PLUGGED WITH ROOTS.**

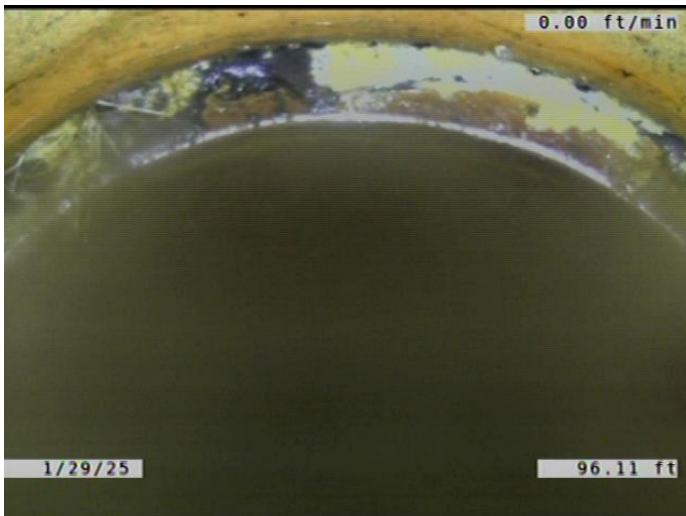
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Code: **DAE**  
 Description: **Deposits Attached Encrustation**

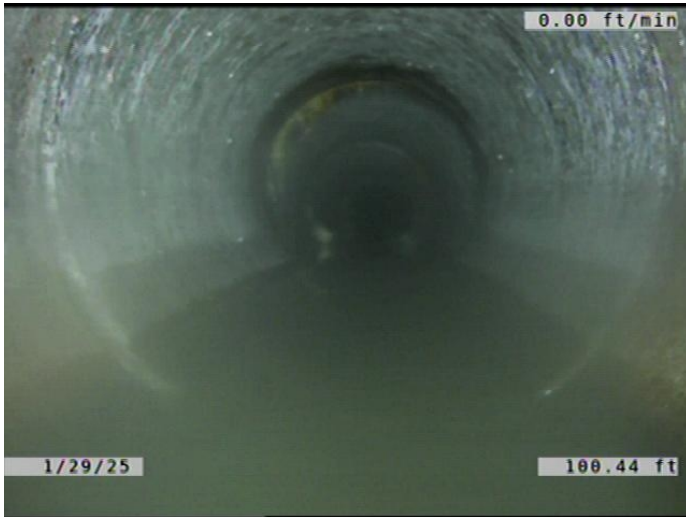
Distance (ft): **95.7**  
 Structural Grade: **0**  
 O&M Grade: **2**  
 Clock Start/From: **9**  
 Clock To: **3**  
 1st Value:  
 2nd Value:  
 Value Percent: **5.000**  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:



Code: **JOMD**  
 Description: **Joint Offset Medium Defective**

Distance (ft): **96.1**  
 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: **MWLS**  
Description: **Miscellaneous Water Level Sag**

Distance (ft): **100.4**  
Structural Grade: **2**  
O&M Grade: **0**  
Clock Start/From:  
Clock To:  
1st Value:  
2nd Value:  
Value Percent: **30.000**  
Continuous Index: **F02**  
Within 8" of Joint: **NO**  
Remarks:

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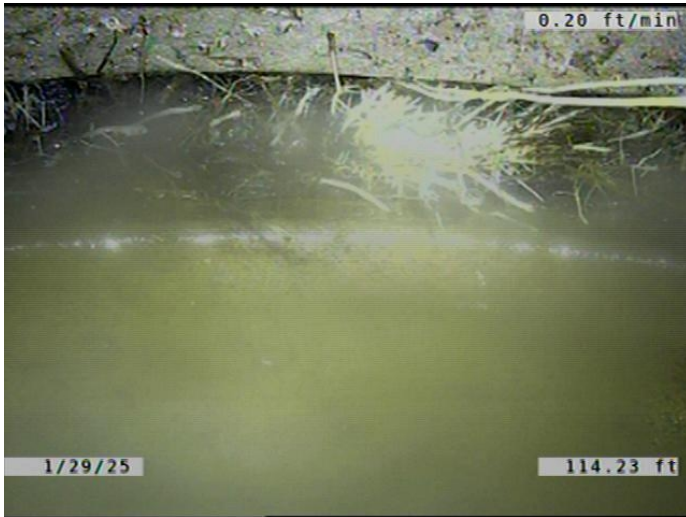


Code: **MWLS**  
Description: **Miscellaneous Water Level Sag**

Distance (ft): **104.2**  
Structural Grade: **2**  
O&M Grade: **0**  
Clock Start/From:  
Clock To:  
1st Value:  
2nd Value:  
Value Percent: **15.000**  
Continuous Index: **S04**  
Within 8" of Joint: **NO**  
Remarks:

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Code: **IDJ**  
 Description: **Infiltration Dripper Joint**

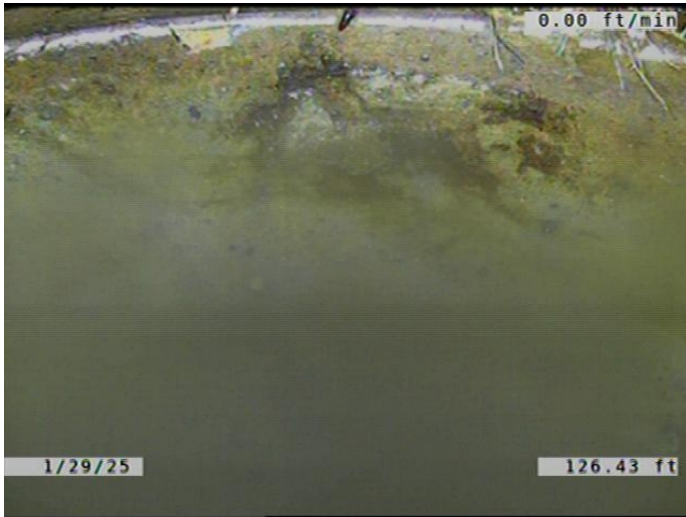
Distance (ft): **114.2**  
 Structural Grade: **0**  
 O&M Grade: **3**  
 Clock Start/From: **12**  
 Clock To: **1**  
 1st Value:  
 2nd Value:  
 Value Percent:  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:



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

Distance (ft): **114.2**  
 Structural Grade: **0**  
 O&M Grade: **2**  
 Clock Start/From: **9**  
 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**

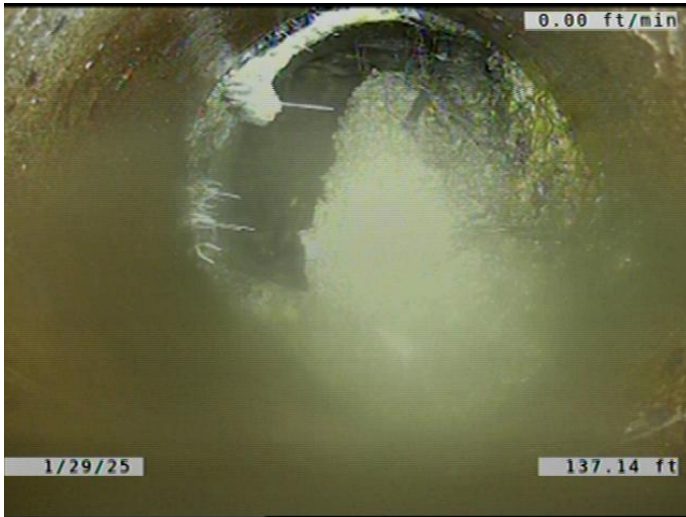
Distance (ft): **126.4**  
 Structural Grade: **0**  
 O&M Grade: **2**  
 Clock Start/From: **8**  
 Clock To: **4**  
 1st Value:  
 2nd Value:  
 Value Percent: **5.000**  
 Continuous Index:  
 Within 8" of Joint: **YES**  
 Remarks:



Code: **LR**  
 Description: **Line Right**

Distance (ft): **126.4**  
 Structural Grade: **0**  
 O&M Grade: **1**  
 Clock Start/From:  
 Clock To:  
 1st Value:  
 2nd Value:  
 Value Percent: **10.000**  
 Continuous Index:  
 Within 8" of Joint: **NO**  
 Remarks:





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

Distance (ft): **137.1**  
Structural Grade: **0**  
O&M Grade: **3**  
Clock Start/From: **2**  
Clock To:  
1st Value: **6.000**  
2nd Value:  
Value Percent:  
Continuous Index:  
Within 8" of Joint: **YES**  
Remarks: **100% PLUGGED WITH ROOTS.**

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

Distance (ft): **139.8**  
Structural Grade: **2**  
O&M Grade: **0**  
Clock Start/From:  
Clock To:  
1st Value:  
2nd Value:  
Value Percent: **15.000**  
Continuous Index: **F04**  
Within 8" of Joint: **NO**  
Remarks:

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

Distance (ft): **140.3**  
Structural Grade: **0**  
O&M Grade: **3**  
Clock Start/From: **9**  
Clock To:  
1st Value: **6.000**  
2nd Value:  
Value Percent:  
Continuous Index:  
Within 8" of Joint: **YES**  
Remarks: **100% PLUGGED WITH ROOTS.**

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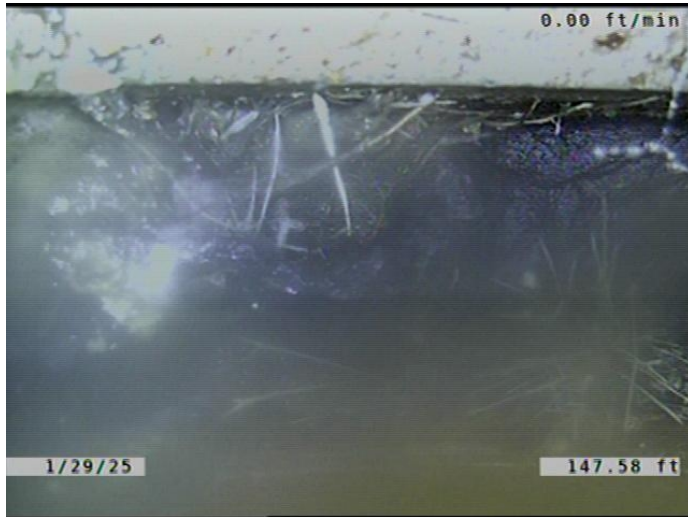


Code: **MWLS**  
Description: **Miscellaneous Water Level Sag**

Distance (ft): **143.8**  
Structural Grade: **2**  
O&M Grade: **0**  
Clock Start/From:  
Clock To:  
1st Value:  
2nd Value:  
Value Percent: **20.000**  
Continuous Index: **S05**  
Within 8" of Joint: **NO**  
Remarks:

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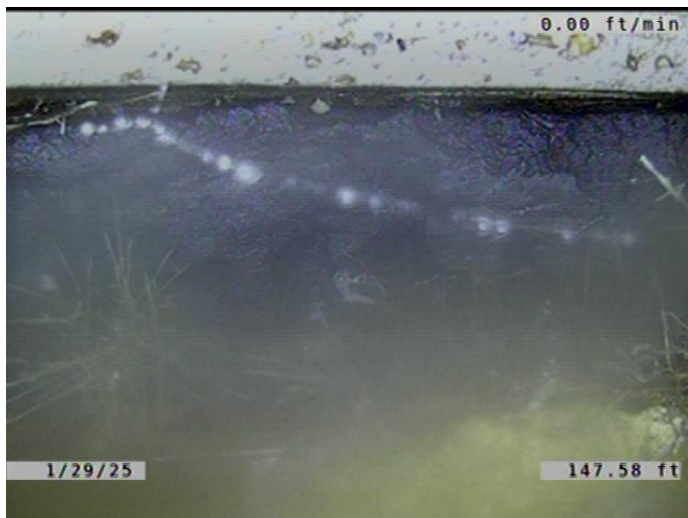




Code: **DAE**  
Description: **Deposits Attached Encrustation**

Distance (ft): **147.6**  
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:

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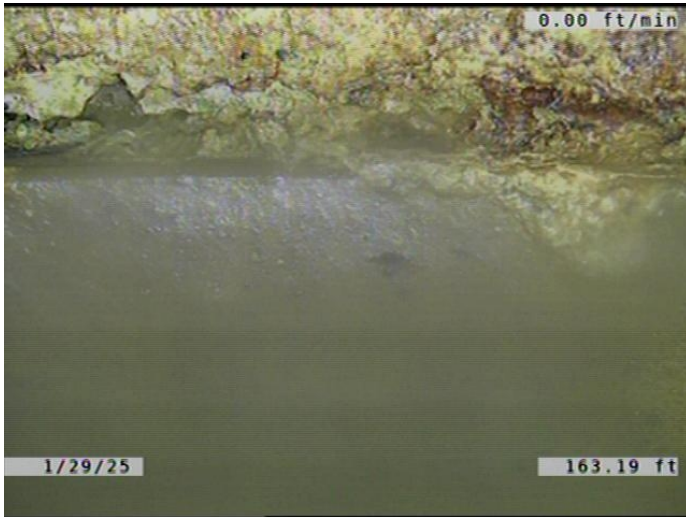


Code: **JAM**  
Description: **Joint Angular Medium**

Distance (ft): **147.6**  
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:

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

Distance (ft): **163.2**  
Structural Grade: **0**  
O&M Grade: **2**  
Clock Start/From: **8**  
Clock To: **4**  
1st Value:  
2nd Value:  
Value Percent: **5.000**  
Continuous Index: **S06**  
Within 8" of Joint: **YES**  
Remarks:

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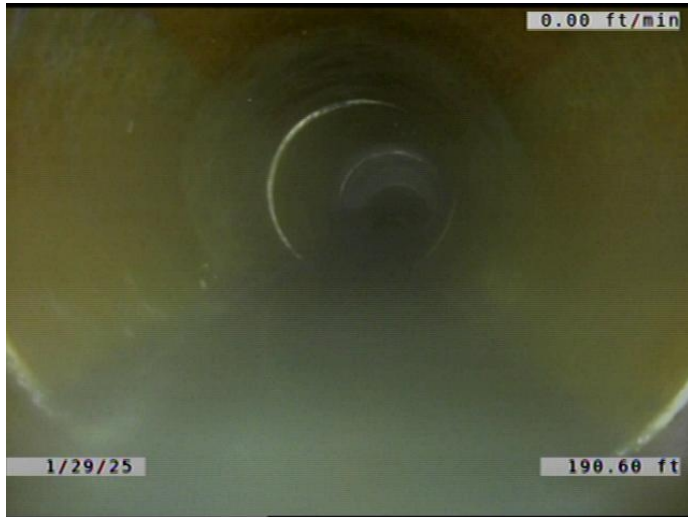


Code: **RMJ**  
Description: **Roots Medium Joint**

Distance (ft): **163.2**  
Structural Grade: **0**  
O&M Grade: **3**  
Clock Start/From: **8**  
Clock To: **4**  
1st Value:  
2nd Value:  
Value Percent: **5.000**  
Continuous Index: **F03**  
Within 8" of Joint: **YES**  
Remarks:

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

Distance (ft): **190.6**  
Structural Grade: **2**  
O&M Grade: **0**  
Clock Start/From:  
Clock To:  
1st Value:  
2nd Value:  
Value Percent: **20.000**  
Continuous Index: **F05**  
Within 8" of Joint: **NO**  
Remarks:

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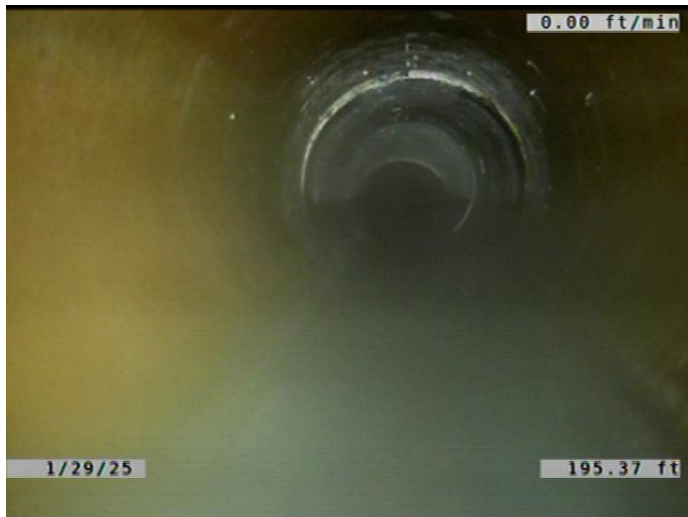


Code: **LR**  
Description: **Line Right**

Distance (ft): **190.6**  
Structural Grade: **0**  
O&M Grade: **1**  
Clock Start/From:  
Clock To:  
1st Value:  
2nd Value:  
Value Percent: **5.000**  
Continuous Index:  
Within 8" of Joint: **NO**  
Remarks:

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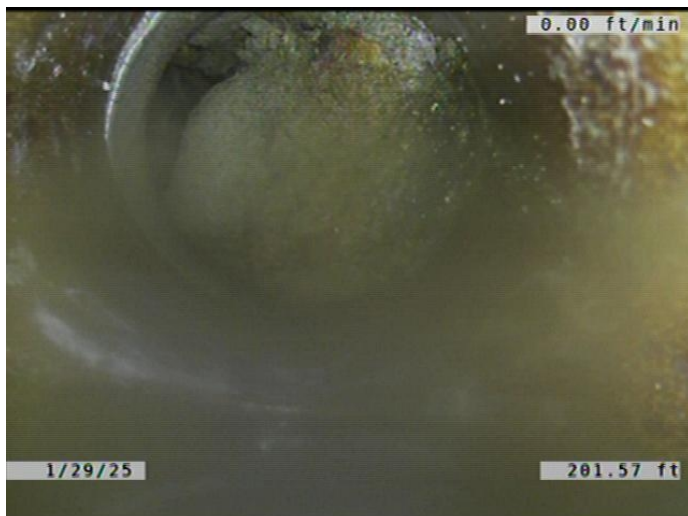




Code: **LR**  
Description: **Line Right**

Distance (ft): **195.4**  
Structural Grade: **0**  
O&M Grade: **1**  
Clock Start/From:  
Clock To:  
1st Value:  
2nd Value:  
Value Percent: **5.000**  
Continuous Index:  
Within 8" of Joint: **NO**  
Remarks:

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

Distance (ft): **201.6**  
Structural Grade: **0**  
O&M Grade: **3**  
Clock Start/From: **3**  
Clock To:  
1st Value: **6.000**  
2nd Value:  
Value Percent:  
Continuous Index:  
Within 8" of Joint: **YES**  
Remarks: **90% PLUGGED WITH DIRT AND ENCRUSTATION.**

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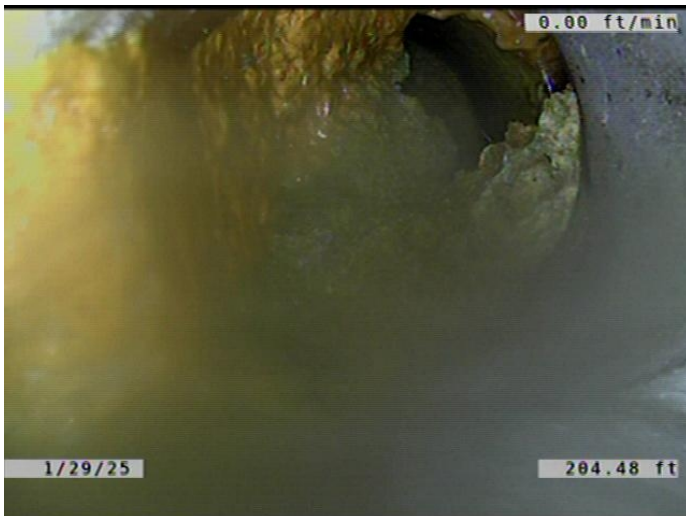




Code: **MWLS**  
Description: **Miscellaneous Water Level Sag**

Distance (ft): **202.5**  
Structural Grade: **2**  
O&M Grade: **0**  
Clock Start/From:  
Clock To:  
1st Value:  
2nd Value:  
Value Percent: **25.000**  
Continuous Index: **S07**  
Within 8" of Joint: **NO**  
Remarks:

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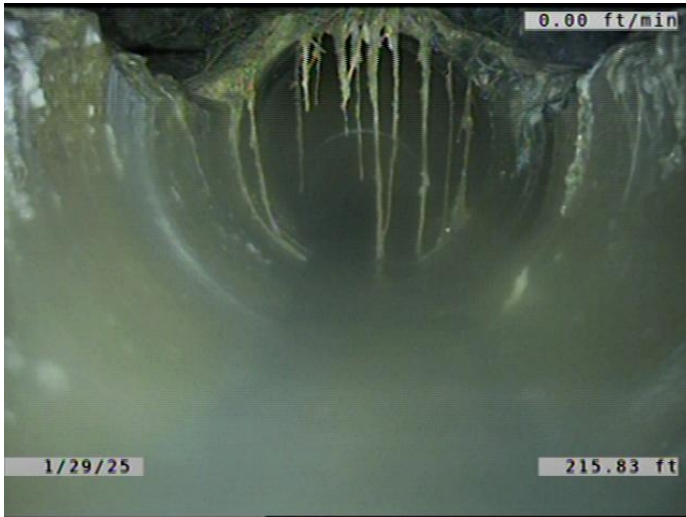


Code: **TFD**  
Description: **Tap Factory Defective**

Distance (ft): **204.5**  
Structural Grade: **0**  
O&M Grade: **3**  
Clock Start/From: **9**  
Clock To:  
1st Value: **6.000**  
2nd Value:  
Value Percent:  
Continuous Index:  
Within 8" of Joint: **YES**  
Remarks: **95% PLUGGED WITH DIRT AND ENCRUSTATION. ENCRUSTATION C**

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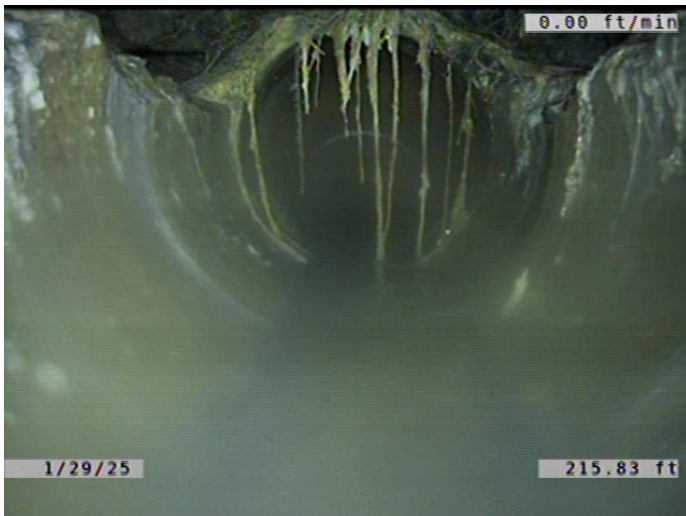




Code: **MWLS**  
Description: **Miscellaneous Water Level Sag**

Distance (ft): **215.8**  
Structural Grade: **2**  
O&M Grade: **0**  
Clock Start/From:  
Clock To:  
1st Value:  
2nd Value:  
Value Percent: **25.000**  
Continuous Index: **F07**  
Within 8" of Joint: **NO**  
Remarks:

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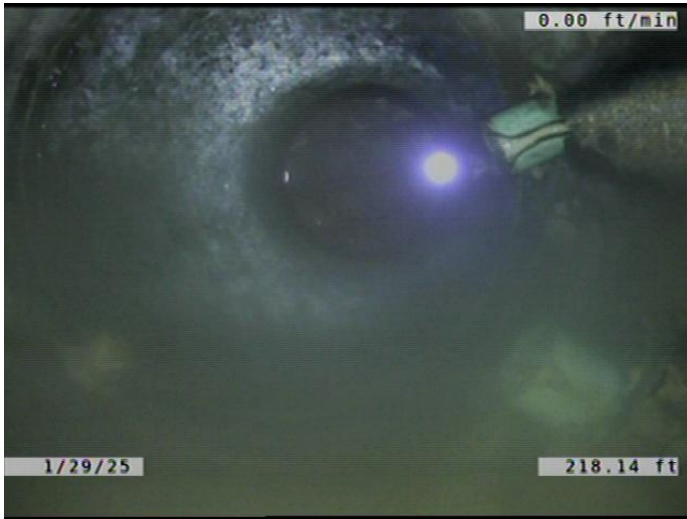


Code: **DAE**  
Description: **Deposits Attached Encrustation**

Distance (ft): **215.8**  
Structural Grade: **0**  
O&M Grade: **2**  
Clock Start/From: **8**  
Clock To: **4**  
1st Value:  
2nd Value:  
Value Percent: **5.000**  
Continuous Index: **F06**  
Within 8" of Joint: **YES**  
Remarks:

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Code:	AMH
Description:	Manhole
Distance (ft):	218.1
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:	M-507-011