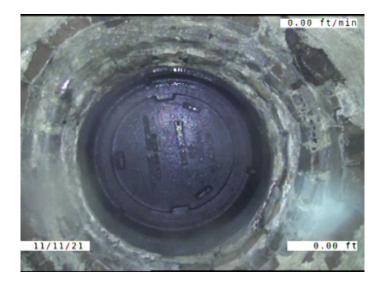
Profile/Phot	o Observation R	eport			RedZon
Date:	11/11/2021	Weather:		Coding:	PACP 7.0
Pipe Length (ft):	175.9	Owner:	City of Hobart	Pre Clean:	Heavy Cleaning
P.O.#:	YES502259	Surveyor:	Steven Bucklin	PSR:	P-605-028-027
Customer:	City of Hobart, IN (Red	d Clean Date:	11/10/2021	Shape:	С
Street:	South Ash Street		Flow Control:	Not Controlled	
City:	City of Hobart		Year Renewed:		
Location:	Local rural streets wit	h light traffic,	t Tape/Media #:		
Purpose:	Routine Assessment		Dia/Height:	12"	
Use:	Sanitary Sewage Pipe		Material:	VCP	
Drain Area:			Lining:	None	
Category:	NA				
Comment:					
Location Details:			Direction of Survey	/: Downstream	
US MH: M	-605-027	DS MH:	M-605-028	Total Length Surveyed (ft):	175.9
0&M Index:	1.97	O&M Quick:	423A	O&M Rating:	179.00
tructural Index:	3.86	Structural Qu	ick: 5241	Structural Rating:	224.00
Overall Index:	2.70	Overall Quick	52.41	Overall Rating:	403.00

	Position	Code	Observation	Video (sec)	Grade
605-	027				
\mathbf{H}	0.	AMH	Manhole	98	NA
	.0	MWL	Miscellaneous Water Level	119	NA
	4.5	RFJ	Roots Fine Joint	175	M 1
	4.5	MWLS(S01)	Miscellaneous Water Level Sag	198	S 2
**	1.6	В	Broken	266	S 4
	4.6	FM(S08)	Fracture Multiple	272	S 4
	4.6	DSF(S03)	Deposits Settled Fine	281	M 2
	8.8	RFJ	Roots Fine Joint	335	M 1
	12.8	RFJ	Roots Fine Joint	378	M 1
	14.9	RFJ	Roots Fine Joint	409	M 1
	16.6	DR(S04)	Deformed Rigid	443	S 4
	17.9	TFD	Tap Factory Defective	475	M 3
	19.2	RFJ	Roots Fine Joint	503	M 1
	20.0	TFC	Tap Factory Capped	540	NA
	26.7	MWLS(F01)	Miscellaneous Water Level Sag	592	S 2
-	- 45.7	RFJ	Roots Fine Joint	681	M 1
	47.9	RFJ	Roots Fine Joint	716	M 1
	53.8	RMJ	Roots Medium Joint	774	M 3
	56.2	RFJ	Roots Fine Joint	805	M 1

58.3	RMJ	Roots Medium Joint	845	MB
59.3	TFD	Tap Factory Defective	903	MB
61.2	TFD	Tap Factory Defective	953	M
1	RMJ	Roots Medium Joint	1014	M
() 63.8	RMJ	Roots Medium Joint	1077	M
66.4	RFJ(S05)	Roots Fine Joint	1114	M
80.5	DAE	Deposits Attached Encrustation	1230	M
82.5	DAE	Deposits Attached Encrustation	1264	M
91.0	DAE	Deposits Attached Encrustation	1328	M
93.0	DAE	Deposits Attached Encrustation	1371	M
//93.4	DAE	Deposits Attached Encrustation	1402	M
/// 93.4	MWL	Miscellaneous Water Level	1421	NA
94.5	ТВ	Tap Break-in/Hammer	1468	NA
97.3	FM(F08)	Fracture Multiple	1528	S 4
97.3	MCU	Miscellaneous Camera Underwater	1530	M
97.3	DR(F04)	Deformed Rigid	1536	S 4
97.4	RMB	Roots Medium Barrel	1544	M
99.9	TFD	Tap Factory Defective	1702	M
100.7	FM(S09)	Fracture Multiple	1727	S 4
100.7	SSS	Surface Damage Surface Spalling	1728	S 2
107.5	DAE(S06)	Deposits Attached Encrustation	1821	M
107.5	DAE(S07)	Deposits Attached Encrustation	1859	M
113.1	MWL	Miscellaneous Water Level	1910	NA
117.0	RFJ(F05)	Roots Fine Joint	1943	M
134.7	TBD	Tap Break-in/Hammer Defective	2061	M
/ 134.8	B(S10)	Broken	2082	S 4
136.5	BSV	Broken Soil Visible	2122	S 5
136.5	TFD	Tap Factory Defective	2145	M
138.4	BSV	Broken Soil Visible	2210	S 5
138.7	ТВІ	Tap Break-in Intruding	2238	M
139.0	TFD	Tap Factory Defective	2262	M
141.2	TFC	Tap Factory Capped	2313	NA
141.2	B(F10)	Broken	2329	S 4
<u> </u>	DAE(F07)	Deposits Attached Encrustation	2404	M
156.5	DAE(F06)	Deposits Attached Encrustation	2412	M
158.2	MWL	Miscellaneous Water Level	2436	NA
171.8	FM(F09)	Fracture Multiple	2595	S 4
/ 173.7	MWL	Miscellaneous Water Level	2609	NA
// 174.6	DSF(F03)	Deposits Settled Fine	2638	M
175.9	AMH	Manhole	2721	NA

Wednesday, January 19, 2022



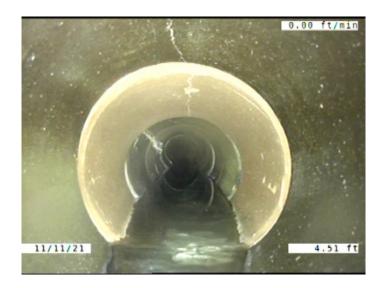
Code:	AMH
Description:	Manhole
Distance (ft)	•
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	M-605-027
Within 8" of Joint:	



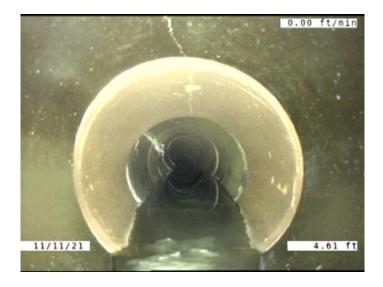
Code: Description:	MWL Miscellaneous Water Level
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



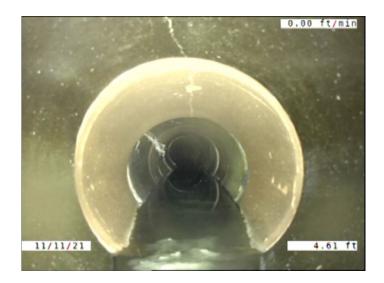
Code:	RFJ
Description:	Roots Fine Joint
Distance (ft):	4.5
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	9
Clock To:	10
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	4.5
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	S01
Within 8" of Joint:	NO
Remarks:	



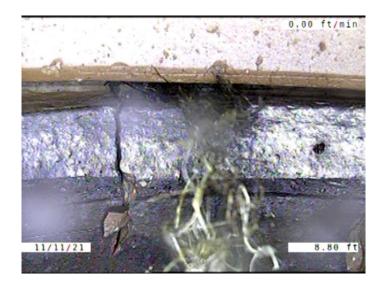
Code:	В
Description:	Broken
Distance (ft):	4.6
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	12
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



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:	4.6 4 0 8 4 508 YES
Remarks:	



Code:	DSF
Description:	Deposits Settled Fine
Distance (ft):	4.6
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	5
Clock To:	7
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S03
Within 8" of Joint:	YES
Remarks:	ALSO RAGS



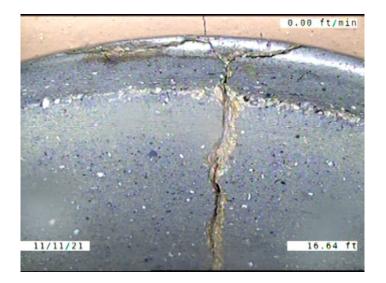
Code: Description:	RFJ Roots Fine Joint
Distance (ft):	8.8
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	10
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



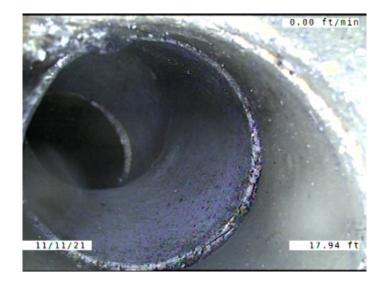
Code: Description:	RFJ Roots Fine Joint
Distance (ft):	12.8
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	10
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	RFJ Roots Fine Joint
Distance (ft):	14.9
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:	



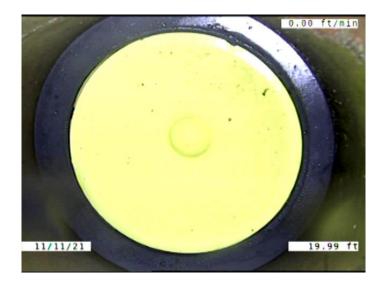
Code: Description:	DR Deformed Rigid
Distance (ft):	16.6
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S04
Within 8" of Joint:	NO
Remarks:	



Code: Description:	TFD Tap Factory Defective
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	17.9 0 3 10 4.000
Remarks:	CONSTANTLY RUNNING WATER. BROKEN. ROOTS GROWING FROM T



Code:	RFJ
Description:	Roots Fine Joint
Distance (ft):	19.2
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	3
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	TFC Tap Factory Capped
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:	20.0 0 1 4.000 YES

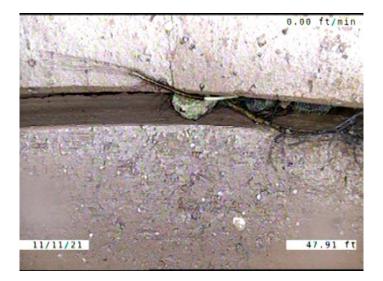


Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	26.7
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	F01
Within 8" of Joint:	NO

Remarks:



Code: Description:	RFJ Roots Fine Joint
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	45.7 0 1 10 YES
Remarks:	163



Code:	RFJ
Description:	Roots Fine Joint
Distance (ft):	47.9
Distance (ft):	47.5
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:	



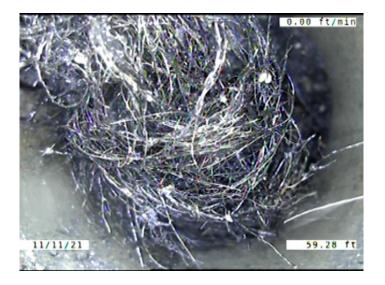
Code: Description:	RMJ Roots Medium Joint
Distance (ft):	53.8
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



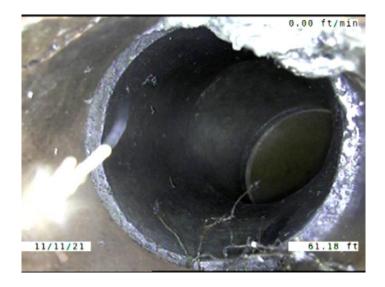
RFJ Roots Fine Joint
56.2 0 1
9
3
YES



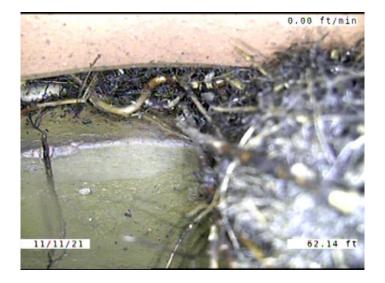
RMJ Roots Medium Joint
58.3
0
3
8
4
15.000
YES



Code: Description:	TFD Tap Factory Defective
Distance (ft):	59.3
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	10
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	LOOKS TO BE 100% PLUGGED WITH ROOTS.



Code: Description:	TFD Tap Factory Defective
Distance (ft):	61.2
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	2
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	BROKEN. ROOTS GROWING OUT OF THE JOINTS



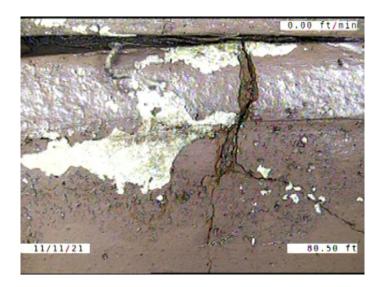
Code: Description:	RMJ Roots Medium Joint
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	62.1 0 3 8 4 15.000
Within 8" of Joint: Remarks:	YES



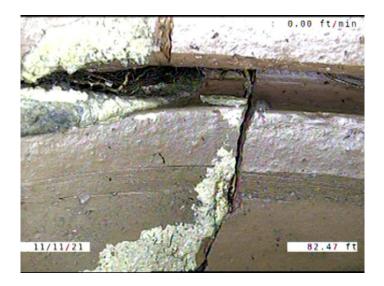
Code: Description:	RMJ Roots Medium Joint
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	63.8 0 3 8 4 5.000 YES
Remarks:	



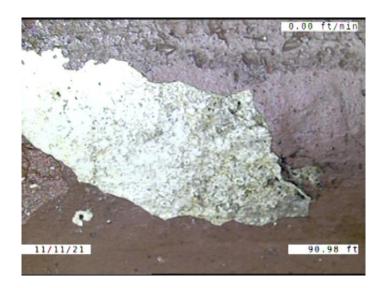
Code:	RFJ
Description:	Roots Fine Joint
	<i></i>
Distance (ft):	66.4
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S05
Within 8" of Joint:	YES
Remarks:	



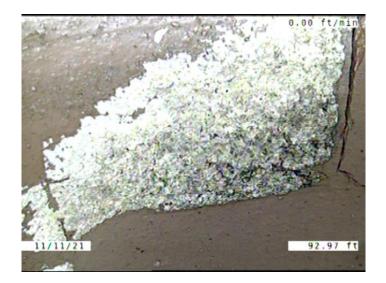
Code:	DAE
Description:	Deposits Attached Encrustation
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	80.5 0 2 8 12 5.000 YES



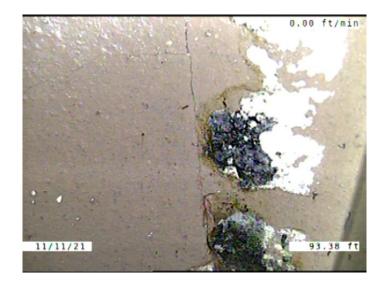
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	82.5
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
Clock To:	10
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



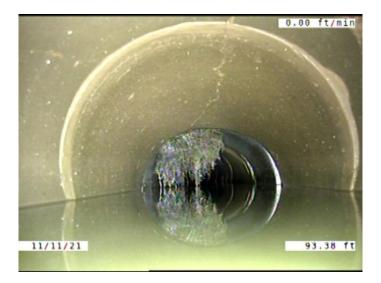
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	91.0 0 2 8 10 5.000 YES



Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	93.0
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:	DAE Deposits Attached Encrustation
Distance (ft):	93.4
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	2
Clock To:	3
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	MWL Miscellaneous Water Level
Distance (ft):	93.4
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	40.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code: Description:	TB Tap Break-in/Hammer
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:	94.5 0 1 4.000 YES ROOTS GROWING AROUND THE
	CONNECTION



Description: Fra	
Distance (ft):97.3Structural Grade:4O&M Grade:0Clock Start/From:8Clock To:41st Value:42nd Value:4Value Percent:508Within 8" of Joint:YESRemarks:508	3



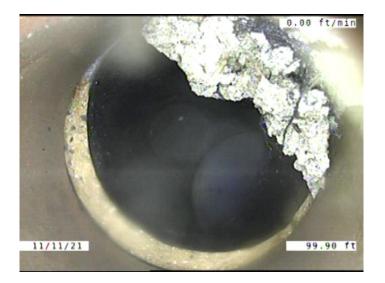
Code: Description:	MCU Miscellaneous Camera Underwater
Distance (ft):	97.3
Structural Grade:	0
O&M Grade:	4
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	Out at 98.1



Code:	DR
Description:	Deformed Rigid
Distance (ft):	97.3
Structural Grade:	4
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:	



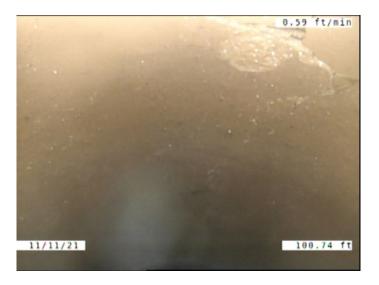
Code: Description:	RMB Roots Medium Barrel
Distance (ft):	97.4
Structural Grade:	0
O&M Grade:	4 9
Clock Start/From: Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	30.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code:	TFD
Description:	Tap Factory Defective
	22.2
Distance (ft):	99.9
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:	CAPPED. OFFSET. ROOTS GROWING OUT OF THE JOINT



Code:	FM
Description:	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:	100.7 4 0 8 4 4 S09 YES

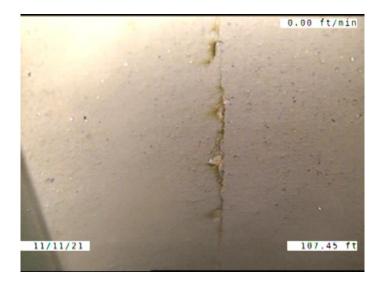


Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft):	100.7
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO

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:	107.5 0 2 2 4 5.000 S06 YES

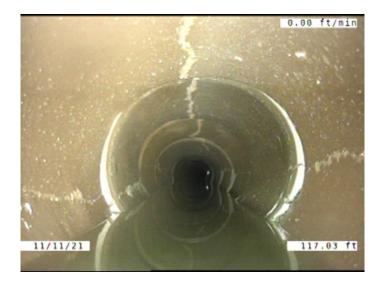


Code:	DAE
Description:	Deposits Attached Encrustation
Distance (ft):	107.5

107.5		
0		
2		
8		
10		
1st Value:		
5.000		
S07		
YES		



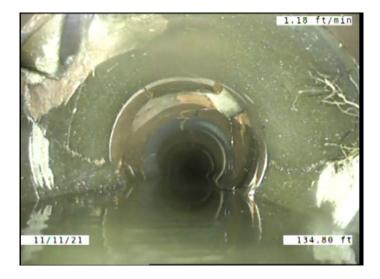
Code: Description:	MWL Miscellaneous Water Level
Distance (ft):	113.1
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code:	RFJ
Description:	Roots Fine Joint
Distance (ft):	117.0
Distance (ft):	117.0
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F05
Within 8" of Joint:	YES
Remarks:	



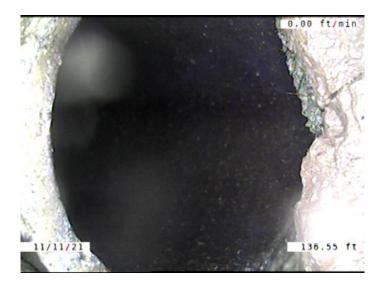
Code: Description:	TBD Tap Break-in/Hammer Defective
Distance (ft): Structural Grade: O&M Grade:	134.7 0 3
Clock Start/From: Clock To:	2
1st Value: 2nd Value:	4.000
Value Percent: Continuous Index:	
Within 8" of Joint: Remarks:	YES CONSTANTLY RUNNING WATER.
	ROOTS GROWING FROM THE JOINT



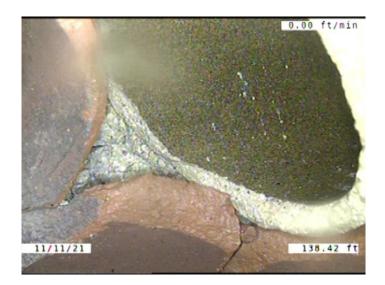
Code:	В
Description:	Broken
	424.0
Distance (ft):	134.8
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	10
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S10
Within 8" of Joint:	YES
Remarks:	



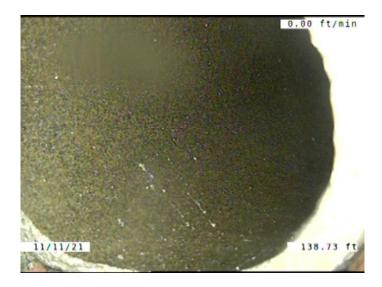
Code: Description:	BSV Broken Soil Visible
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	136.5 5 0 8 11
Within 8" of Joint: Remarks:	YES



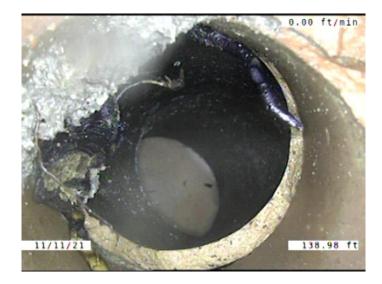
Code: Description:	TFD Tap Factory Defective
Description.	
Distance (ft):	136.5
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	11
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	Defective



Distance (ft): 138.4	
Structural Grade:5O&M Grade:0Clock Start/From:12Clock To:21st Value:-2nd Value:-Value Percent:-Continuous Index:YESRemarks:-	



Code:	тві
Description:	Tap Break-in Intruding
Distance (ft):	138.7
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	1
Clock To:	
1st Value:	4.000
2nd Value:	2.000
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



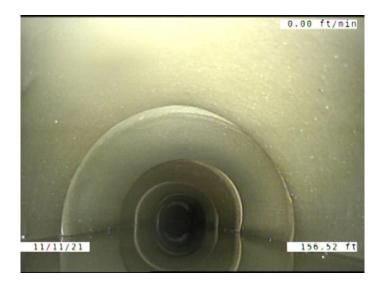
Code:	TFD
Description:	Tap Factory Defective
Distance (ft):	139.0
Structural Grade:	0
O&M Grade:	3
Clock Start/From: Clock To:	11
1st Value: 2nd Value: Value Percent:	4.000
Continuous Index:	YES
Within 8" of Joint:	BROKEN. SOIL VISIBLE. ROOTS
Remarks:	GROWING OUT OF THE OFFSET AND



Code:	TFC
Description:	Tap Factory Capped
Distance (ft):	141.2
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:	YES
Remarks:	BROKEN. OFFSET. SOIL VISIBLE. ROOTS GROWING FROM THE JOINT



Code: Description:	B Broken	
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	141.2 4 0 10 2 F10	
Within 8" of Joint: Remarks:	YES	



Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	156.5
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
	-
Clock To:	10
1st Value:	
2nd Value:	

5.000

F07

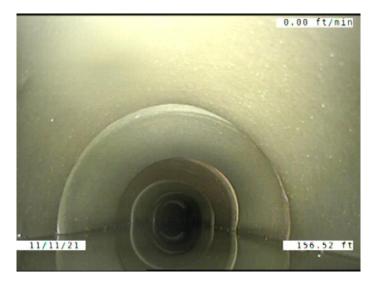
YES

Value Percent:

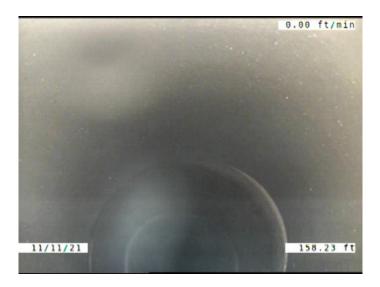
Remarks:

Continuous Index:

Within 8" of Joint:



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:	156.5 0 2 2 4 5.000 F06
Within 8" of Joint: Remarks:	YES



MWL Miscellaneous Water Level
158.2
0
0
15.000
NO



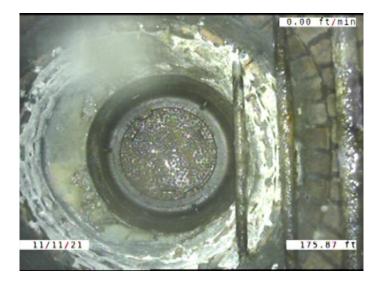
Code: Description:	FM Fracture Multiple
Distance (ft):	171.8
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F09
Within 8" of Joint:	YES
Remarks:	



Code: Description:	MWL Miscellaneous Water Level
Distance (ft):	173.7
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: Description:	DSF 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:	174.6 0 2 5 7 5.000 F03 YES ALSO RAGS



Code:	AMH
Description:	Manhole
Distance (ft):	175.9
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:	M-605-028