## **Profile/Photo Observation Report**

-		-			ROBOTICS
Date:	10/22/2021	Weather:		Coding:	PACP 7.0
Pipe Length (ft):	241.0	Owner:	City of Hobart	Pre Clean:	Light Cleaning
P.O.#:	YES502259	Surveyor:	S. Bucklin	PSR:	P-504-107-106
Customer:	City of Hobart	Clean Date:	08/30/2021	Shape:	С
Street:	42nd Avenue		Flow Control:	Not Controlled	
City:	Hobart, IN		Year Renewed:		
Location:	Alley		Tape/Media #:		
Purpose:	Routine Assessmer	nt	Dia/Height:	8"	
Use:	Sanitary Sewage Pi	ре	Material:	СР	
Drain Area:			Lining:		
Category:	NA				
Comment:					
Location Details	:		Direction of Surv	vey: Upstream	
US MH:	M-504-106	DS MH:	M-504-107	Total Length Surveyed (ft)	: <b>105.6</b>
D&M Index:	1.86	O&M Quick:	413	1 O&M Rating:	54.00
Structural Index:	2.72	Structural Qu	uick: 514	2 Structural Rating:	49.00
Overall Index:	2.19	Overall Quick			103.00

	Position	Code	Observation	Video (sec)	Grade
504	-)107				
H	.0	AMH	Manhole	1	NA
	.0	MWL	Miscellaneous Water Level	80	NA
	.2	DSC	Deposits Settled Hard/Compacted	109	M 2
	.3	FC	Fracture Circumferential	175	S 2
ш	.3	IWB	Infiltration Weeper Barrel	190	M 2
Ш	.3	ISB	Infiltration Stain Barrel	207	M 1
Ш	1.1	JAM	Joint Angular Medium	260	S 3
Ш	4.2	ISJ	Infiltration Stain Joint	318	M 1
Ш	4.6	FC	Fracture Circumferential	385	S 2
Ш	7.3	IRJ	Infiltration Runner Joint	433	M 4
H	24.0	MMC	Miscellaneous Material Change	563	NA
Ш	27.8	TF	Tap Factory	605	NA
	29.8	MMC	Miscellaneous Material Change	654	NA
	30.9	CS	Crack Spiral	709	S 2
Ш	30.9	DAE	Deposits Attached Encrustation	732	M 2
	31.4	DSF(S01)	Deposits Settled Fine	756	M 2
	38.6	MWLS(S02)	Miscellaneous Water Level Sag	800	S 2
	48.7	DAE	Deposits Attached Encrustation	883	M 2
	/49.4	MWLS(F02)	Miscellaneous Water Level Sag	903	S 2

Thursday, December 30, 2021

**RedZone**<sup>®</sup>

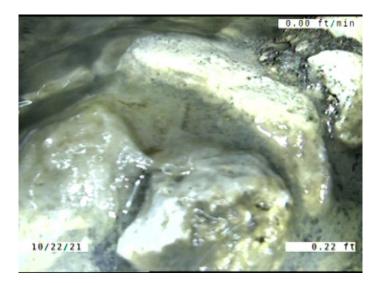
// 52.1	SMW	Surface Damage Missing Wall	979	S 5
// 52.1	FM	Fracture Multiple	1012	S 4
56.8	ISB	Infiltration Stain Barrel	1088	M
/ 56.9	СМ	Crack Multiple	1124	S 3
/ 58.3	ISJ	Infiltration Stain Joint	1180	M
61.1	MMC	Miscellaneous Material Change	1235	NA
61.1	СМ	Crack Multiple	1249	S 3
61.2	ISJ	Infiltration Stain Joint	1261	M
63.2	TF	Tap Factory	1292	NA
64.3	ISJ	Infiltration Stain Joint	1333	M
64.3	MMC	Miscellaneous Material Change	1344	NA
72.7	JOM	Joint Offset Medium	1408	S 3
74.7	MWLS(S03)	Miscellaneous Water Level Sag	1432	S 2
78.9	JOM	Joint Offset Medium	1467	S 3
79.5	MWLS(F03)	Miscellaneous Water Level Sag	1488	S 2
80.8	ISB	Infiltration Stain Barrel	1544	M
84.6	MWLS(S04)	Miscellaneous Water Level Sag	1602	S 2
94.2	MMC	Miscellaneous Material Change	1680	NA
96.3	TFD	Tap Factory Defective	1711	M
//97.0	MMC	Miscellaneous Material Change	1759	NA
/// 97.7	MWLS(F04)	Miscellaneous Water Level Sag	1782	S 2
/// 102.8	JOM	Joint Offset Medium	1820	S 3
// 104.1	В	Broken	1876	S 4
// 105.0	TBI	Tap Break-in Intruding	1907	M
/// 105.6	DSF(F01)	Deposits Settled Fine	1982	M
105.6	MSA	Miscellaneous Survey Abandoned	1991	NA



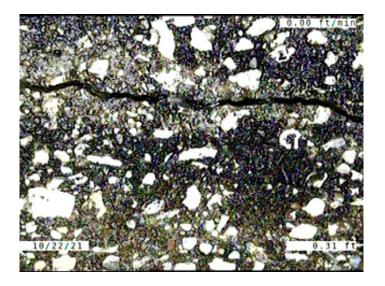
Code: Description:	AMH Manhole
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	M-504-107



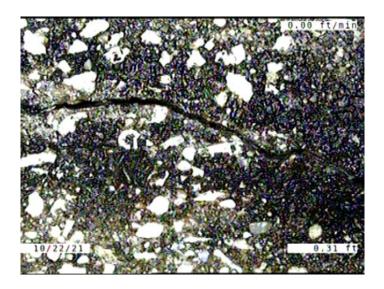
Code: Description:	MWL Miscellaneous Water Level
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



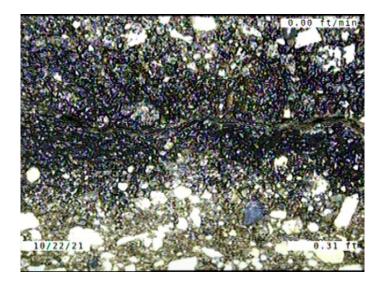
Code: Description:	DSC Deposits Settled Hard/Compacted
Distance (ft):	2
Distance (ft):	.2
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	4
Clock To:	7
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



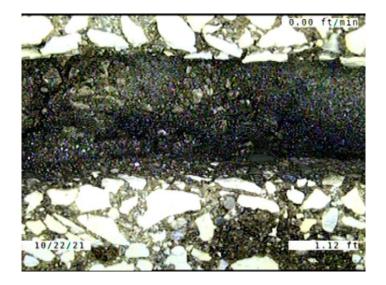
Code: Description:	FC Fracture Circumferential
Distance (ft):	.3
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	12
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



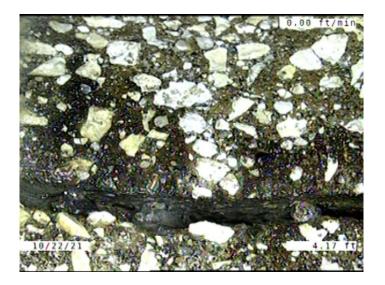
Code: Description:	IWB Infiltration Weeper Barrel
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	.3 0 2 11 12 YES
Remarks:	



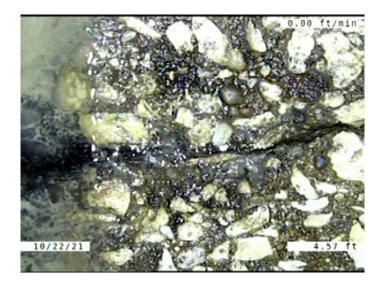
Code: Description:	ISB Infiltration Stain Barrel
Distance (ft):	.3
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	JAM Joint Angular Medium
Distance (ft):	1.1
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:	



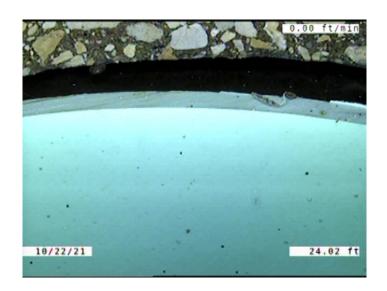
Code: Description:	ISJ Infiltration Stain Joint
Distance (ft):	4.2
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	4
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



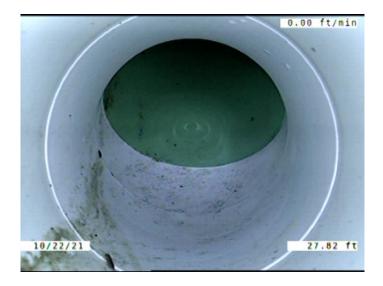
Code: Description:	FC Fracture Circumferential
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent:	4.6 2 0 1 10
Continuous Index: Within 8" of Joint: Remarks:	YES



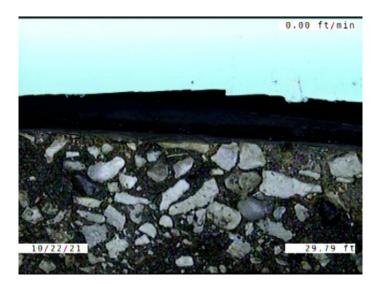
Code: Description:	IRJ Infiltration Runner Joint
Distance (ft):	7.3
Structural Grade:	0
O&M Grade:	4
Clock Start/From:	12
Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



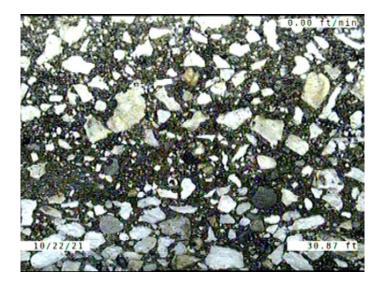
MMC Miscellaneous Material Change
24.0 0
0
NO CONCRETE TO PVC.



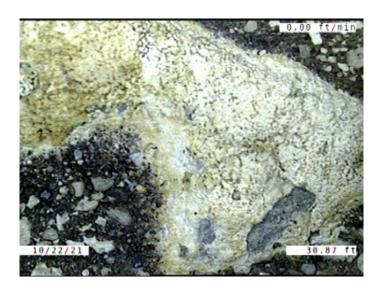
Code:	TF
Description:	Tap Factory
Distance (ft):	27.8
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	10
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



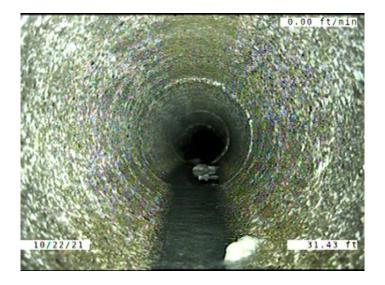
Code: Description:	MMC Miscellaneous Material Change
Distance (ft):	29.8
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	PVC TO CONCRETE



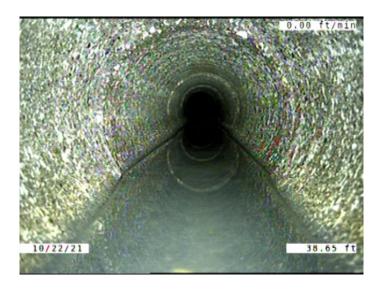
Code:	CS
Description:	Crack Spiral
Distance (ft):	30.9
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	12
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



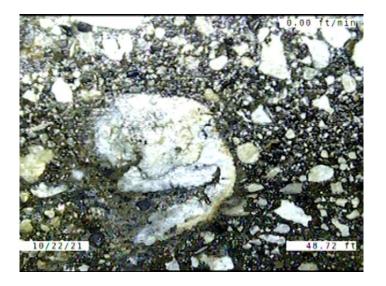
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	30.9 0 2 7 9 5.000
Within 8" of Joint: Remarks:	YES



DSF
<b>Deposits Settled Fine</b>
31.4
0
2
5
7
5.000
S01
YES



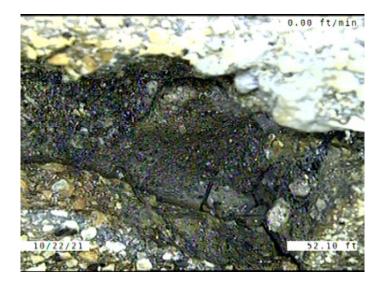
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	38.6
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S02
Within 8" of Joint:	NO
Remarks:	



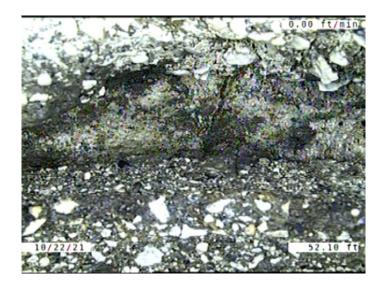
Code: Description:	DAE Deposits Attached Encrustation
2 000.19 000.0	
Distance (ft):	48.7
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	7
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



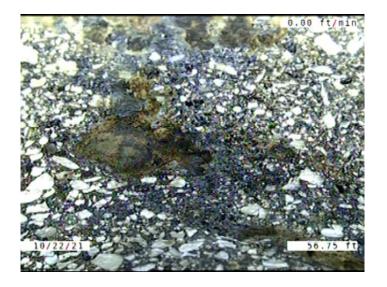
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	49.4
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F02
Within 8" of Joint:	NO
Remarks:	



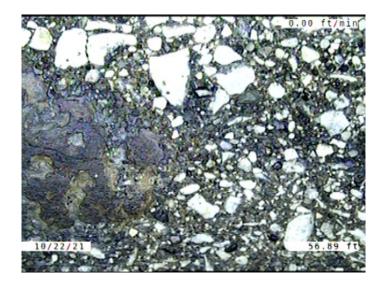
Code: Description:	SMW Surface Damage Missing Wall
Distance (ft):	52.1
Structural Grade:	5
O&M Grade:	0
Clock Start/From:	9
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	INSIDE OF THE JOINT



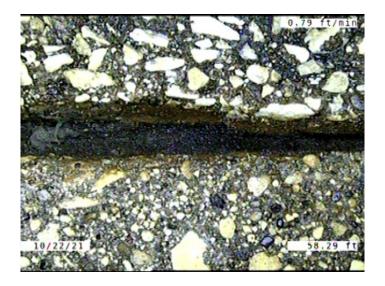
Code:	FM
Description:	Fracture Multiple
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	52.1 4 0 12 3 YES



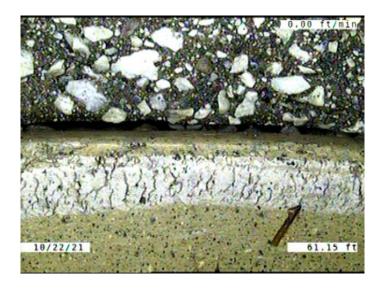
Code: Description:	ISB Infiltration Stain Barrel
Distance (ft):	56.8
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	8
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



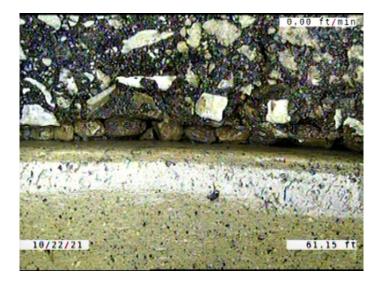
Code: Description:	CM Crack Multiple
Distance (ft):	56.9
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	7
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



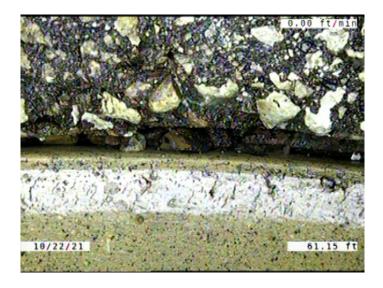
Code: Description:	ISJ Infiltration Stain Joint
Distance (ft):	58.3
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	7
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	MMC Miscellaneous Material Change
Distance (ft):	61.1
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:	CONCRETE TO VCP



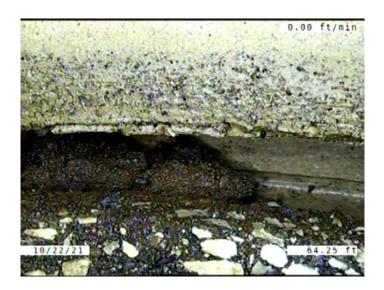
Code:	СМ
Description:	Crack Multiple
Distance (ft):	61.1
Distance (ft):	
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	12
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



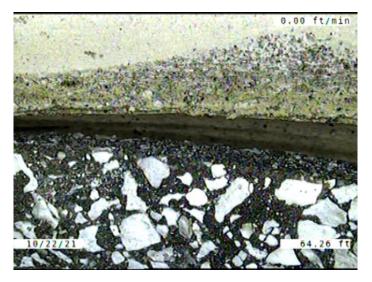
Code: Description:	ISJ Infiltration Stain Joint
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	61.2 0 1 7 5
Remarks:	



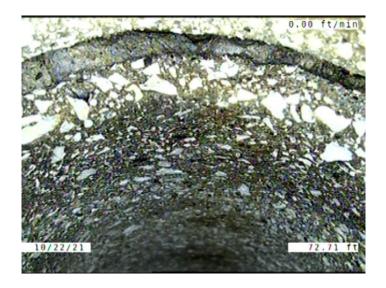
Code:	TF
Description:	Tap Factory
	~ ~
Distance (ft):	63.2
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	3
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



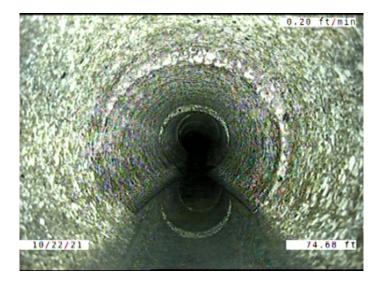
Code: Description:	ISJ Infiltration Stain Joint
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	64.3 0 1 1 5
Within 8" of Joint: Remarks:	YES



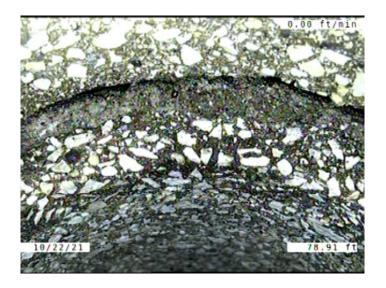
Code: Description:	MMC Miscellaneous Material Change
Distance (ft):	64.3
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	VCP TO CONCRETE



Code: Description:	JOM Joint Offset Medium
Distance (ft):	72.7
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:	



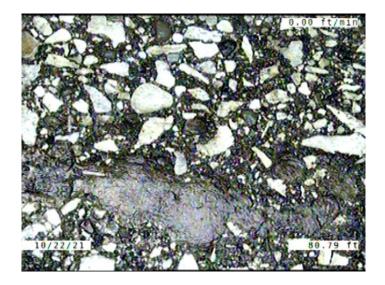
Code:	MWLS
Description:	Miscellaneous Water Level Sag
Distance (ft):	74.7
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S03
Within 8" of Joint:	NO
Remarks:	



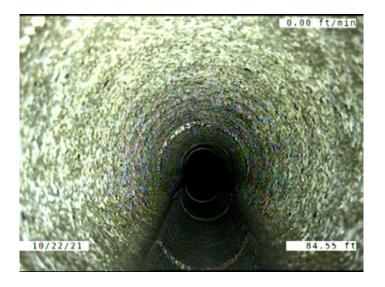
Code: Description:	JOM Joint Offset Medium
Distance (ft):	78.9
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



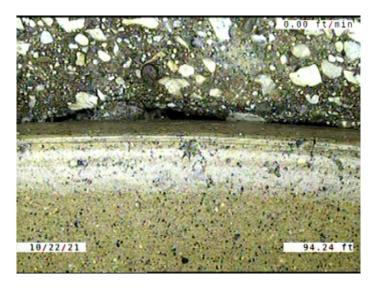
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	79.5
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F03
Within 8" of Joint:	NO
Remarks:	



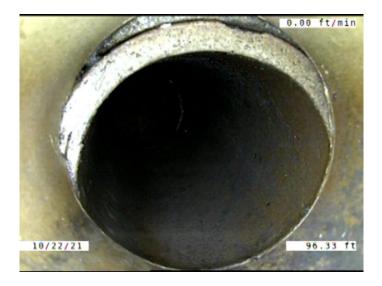
Code: Description:	ISB Infiltration Stain Barrel
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent:	80.8 0 1 8 4
Continuous Index: Within 8" of Joint: Remarks:	NO



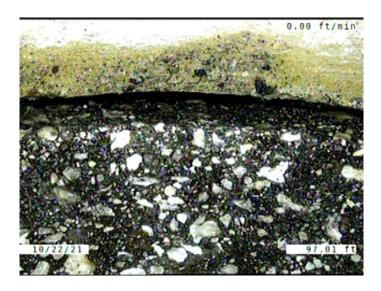
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	84.6
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	S04
Within 8" of Joint:	NO
Remarks:	



Code: Description:	MMC Miscellaneous Material Change
Distance (ft):	94.2
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



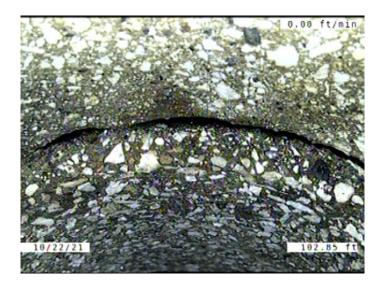
Code:	TFD
Description:	Tap Factory Defective
Distance (ft):	96.3
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	11
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	LARGE OFFSET AT THE FIRST JOINT BACK. CONSTANTLY RUNNING WAT



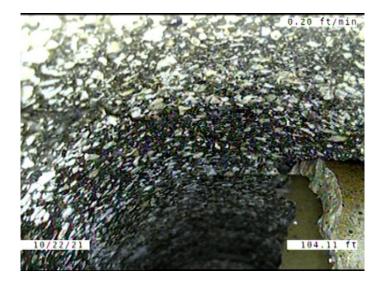
Code: Description:	MMC Miscellaneous Material Change
Distance (ft):	97.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	VCP TO CONCRETE



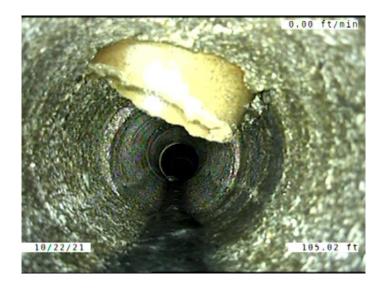
Code: Description:	MWLS Miscellaneous Water Level Sag
Description.	wiscellaneous water Level Sag
Distance (ft):	97.7
Structural Grade:	2
O&M Grade:	-
Clock Start/From:	-
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	F04
Within 8" of Joint:	NO
Remarks:	



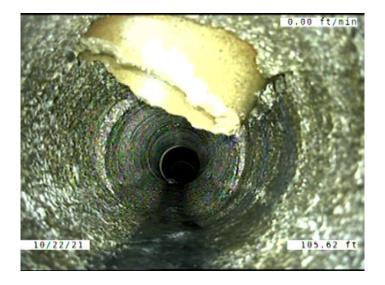
Code: Description:	JOM Joint Offset Medium
Distance (ft):	102.8
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code:	В
Description:	Broken
Distance (ft):	104.1
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	12
Clock To:	3
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	

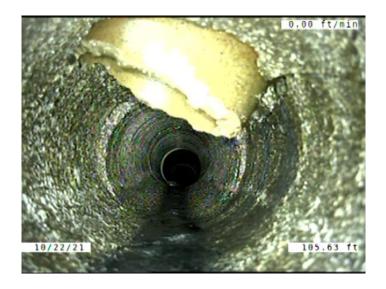


Distance (ft):105.0Structural Grade:0O&M Grade:2Clock Start/From:1Clock To:11st Value:4.0002nd Value:2.000Value Percent:Continuous Index:Within 9" of Isint:XES	Code: Description:	TBI Tap Break-in Intruding
Remarks:	Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	0 2 1 4.000



Code:	DSF
Description:	<b>Deposits Settled Fine</b>
Distance (ft):	105.6
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	5
Clock To:	7
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F01
Within 8" of Joint:	YES
Remarks:	

Code:



Description:	Miscellaneous Survey Abandoned
Distance (ft):	105.6
Distance (ft):	105.0
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:	MADE IT TO THE POINT OF OVERLAP. REVERSAL COMPLETE

MSA