## **Profile/Photo Observation Report**

		-				ROBOTIC
Date:	10/30/2021	Weather:			Coding:	PACP 7.0
Pipe Length (ft)	: <b>202.6</b>	Owner:	City of Ho	obart	Pre Clean:	Heavy Cleaning
P.O.#:	YES502259	Surveyor:	S. Bucklir	1	PSR:	P-504-050-049
Customer:	City of Hobart	Clean Date	: 10/26/20	21	Shape:	с
Street:	North Cavender St	reet	Flow Contr	ol:	Not Controlled	
City:	Hobart, IN		Year Renev	ved:		
Location:	Alley		Tape/Med	a #:		
Purpose:	Routine Assessme	nt	Dia/Height	:	10"	
Use:	Sanitary Sewage P	ре	Material:		VCP	
Drain Area:			Lining:		None	
Category:	NA					
Comment:						
Location Details	s:		Direction o	of Survey:	Upstream	
US MH:	M-504-049	DS MH:	M-504-050	Т	otal Length Surveyed (ft):	202.6
O&M Index:	1.89	O&M Quick	:	362H	O&M Rating:	125.00
Structural Index:	2.64	Structural C	uick:	5136	Structural Rating:	37.00
Overall Index:	2.03	Overall Qui	ck.	513A	Overall Rating:	162.00

	Position	Code	Observation	Video (sec)	Grade
M(504-)	050				
$\square$	0. //	AMH	Manhole	1	NA
	.0	MWL	Miscellaneous Water Level	84	NA
	1	RFJ	Roots Fine Joint	121	M 1
		JAM	Joint Angular Medium	198	S 3
- 11	\\\8.7	JAM	Joint Angular Medium	239	S 3
- 11	$\sqrt{14.6}$	TFC	Tap Factory Capped	291	NA
	21.0	RFJ	Roots Fine Joint	347	M 1
- 11	36.6	RFJ	Roots Fine Joint	500	M 1
	40.0	TFC	Tap Factory Capped	538	NA
5 <b>-</b>	43.9	RFJ	Roots Fine Joint	597	M 1
ecti	48.9	RFJ	Roots Fine Joint	667	M 1
ja – –	51.7	RMJ	Roots Medium Joint	736	M 3
Camera Direction	52.2	RMC	Roots Medium Connection	779	M 3
Can	52.3	СМ	Crack Multiple	976	S 3
	52.5	TBI	Tap Break-in Intruding	797	M 2
	1154.1	RMJ	Roots Medium Joint	837	M 3
1 📑	56.9	RFJ	Roots Fine Joint	886	M 1
	59.0	RMJ	Roots Medium Joint	932	M 3
	62.7	TFC	Tap Factory Capped	1061	NA

Thursday, December 30, 2021

**RedZone**<sup>®</sup>

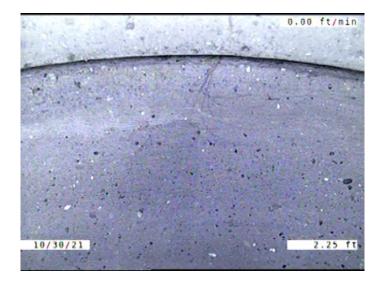
	63.6	RMJ	Roots Medium Joint	1092	M 3
	65.6	RMJ	Roots Medium Joint	1134	M 3
	68.4	SMW	Surface Damage Missing Wall	1210	S 5
	69.5	DSF(S01)	Deposits Settled Fine	1253	M 2
	71.2	SSS	Surface Damage Surface Spalling	1301	S 2
	73.7	RFJ	Roots Fine Joint	1337	M 1
	90.7	SSS	Surface Damage Surface Spalling	1442	S 2
	92.9	SSS	Surface Damage Surface Spalling	1469	S 2
	93.1	CM	Crack Multiple	1494	S 3
	93.4	ТВ	Tap Break-in/Hammer	1517	NA
	106.3	MWLS(S02)	Miscellaneous Water Level Sag	1597	S 2
	109.7	RFJ	Roots Fine Joint	1639	M 1
\ '	110.5	TFC	Tap Factory Capped	1665	NA
	111.8	RFJ	Roots Fine Joint	1701	M 1
	122.0	SZ	Surface Damage Other	1782	NA
	127.3	JAM	Joint Angular Medium	1836	S 3
	127.3	SZ	Surface Damage Other	1848	NA
	127.3	MWLS(F02)	Miscellaneous Water Level Sag	1862	S 2
	129.8	RFJ	Roots Fine Joint	1914	M 1
	145.3	DAE	Deposits Attached Encrustation	2008	M 2
/  /	145.3	DAE(S03)	Deposits Attached Encrustation	2029	M 2
<u> </u>	145.3	SZ	Surface Damage Other	2040	NA
//	150.5	ISJ	Infiltration Stain Joint	2105	M 1
	153.1	DAE	Deposits Attached Encrustation	2153	M 2
	160.7	ISJ	Infiltration Stain Joint	2246	M 1
	163.5	ISJ	Infiltration Stain Joint	2287	M 1
	163.5	JAM	Joint Angular Medium	2309	S 3
	166.1	DAE(S04)	Deposits Attached Encrustation	2356	M 2
	200.9	DSF(F01)	Deposits Settled Fine	2573	M 2
	/200.9	DAE(F03)	Deposits Attached Encrustation	2580	M 2
	/ 200.9	DAE(F04)	Deposits Attached Encrustation	2588	M 2
	202.6	AMH	Manhole	2666	NA



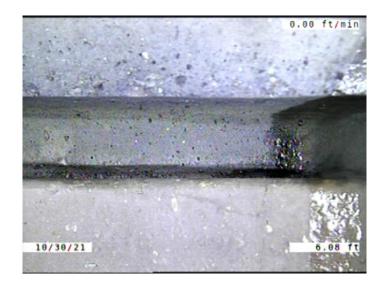
Code:	AMH
Description:	Manhole
Distance (ft):	.0
Structural Grade:	0
0&M Grade:	0
Oalvi Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	M-504-050



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:	10.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code:	RFJ
Description:	<b>Roots Fine Joint</b>
Distance (ft):	2.3
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:	



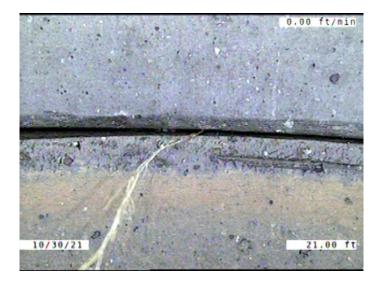
JAM Joint Angular Medium
6.1
3
0
NO



Code: Description:	JAM Joint Angular Medium
·	J.
Distance (ft):	8.7
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:	



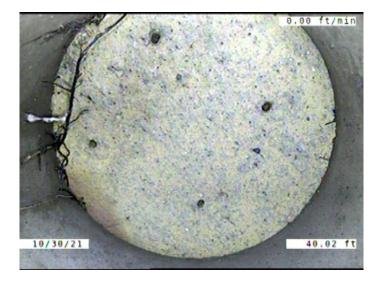
Code: Description:	TFC Tap Factory Capped
Distance (ft):	14.6
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	11
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	ROOTS GROWING AROND THE CAP



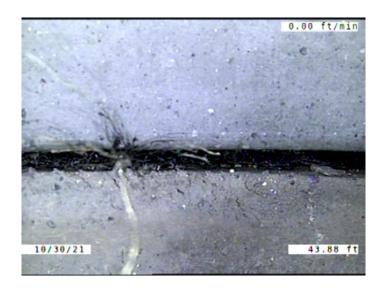
RFJ
<b>Roots Fine Joint</b>
21.0
0
1
1
YES



Code: Description:	RFJ Roots Fine Joint
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value:	36.6 0 1 11 2
Value Percent: Continuous Index: Within 8" of Joint: Remarks:	YES



Code:	TFC
Description:	Tap Factory Capped
Distance (ft):	40.0
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:	ROOTS GROWING AROUND THE CAP



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: Remarks:	43.9 0 1 9 1 YES



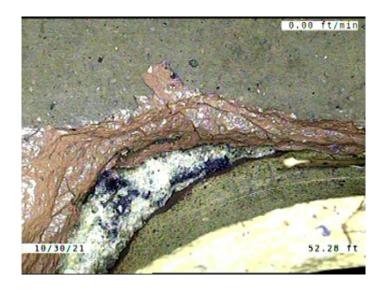
Code:	RFJ
Description:	<b>Roots Fine Joint</b>
Distance (ft):	48.9
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	11
Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



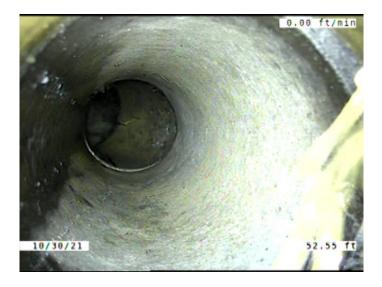
Code: Description:	RMJ Roots Medium Joint
Distance (ft): Structural Grade: O&M Grade:	51.7 0 3
Clock Start/From: Clock To: 1st Value: 2nd Value:	11 2
Value Percent: Continuous Index: Within 8" of Joint:	5.000 YES
Remarks:	



Code:	RMC
Description:	<b>Roots Medium Connection</b>
Distance (ft):	52.2
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	10
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



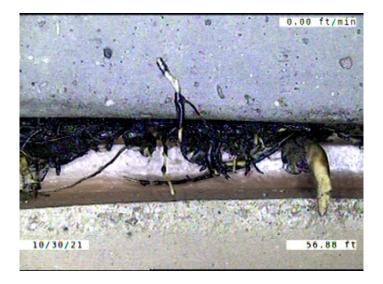
Code: Description:	CM Crack Multiple
Distance (ft):	52.3
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	10
Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



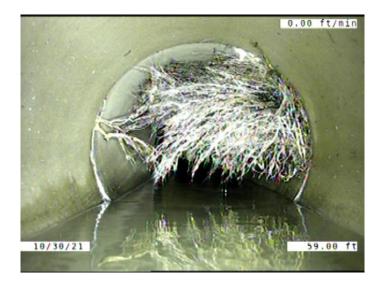
Code:	ТВІ
Description:	Tap Break-in Intruding
	53.5
Distance (ft):	52.5
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	11
Clock To:	
1st Value:	4.000
2nd Value:	1.000
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	CONSTANTLY RUNNING WATER.
	ROOTS GROWING INSIDE AND OUTS



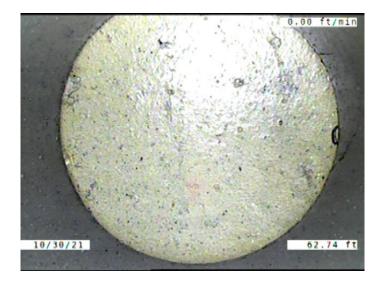
Code: Description:	RMJ Roots Medium Joint
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value:	54.1 0 3 11 2
Value Percent: Continuous Index:	10.000
Within 8" of Joint: Remarks:	YES



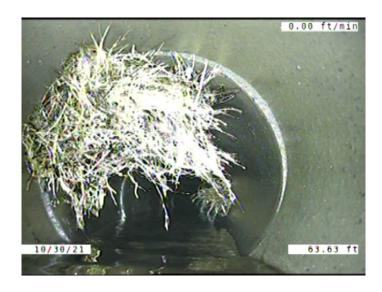
Description: Roots Fine Joint
Distance (ft): 56.9
Structural Grade: <b>0</b>
O&M Grade: 1
Clock Start/From: 10
Clock To: <b>12</b>
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: YES
Remarks:



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:	59.0 0 3 9 3 50.000
Within 8" of Joint: Remarks:	YES



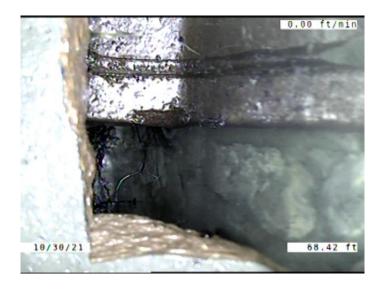
Code:	TFC
Description:	Tap Factory Capped
Distance (ft):	62.7
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	1
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	SERVICE CRACKED



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: Remarks:	63.6 0 3 8 2 40.000 YES



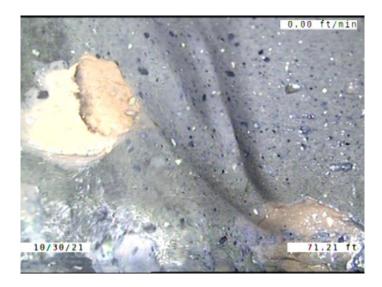
Code: Description:	RMJ Roots Medium Joint
Distance (ft):	65.6
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	2
Clock To:	3
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



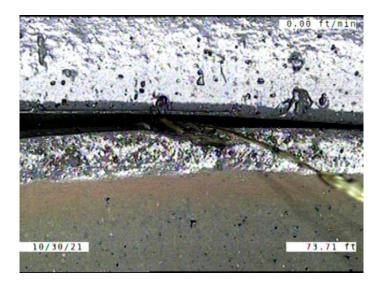
Code: Description:	SMW Surface Damage Missing Wall
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	68.4 5 0 6 9



Code: Description:	DSF Deposits Settled Fine
Distance (ft):	69.5
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:	SSS
Description:	Surface Damage Surface Spalling
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:	71.2 2 0 4 5



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:	73.7 0 1 11
Remarks:	. 20



Code: Description:	SSS Surface Damage Surface Spalling
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:	90.7 2 0 5 8



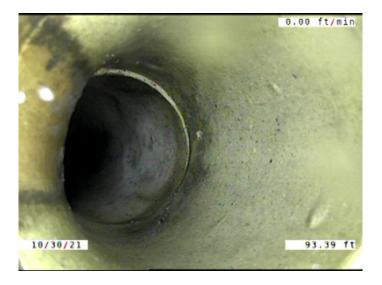
Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft):	92.9
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	10
Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	

NO

Within 8" of Joint:



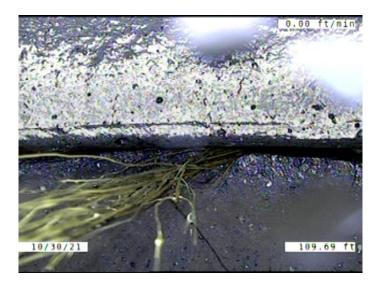
Code: Description:	CM Crack Multiple
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	93.1 3 0 10 11



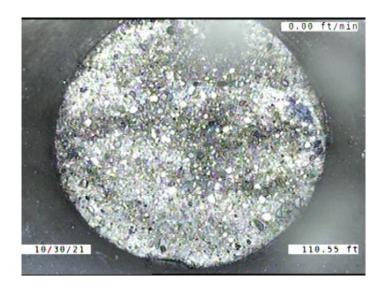
Code:	тв
Description:	Tap Break-in/Hammer
Distance (ft):	93.4
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	11
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	CONSTANTLY RUNNING WATER



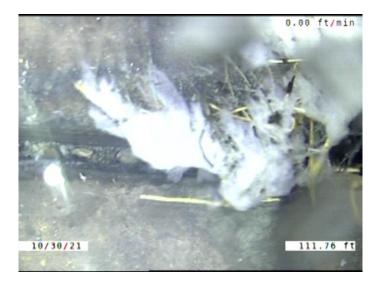
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	106.3
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	S02
Within 8" of Joint:	NO
Remarks:	



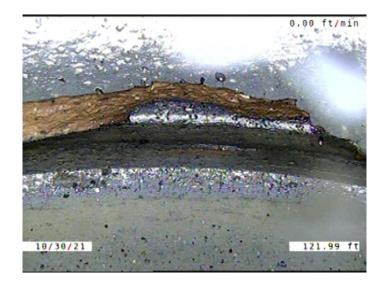
Code: Description:	RFJ Roots Fine Joint
Distance (ft):	109.7
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	10
Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



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:	110.5 0 0 11 4.000 YES



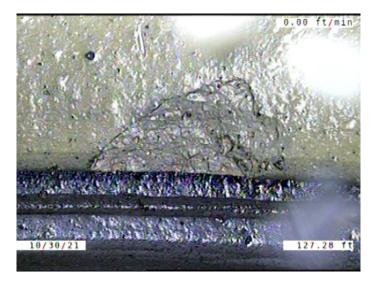
Code: Description:	RFJ Roots Fine Joint
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	111.8 0 1 4 5
Within 8" of Joint: Remarks:	YES



Code: Description:	SZ Surface Damage Other
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:	122.0 0 11 1 1 YES A PIECE OF THE INSIDE JOINT CHIPPED AWAY

The second	allow-	-	0.20	ft/min
( NOVE THE ST	N. Com	11. 11. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	1	
		PAN'NY A	airit A	88 <u>%</u> .
		174 v 19	R. Q	
10/30/21			12	7.28 ft

Code: Description:	JAM Joint Angular Medium
Distance (ft):	127.3
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:	



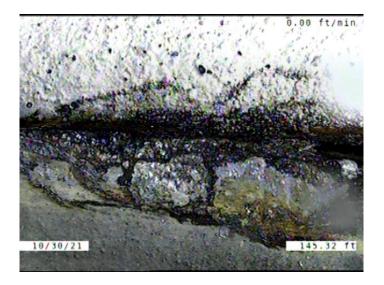
Code:	SZ
Description:	Surface Damage Other
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	127.3 0 2 2 YES A PIECE CHIPPED AWAY FROM THE JOINT



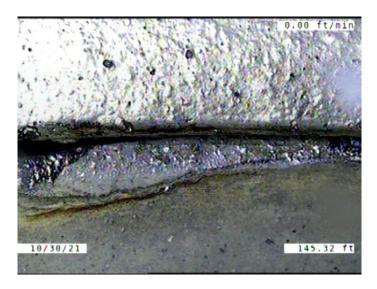
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	127.3
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	F02
Within 8" of Joint:	NO



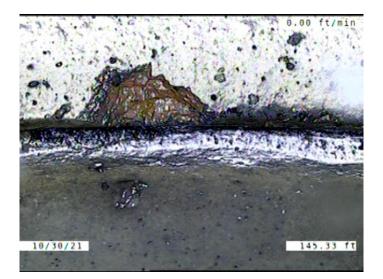
Code: Description:	RFJ Roots Fine Joint
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	129.8 0 1 5 7 YES



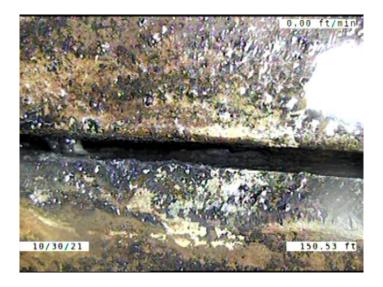
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	145.3
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	1
Clock To:	3
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



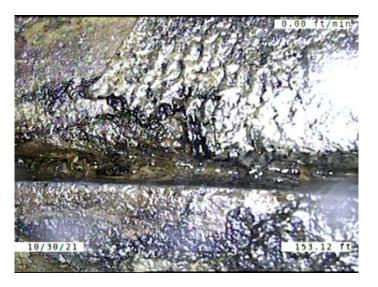
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	145.3 0 2 10 12 5.000 \$03 YES



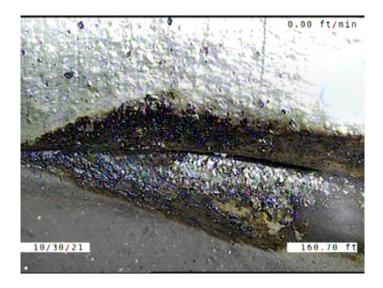
Code:	SZ
Description:	Surface Damage Other
Distance (ft):	145.3
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	11
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	A PIECE CHIPPED AWAY FRO THE JOINT



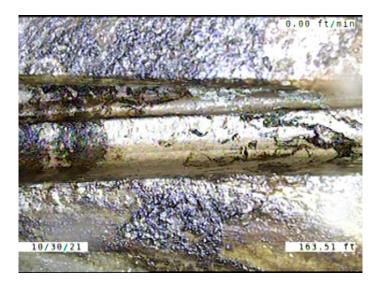
Code:	ISJ
Description:	Infiltration Stain Joint
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	150.5 0 1 1 4 YES



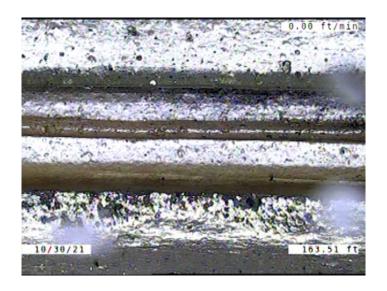
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	153.1
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	1
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES



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: Remarks:	160.7 0 1 3 YES



Code: Description:	ISJ Infiltration Stain Joint
Distance (ft):	163.5
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	1
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):	163.5
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:	DAE Deposits Attached Encrustation
Distance (ft):	166.1
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	12
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S04

YES

Within 8" of Joint:



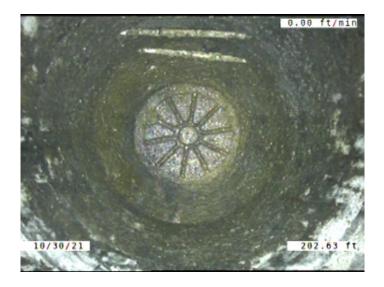
Code: Description:	DSF Deposits Settled Fine
Distance (ft):	200.9
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	5
Clock To:	7
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F01
Within 8" of Joint:	YES
Remarks:	



Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	200.9
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	10
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F03
Within 8" of Joint:	YES



Code: Description:	DAE Deposits Attached Encrustation
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent:	200.9 0 2 12 4
Continuous Index: Within 8" of Joint: Remarks:	F04 YES



Code: Description:	AMH Manhole
Distance (ft): Structural Grade: O&M Grade: Clock Start/From:	202.6 0 0
Clock To: 1st Value: 2nd Value:	
Value Percent: Continuous Index: Within 8" of Joint: Remarks:	NO M-504-049