Profile/Photo Observation Report

		-			ROBOTICS
Date:	10/30/2021	Weather:		Coding:	PACP 7.0
Pipe Length (ft	: 167.0	Owner:	City of Hobart	Pre Clean:	Heavy Cleaning
P.O.#:	YES502259	Surveyor:	S. Bucklin	PSR:	P-504-047-048
Customer:	City of Hobart	Clean Date:	10/26/2021	Shape:	С
Street:	North Delaware St	reet	Flow Control:	Not Controlled	
City:	Hobart, IN		Year Renewed:		
Location:	Alley		Tape/Media #:		
Purpose:	Routine Assessmer	nt	Dia/Height:	10"	
Use:	Sanitary Sewage Pi	ре	Material:	VCP	
Drain Area:			Lining:	None	
Category:	NA				
Comment:					
Location Detail	s:		Direction of Surve	ey: Downstream	
US MH:	M-504-048	DS MH:	M-504-047	Total Length Surveyed (ft):	167.0
O&M Index:	1.90	O&M Quick:	4132	O&M Rating:	99.00
Structural Index:	2.83	Structural Qu	ick: 5444		68.00
Overall Index:	2.20	Overall Quick			167.00

	Position	Code	Observation	Video (sec)	Grade
M-504	-048				
\square	.0	AMH	Manhole	1	NA
- 11	0	MWL	Miscellaneous Water Level	103	NA
	0	DSF(S01)	Deposits Settled Fine	110	M 2
	2.1	RFJ	Roots Fine Joint	178	M 1
- 11	4.7	RFJ	Roots Fine Joint	246	M 1
- 11	4.7	DAE	Deposits Attached Encrustation	256	M 2
- 11	9.8	RFJ(SO3)	Roots Fine Joint	330	M 1
- 11	11.5	В	Broken	402	S 4
- 11	12.0	ТВІ	Tap Break-in Intruding	431	M 2
5	12.4	SMW	Surface Damage Missing Wall	461	S 5
Camera Direction	12.4	HSV	Hole Soil Visible	529	S 5
	12.8	MWLS(S02)	Miscellaneous Water Level Sag	554	S 2
uera	14.7	RMJ	Roots Medium Joint	594	M 3
Ca	37.2	MWLS(F02)	Miscellaneous Water Level Sag	704	S 2
	38.8	TFC	Tap Factory Capped	729	NA
	38.8	B(S04)	Broken	773	S 4
↓ I II	41.5	BSV	Broken Soil Visible	832	S 5
	43.1	B(F04)	Broken	853	S 4
	45.1	RFJ(F03)	Roots Fine Joint	876	M 1

RedZone[®]

45.1	MWLS(S05)	Miscellaneous Water Level Sag	885	S 2
51.1	SSS	Surface Damage Surface Spalling	960	S 2
51.4	TBI	Tap Break-in Intruding	989	M
64.3	TFD	Tap Factory Defective	1076	M
74.6	TFC	Tap Factory Capped	1141	NA
86.7	FM	Fracture Multiple	1274	S 4
86.7	DAE	Deposits Attached Encrustation	1286	M
87.5	TFC	Tap Factory Capped	1310	NA
91.2	MWLS(F05)	Miscellaneous Water Level Sag	1345	S 2
110.8	TFC	Tap Factory Capped	1425	NA
115.5	SSS	Surface Damage Surface Spalling	1493	S 2
115.5	IRC	Infiltration Runner Connection	1511	M
116.0	TBI	Tap Break-in Intruding	1536	M
134.1	TFC	Tap Factory Capped	1621	NA
154.7	TFC	Tap Factory Capped	1722	NA
162.9	BSV	Broken Soil Visible	1790	S 5
163.4	TBI	Tap Break-in Intruding	1837	M
165.0	OBN	Obstruction Construction Debris	1881	M
165.8	В	Broken	1971	S 4
167.0	DSF(F01)	Deposits Settled Fine	2117	M
167.0	AMH	Manhole	2134	NA



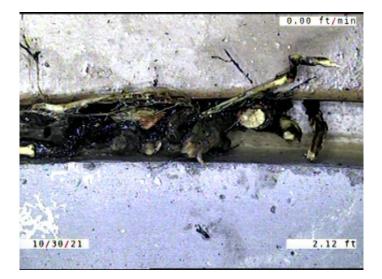
Code: Description:	AMH Manhole
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	M-504-048



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:	



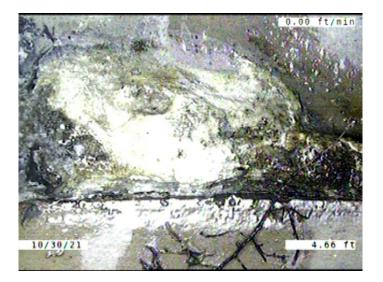
Code:	DSF
Description:	Deposits Settled Fine
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	.0 0 2 5 7 5.000 \$01 YES



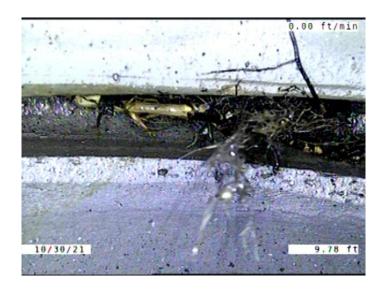
Code:	RFJ
Description:	Roots Fine Joint
Distance (ft):	2.1
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	9
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



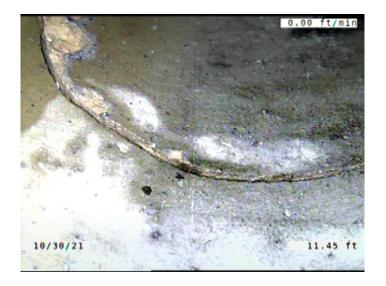
Code: Description:	RFJ Roots Fine Joint
Distance (ft):	4.7
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	9
Clock To:	11
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	4.7
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	4
Clock To:	8
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



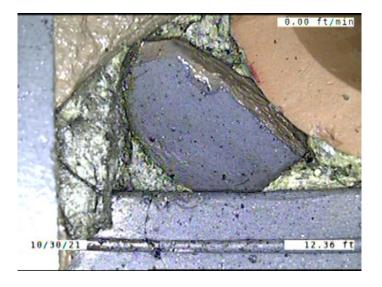
Code: Description:	RFJ Roots Fine Joint
Distance (ft):	9.8
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S03
Within 8" of Joint:	YES
Remarks:	



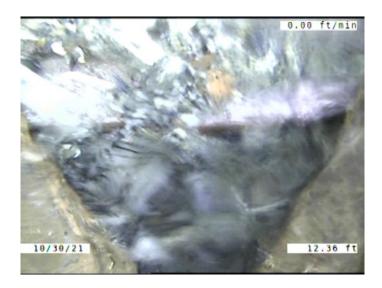
Code:	В
Description:	Broken
Distance (ft):	11.5
Structural Grade:	4
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	12
Clock To:	7
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:	TBI
Description:	Tap Break-in Intruding
Distance (ft):	12.0
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	2
Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	4.000 1.000
Within 8" of Joint:	YES
Remarks:	CONSTANTLY RUNNING WATER



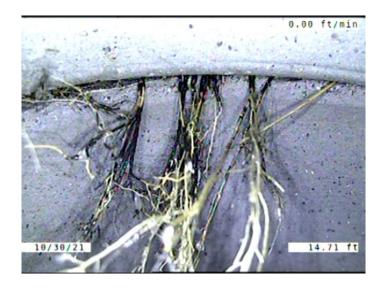
Code: Description:	SMW Surface Damage Missing Wall
Distance (ft):	12.4
Structural Grade:	5
O&M Grade:	0
Clock Start/From:	12
Clock To:	3
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	HSV Hole Soil Visible
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:	12.4 5 0 6 YES



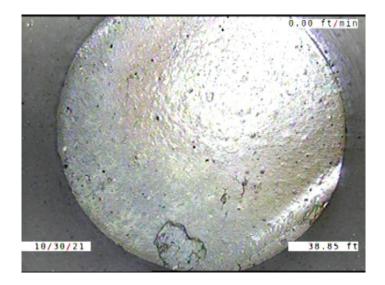
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	12.8
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S02
Within 8" of Joint:	NO
Remarks:	



Code: Description:	RMJ Roots Medium Joint
Distance (ft):	14.7
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	10
Clock To:	3
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):	37.2
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:	TFC Tap Factory Capped
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	38.8 0 0 1 4.000
Within 8" of Joint: Remarks:	YES



Code:	В
Description:	Broken
Distance (ft):	38.8
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	12
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S04
Within 8" of Joint:	YES
Remarks:	



Code:	BSV
Description:	Broken Soil Visible
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:	41.5 5 4 5 YES



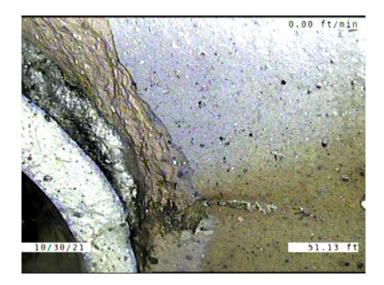
Code:	В
Description:	Broken
Distance (ft):	43.1
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	12
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F04
Within 8" of Joint:	YES
Remarks:	



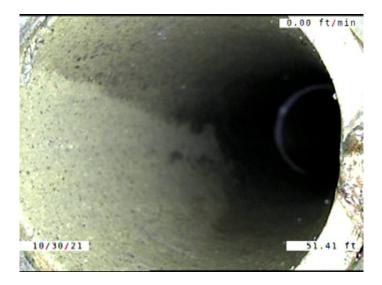
Distance (ft):45.1Structural Grade:0O&M Grade:1Clock Start/From:8Clock To:41st Value:2nd Value:Value Percent:F03Within 8" of Joint:YES	Code: Description:	RFJ Roots Fine Joint
Remarks:	Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	0 1 8 4 F03



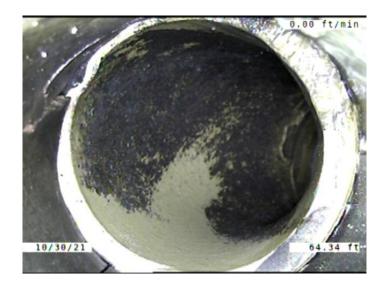
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	45.1
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S05
Within 8" of Joint:	NO
Remarks:	



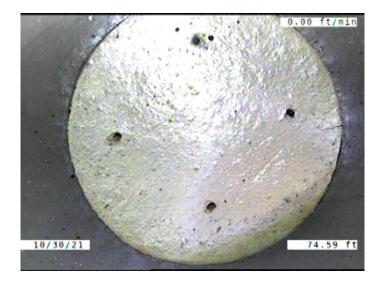
Code: Description:	SSS Surface Damage Surface Spalling
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent:	51.1 2 0 12 3
Continuous Index: Within 8" of Joint: Remarks:	YES



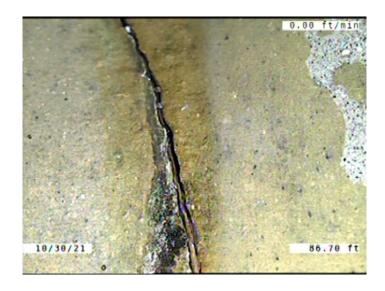
Code:	ТВІ
Description:	Tap Break-in Intruding
Distance (ft):	51.4
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	2
Clock To:	
1st Value:	4.000
2nd Value:	1.000
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	CONSTANTLY RUNNING WATER



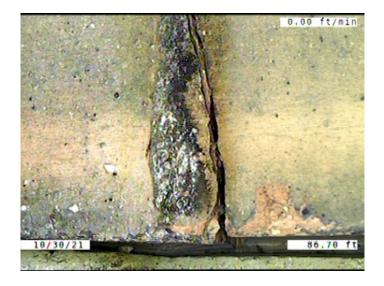
Code:	TFD
Description:	Tap Factory Defective
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent:	64.3 0 3 1 4.000
Continuous Index:	YES
Within 8" of Joint:	TAP BROKEN. CONSTANTLY
Remarks:	RUNNING WATER



Code:	TFC
Description:	Tap Factory Capped
Distance (ft):	74.6
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:	



Code: Description:	FM Fracture Multiple
Distance (ft):	86.7
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	7
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



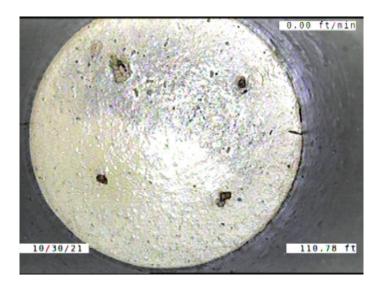
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	86.7
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	7
Clock To:	9
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



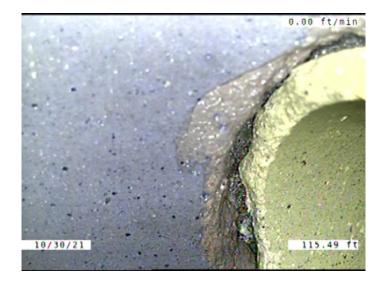
Code: Description:	TFC Tap Factory Capped
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	87.5 0 0 1 4.000
Within 8" of Joint: Remarks:	YES



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	91.2
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F05
Within 8" of Joint:	NO
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:	110.8 0 2 4.000 YES TAP CRACKED



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:	115.5 2 0 12 3
Continuous Index:	

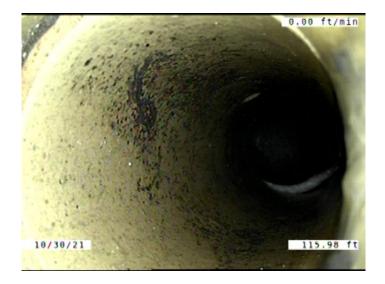
NO

Within 8" of Joint:

Remarks:



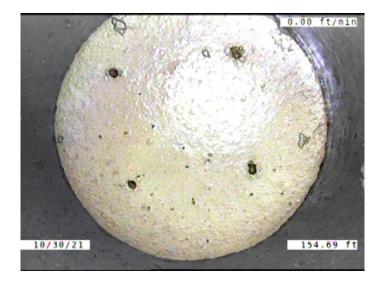
Code: Description:	IRC Infiltration Runner Connection
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	115.5 0 4 3
Within 8" of Joint: Remarks:	YES



Code:	ТВІ
Description:	Tap Break-in Intruding
	446.0
Distance (ft):	116.0
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:	YES
Remarks:	CONSTANTLY RUNNING WATER

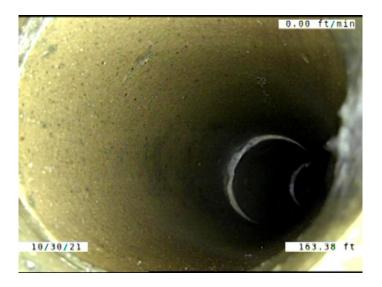


Code: Description:	TFC Tap Factory Capped
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	134.1 0 0 1 4.000 YES





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:	162.9 5 0 12 3
Within 8" of Joint: Remarks:	NO



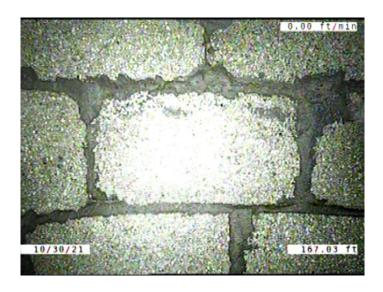
Code:	ТВІ
Description:	Tap Break-in Intruding
Distance (ft):	163.4
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	2
Clock To:	
1st Value:	4.000
2nd Value:	1.000
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	CONSTANTLY RUNNING WATER



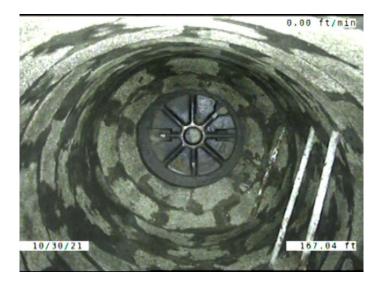
Code: Description:	OBN Obstruction Construction Debris
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	165.0 0 2 6 5.000
Within 8" of Joint: Remarks:	YES



Code:	В
Description:	Broken
Distance (ft):	165.8
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:	DSF Deposits Settled Fine
Distance (ft):	167.0
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:	AMH Manhole
Distance (ft):	167.0
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-504-047