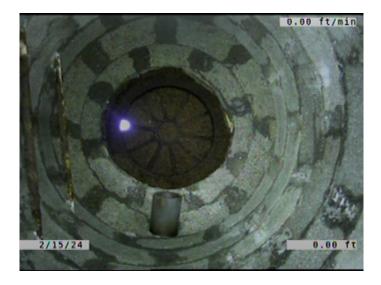
## **Profile/Photo Observation Report**

-		•				ROBOTICS
Date:	02/15/2024	Weather:			Coding:	PACP 7.0
Pipe Length (ft)	: <b>159.0</b>	Owner:	City of Hob	art	Pre Clean:	Heavy Cleaning
P.O.#:	YES502259	Surveyor:	S. Bucklin		PSR:	P-504-015-013
Customer:	City of Hobart	Clean Date:	10/18/2022	2	Shape:	С
Street:	N DELAWARE ST		Flow Control	:	Not Controlled	
City:	Hobart, IN		Year Renewe	d:		
Location:	Alley		Tape/Media	#:		
Purpose:	Routine Assessmen	t	Dia/Height:		10"	
Use:	Sanitary Sewage Pi	ре	Material:		VCP	
Drain Area:			Lining:		None	
Category:	NA					
Comment:						
Location Details	5.		Direction of S	Survey:	Downstream	
US MH:	M-504-013	DS MH:	M-504-015		Total Length Surveyed (ft):	158.7
D&M Index:	2.06	O&M Quick:		4138	O&M Rating:	97.00
Structural Index:	3.24	Structural Qu	lick:	534C	Structural Rating:	133.00
Overall Index:	2.61	Overall Quick	<:	534C	Overall Rating:	230.00

	Position	Code	Observation	Video (sec)	Grade
M(504-	013				
	0.	AMH	Manhole	0	NA
- 11	.0	MWL	Miscellaneous Water Level	69	NA
- 11	1.7	MWLS(S01)	Miscellaneous Water Level Sag	86	S 2
- 11	$\sqrt{1.7}$	DSF(S02)	Deposits Settled Fine	94	M 2
	1/9.7	RFJ	Roots Fine Joint	150	M 1
	12.6	TFC	Tap Factory Capped	204	NA
- 11	13.9	RFJ	Roots Fine Joint	245	M 1
- 11	14.8	TFD	Tap Factory Defective	308	M 3
	116.2	RFJ	Roots Fine Joint	350	M 1
5	18.3	SSC	Surface Spalling of Damage Coating	381	S 1
amera Direction	7	FM(S03)	Fracture Multiple	479	S 4
Di	26.4	MWLS(F01)	Miscellaneous Water Level Sag	506	S 2
nera	\\30.7	RFJ	Roots Fine Joint	571	M 1
Ca	40.4	MWLS(S04)	Miscellaneous Water Level Sag	636	S 2
	40.4	FM(F03)	Fracture Multiple	644	S 4
	47.9	DR	Deformed Rigid	699	S 4
1	48.3	BVV	Broken Void Visible	843	S 5
	1 48.4	TBD	Tap Break-in/Hammer Defective	863	M 3
	50.2	TFD	Tap Factory Defective	904	M 3

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50.2	CM	Crack Multiple	917	S 3
52.5	TFD	Tap Factory Defective	960	M
58.6	MWLS(F04)	Miscellaneous Water Level Sag	1007	S 2
7	JAM	Joint Angular Medium	1054	S 3
60.2	MWLS(S05)	Miscellaneous Water Level Sag	1071	S 2
65.7	CH3	Crack Longitudinal Hinge, 3	1113	S 3
√ \ 67.3	MWLS(F05)	Miscellaneous Water Level Sag	1122	S 2
76.5	MWLS(S06)	Miscellaneous Water Level Sag	1167	S 2
	MWLS(F06)	Miscellaneous Water Level Sag	1210	S 2
85.5	MWLS(S07)	Miscellaneous Water Level Sag	1228	S 2
91.0	RFJ	Roots Fine Joint	1297	M
92.0	TFD	Tap Factory Defective	1355	M
94.1	TFC	Tap Factory Capped	1428	NA
98.5	MWLS(F07)	Miscellaneous Water Level Sag	1472	S 2
99.3	HSV	Hole Soil Visible	1544	S 5
99.3	RPPD	Point Repair Patch Patch Defective	1558	S 4
99.4	TBD	Tap Break-in/Hammer Defective	1578	M
101.6	В	Broken	1633	S 4
101.6	RFJ	Roots Fine Joint	1640	M
105.3	MWLS(S08)	Miscellaneous Water Level Sag	1673	S 4
105.8	FM	Fracture Multiple	1688	S 4
105.8	RFJ	Roots Fine Joint	1720	M
129.7	TFD	Tap Factory Defective	1927	M
131.8	TFD	Tap Factory Defective	1993	M
149.4	MCU(S09)	Miscellaneous Camera Underwater	2275	M
155.0	MCU(F09)	Miscellaneous Camera Underwater	2380	M
155.6	FM	Fracture Multiple	2406	S 4
155.6	HSV	Hole Soil Visible	2428	S 5
155.6	JAL	Joint Angular Large	2460	S 4
158.0	MWLS(F08)	Miscellaneous Water Level Sag	2530	S 4
///158.0	DSF(F02)	Deposits Settled Fine	2544	M
// 158.3	MGO	Miscellaneous General Observation	2700	NA
	AMH	Manhole	2681	NA



Code:	АМН
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-504-013



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



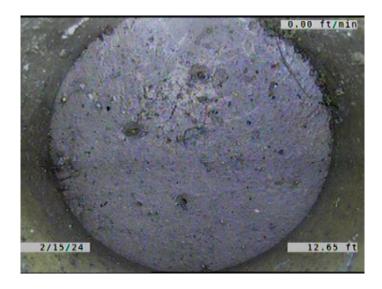
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	1.7
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	15.000
Continuous Index:	S01
Within 8" of Joint:	NO
Remarks:	



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:	1.7 0 2 5 7 5.000 \$02 YES



Code:	RFJ
Description:	Roots Fine Joint
Distance (ft):	9.7
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	7
Clock To:	9
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:	12.6 0 0 1 6.000
Within 8" of Joint: Remarks:	YES



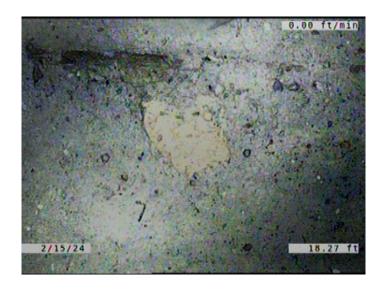
Code:	RFJ
Description:	<b>Roots Fine Joint</b>
Distance (ft):	12.0
Distance (ft):	13.9
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	2
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	TFD Tap Factory Defective
Distance (ft):	14.8
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	11
Clock To:	
1st Value:	6.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	CAPPED. TAP CRACKED.



Code:	RFJ
Description:	<b>Roots Fine Joint</b>
Distance (ft):	16.2
Distance (ft):	10.2
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:	



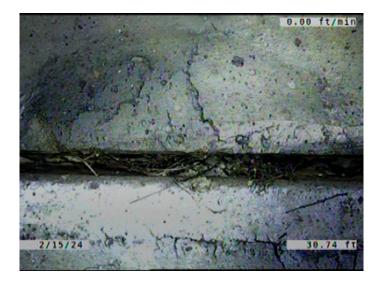
Code:	SSC
Description:	Surface Spalling of Damage Coating
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	18.3 1 0 9



Code:	FM
Description:	Fracture Multiple
Distance (ft):	24.3
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	7
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S03
Within 8" of Joint:	YES
Remarks:	



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	26.4
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	15.000
Continuous Index:	F01
Within 8" of Joint:	NO
Remarks:	
Remarks:	



Description:Roots Fine JointDistance (ft):30.7Structural Grade:0O&M Grade:1Clock Start/From:9Clock To:31st Value:-2nd Value:-Value Percent:-Continuous Index:YESWithin 8" of Joint:YES	Code:	RFJ
Structural Grade:0O&M Grade:1Clock Start/From:9Clock To:31st Value:	Description:	<b>Roots Fine Joint</b>
Structural Grade:0O&M Grade:1Clock Start/From:9Clock To:31st Value:		
Structural Grade:0O&M Grade:1Clock Start/From:9Clock To:31st Value:	Distance (ft):	20.7
O&M Grade:1Clock Start/From:9Clock To:31st Value:		
Clock Start/From: 9 Clock To: 3 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: YES	Structural Grade:	0
Clock To: 3 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: YES	O&M Grade:	1
1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: YES	Clock Start/From:	9
2nd Value: Value Percent: Continuous Index: Within 8" of Joint: YES	Clock To:	3
Value Percent: Continuous Index: Within 8" of Joint: YES	1st Value:	
Continuous Index: Within 8" of Joint: YES	2nd Value:	
Within 8" of Joint: YES	Value Percent:	
	Continuous Index:	
Remarks:	Within 8" of Joint:	YES
	Remarks:	



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	40.4
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:	



Code: Description:	FM Fracture Multiple
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value:	40.4 4 0 7 5
Value Percent: Continuous Index: Within 8" of Joint: Remarks:	F03 YES



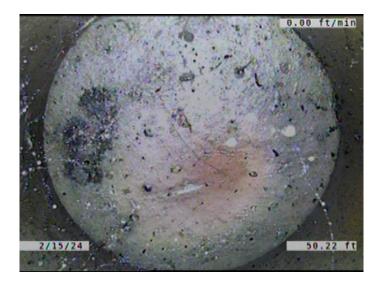
Code: Description:	DR Deformed Rigid
Distance (ft):	47.9
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code:	BVV
Description:	Broken Void Visible
Distance (ft):	48.3
Structural Grade:	5
O&M Grade:	0
Clock Start/From:	11
Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	SOIL VISIBLE ALSO.



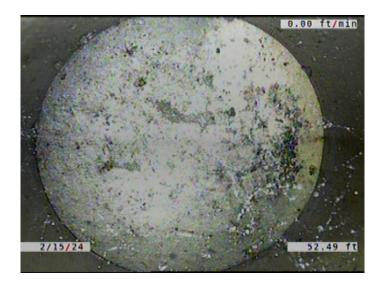
Code:	TBD
Description:	Tap Break-in/Hammer Defective
Distance (ft):	48.4
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	12
Clock To: 1st Value: 2nd Value:	6.000
Value Percent: Continuous Index: Within 8" of Joint: Remarks:	YES COMES FROM THE RIGHT (WEST). ACTIVITY.



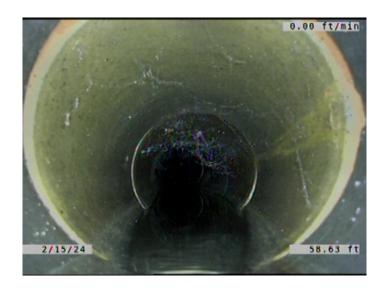
Code:	TFD
Description:	<b>Tap Factory Defective</b>
Distance (ft):	50.2
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	2
Clock To:	
1st Value:	6.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	CAPPED. TAP BROKEN.



Distance (ft):50.2Structural Grade:3O&M Grade:0Clock Start/From:10Clock To:21st Value:	Code: Description:	CM Crack Multiple	
Continuous Index: Within 8" of Joint: YES Remarks:	Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	3 0 10 2	



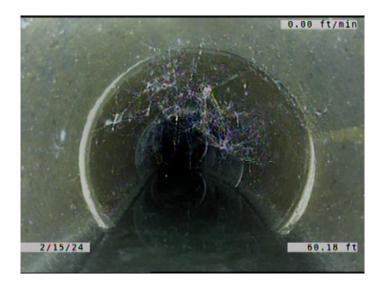
Code:	TFD
Description:	Tap Factory Defective
Distance (ft):	52.5
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	11
Clock To:	
1st Value:	6.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	CAPPED. TAP BROKEN.



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	58.6
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:	



Code: Description:	JAM Joint Angular Medium
Distance (ft):	59.9
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):	60.2
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	S05
Within 8" of Joint:	NO
Remarks:	



Code: Description:	CH3 Crack Longitudinal Hinge, 3
Distance (ft):	65.7
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	9
Clock To:	3
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



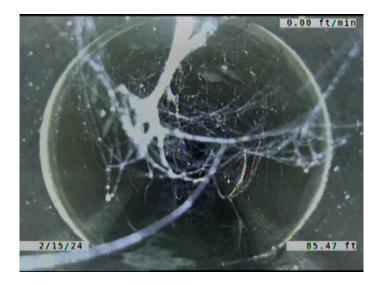
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	67.3
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	F05
Within 8" of Joint:	NO
Remarks:	



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	76.5
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S06
Within 8" of Joint:	NO
Remarks:	



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	83.6
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F06
Within 8" of Joint:	NO
Remarks:	



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	85.5
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	S07
Within 8" of Joint:	NO
Remarks:	



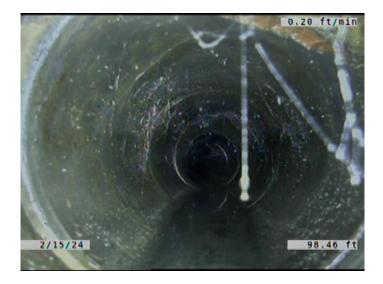
Code: Description:	RFJ Roots Fine Joint
Distance (ft):	91.0
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	3
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



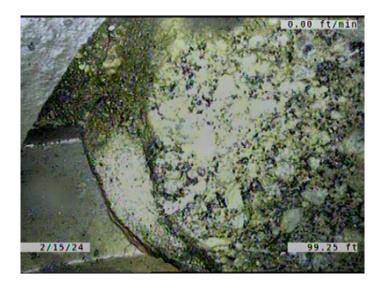
Code:	TFD
Description:	Tap Factory Defective
(0)	
Distance (ft):	92.0
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	1
Clock To:	
1st Value:	6.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	CAPPED. CAP BROKEN. SOIL VISIBLE.



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:	94.1 0 0 11 6.000 YES



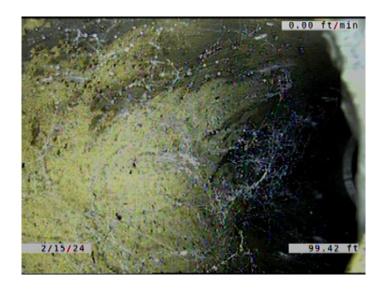
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	98.5
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	F07
Within 8" of Joint:	NO
Remarks:	



Code: Description:	HSV Hole Soil Visible
Distance (ft):	99.3
Structural Grade:	5
O&M Grade:	0
Clock Start/From:	10
Clock To:	3
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:	RPPD
Description:	Point Repair Patch Patch Defective
Distance (ft):	99.3
Structural Grade:	4
	•
O&M Grade:	0
Clock Start/From:	10
Clock To:	3
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	LOOKS TO BE MORTAR ON TOP OF
	THE MISSING PIPE SECTION AND AR



Code: Description:	TBD Tap Break-in/Hammer Defective
Distance (ft):	99.4
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:	CONSTANTLY RUNNING WATER.



Code:	В
Description:	Broken
Distance (ft):	101.6
Structural Grade:	4
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:	



RFJ Roots Fine Joint
101.6
0
1
7
5
YES



Code: MWLS Description: **Miscellaneous Water Level Sag** Distance (ft): 105.3 Structural Grade: 4 O&M Grade: 0 Clock Start/From: Clock To: 1st Value: 2nd Value: 55.000 Value Percent: Continuous Index: S08 Within 8" of Joint: NO Remarks:



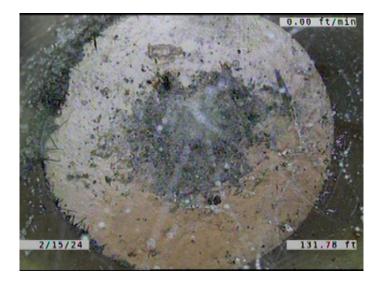
Code: Description:	FM Fracture Multiple
Distance (ft):	105.8
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	7
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:	RFJ
Description:	<b>Roots Fine Joint</b>
	405.0
Distance (ft):	105.8
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:	TFD Tap Factory Defective
Distance (ft):	129.7
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	1
Clock To:	
1st Value:	6.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	CAPPED. ROOTS GROWING AROUND THE CAP.



Code:	TFD
Description:	Tap Factory Defective
Distance (ft):	121.0
Distance (ft):	131.8
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	11
Clock To:	
1st Value:	6.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	CAPPED. ROOTS GROWING AROUND THE CAP.
	ITE CAP.



Code: Description:	MCU Miscellaneous Camera Underwater
Distance (ft):	149.4
Structural Grade:	0
O&M Grade:	4
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S09
Within 8" of Joint:	NO
Remarks:	



Code: MCU Description: Miscellaneous Camera Underwater Distance (ft): 155.0 Structural Grade: 0 O&M Grade: 4 Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: F09 Within 8" of Joint: NO

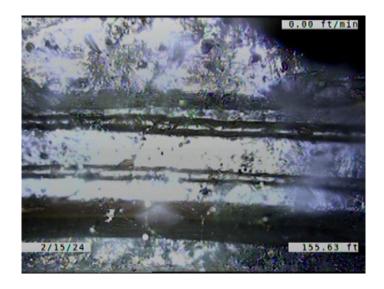


Code: Description:	FM Fracture Multiple
Distance (ft):	155.6
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	10
Clock To:	11
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	

Remarks:



Code:	HSV
Description:	Hole Soil Visible
Distance (ft):	155.6
Structural Grade:	5
O&M Grade:	0
Clock Start/From:	3
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	THE BELL/ OUTSIDE OF THE JOINT.



Code: Description:	JAL Joint Angular Large
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	155.6 4 0
Within 8" of Joint: Remarks:	ΝΟ



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	158.0
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	55.000
Continuous Index:	F08
Within 8" of Joint:	NO

Remarks:



	DSF Deposits Settled Fine
Structural Grade: C O&M Grade: 2 Clock Start/From: 5 Clock To: 7 1st Value: 2 2nd Value: Value Percent: 5 Continuous Index: 6	158.0 0 2 5 5 7 5.000 F02 YES



Code: MGO Description: **Miscellaneous General Observation** Distance (ft): 158.3 Structural Grade: 0 0 O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: NO Remarks: A VIEW OF THE SAG FROM THE BACK UP CAMERA.



Code: Description:	AMH Manhole
Distance (ft):	158.7
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-504-015