Profile/Photo Observation Report

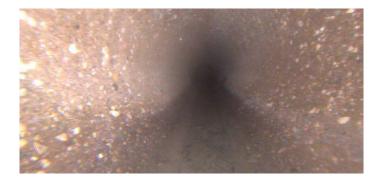
					K O B O I I C S
Date:	04/17/2018	Weather:		Coding:	PACP 6.0
Pipe Length (ft):	208.7	Owner:	NA	Pre Clean:	Not Known
P.O.#:		Surveyor:	Justin Gonzales	PSR:	P-504-101-072
Customer:		Clean Date:	01/01/1900	Shape:	С
Street:	Summerlin		Flow Control:	Not Controlled	
City:	Hobart, IN		Year Renewed:		
Location:	Light Highway		Tape/Media #:		
Purpose:	Not Known		Dia/Height:	10"	
Use:	Sanitary		Material:	СР	
Drain Area:	NA		Lining:		
Category:	NA				
Comment:					
Location Details	:		Direction of Survey:	Downstream	
US MH:	M-504-072	DS MH:	M-504-101	Total Length Surveyed (ft):	207.1
O&M Index:	2.11	O&M Quick:	412B	O&M Rating:	38.00
Structural Index:	3.09	Structural Qui	ck: 5342	Structural Rating:	176.00
Overall Index:	2.85	Overall Quick:	5040	Overall Rating:	214.00

	Position	Code	Observation	Video (sec)	Grade
M-504-	072				
\square	0.	SAP(S01)	Surface Aggregate Projecting	10	S 3
	.0	AMH	Manhole	21	NA
	0.	MWL	Water Level	32	NA
- 11	15.9	MMC	Material Change	76	NA
	16.3	TF	Tap Factory	89	NA
	18.7	MMC	Material Change	105	NA
	24.4	IS	Infil Stain	128	NA
- 11	27.6	IS	Infil Stain	146	NA
- 11	48.3	MMC	Material Change	199	NA
5	49.0	TF	Tap Factory	213	NA
Camera Direction	//51.6	TF	Tap Factory	230	NA
Dir Dir	// 54.4	MMC	Material Change	247	NA
uera	_// 63.2	IS	Infil Stain	277	NA
Car	-// 63.2	DAE	Deposits Attached Encrustation	288	M 2
		DAE	Deposits Attached Encrustation	305	M 2
	69.2	CS	Crack Spiral	323	S 2
↓ + + +	_// 84.1	СМ	Crack Multiple	365	S 3
	_/ 99.4	IR	Infil Runner	408	M 4
	99.4	FS	Fracture Spiral	419	S 3

Tuesday, December 8, 2020

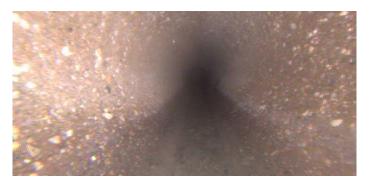
RedZone

99.4	В	Broken	430	S 3
99.4	TF	Tap Factory	441	NA
99.6	IW	Infil Weeper	454	М
99.6	CM	Crack Multiple	465	S 3
/101.8	FS	Fracture Spiral	481	S 3
/102.6	TFD	Tap Factory Defective	495	М
// 102.6	FL	Fracture Longitudinal	506	S 3
104.8	MMC	Material Change	522	NA
113.3	СМ	Crack Multiple	551	S 3
140.0	CC	Crack Circumferential	616	S 1
142.3	IS	Infil Stain	632	NA
144.8	MMC	Material Change	649	NA
145.0	FM	Fracture Multiple	661	S 4
145.1	FM	Fracture Multiple	673	S 4
146.0	TF	Tap Factory	688	NA
146.0	CM	Crack Multiple	699	S 3
/ 148.8	TF	Tap Factory	717	NA
/149.7	FS	Fracture Spiral	731	S 3
// 151.4	MMC	Material Change	746	NA
153.8	IW	Infil Weeper	762	M
159.6	DAE(S03)	Deposits Attached Encrustation	785	М
177.6	MMC	Material Change	833	NA
178.3	DAGS	Deposits Attached Grease	846	М
178.3	TF	Tap Factory	857	NA
// 180.8	MMC	Material Change	874	NA
// 197.1	MWL	Water Level	918	NA
205.2	HSV	Hole Soil Visible	946	S 5
205.2	MMC	Material Change	958	NA
205.3	HVV	Hole Void Visible	970	S 5
206.0	В	Broken	983	S 5
206.0	DSC	Deposits Settled Compacted	995	M
207.1	SAP(F01)	Surface Aggregate Projecting	1008	S 3
/207.1	MSA	Abandoned Survey	1019	NA
207.1	DAE(F03)	Deposits Attached Encrustation	1031	М

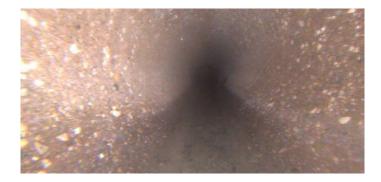


Code:SAPDescription:Surface Aggregate Projecting

Distance (ft):	.0
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	7
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S01
Within 8" of Joint:	YES
Remarks:	WANDER



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-504-072



Code: MWL Description: 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:	MMC
Description:	Material Change
Distance (ft):	15.9



Code:	TF
Description:	Tap Factory

46.2
16.3
0
0
11
4.000



Code:	MMC
Description:	Material Change
Distance (ft):	18.7
Structural Grade:	0
O&M Grade:	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 CP



Code:	IS
Description:	Infil Stain
Distance (ft):	24.4

Distance (ft):	24.4	
Structural Grade:	0	
O&M Grade:	0	
Clock Start/From:	4	
Clock To:	5	
1st Value:		
2nd Value:		
Value Percent:		
Continuous Index:		
Within 8" of Joint:	YES	
Remarks:		



Code: Description:	IS Infil Stain
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent:	27.6 0 0 4 5
Continuous Index: Within 8" of Joint: Remarks:	YES



Code: MMC Description: Material Change

Distance (ft):	48.3
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:	CP TO VCP

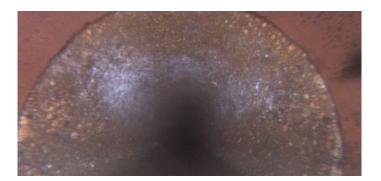


Code:	TF
Description:	Tap Factory
Distance (ft):	49.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	1
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	



Code:	TF
Description:	Tap Factory

Distance (ft):	51.6
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:	
Remarks:	



Code:	ММС
Description:	Material Change

Distance (ft):	54.4
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:	CP TO VCP



Code: Description:	IS Infil Stain
Distance (ft):	63.2
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:	DAE
Description:	Deposits Attached Encrustation

Distance (ft):	63.2
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	3
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:DAEDescription:Deposits Attached Encrustation

Distance (ft):	66.2
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:	CS Crack Spiral
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	69.2 2 0 10 12
Within 8" of Joint: Remarks:	YES



Code:	СМ
Description:	Crack Multiple

Distance (ft):	84.1
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	9
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	IR Infil Runner
Distance (ft):	99.4
Structural Grade:	0
O&M Grade:	4
Clock Start/From:	11
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	



Code:FSDescription:Fracture Spiral

Distance (ft):	99.4
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	10
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	B Broken
Distance (ft):	99.4
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	10
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	



Code:	TF
Description:	Tap Factory

Distance (ft):	99.4
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:	
Remarks:	



Code: Description:	IW Infil Weeper
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	99.6 0 2 8 12
Within 8" of Joint: Remarks:	



Code:CMDescription:Crack Multiple

Distance (ft):	99.6
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	9
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	



Code:	FS
Description:	Fracture Spiral
	404.0
Distance (ft):	101.8
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	12
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



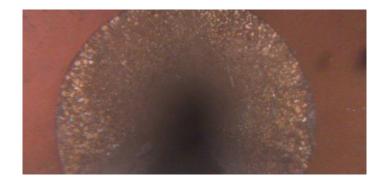
Code:TFDDescription:Tap Factory Defective

Distance (ft):	102.6
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	1
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	fractured



Code:	FL
Description:	Fracture Longitudinal
D (1)	
Distance (ft):	102.6
Structural Grade:	3
O&M Grade:	0

Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	

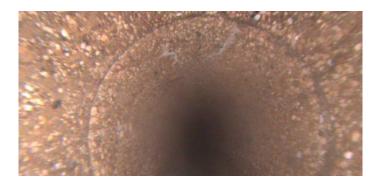


Code:MMCDescription:Material Change

Distance (ft):	104.8
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:	VCP

Code:

Description:



Distance (ft):	113.3
Structural Grade:	3
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:	

СМ

Crack Multiple



Code:CCDescription:Crack Circumferential

Distance (ft):	140.0
Structural Grade:	1
O&M Grade:	0
Clock Start/From:	3
Clock To:	9
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	

Code:

Description:



Distance (ft):	142.3
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	4
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	

IS

Infil Stain



Code:MMCDescription:Material Change

Distance (ft):	144.8
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:	CP TO VCP

Code:

Remarks:



Description:	Fracture Multiple
Distance (ft):	145.0
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	10
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES

FM

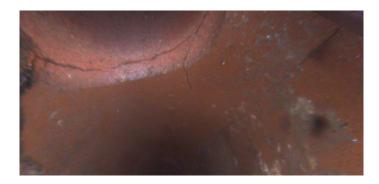


Code:FMDescription:Fracture Multiple

Distance (ft):	145.1
Structural Grade:	4
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:	



Code: Description:	TF Tap Factory
Distance (ft):	146.0
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:	
Remarks:	

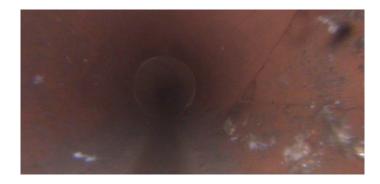


Code:CMDescription:Crack Multiple

Distance (ft):	146.0
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	12
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	



Code: Description:	TF Tap Factory
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:	148.8 0 0 1 4.000



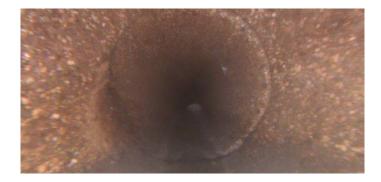
Code:FSDescription:Fracture Spiral

Distance (ft):	149.7
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	1
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:	ММС
Description:	Material Change

Distance (ft):	151.4
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 CP



Code:	IW
Description:	Infil Weeper

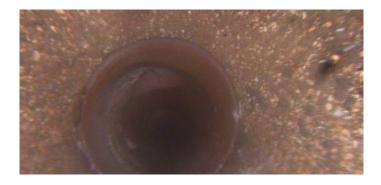
Distance (ft):	153.8
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	7
Clock To:	9
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:	DAE
Description:	Deposits

DAL
Deposits Attached Encrustation

Distance (ft):	159.6
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	7
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S03
Within 8" of Joint:	YES
Remarks:	WANDER



Code: MMC Description: Material Change

Distance (ft):	177.6
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 CP

Code:

Description:



Distance (ft):	178.3
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	7
Clock To:	11
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	

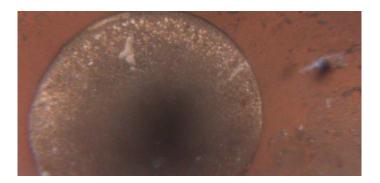
DAGS

Deposits Attached Grease



Code:	TF
Description:	Tap Factory

Distance (ft):	178.3
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:	
Remarks:	



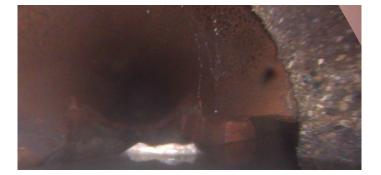
Code:	ММС
Description:	Material Change

Distance (ft):	180.8
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:	VCP TO CP



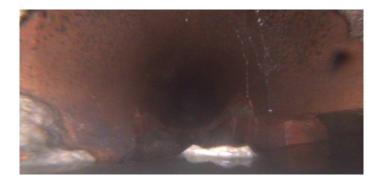
Code:MWLDescription:Water Level

Distance (ft):	197.1
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:	HSV
Description:	Hole Soil Visible

Distance (ft):	205.2
Structural Grade:	5
O&M Grade:	0
Clock Start/From:	5
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:MMCDescription:Material Change

Distance (ft):	205.2
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:	CP TO VCP

Code:

Description:



Distance (ft):	205.3
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:	

HVV

Hole Void Visible



Code:	В
Description:	Broken

Distance (ft):	206.0
Structural Grade:	5
O&M Grade:	0
Clock Start/From:	3
Clock To:	7
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	



Code:	DSC
Description:	Deposits Settled Compacted

Distance (ft):	206.0
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	6
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code:SAPDescription:Surface Aggregate Projecting

Distance (ft):	207.1
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	7
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F01
Within 8" of Joint:	YES
Remarks:	WANDER

Code:

Description:



Distance (ft):	207.1
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:	Robot stopped at external drop connection

MSA

Abandoned Survey

Code: Description: DAE Deposits Attached Encrustation



Distance (ft):	207.1
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	7
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F03
Within 8" of Joint:	YES
Remarks:	WANDER