Date:	04/20/2018	Weather:			Coding:	PACP 6.0
Pipe Length (ft)		Owner:	NA		Pre Clean:	No Pre-Cleaning
P.O.#:		Surveyor:	Byrd Fitzge	rald	PSR:	P-405-039-038
Customer:		Clean Date:	01/01/190	0	Shape:	С
Street:	3RD PL		Flow Contro	l:	Not Controlled	l
City:	Hobart, IN		Year Renewe	ed:		
Location:	Yard		Tape/Media	#:		
Purpose:	Routine Assessment	:	Dia/Height:		8"	
Use:	Sanitary		Material:		PVC	
Drain Area:	NA		Lining:			
Category:	NA					
Comment:	Flow direction wron	g				
Location Detail	s:		Direction of	Survey:	Upstream	
US MH:	M-405-038	DS MH:	M-405-039	Т	otal Length Surveyed (ft	): <b>83.8</b>
D&M Index:	1.65	O&M Quick:		3229	O&M Rating:	33.00
Structural Index:	3.00	Structural Qu	uick:	3900	Structural Rating:	27.00
Overall Index:	2.07	Overall Quic		3A29	Overall Rating:	60.00

M405-039         .0         AMH         Manhole         10         NA           .0         MWL         Water Level         21         NA           31.9         MMC         Material Change         98         NA           38.2         CM(S01)         Crack Multiple         124         \$3           39.4         RFJ(S02)         Roots Fine Joint         139         M1           40.6         RFB(S03)         Roots Fine Barrel         154         M 2           45.4         DAZ(S04)         Deposits Attached Other         176         M 2           47.2         RFB(F03)         Roots Fine Barrel         192         M 2           48.7         TFC         Tap Factory Capped         208         NA           50.7         RMJ         Roots Medium Joint         224         M 3           52.3         TF         Tap Factory         241         NA           52.3         RML         Roots Medium Lateral         252         M 3           63.0         DAE         Deposits Attached Encrustation         287         M 2           71.6         MMC         Material Change         318         NA           81.0         MMC         Materi	M(405-)03	20				
O         AMH         Manhole         10         NA           .0         MWL         Water Level         21         NA           31.9         MMC         Material Change         98         NA           38.2         CM(S01)         Crack Multiple         124         S 3           39.4         RFJ(S02)         Roots Fine Joint         139         M 1           40.6         RFB(S03)         Roots Fine Barrel         154         M 2           45.4         DAZ(S04)         Deposits Attached Other         176         M 2           48.7         TFC         Tap Factory Capped         208         NA           52.3         TF         Tap Factory Capped         208         NA           52.3         TF         Tap Factory         241         NA           52.3         TF         Tap Factory         241         NA           52.3         RML         Roots Medium Lateral         252         M 3           63.0         DAE         Deposits Attached Encrustation         287         M 2           71.6         MMC         Material Change         318         NA           81.0         MMC         Material Change         350		7				
31.9MMCMaterial Change98NA38.2CM(S01)Crack Multiple124S 339.4RFJ(S02)Roots Fine Joint139M 140.6RFB(S03)Roots Fine Barrel154M 245.4DAZ(S04)Deposits Attached Other176M 247.2RFB(F03)Roots Fine Barrel192M 248.7TFCTap Factory Capped208NA50.7RMJRoots Medium Joint224M 352.3TFTap Factory241NA52.3RMLRoots Medium Lateral252M 363.0DAEDeposits Attached Encrustation287M 271.6MMCMaterial Change318NA81.0MMCMaterial Change350NA82.1DAZ(F04)Deposits Attached Other366M 282.1CM(F01)Crack Multiple388S 3	$\sim$		AMH	Manhole	10	NA
38.2         CM(S01)         Crack Multiple         124         S 3           39.4         RFJ(S02)         Roots Fine Joint         139         M 1           40.6         RFB(S03)         Roots Fine Barrel         154         M 2           45.4         DAZ(S04)         Deposits Attached Other         176         M 2           47.2         RFB(F03)         Roots Fine Barrel         192         M 2           48.7         TFC         Tap Factory Capped         208         NA           50.7         RMJ         Roots Medium Joint         224         M 3           52.3         TF         Tap Factory         241         NA           52.3         RML         Roots Medium Lateral         252         M 3           63.0         DAE         Deposits Attached Encrustation         287         M 2           71.6         MMC         Material Change         318         NA           81.0         MMC         Material Change         350         NA           82.1         DAZ(F04)         Deposits Attached Other         366         M 2           82.1         RFJ(F02)         Roots Fine Joint         377         M 1           82.1         CM(F01) <td></td> <td>\ \0</td> <td>MWL</td> <td>Water Level</td> <td>21</td> <td>NA</td>		\ \0	MWL	Water Level	21	NA
39.4         RFJ(S02)         Roots Fine Joint         139         M 1           40.6         RFB(S03)         Roots Fine Barrel         154         M 2           45.4         DAZ(S04)         Deposits Attached Other         176         M 2           47.2         RFB(F03)         Roots Fine Barrel         192         M 2           48.7         TFC         Tap Factory Capped         208         NA           50.7         RMJ         Roots Medium Joint         224         M 3           52.3         TF         Tap Factory         241         NA           52.3         RML         Roots Medium Lateral         252         M 3           63.0         DAE         Deposits Attached Encrustation         287         M 2           71.6         MMC         Material Change         318         NA           81.0         MMC         Material Change         350         NA           82.1         DAZ(F04)         Deposits Attached Other         366         M 2           82.1         RFJ(F02)         Roots Fine Joint         377         M 1           82.1         CM(F01)         Crack Multiple         388         S 3		31.9	MMC	Material Change	98	NA
40.6RFB(S03)Roots Fine Barrel154M 245.4DAZ(S04)Deposits Attached Other176M 247.2RFB(F03)Roots Fine Barrel192M 248.7TFCTap Factory Capped208NA50.7RMJRoots Medium Joint224M 352.3TFTap Factory241NA52.3RMLRoots Medium Lateral252M 363.0DAEDeposits Attached Encrustation287M 271.6MMCMaterial Change318NA81.0MMCMaterial Change350NA82.1DAZ(F04)Deposits Attached Other366M 282.1RFJ(F02)Roots Fine Joint377M 182.1CM(F01)Crack Multiple388S 3		38.2	CM(S01)	Crack Multiple	124	S 3
45.4DAZ(S04)Deposits Attached Other176M 247.2RFB(F03)Roots Fine Barrel192M 248.7TFCTap Factory Capped208NA50.7RMJRoots Medium Joint224M 352.3TFTap Factory241NA52.3RMLRoots Medium Lateral252M 363.0DAEDeposits Attached Encrustation287M 271.6MMCMaterial Change318NA81.0MMCMaterial Change350NA82.1DAZ(F04)Deposits Attached Other366M 282.1RFJ(F02)Roots Fine Joint377M 182.1CM(F01)Crack Multiple388S 3		39.4	RFJ(S02)	Roots Fine Joint	139	M 1
47.2RFB(F03)Roots Fine Barrel192M 248.7TFCTap Factory Capped208NA50.7RMJRoots Medium Joint224M 352.3TFTap Factory241NA52.3RMLRoots Medium Lateral252M 363.0DAEDeposits Attached Encrustation287M 271.6MMCMaterial Change318NA81.0MMCMaterial Change350NA82.1DAZ(F04)Deposits Attached Other366M 282.1RFJ(F02)Roots Fine Joint377M 182.1CM(F01)Crack Multiple388S 3		40.6	RFB(S03)	Roots Fine Barrel	154	M 2
48.7TFCTap Factory Capped208NA50.7RMJRoots Medium Joint224M 352.3TFTap Factory241NA52.3RMLRoots Medium Lateral252M 363.0DAEDeposits Attached Encrustation287M 271.6MMCMaterial Change318NA81.0MMCMaterial Change350NA82.1DAZ(F04)Deposits Attached Other366M 282.1RFJ(F02)Roots Fine Joint377M 182.1CM(F01)Crack Multiple388S 3		45.4	DAZ(S04)	Deposits Attached Other	176	M 2
50.7RMJRoots Medium Joint224M 352.3TFTap Factory241NA52.3RMLRoots Medium Lateral252M 363.0DAEDeposits Attached Encrustation287M 271.6MMCMaterial Change318NA81.0MMCMaterial Change350NA82.1DAZ(F04)Deposits Attached Other366M 282.1RFJ(F02)Roots Fine Joint377M 182.1CM(F01)Crack Multiple388S 3		47.2	RFB(F03)	Roots Fine Barrel	192	M 2
52.3TFTap Factory241NA52.3RMLRoots Medium Lateral252M 363.0DAEDeposits Attached Encrustation287M 271.6MMCMaterial Change318NA81.0MMCMaterial Change350NA82.1DAZ(F04)Deposits Attached Other366M 282.1RFJ(F02)Roots Fine Joint377M 182.1CM(F01)Crack Multiple388S 3		48.7	TFC	Tap Factory Capped	208	NA
81.0         MMC         Material Change         350         NA           82.1         DAZ(F04)         Deposits Attached Other         366         M 2           82.1         RFJ(F02)         Roots Fine Joint         377         M 1           82.1         CM(F01)         Crack Multiple         388         S 3	5 <b>  _ '</b>	50.7	RMJ	Roots Medium Joint	224	M 3
81.0         MMC         Material Change         350         NA           82.1         DAZ(F04)         Deposits Attached Other         366         M 2           82.1         RFJ(F02)         Roots Fine Joint         377         M 1           82.1         CM(F01)         Crack Multiple         388         S 3		52.3	TF	Tap Factory	241	NA
81.0         MMC         Material Change         350         NA           82.1         DAZ(F04)         Deposits Attached Other         366         M 2           82.1         RFJ(F02)         Roots Fine Joint         377         M 1           82.1         CM(F01)         Crack Multiple         388         S 3		52.3	RML	Roots Medium Lateral	252	M 3
81.0         MMC         Material Change         350         NA           82.1         DAZ(F04)         Deposits Attached Other         366         M 2           82.1         RFJ(F02)         Roots Fine Joint         377         M 1           82.1         CM(F01)         Crack Multiple         388         S 3		63.0	DAE	Deposits Attached Encrustation	287	M 2
82.1         DAZ(F04)         Deposits Attached Other         366         M 2           82.1         RFJ(F02)         Roots Fine Joint         377         M 1           82.1         CM(F01)         Crack Multiple         388         S 3		71.6	MMC	Material Change	318	NA
82.1         RFJ(F02)         Roots Fine Joint         377         M 1           82.1         CM(F01)         Crack Multiple         388         S 3		81.0	MMC	Material Change	350	NA
82.1 CM(F01) Crack Multiple 388 S 3		82.1	DAZ(F04)	Deposits Attached Other	366	M 2
		82.1	RFJ(F02)	Roots Fine Joint	377	M 1
83.8 AMH Manhole 404 NA		82.1	CM(F01)	Crack Multiple	388	S 3
		83.8	AMH	Manhole	404	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-405-039

M(405)038



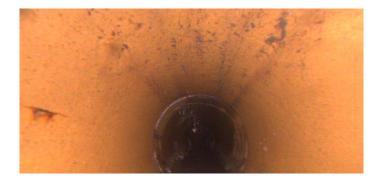
Code: MWL Description: Water Level

.0
0
0
5.000
NO



Code:	ММС
Description:	Material Change
Distance (ft):	31.9
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	

Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: NO Remarks: vcp

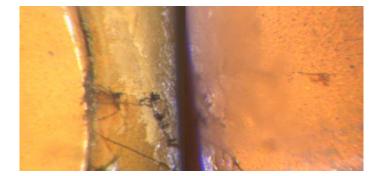


Code:	СМ
Description:	Crack Multiple

Distance (ft):	38.2
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	9
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S01
Within 8" of Joint:	YES
Remarks:	wandering

Code:

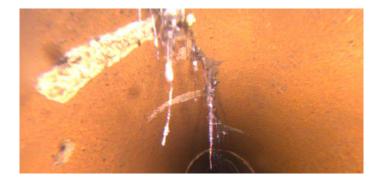
Description:



Distance (ft):	39.4
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	7
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S02
Within 8" of Joint:	YES
Remarks:	

RFJ

**Roots Fine Joint** 



Code: Description:	RFB Roots Fine Barrel
Distance (ft):	40.6
Structural Grade:	0
OQ MA Creader	2

O&M Grade:	2
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S03
Within 8" of Joint:	NO
Remarks:	

Code:



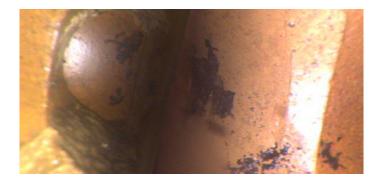
Description:	Deposits Attached Other
Distance (ft):	45.4
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	7
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S04
Within 8" of Joint:	NO
Remarks:	wandering at joints and barrel

DAZ



Code:	RFB
Description:	Roots Fine Barrel
Distance (ft):	47.2

Distance (it).	
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F03
Within 8" of Joint:	NO
Remarks:	



Code:	TFC
Description:	Tap Factory Capped
Distance (ft):	48.7
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:RMJDescription:Roots Medium Joint

Distance (ft):	50.7
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	7
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	TF Tap Factory
Distance (ft):	52.3
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	2
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:RMLDescription:Roots Medium Lateral

Distance (ft):	52.3
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	12
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



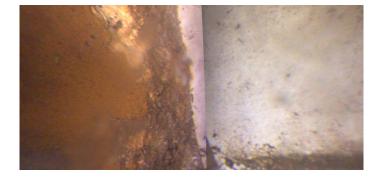
Code:	DAE
Description:	Deposits A

Deposits Attached Encrustation

Distance (ft):	63.0
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	5
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	MMC Material Change
Distance (ft):	71.6
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:	рvс



Code:	ММС
Description:	Material Change
Distance (ft):	81.0
Structural 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	



Code:DAZDescription:Deposits Attached Other

Distance (ft):	82.1
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	7
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F04
Within 8" of Joint:	NO
Remarks:	wandering at joints and barrel

RFJ

**Roots Fine Joint** 



Distance (ft):	82.1	
Structural Grade:	0	
O&M Grade:	1	
Clock Start/From:	7	
Clock To:	5	
1st Value:		
2nd Value:		
Value Percent:		
Continuous Index:	F02	
Within 8" of Joint:	YES	
Remarks:		

Code:

Description:

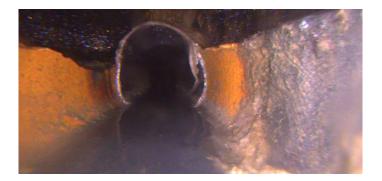


Code:	СМ
Description:	Crack Multiple

Distance (ft):	82.1
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	9
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F01
Within 8" of Joint:	YES
Remarks:	wandering

Code:

Description:



Distance (ft):	83.8
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:	M-405-038

AMH

Manhole