Profile/Photo Observation Report



Date: 04/23/2018 Weather: Coding: PACP 6.0

Pipe Length (ft): 289.0 Owner: NA Pre Clean: No Pre-Cleaning
P.O.#: Surveyor: Jen Costello PSR: P-405-021-020

Customer: Clean Date: 01/01/1900 Shape: C

Street: W 3RD ST Flow Control: Not Controlled

City: Hobart, IN Year Renewed:

Location: Yard Tape/Media #:
Purpose: Routine Assessment Dia/Height:

Purpose: Routine Assessment Dia/Height: 12"
Use: Sanitary Material: VCP

Drain Area: NA Lining:

Category: NA

Comment:

Location Details: Direction of Survey: **Upstream**

US MH: M-405-021 DS MH: M-405-020 Total Length Surveyed (ft): 285.2

352C 2.00 62.00 O&M Index: O&M Quick: O&M Rating: 3.78 208.00 Structural Quick: Structural Rating: Structural Index: 3.14 270.00 Overall Index: Overall Quick: Overall Rating:

| | Position | Code | Observation | Video (sec) | Grade |
|--------|---------------|---------|--------------------------------|-------------|-------|
| 405-02 | 20 | | | | |
| | .0 | AMH | Manhole | 10 | NA |
| | 0. | MWL | Water Level | 21 | NA |
| | \\ <u>5.7</u> | FM | Fracture Multiple | 44 | S 4 |
| | 5.7 | RMJ | Roots Medium Joint | 56 | M 3 |
| \ | 14.1 | FM(S01) | Fracture Multiple | 84 | S 4 |
| | 20.8 | RMJ | Roots Medium Joint | 109 | M 3 |
| | 23.6 | RMJ | Roots Medium Joint | 127 | M 3 |
| | 32.2 | MGO | General Observation | 157 | NA |
| | 54.6 | RFJ | Roots Fine Joint | 214 | M 1 |
| | \54.6 | IW | Infil Weeper | 225 | M 2 |
| | √63.9 | RFJ | Roots Fine Joint | 256 | M 1 |
| | 63.9 | DAE | Deposits Attached Encrustation | 267 | M 2 |
| | 68.6 | TF | Tap Factory | 288 | NA |
| | 69.4 | DAE | Deposits Attached Encrustation | 302 | M 2 |
| | 72.3 | ID | Infil Dripper | 320 | M 3 |
| | 72.3 | DAE | Deposits Attached Encrustation | 331 | M 2 |
| | 75.0 | FM(F01) | Fracture Multiple | 348 | S 4 |
| | 75.0 | MMC | Material Change | 360 | NA |
| | 82.5 | TF | Tap Factory | 387 | NA |

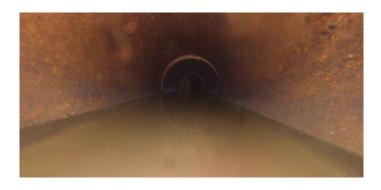
| 84.7 | MMC | Material Change | 403 | NA |
|----------|----------|--------------------------------|------|-----|
| 87.4 | CM(S02) | Crack Multiple | 421 | S 3 |
| 99.6 | IW | Infil Weeper | 457 | M 2 |
| 99.6 | FM | Fracture Multiple | 468 | S 4 |
| 126.7 | FM | Fracture Multiple | 534 | S 4 |
| 129.7 | FS | Fracture Spiral | 552 | S 3 |
| 131.7 | TF | Tap Factory | 568 | NA |
| 141.5 | FM(S03) | Fracture Multiple | 599 | S 4 |
| 141.5 | CM(F02) | Crack Multiple | 610 | S 3 |
| 153.3 | RFJ | Roots Fine Joint | 646 | M |
| 154.3 | TBD | Tap Break-in Defective | 661 | M |
| 154.3 | RFC | Roots Fine Connection | 672 | M |
| 168.7 | DAE | Deposits Attached Encrustation | 713 | M |
| 191.8 | ТВІ | Tap Break-in Intruding | 771 | M |
| 195.4 | TFA | Tap Factory Active | 790 | NA |
| 212.9 | TF | Tap Factory | 837 | NA |
| 216.7 | DAE(S04) | Deposits Attached Encrustation | 857 | M |
| 255.6 | DAR | Deposits Attached Ragging | 947 | M |
| 272.8 | TF | Tap Factory | 993 | NA |
| 282.7 | RFJ | Roots Fine Joint | 1025 | М |
| //_282.7 | DAE(F04) | Deposits Attached Encrustation | 1038 | М |
| 282.7 | FM(F03) | Fracture Multiple | 1049 | S 4 |
| 285.2 | АМН | Manhole | 1070 | NA |



Code: **AMH** 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-405-020



Code: MWL
Description: Water Level

Distance (ft): .0
Structural Grade: 0
O&M Grade: 0

Clock Start/From:

Clock To: 1st Value: 2nd Value:

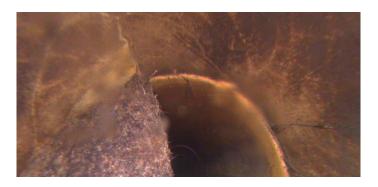
Value Percent: 30.000

Continuous Index:

Within 8" of Joint:

Remarks:

NO



Code: FM

Description: Fracture Multiple

Distance (ft): 5.7
Structural Grade: 4

O&M Grade: 0

Clock Start/From: 8

Clock To: 4

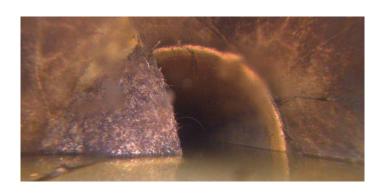
1st Value:

2nd Value:

Value Percent:

Continuous Index:

Within 8" of Joint: YES



Code: RMJ

Description: Roots Medium Joint

Distance (ft): 5.7
Structural Grade: 0
O&M Grade: 3
Clock Start/From: 6
Clock To: 12

1st Value: 2nd Value:

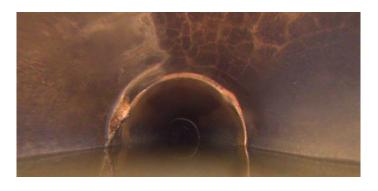
Value Percent: 40.000

Continuous Index:

Within 8" of Joint:

Remarks:

YES



Code: FM

Description: Fracture Multiple

Distance (ft): 14.1
Structural Grade: 4

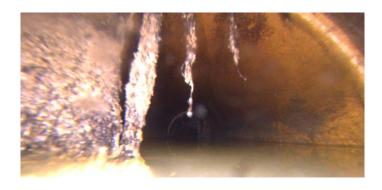
O&M Grade: 0

Clock Start/From: 8

Clock To: 4

1st Value: 2nd Value: Value Percent:

Continuous Index: **S01** Within 8" of Joint: **YES**



Code: RMJ

Description: Roots Medium Joint

Distance (ft): 20.8
Structural Grade: 0
O&M Grade: 3
Clock Start/From: 8
Clock To: 4
1st Value:

2nd Value:

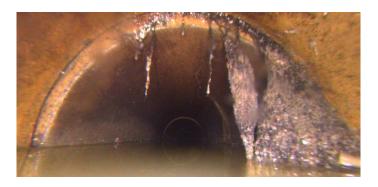
Value Percent: 20.000

Continuous Index:

Within 8" of Joint:

Remarks:

YES



Code: RMJ

Description: Roots Medium Joint

Distance (ft): 23.6
Structural Grade: 0

O&M Grade: 3

Clock Start/From: 12

Clock To: 4

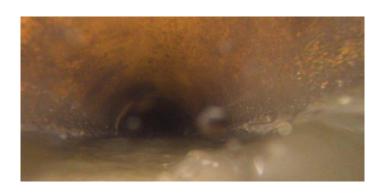
1st Value:

1st Value: 2nd Value:

Value Percent: 20.000

Continuous Index:

Within 8" of Joint: YES



Code: MGO

Description: General Observation

Distance (ft): 32.2
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: rear camera

Code: RFJ

Description: Roots Fine Joint



Distance (ft): 54.6
Structural Grade: 0

O&M Grade: 1

Clock Start/From: 8

Clock To: 4

1st Value: 2nd Value: Value Percent: Continuous Index:

Within 8" of Joint: YES



Code: IW

Description: Infil Weeper

Distance (ft): 54.6
Structural Grade: 0

O&M Grade: 2

Clock Start/From: 8

Clock To: 4

1st Value: 2

2nd Value:

Value Percent: Continuous Index:

Within 8" of Joint:

Remarks:

YES



Code: RFJ

Description: Roots Fine Joint

Distance (ft): 63.9
Structural Grade: 0
O&M Grade: 1
Clock Start/From: 2
Clock To: 1st Value: 2nd Value: Value Percent:

Within 8" of Joint:

Continuous Index:

Remarks:

YES



Description: Deposits Attached Encrustation

Distance (ft): 63.9
Structural Grade: 0

O&M Grade: 2

Clock Start/From: 12

Clock To: 4

1st Value:

2nd Value:

Value Percent: 5.000

Continuous Index:

Within 8" of Joint:

Remarks:

YES



Code: TF

Description: Tap Factory

Distance (ft): 68.6
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:



Description: Deposits Attached Encrustation

Distance (ft): 69.4
Structural Grade: 0

O&M Grade: 2

Clock Start/From: 8

Clock To: 4

1st Value:

1st Value: 2nd Value:

Value Percent: 5.000

Continuous Index:

Within 8" of Joint:

Remarks:

YES



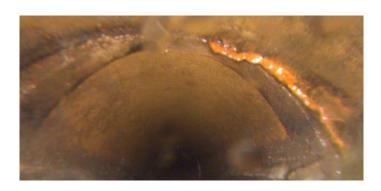
Code: ID

Description: Infil Dripper

Distance (ft): 72.3
Structural Grade: 0
O&M Grade: 3
Clock Start/From: 12
Clock To:
1st Value:
2nd Value:

Value Percent: Continuous Index:

Within 8" of Joint: YES



Description: Deposits Attached Encrustation

Distance (ft): 72.3
Structural Grade: 0
O&M Grade: 2
Clock Start/From: 8
Clock To: 4
1st Value:

1st Value: 2nd Value:

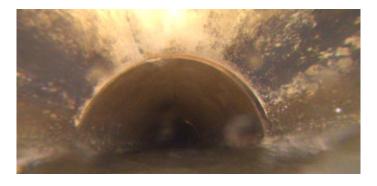
Value Percent: 5.000

Continuous Index:

Within 8" of Joint:

Remarks:

YES



Code: FM

Description: Fracture Multiple

Distance (ft): 75.0
Structural Grade: 4

O&M Grade: 0
Clock Start/From: 8

Clock To: 4

1st Value:
2nd Value:
Value Percent:
Continuous Index: F01

Within 8" of Joint: Remarks:

YES



Code: MMC

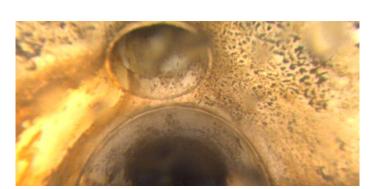
Description: Material Change

Distance (ft): 75.0
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: PVC



Code: **TF**

Description: Tap Factory

Distance (ft): 82.5
Structural Grade: 0

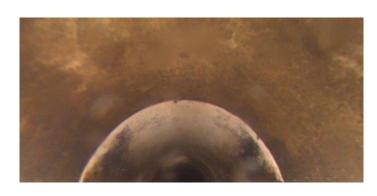
O&M Grade: 0

Clock Start/From: 12

Clock To:

1st Value: **4.000**

2nd Value: Value Percent: Continuous Index: Within 8" of Joint:



Code: MMC

Description: Material Change

Distance (ft): 84.7
Structural Grade: 0

O&M Grade: 0

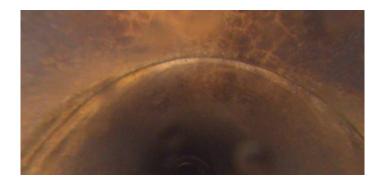
Clock Start/From: Clock To:

1st Value:
2nd Value:
Value Percent:
Continuous Index:

Within 8" of Joint: NO Remarks: vcp

Code: CM

Description: Crack Multiple



Distance (ft): 87.4
Structural Grade: 3
O&M Grade: 0
Clock Start/From: 11

Clock Start/From: 11
Clock To: 1
1st Value:

2nd Value: Value Percent:

Continuous Index: **S02** Within 8" of Joint: **YES**



Code: IW

Description: Infil Weeper

Distance (ft): 99.6
Structural Grade: 0
O&M Grade: 2
Clock Start/From: 8
Clock To: 4
1st Value:
2nd Value:

Value Percent:
Continuous Index:

Within 8" of Joint:

Remarks:

YES



Code: **FM**

Description: Fracture Multiple

Distance (ft): 99.6
Structural Grade: 4

O&M Grade: 0

Clock Start/From: 8

Clock To: 4

1st Value:
2nd Value:
Value Percent:
Continuous Index:

Within 8" of Joint: YES



Code: FM

Description: Fracture Multiple

Distance (ft): 126.7
Structural Grade: 4

O&M Grade: 0

Clock Start/From: 8

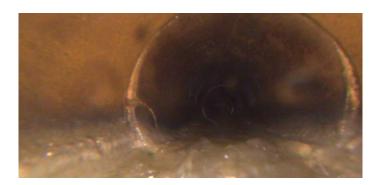
Clock To: 4

1st Value: 2nd Value: Value Percent:

Continuous Index: Within 8" of Joint:

Remarks:

YES



Code: **FS**

Description: Fracture Spiral

Distance (ft): 129.7
Structural Grade: 3
O&M Grade: 0
Clock Start/From: 3
Clock To: 4
1st Value:
2nd Value:
Value Percent:
Continuous Index:

Within 8" of Joint: YES



Code: TF

Description: **Tap Factory**

Distance (ft): 131.7 Structural Grade: 0 0 O&M Grade: Clock Start/From: 1

Clock To:

1st Value: 4.000

2nd Value: Value Percent: Continuous Index: Within 8" of Joint:

Remarks:



Code: FΜ

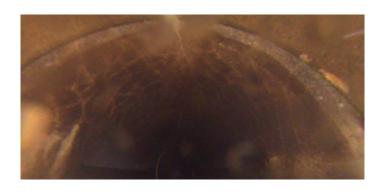
Description: **Fracture Multiple**

YES

Distance (ft): 141.5 Structural Grade: 4 O&M Grade: 0 Clock Start/From: 8 Clock To: 4 1st Value: 2nd Value: Value Percent: Continuous Index: **S03**

Remarks:

Within 8" of Joint:



Code: CM

Description: Crack Multiple

Distance (ft): 141.5
Structural Grade: 3
O&M Grade: 0
Clock Start/From: 11
Clock To: 1
1st Value:

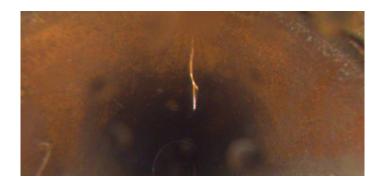
1st Value: 2nd Value: Value Percent:

Continuous Index: F02
Within 8" of Joint: YES

Remarks:

Code: RFJ

Description: Roots Fine Joint

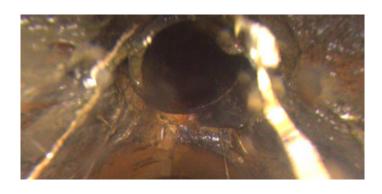


Distance (ft): 153.3
Structural Grade: 0
O&M Grade: 1

Clock Start/From: 12

Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Index:

Within 8" of Joint: YES



Code: **TBD**

Description: Tap Break-in Defective

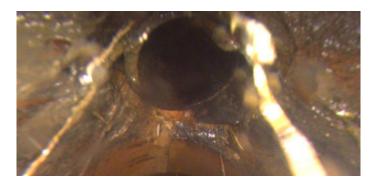
Distance (ft): 154.3
Structural Grade: 0
O&M Grade: 3
Clock Start/From: 12

Clock To:

1st Value: **4.000**

2nd Value: Value Percent: Continuous Index: Within 8" of Joint:

Remarks: roots



Code: RFC

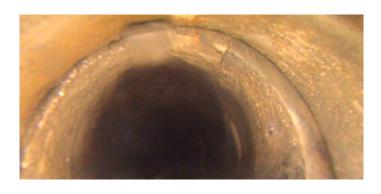
Description: Roots Fine Connection

NO

Distance (ft): 154.3
Structural Grade: 0
O&M Grade: 1
Clock Start/From: 11
Clock To: 1
1st Value: 2nd Value: Value Percent:

Within 8" of Joint:

Continuous Index:



Description: Deposits Attached Encrustation

Distance (ft): 168.7
Structural Grade: 0
O&M Grade: 2
Clock Start/From: 8
Clock To: 4
1st Value:

1st Value: 2nd Value:

Value Percent: 5.000

Continuous Index:

Within 8" of Joint:

YES

Remarks:



Code: TBI

Description: Tap Break-in Intruding

Distance (ft): 191.8
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:



Code: TFA

Description: Tap Factory Active

4.000

Distance (ft): 195.4
Structural Grade: 0
O&M Grade: 0
Clock Start/From: 11

Clock To:

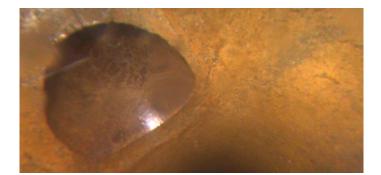
1st Value:

2nd Value: Value Percent: Continuous Index: Within 8" of Joint:

Remarks:

Code: **TF**

Description: Tap Factory

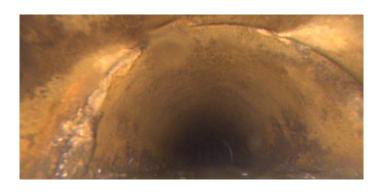


Distance (ft): 212.9
Structural Grade: 0
O&M Grade: 0
Clock Start/From: 1

Clock To:

1st Value: **4.000**

2nd Value: Value Percent: Continuous Index: Within 8" of Joint:



Description: Deposits Attached Encrustation

Distance (ft): 216.7
Structural Grade: 0
O&M Grade: 2
Clock Start/From: 8
Clock To: 4
1st Value:

1st Value: 2nd Value:

Value Percent: 5.000
Continuous Index: S04
Within 8" of Joint: YES

Remarks:

Code: DAR

Description: Deposits Attached Ragging

4



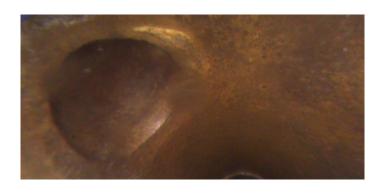
Distance (ft): 255.6
Structural Grade: 0
O&M Grade: 2
Clock Start/From: 3

Clock To: 1st Value: 2nd Value:

Value Percent: 10.000

Continuous Index:

Within 8" of Joint: YES



Code: **TF**

Description: Tap Factory

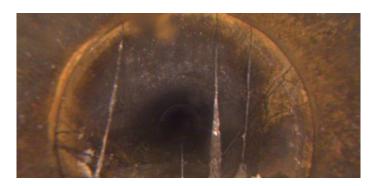
Distance (ft): 272.8
Structural Grade: 0
O&M Grade: 0
Clock Start/From: 2

Clock To:

1st Value: **4.000**

2nd Value: Value Percent: Continuous Index: Within 8" of Joint:

Remarks:



Code: RFJ

Description: Roots Fine Joint

Distance (ft): 282.7 Structural Grade: 0 O&M Grade: 1 Clock Start/From: 8 Clock To: 4 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: YES

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Description: Deposits Attached Encrustation

Distance (ft): 282.7
Structural Grade: 0
O&M Grade: 2
Clock Start/From: 8
Clock To: 4
1st Value:

1st Value: 2nd Value:

Value Percent: 5.000
Continuous Index: F04
Within 8" of Joint: YES

Remarks:

Code: FM

Description: Fracture Multiple

4



Distance (ft): 282.7
Structural Grade: 4
O&M Grade: 0
Clock Start/From: 8

Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Ind

Continuous Index: F03
Within 8" of Joint: YES



Code: AMH
Description: Manhole

Distance (ft): 285.2
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: M-405-021