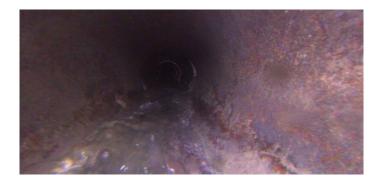
| Profile/Ph | oto Observation | Report | | | | RedZon R 0 B 0 T I C S |
|------------------|-------------------|-------------------|-----------------|----------------------|-------------------|---------------------------|
| Date: | 04/20/2018 | Weather: | | | Coding: | PACP 6.0 |
| Pipe Length (ft | :): 273.0 | Owner: | NA | | Pre Clean: | No Pre-Cleaning |
| P.O.#: | | Surveyor: | Byrd Fitzgera | ld | PSR: | P-405-026-025 |
| Customer: | | Clean Date: | 01/01/1900 | | Shape: | С |
| Street: | FOXCROFT STREET | | Flow Control: | | Not Controlled | |
| City: | Hobart, IN | | Year Renewed: | | | |
| Location: | Yard | | Tape/Media #: | | | |
| Purpose: | Routine Assessmen | t | Dia/Height: | | 10" | |
| Use: | Sanitary | | Material: | | VCP | |
| Drain Area: | NA | | Lining: | | | |
| Category: | NA | | | | | |
| Comment: | | | | | | |
| Location Detai | ls: | | Direction of Su | rvey: | Downstream | |
| US MH: | M-405-026 | DS MH: | M-405-025 | Total Leng | th Surveyed (ft): | 273.2 |
| 0&M Index: | 2.07 | O&M Quick: | 43 | 3 <mark>31</mark> 08 | M Rating: | 222.00 |
| tructural Index: | 0.00 | Structural Qu | iick: OC | 00 Str | uctural Rating: | 0.00 |
| Overall Index: | 2.07 | Overall Quick | 43 | 33I Ov | erall Rating: | 222.00 |

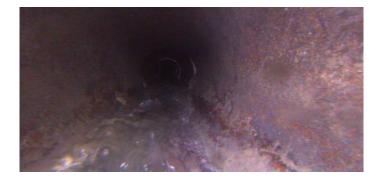
| | Position | Code | Observation | Video (sec) | Grade |
|----------|----------|----------|--------------------------------|-------------|-------|
| 1(405-)0 |)26 | | | | |
| X | 0. / | AMH | Manhole | 10 | NA |
| | .0 | MWL | Water Level | 21 | NA |
| | 3.6 | RMJ | Roots Medium Joint | 40 | M 3 |
| | 6.7 | MMC | Material Change | 58 | NA |
| | 9.1 | TF | Tap Factory | 75 | NA |
| | 13.4 | MMC | Material Change | 98 | NA |
| | 20.7 | RMJ(S01) | Roots Medium Joint | 125 | M 3 |
| | 21.4 | RFJ(SO2) | Roots Fine Joint | 137 | M 1 |
| | 35.7 | MWL | Water Level | 178 | NA |
| | 37.0 | MMC | Material Change | 193 | NA |
| | 38.8 | TF | Tap Factory | 209 | NA |
| | 40.6 | MMC | Material Change | 225 | NA |
| | 43.7 | TFC | Tap Factory Capped | 244 | NA |
| | 45.5 | RMJ | Roots Medium Joint | 260 | M 3 |
| | 48.5 | MCU(S03) | Camera Underwater | 278 | M 4 |
| | 56.3 | MCU(F03) | Camera Underwater | 305 | M 4 |
| | 84.1 | MMC | Material Change | 373 | NA |
| | 98.2 | MWL | Water Level | 412 | NA |
| | 121.2 | MMC | Material Change | 471 | NA |
| | 162.4 | DAE | Deposits Attached Encrustation | 565 | M 2 |
| | 162.4 | MWL | Water Level | 576 | NA |
| | 171.6 | DAE | Deposits Attached Encrustation | 606 | M 2 |
| | \\174.6 | MMC | Material Change | 624 | NA |
| | 192.8 | MWL | Water Level | 672 | NA |
| | 254.8 | MWL | Water Level | 808 | NA |
| | 261.7 | MWL | Water Level | 833 | NA |
| | 262.4 | MCU | Camera Underwater | 846 | M 4 |
| | 269.6 | MWL | Water Level | 872 | NA |
| | 269.6 | RFJ(F02) | Roots Fine Joint | 883 | M 1 |
| | 269.6 | RMJ(F01) | Roots Medium Joint | 894 | M 3 |
| | 273.2 | AMH | Manhole | 913 | NA |



| Code: | АМН |
|--------------|---------|
| Description: | Manhole |
| | |

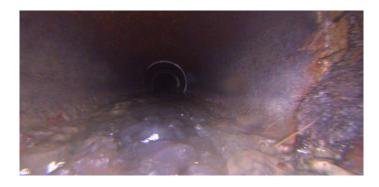
| Distance (ft): | .0 |
|---------------------|-----------|
| Structural Grade: | 0 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | NO |
| Remarks: | M-405-026 |

Code:



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

MWL



Code:RMJDescription:Roots Medium Joint

| Distance (ft): | 3.6 |
|---------------------|-------|
| Structural Grade: | 0 |
| O&M Grade: | 3 |
| Clock Start/From: | 3 |
| Clock To: | 5 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



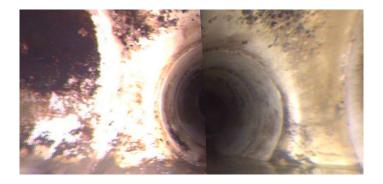
| Code: | MMC |
|-------------------|-----------------|
| Description: | Material Change |
| | |
| | |
| Distance (ft): | 6.7 |
| Structural Grade: | 0 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |

NO

pvc

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

Remarks:



| Code: | TF |
|---------------------|-------------|
| Description: | Tap Factory |
| | |
| Distance (ft): | 9.1 |
| Structural Grade: | 0 |
| O&M Grade: | 0 |
| Clock Start/From: | 3 |
| Clock To: | |
| 1st Value: | 4.000 |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



| Code: Description: | MMC Material Change |
|-----------------------|------------------------|
| | |
| Distance (ft): | 13.4 |
| Structural Grade: | 0 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |

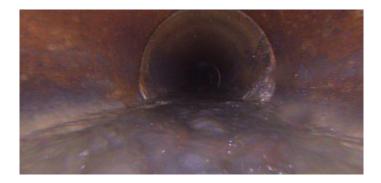
NO

vcp

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

Remarks:

5



Code:RMJDescription:Roots Medium Joint

| Distance (ft): | 20.7 |
|---------------------|-----------|
| Structural Grade: | 0 |
| O&M Grade: | 3 |
| Clock Start/From: | 3 |
| Clock To: | 5 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | S01 |
| Within 8" of Joint: | YES |
| Remarks: | wandering |
| | |

Code:

Description:



| Distance (ft): | 21.4 |
|---------------------|-----------|
| Structural Grade: | 0 |
| O&M Grade: | 1 |
| Clock Start/From: | 7 |
| Clock To: | 3 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | S02 |
| Within 8" of Joint: | YES |
| Remarks: | wandering |
| | |

RFJ

Roots Fine Joint



Code: MWL Description: Water Level

| Distance (ft): | 35.7 |
|---------------------|--------|
| Structural Grade: | 0 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 25.000 |
| Continuous Index: | |
| Within 8" of Joint: | NO |
| Remarks: | |

Code:



| Description: | Material Change |
|-------------------|-----------------|
| | |
| Distance (ft): | 37.0 |
| Structural Grade: | 0 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |

ммс

| 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): | 38.8 |
| 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: | YES |
| Remarks: | |



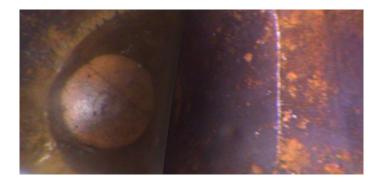
| Code: | ММС |
|-------------------|-----------------|
| Description: | Material Change |
| | |
| | 40.0 |
| Distance (ft): | 40.6 |
| Structural Grade: | 0 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |

NO

vcp

1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:

Remarks:



Code:TFCDescription:Tap Factory Capped

| Distance (ft): | 43.7 |
|---------------------|-------|
| 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: | RMJ |
|-------------------|---------------------------|
| Description: | Roots Medium Joint |
| | |
| | |
| Distance (ft): | 45.5 |
| Structural Grade: | 0 |
| O&M Grade: | 3 |
| Clock Start/From: | 7 |

5

40.000

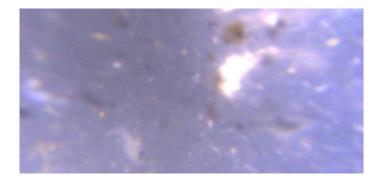
YES

Clock To:

1st Value: 2nd Value: Value Percent:

Remarks:

Continuous Index: Within 8" of Joint:



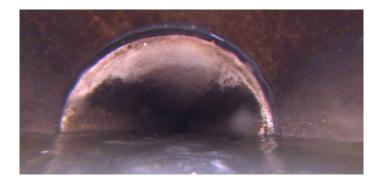
Code:MCUDescription:Camera Underwater

| Distance (ft): | 48.5 |
|---------------------|------|
| Structural Grade: | 0 |
| O&M Grade: | 4 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | S03 |
| Within 8" of Joint: | NO |
| Remarks: | |



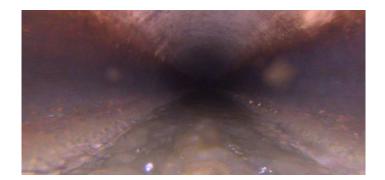
| Code: | МСИ |
|--------------|-------------------|
| Description: | Camera Underwater |
| | |

| Distance (ft): | 56.3 |
|---------------------|------|
| Structural Grade: | 0 |
| O&M Grade: | 4 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | F03 |
| Within 8" of Joint: | NO |
| Remarks: | |
| | |



Code:MMCDescription:Material ChangeDistance (ft):84.1Structural Grade:0O&M 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: | рус |



| Code: | MWL |
|-------------------|-------------|
| Description: | Water Level |
| | |
| | |
| Distance (ft): | 98.2 |
| Structural Grade: | 0 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |

| Uaivi Grade: | U |
|---------------------|-------|
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | |
| Within 8" of Joint: | NO |
| Remarks: | |



Code:MMCDescription:Material ChangeDistance (ft):121.2Structural Grade:0O&M Grade:0Clock Start/From:Clock To:1st Value:2nd Value:

NO

vcp

DAE

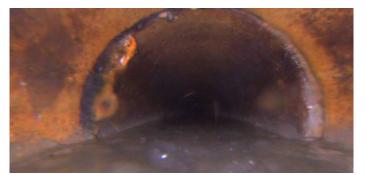
Deposits Attached Encrustation

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

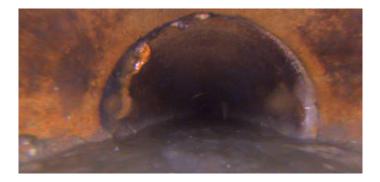
Remarks:

Code:

Description:



| Distance (ft): | 162.4 |
|---------------------|-------|
| Structural Grade: | 0 |
| O&M Grade: | 2 |
| Clock Start/From: | 8 |
| Clock To: | 10 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



Code: MWL Description: Water Level

| Distance (ft): | 162.4 |
|---------------------|--------|
| Structural Grade: | 0 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 25.000 |
| Continuous Index: | |
| Within 8" of Joint: | NO |
| Remarks: | |

Code:

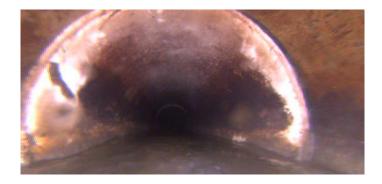
Description:



| Distance (ft): | 171.6 |
|---------------------|-------|
| Structural Grade: | 0 |
| O&M Grade: | 2 |
| Clock Start/From: | 1 |
| Clock To: | 4 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |

DAE

Deposits Attached Encrustation



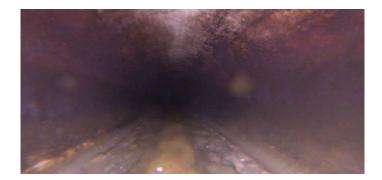
| Code: Description: | MMC Material Change |
|-----------------------|------------------------|
| Distance (ft): | 174.6 |
| Structural Grade: | 0 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |

NO

pvc

MWL

Water Level



| Distance (ft): | 192.8 |
|---------------------|-------|
| 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: | |

Within 8" of Joint:

Remarks:

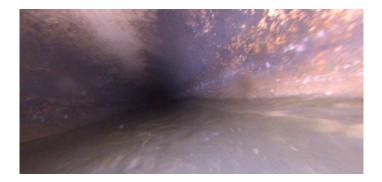
Code:

Description:

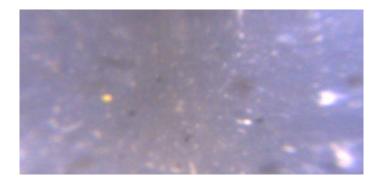


Code: MWL Description: Water Level

| Distance (ft): | 254.8 |
|---------------------|--------|
| Structural Grade: | 0 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 25.000 |
| Continuous Index: | |
| Within 8" of Joint: | NO |
| Remarks: | |



| Code: Description: | MWL Water Level |
|-----------------------|--------------------|
| Distance (ft): | 261.7 |
| Structural Grade: | 0 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 50.000 |
| Continuous Index: | |
| Within 8" of Joint: | NO |
| Remarks: | |
| | |



Code: Description:

MCU Camera Underwater

| Distance (ft): | 262.4 |
|---------------------|-------|
| Structural Grade: | 0 |
| O&M Grade: | 4 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | NO |
| Remarks: | |



| Code: | MWL |
|----------------|-------------|
| Description: | Water Level |
| | |
| Distance (ft): | 269.6 |

| Structural Grade: | 0 |
|---------------------|--------|
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 25.000 |
| Continuous Index: | |
| Within 8" of Joint: | NO |
| Remarks: | |
| | |



Code:RFJDescription:Roots Fine Joint

| Distance (ft): | 269.6 |
|---------------------|-----------|
| Structural Grade: | 0 |
| O&M Grade: | 1 |
| Clock Start/From: | 7 |
| Clock To: | 3 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | F02 |
| Within 8" of Joint: | YES |
| Remarks: | wandering |



| Code: | |
|--------------|--|
| Description: | |

RMJ Roots Medium Joint

| Distance (ft): | 269.6 |
|---------------------|-----------|
| Structural Grade: | 0 |
| O&M Grade: | 3 |
| Clock Start/From: | 3 |
| Clock To: | 5 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | F01 |
| Within 8" of Joint: | YES |
| Remarks: | wandering |



| Code: | AMH |
|-------------------|---------|
| Description: | Manhole |
| | |
| | |
| Distance (ft): | 273.2 |
| 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: | M-405-025 |