| Profile/Ph       | noto Observation | n Report      |                  |                           | ROBOTIC          |
|------------------|------------------|---------------|------------------|---------------------------|------------------|
| Date:            | 10/09/2018       | Weather:      |                  | Coding:                   | PACP 6.0         |
| Pipe Length (f   | t): <b>135.8</b> | Owner:        | NA               | Pre Clean:                | Not Known        |
| P.O.#:           |                  | Surveyor:     | Selasie Honu     | PSR:                      | P-507-021-020    |
| Customer:        |                  | Clean Date:   | 01/01/1900       | Shape:                    | С                |
| Street:          | Dekalb St.       |               | Flow Control:    | Not Controlle             | d                |
| City:            | Hobart, IN       |               | Year Renewed:    |                           |                  |
| Location:        | Light Highway    |               | Tape/Media #:    |                           |                  |
| Purpose:         | Routine Assessme | ent           | Dia/Height:      | 8"                        |                  |
| Use:             | Sanitary         |               | Material:        | VCP                       |                  |
| Drain Area:      | NA               |               | Lining:          |                           |                  |
| Category:        | NA               |               |                  |                           |                  |
| Comment:         |                  |               |                  |                           |                  |
| Location Detai   | ils:             |               | Direction of Sur | vey: Downstream           |                  |
| US MH:           | M-507-020        | DS MH:        | M-507-021        | Total Length Surveyed (fi | t): <b>133.8</b> |
| D&M Index:       | 1.46             | O&M Quick:    | 32               | 27 O&M Rating:            | 35.00            |
| Structural Index | . 0.00           | Structural Qu |                  |                           | . 0.00           |
| Overall Index:   | 1.46             | Overall Quicl | . 32             |                           | 35.00            |

|                  | Position                  | Code | Observation                    | Video (sec) | Grade |
|------------------|---------------------------|------|--------------------------------|-------------|-------|
| M(50             | 7-020                     |      |                                |             |       |
|                  | .0                        | AMH  | Manhole                        | 10          | NA    |
| - 84             | 0                         | MWL  | Water Level                    | 21          | NA    |
|                  | 5.4                       | RFJ  | Roots Fine Joint               | 43          | M 1   |
| - 11             | 10.0                      | DAE  | Deposits Attached Encrustation | 64          | M 3   |
|                  | 15.0                      | RFJ  | Roots Fine Joint               | 85          | M 1   |
| - 11             | 20.0                      | RFJ  | Roots Fine Joint               | 106         | M 1   |
| - 14             | 25.1                      | RFJ  | Roots Fine Joint               | 128         | M 1   |
| - 11             | 30.2                      | RFJ  | Roots Fine Joint               | 149         | M 1   |
| - 11             | 35.4                      | DAE  | Deposits Attached Encrustation | 171         | M 2   |
| s 🗕              | 40.2                      | DAE  | Deposits Attached Encrustation | 192         | M 2   |
|                  | 40.2                      | RFJ  | Roots Fine Joint               | 203         | M 1   |
| Camera Direction | 45.3                      | RFJ  | Roots Fine Joint               | 224         | M 1   |
| nera             | 50.4                      | DAE  | Deposits Attached Encrustation | 246         | M 2   |
| ā –              | 55.5                      | RFJ  | Roots Fine Joint               | 267         | M 1   |
| 144              | 55.5                      | IS   | Infil Stain                    | 278         | NA    |
|                  | 60.6                      | DAE  | Deposits Attached Encrustation | 300         | M 2   |
| t 🗆              | 64.7                      | IS   | Infil Stain                    | 319         | NA    |
|                  | 65.4                      | IS   | Infil Stain                    | 332         | NA    |
| - 11             | 65.7                      | RFJ  | Roots Fine Joint               | 344         | M 1   |
| - 11             | 66.6                      | IS   | Infil Stain                    | 358         | NA    |
| - 11             | 66.9                      | IS   | Infil Stain                    | 370         | NA    |
| - 83             |                           | IS   | Infil Stain                    | 400         | NA    |
|                  | 76.3                      | RFJ  | Roots Fine Joint               | 411         | M 1   |
| - 11             | 81.1                      | DAE  | Deposits Attached Encrustation | 432         | M 2   |
| - 11             | 86.0                      | RFJ  | Roots Fine Joint               | 453         | M 1   |
| - 11             | + <u>\</u> \\ <u>86.0</u> | IS   | Infil Stain                    | 464         | NA    |
| - 84             | 91.6                      | DAE  | Deposits Attached Encrustation | 487         | M 3   |
| - 11             | 96.0                      | IS   | Infil Stain                    | 507         | NA    |
|                  | 96.0                      | RFJ  | Roots Fine Joint               | 518         | M 1   |
| - 11             | 101.1                     | RFJ  | Roots Fine Joint               | 540         | M 1   |
|                  |                           | DAE  | Deposits Attached Encrustation | 562         | M 2   |
|                  | 116.3                     | RFJ  | Roots Fine Joint               | 593         | M 1   |
|                  | 121.2                     | DAE  | Deposits Attached Encrustation | 614         | M 2   |
|                  | 126.1                     | RFJ  | Roots Fine Joint               | 636         | M 1   |
|                  | 133.8                     | AMH  | Manhole                        | 663         | NA    |



| Code:<br>Description: | AMH<br>Manhole |
|-----------------------|----------------|
| Distance (ft):        | .0             |
| Structural Grade:     | 0              |
| O&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:            | M-507-02 |

Code:

Description:

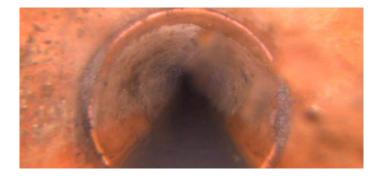
| NO        |
|-----------|
| M-507-020 |

MWL

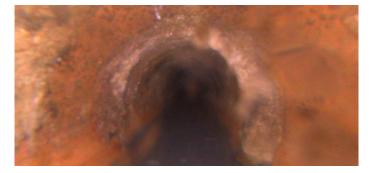
Water Level



| 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:            |       |

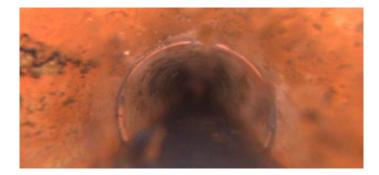


| 5.4 |
|-----|
| 0   |
| 1   |
| 8   |
| 4   |
|     |
|     |
|     |
|     |
| YES |
|     |
|     |

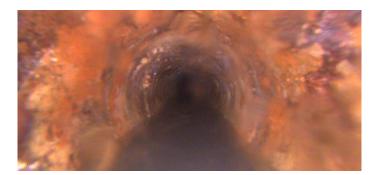


| Code:        | DAE                            |
|--------------|--------------------------------|
| Description: | Deposits Attached Encrustation |

| Distance (ft):      | 10.0   |
|---------------------|--------|
| Structural Grade:   | 0      |
| O&M Grade:          | 3      |
| Clock Start/From:   | 8      |
| Clock To:           | 5      |
| 1st Value:          |        |
| 2nd Value:          |        |
| Value Percent:      | 20.000 |
| Continuous Index:   |        |
| Within 8" of Joint: | YES    |
| Remarks:            |        |

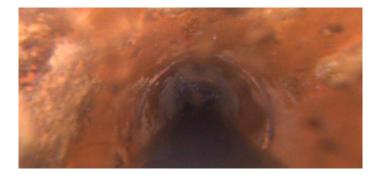


| Distance (ft):      | 15.0 |
|---------------------|------|
| Structural Grade:   | 0    |
| O&M Grade:          | 1    |
| Clock Start/From:   | 8    |
| Clock To:           | 4    |
| 1st Value:          |      |
| 2nd Value:          |      |
| Value Percent:      |      |
| Continuous Index:   |      |
| Within 8" of Joint: | YES  |
| Remarks:            |      |

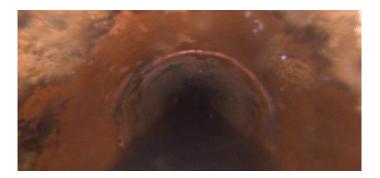


| Code:               | RFJ                     |
|---------------------|-------------------------|
| Description:        | <b>Roots Fine Joint</b> |
|                     |                         |
|                     |                         |
| Distance (ft):      | 20.0                    |
| 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                     |
|                     |                         |

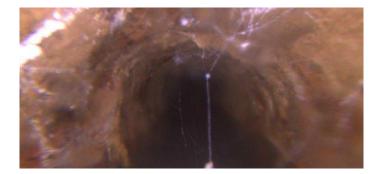
Remarks:



| Distance (ft):      | 25.1 |
|---------------------|------|
| 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  |
| Remarks:            |      |



| Code:<br>Description: | RFJ<br>Roots Fine Joint |
|-----------------------|-------------------------|
|                       |                         |
| Distance (ft):        | 30.2                    |
| 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                     |
| Remarks:              |                         |



| Distance (ft):      | 35.4   |
|---------------------|--------|
| Structural Grade:   | 0      |
| O&M Grade:          | 2      |
| Clock Start/From:   | 8      |
| Clock To:           | 4      |
| 1st Value:          |        |
| 2nd Value:          |        |
| Value Percent:      | 10.000 |
| Continuous Index:   |        |
| Within 8" of Joint: | YES    |
| Remarks:            |        |

Code: DAE Description: Deposits A

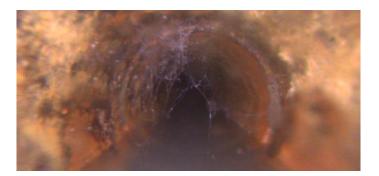
Deposits Attached Encrustation



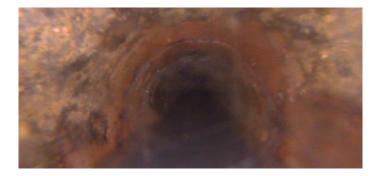
| Distance (ft):      | 40.2  |
|---------------------|-------|
| Structural Grade:   | 0     |
| O&M Grade:          | 2     |
| Clock Start/From:   | 8     |
| Clock To:           | 4     |
| 1st Value:          |       |
| 2nd Value:          |       |
| Value Percent:      | 5.000 |
| Continuous Index:   |       |
| Within 8" of Joint: | YES   |
| Remarks:            |       |



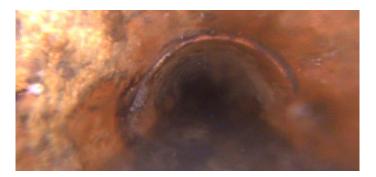
| Distance (ft):      | 40.2 |
|---------------------|------|
| Structural Grade:   | 0    |
| O&M Grade:          | 1    |
| Clock Start/From:   | 8    |
| Clock To:           | 4    |
| 1st Value:          |      |
| 2nd Value:          |      |
| Value Percent:      |      |
| Continuous Index:   |      |
| Within 8" of Joint: | YES  |
| Remarks:            |      |



| Code:               | RFJ                     |
|---------------------|-------------------------|
| Description:        | <b>Roots Fine Joint</b> |
|                     |                         |
| Distance (ft):      | 45.3                    |
| 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                     |
| Remarks:            |                         |



| Distance (ft):      | 50.4  |
|---------------------|-------|
| Structural Grade:   | 0     |
| O&M Grade:          | 2     |
| Clock Start/From:   | 8     |
| Clock To:           | 4     |
| 1st Value:          |       |
| 2nd Value:          |       |
| Value Percent:      | 5.000 |
| Continuous Index:   |       |
| Within 8" of Joint: | YES   |
| Remarks:            |       |



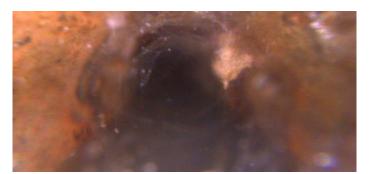
| Code:               | RFJ                     |
|---------------------|-------------------------|
| Description:        | <b>Roots Fine Joint</b> |
|                     |                         |
|                     |                         |
| Distance (ft):      | 55.5                    |
| Structural Grade:   | 0                       |
| O&M Grade:          | 1                       |
| Clock Start/From:   | 9                       |
| Clock To:           | 3                       |
| 1st Value:          |                         |
| 2nd Value:          |                         |
| Value Percent:      |                         |
| Continuous Index:   |                         |
| Within 8" of Joint: | YES                     |

Remarks:



| Code:        | IS          |
|--------------|-------------|
| Description: | Infil Stain |
|              |             |

| 55.5 |
|------|
| 0    |
| 0    |
| 8    |
| 4    |
|      |
|      |
|      |
|      |
| YES  |
|      |
|      |



| Code:        | DAE               |
|--------------|-------------------|
| Description: | Deposits Attached |
|              |                   |

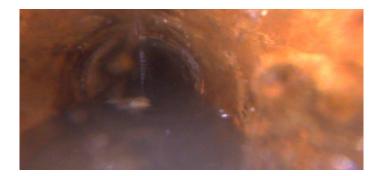
| Distance (ft):      | 60.6   |
|---------------------|--------|
| Structural Grade:   | 0      |
| O&M Grade:          | 2      |
| Clock Start/From:   | 8      |
| Clock To:           | 4      |
| 1st Value:          |        |
| 2nd Value:          |        |
| Value Percent:      | 10.000 |
| Continuous Index:   |        |
| Within 8" of Joint: | YES    |
| Remarks:            |        |

Encrustation

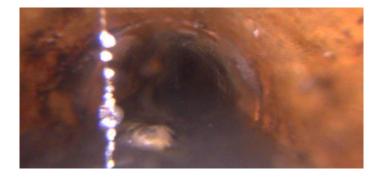


Code: IS Description: Infil Stain

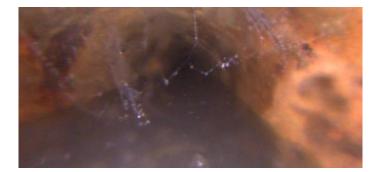
| Distance (ft):      | 64.7 |
|---------------------|------|
| Structural Grade:   | 0    |
| O&M Grade:          | 0    |
| Clock Start/From:   | 8    |
| Clock To:           | 10   |
| 1st Value:          |      |
| 2nd Value:          |      |
| Value Percent:      |      |
| Continuous Index:   |      |
| Within 8" of Joint: |      |
| Remarks:            |      |



| Code:               | IS          |
|---------------------|-------------|
| Description:        | Infil Stain |
|                     |             |
| Distance (ft):      | 65.4        |
| 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:            |             |



| Distance (ft):      | 65.7 |
|---------------------|------|
| Structural Grade:   | 0    |
| O&M Grade:          | 1    |
| Clock Start/From:   | 8    |
| Clock To:           | 3    |
| 1st Value:          |      |
| 2nd Value:          |      |
| Value Percent:      |      |
| Continuous Index:   |      |
| Within 8" of Joint: | YES  |
| Remarks:            |      |

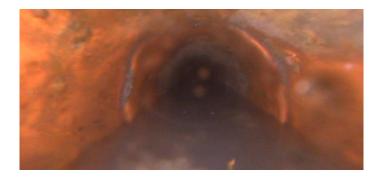


| Code:<br>Description: | IS<br>Infil Stain |
|-----------------------|-------------------|
| Distance (ft):        | 66.6              |
| Structural Grade:     | 0                 |
| O&M Grade:            | 0                 |
| Clock Start/From:     | 8                 |
| Clock To:             | 10                |
| 1st Value:            |                   |
| 2nd Value:            |                   |
| Value Percent:        |                   |
| Continuous Index:     |                   |
| Within 8" of Joint:   |                   |
| Remarks:              |                   |
|                       |                   |

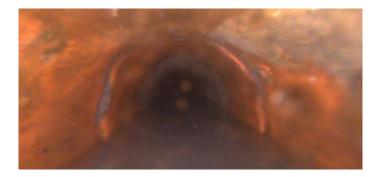


Code: IS Description: Infil Stain

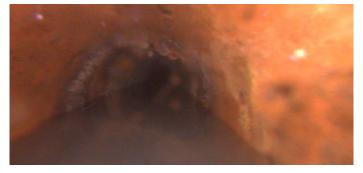
| Distance (ft):      | 66.9 |
|---------------------|------|
| Structural Grade:   | 0    |
| O&M Grade:          | 0    |
| Clock Start/From:   | 8    |
| Clock To:           | 4    |
| 1st Value:          |      |
| 2nd Value:          |      |
| Value Percent:      |      |
| Continuous Index:   |      |
| Within 8" of Joint: |      |
| Remarks:            |      |



| Code:<br>Description:  | IS<br>Infil Stain        |
|--|--------------------------|
| Distance (ft):<br>Structural Grade:<br>O&M Grade:<br>Clock Start/From:<br>Clock To:<br>1st Value:<br>2nd Value:<br>Value Percent:<br>Continuous Index: | 76.3<br>0<br>0<br>8<br>4 |
| Within 8" of Joint:<br>Remarks:  | YES                      |



| Distance (ft):      | 76.3 |
|---------------------|------|
| Structural Grade:   | 0    |
| O&M Grade:          | 1    |
| Clock Start/From:   | 8    |
| Clock To:           | 3    |
| 1st Value:          |      |
| 2nd Value:          |      |
| Value Percent:      |      |
| Continuous Index:   |      |
| Within 8" of Joint: | YES  |
| Remarks:            |      |



| Code:        | DAE                            |
|--------------|--------------------------------|
| Description: | Deposits Attached Encrustation |

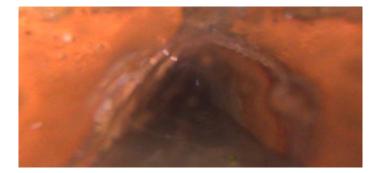
| Distance (ft):      | 81.1   |  |
|---------------------|--------|--|
| Structural Grade:   | 0      |  |
| O&M Grade:          | 2      |  |
| Clock Start/From:   | 8      |  |
| Clock To:           | 4      |  |
| 1st Value:          |        |  |
| 2nd Value:          |        |  |
| Value Percent:      | 10.000 |  |
| Continuous Index:   |        |  |
| Within 8" of Joint: | YES    |  |
| Remarks:            |        |  |



| Distance (ft):      | 86.0 |
|---------------------|------|
| 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  |
| Remarks:            |      |



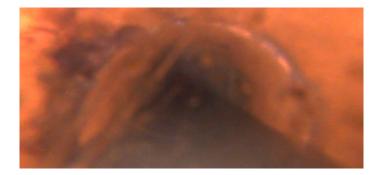
| Code:<br>Description:   | IS<br>Infil Stain          |
|---|----------------------------|
| Distance (ft):<br>Structural Grade:<br>O&M Grade:<br>Clock Start/From:<br>Clock To:<br>1st Value:<br>2nd Value:<br>Value Percent:<br>Continuous Index:<br>Within 8" of Joint: | 86.0<br>0<br>8<br>4<br>YES |
| Remarks:  |                            |



| Distance (ft):      | 91.6   |
|---------------------|--------|
| Structural Grade:   | 0      |
| O&M Grade:          | 3      |
| Clock Start/From:   | 8      |
| Clock To:           | 4      |
| 1st Value:          |        |
| 2nd Value:          |        |
| Value Percent:      | 15.000 |
| Continuous Index:   |        |
| Within 8" of Joint: | YES    |
| Remarks:            |        |



| Code:<br>Description: | IS<br>Infil Stain |
|-----------------------|-------------------|
| Distance (ft):        | 96.0              |
| 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:              |                   |

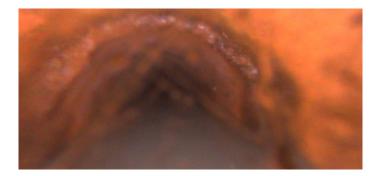


| Distance (ft):      | 96.0 |
|---------------------|------|
| Structural Grade:   | 0    |
| O&M Grade:          | 1    |
| Clock Start/From:   | 8    |
| Clock To:           | 4    |
| 1st Value:          |      |
| 2nd Value:          |      |
| Value Percent:      |      |
| Continuous Index:   |      |
| Within 8" of Joint: | YES  |
| Remarks:            |      |



| Code:        | RFJ                     |
|--------------|-------------------------|
| Description: | <b>Roots Fine Joint</b> |
|              |                         |

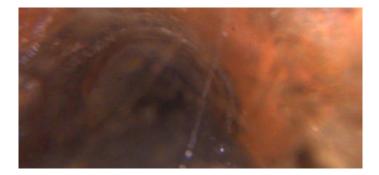
| Distance (ft):      | 101.1 |
|---------------------|-------|
| Structural Grade:   | 0     |
| O&M Grade:          | 1     |
| Clock Start/From:   | 8     |
| Clock To:           | 4     |
| 1st Value:          |       |
| 2nd Value:          |       |
| Value Percent:      |       |
| Continuous Index:   |       |
| Within 8" of Joint: | YES   |
| Remarks:            |       |



| Distance (ft):      | 106.4  |
|---------------------|--------|
| Structural Grade:   | 0      |
| O&M Grade:          | 2      |
| Clock Start/From:   | 8      |
| Clock To:           | 4      |
| 1st Value:          |        |
| 2nd Value:          |        |
| Value Percent:      | 10.000 |
| Continuous Index:   |        |
| Within 8" of Joint: | YES    |
| Remarks:            |        |

| Code:             | RFJ                     |
|-------------------|-------------------------|
| Description:      | <b>Roots Fine Joint</b> |
|                   |                         |
| Distance (ft):    | 116.3                   |
| Structural Grade: | 0                       |
| O&M Grade:        | 1                       |
| Clock Start/From: | 8                       |
| Clock To:         | 4                       |
| 1st Value:        |                         |

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



| Distance (ft):      | 121.2  |
|---------------------|--------|
| Structural Grade:   | 0      |
| O&M Grade:          | 2      |
| Clock Start/From:   | 8      |
| Clock To:           | 4      |
| 1st Value:          |        |
| 2nd Value:          |        |
| Value Percent:      | 10.000 |
| Continuous Index:   |        |
| Within 8" of Joint: | YES    |
| Remarks:            |        |

| Code:             | RFJ                     |
|-------------------|-------------------------|
| Description:      | <b>Roots Fine Joint</b> |
|                   |                         |
|                   |                         |
| Distance (ft):    | 126.1                   |
| Structural Grade: | 0                       |
| O&M Grade:        | 1                       |
| Clock Start/From: | 8                       |
| Clock To:         | 4                       |

YES

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

Remarks:



Code: AMH Description: Manhole

| Distance (ft):      | 133.8     |
|---------------------|-----------|
| 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-507-021 |