Profile/Photo Observation Report

| | | _ | | | ROBOTICS |
|-------------------|--------------------|-----------------|----------------------|-----------------------------|----------------|
| Date: | 10/21/2021 | Weather: | | Coding: | PACP 7.0 |
| Pipe Length (ft |): 319.0 | Owner: | City of Hobart | Pre Clean: | Heavy Cleaning |
| P.O.#: | YES502259 | Surveyor: | S. Bucklin | PSR: | P-503-077-076 |
| Customer: | City of Hobart | Clean Date: | 08/23/2021 | Shape: | С |
| Street: | North Guyer Street | t | Flow Control: | Not Controlled | |
| City: | Hobart, IN | | Year Renewed: | | |
| Location: | Alley | | Tape/Media #: | | |
| Purpose: | Routine Assessmer | nt | Dia/Height: | 10" | |
| Use: | Sanitary Sewage Pi | ipe | Material: | VCP | |
| Drain Area: | | | Lining: | None | |
| Category: | NA | | | | |
| Comment: | | | | | |
| Location Detai | ls: | | Direction of Survey: | Upstream | |
| US MH: | M-503-076 | DS MH: N | 1-503-077 | Total Length Surveyed (ft): | 138.1 |
| O&M Index: | 1.96 | O&M Quick: | 3A24 | O&M Rating: | 53.00 |
| Structural Index: | 4.00 | Structural Quic | 514B | Structural Rating: | 72.00 |
| | · | | K. | | |
| Overall Index: | 2.78 | Overall Quick: | 514B | Overall Rating: | 125.00 |

| | Position | Code | Observation | Video (sec) | Grade |
|-----------------|------------------------------|----------|--------------------------------|-------------|-------|
| M(503 | -077 | | | | |
| Ħ | .0 | AMH | Manhole | 1 | NA |
| - 11 | .0 | MWL | Miscellaneous Water Level | 63 | NA |
| | .9 | В | Broken | 125 | S 4 |
| - 11 | .9 | ISB | Infiltration Stain Barrel | 157 | M 1 |
| | 2.2 | RTJ | Roots Tap Joint | 205 | M 2 |
| | 6.7 | RTJ | Roots Tap Joint | 247 | M 2 |
| - 11 | \\\ <mark>6.7</mark> | FH4(S01) | Fracture Longitudinal Hinge, 4 | 272 | S 4 |
| - 11 | 16.9 | ISJ | Infiltration Stain Joint | 341 | M 1 |
| | 21.8 | RFJ | Roots Fine Joint | 408 | M 1 |
| 5 | 21.9 | DR | Deformed Rigid | 422 | S 5 |
| amera Direction | 26.6 | В | Broken | 438 | S 4 |
| | 7 27.5 | DR | Deformed Rigid | 458 | S 4 |
| nera | 29.6 | В | Broken | 473 | S 4 |
| Car | 36.7 | FH4(F01) | Fracture Longitudinal Hinge, 4 | 503 | S 4 |
| | 46.4 | B(S02) | Broken | 554 | S 4 |
| | 51.7 | RMJ | Roots Medium Joint | 595 | M 3 |
| 1 E | 53.2 | TFD | Tap Factory Defective | 630 | M 3 |
| | | RFJ | Roots Fine Joint | 659 | M 1 |
| | 54.0 | B(F02) | Broken | 672 | S 4 |

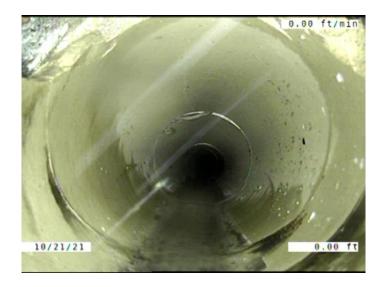
Tuesday, April 25, 2023

RedZone[®]

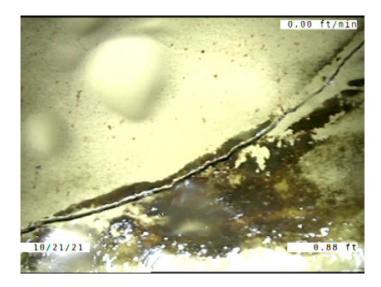
| _58.7 | FS | Fracture Spiral | 745 | S 3 |
|-----------|----------|---------------------------------|------|-----|
| 63.7 | RFJ | Roots Fine Joint | 803 | M |
| 78.9 | RFJ | Roots Fine Joint | 892 | M |
| 80.1 | TFD | Tap Factory Defective | 916 | M |
| | FM(S03) | Fracture Multiple | 959 | S 4 |
| 85.4 | OBN | Obstruction Construction Debris | 994 | M |
| 85.9 | RFJ | Roots Fine Joint | 1039 | М |
| 90.7 | RMJ | Roots Medium Joint | 1085 | M |
| 92.3 | FM(F03) | Fracture Multiple | 1123 | S 4 |
| 105.8 | RFJ | Roots Fine Joint | 1203 | M |
| /105.8 | ISJ | Infiltration Stain Joint | 1236 | M |
| // 110.8 | RMJ(S04) | Roots Medium Joint | 1277 | M |
| //124.0 | OBN | Obstruction Construction Debris | 1354 | M |
| / 124.3 | В | Broken | 1432 | S 4 |
| 124.3 | ISB | Infiltration Stain Barrel | 1459 | M |
| 130.0 | В | Broken | 1521 | S 4 |
| /131.4 | ISB | Infiltration Stain Barrel | 1556 | М |
| 136.8 | TFD | Tap Factory Defective | 1627 | M |
| | RTJ | Roots Tap Joint | 1661 | M |
| ///137.4 | RMJ(F04) | Roots Medium Joint | 1675 | M |
| /// 138.1 | ISJ | Infiltration Stain Joint | 1753 | М |
| 138.1 | MSA | Miscellaneous Survey Abandoned | 1782 | 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-503-077 |



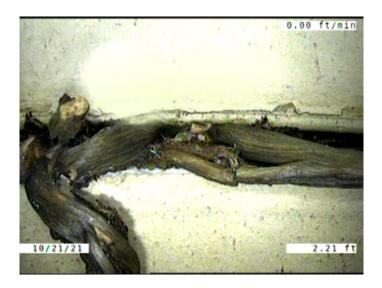
| Code: Description: | MWL Miscellaneous Water Level |
|-----------------------|----------------------------------|
| Distance (ft): | .0 |
| Structural Grade: | 0 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: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



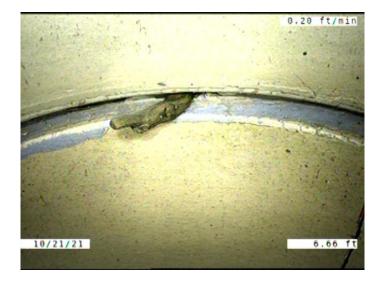
| Code: Description: | B Broken |
|-----------------------|-------------|
| Distance (ft): | .9 |
| Structural Grade: | 4 |
| O&M Grade: | 0 |
| Clock Start/From: | 12 |
| Clock To: | 12 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |
| | |



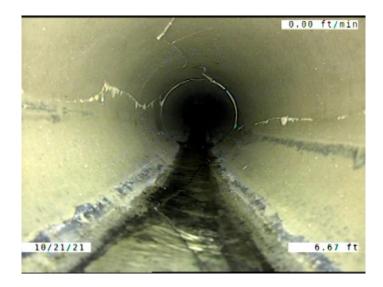
| Code: Description: | ISB Infiltration Stain Barrel |
|-----------------------|----------------------------------|
| Distance (ft): | .9 |
| Structural Grade: | 0 |
| O&M Grade: | 1 |
| Clock Start/From: | 3 |
| Clock To: | 9 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



| RTJ Roots Tap Joint |
|------------------------|
| 2.2 |
| 0 |
| 2 |
| 10 |
| 1 |
| |
| |
| 5.000 |
| |
| YES |
| |
| |



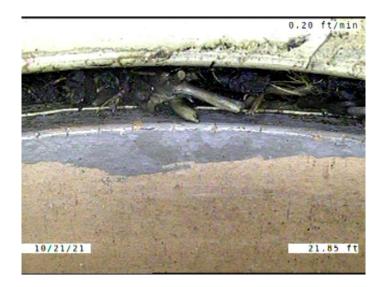
| Code: Description: | RTJ Roots Tap Joint |
|---|------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: | 6.7 0 2 11 |
| 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks: | 5.000 YES |



| Code: Description: | FH4 Fracture Longitudinal Hinge, 4 |
|---|---|
| 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: | 6.7 4 0 12 12 12 SO1 YES |
| | |



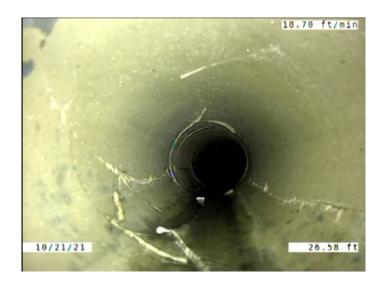
| Code: Description: | ISJ Infiltration Stain Joint |
|-----------------------|---------------------------------|
| Distance (ft): | 16.9 |
| Structural Grade: | 0 |
| O&M Grade: | 1 |
| Clock Start/From: | 2 |
| Clock To: | 5 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



| Code: Description: | RFJ Roots Fine Joint |
|---|----------------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: | 21.8 0 1 10 4 YES |
| Remarks: | |



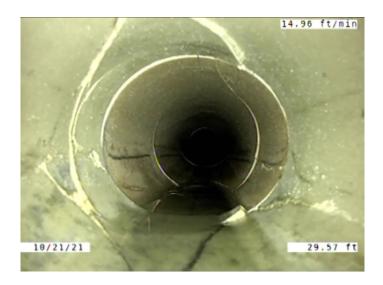
| Code: Description: | DR Deformed Rigid |
|-----------------------|----------------------|
| Distance (ft): | 21.9 |
| Structural Grade: | 5 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 10.000 |
| Continuous Index: | |
| Within 8" of Joint: | NO |
| Remarks: | |



| Code: Description: | B Broken |
|---|--------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: | 26.6 4 0 6 8 |
| Value Percent: Continuous Index: Within 8" of Joint: Remarks: | NO |



| Code: Description: | DR Deformed Rigid |
|-----------------------|----------------------|
| Distance (ft): | 27.5 |
| Structural Grade: | 4 |
| 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: | |

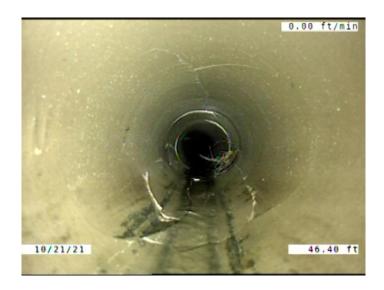


| Code: Description: | B Broken |
|---|----------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: | 29.6 4 0 12 12 |
| Continuous Index: Within 8" of Joint: Remarks: | YES |



| Code: Description: | FH4 Fracture Longitudinal Hinge, 4 |
|-----------------------|---------------------------------------|
| Distance (ft): | 36.7 |
| Structural Grade: | 4 |
| O&M Grade: | 0 |
| Clock Start/From: | 12 |
| Clock To: | 12 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | F01 |
| Within 8" of Joint: | YES |

Remarks:



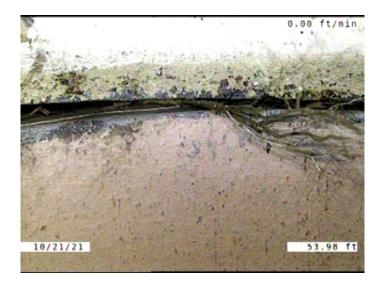
| Code: Description: | B Broken |
|---|----------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: | 46.4 4 0 12 12 |
| Value Percent: Continuous Index: Within 8" of Joint: Remarks: | S02 YES |



| Code: | RMJ |
|---------------------|--------------------|
| Description: | Roots Medium Joint |
| | |
| Distance (ft): | 51.7 |
| Structural Grade: | 0 |
| O&M Grade: | 3 |
| Clock Start/From: | 2 |
| Clock To: | 5 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |
| | |



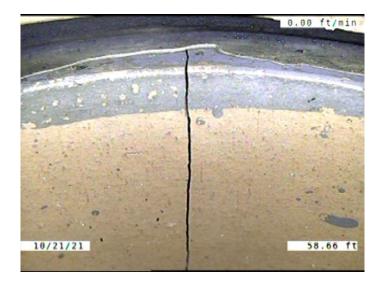
| Code: Description: | TFD Tap Factory Defective |
|--|------------------------------|
| Distance (ft): Structural Grade: | 53.2 0 |
| O&M Grade: Clock Start/From: Clock To: | 3 1 |
| 1st Value: 2nd Value: Value Decemb | 4.000 |
| Value Percent: Continuous Index: Within 8" of Joint: Remarks: | YES Defective |
| | |



| Code: | RFJ |
|---------------------|-------------------------|
| Description: | Roots Fine Joint |
| | |
| Dictores (ft) | 54.0 |
| Distance (ft): | 54.0 |
| Structural Grade: | 0 |
| O&M Grade: | 1 |
| Clock Start/From: | 8 |
| Clock To: | 10 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



| Code: Description: | B Broken |
|-----------------------|-------------|
| Distance (ft): | 54.0 |
| Structural Grade: | 4 |
| O&M Grade: | 0 |
| Clock Start/From: | 12 |
| Clock To: | 12 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | F02 |
| Within 8" of Joint: | YES |
| Remarks: | |



| FS |
|-----------------|
| Fracture Spiral |
| |
| 58.7 |
| - |
| 3 |
| 0 |
| 12 |
| 1 |
| |
| |
| |
| |
| YES |
| |
| |



| Code: Description: | RFJ Roots Fine Joint |
|-----------------------|-------------------------|
| Distance (ft): | 63.7 |
| 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 |
| Remarks: | |



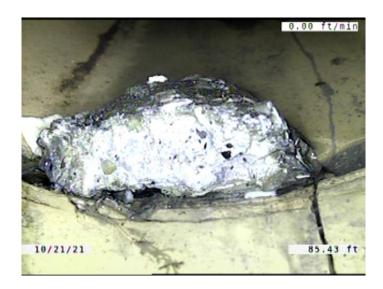
| Code: Description: | RFJ Roots Fine Joint |
|-----------------------|-------------------------|
| Distance (ft): | 78.9 |
| Structural Grade: | 0 |
| O&M Grade: | 1 |
| Clock Start/From: | 10 |
| Clock To: | 2 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



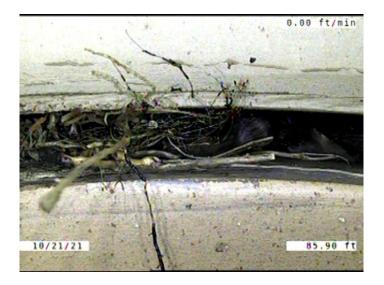
| Code: Description: | TFD Tap Factory Defective |
|--|------------------------------|
| Distance (ft): Structural Grade: O&M Grade: | 80.1 0 3 |
| Clock Start/From: Clock To: | 10 |
| 1st Value: 2nd Value: Value Barconto | 4.000 |
| Value Percent: Continuous Index: Within 8" of Joint: Remarks: | YES Defective |



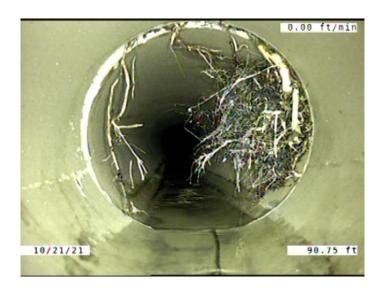
| Code: Description: | FM Fracture Multiple |
|---|--|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: | 81.2 4 0 12 12 503 YES |
| Remarks: | |



| Code: Description: | OBN Obstruction Construction Debris |
|---|--|
| 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: | 85.4 0 2 6 7 5.000 YES |
| | |



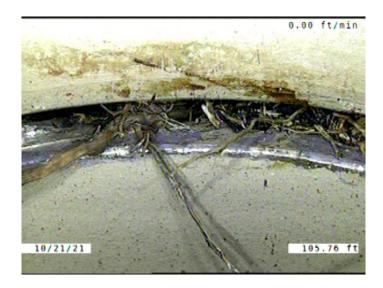
| Code: | RFJ |
|---------------------|-------------------------|
| Description: | Roots Fine Joint |
| | |
| Distance (ft): | 85.9 |
| | 03.9 |
| Structural Grade: | 0 |
| O&M Grade: | 1 |
| Clock Start/From: | 10 |
| Clock To: | 2 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



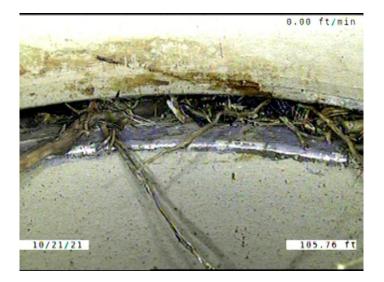
| Code: Description: | RMJ Roots Medium Joint |
|--|-------------------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: | 90.7 0 3 10 4 15.000 |
| Within 8" of Joint: Remarks: | YES |



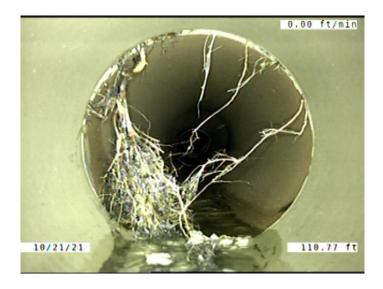
| Code: Description: | FM Fracture Multiple |
|--|----------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: | 92.3 4 0 12 12 |
| Within 8" of Joint: Remarks: | YES |



| Code: Description: | RFJ Roots Fine Joint |
|-----------------------|-------------------------|
| | |
| Distance (ft): | 105.8 |
| Structural Grade: | 0 |
| O&M Grade: | 1 |
| Clock Start/From: | 10 |
| Clock To: | 3 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



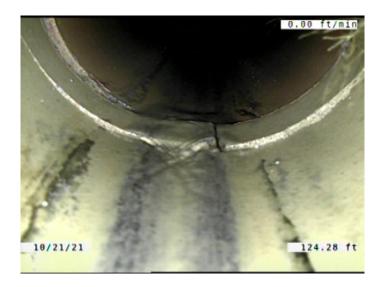
| Code: Description: | ISJ Infiltration Stain Joint |
|-----------------------|---------------------------------|
| Distance (ft): | 105.8 |
| Structural Grade: | 0 |
| O&M Grade: | 1 |
| Clock Start/From: | 8 |
| Clock To: | 1 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



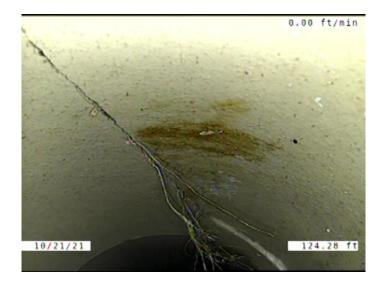
| Code: | RMJ |
|---|--|
| Description: | Roots Medium Joint |
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks: | 110.8 0 3 7 3 10.000 \$04 YES |



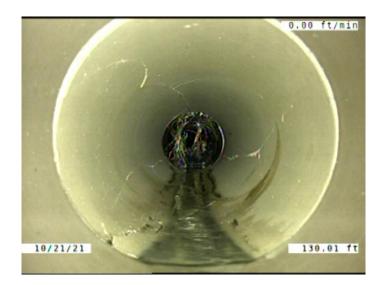
| Code: Description: | OBN Obstruction Construction Debris |
|-----------------------|--|
| Distance (ft): | 124.0 |
| Structural Grade: | 0 |
| O&M Grade: | 3 |
| Clock Start/From: | 5 |
| Clock To: | 7 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 15.000 |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| | |



| Code: Description: | B Broken |
|---|---------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: | 124.3 4 0 2 9 |
| Continuous Index: Within 8" of Joint: Remarks: | YES |



| ISB Infiltration Stain Barrel |
|----------------------------------|
| 124.3 |
| 0 |
| 1 |
| 3 |
| 4 |
| |
| |
| |
| |
| YES |
| |
| |



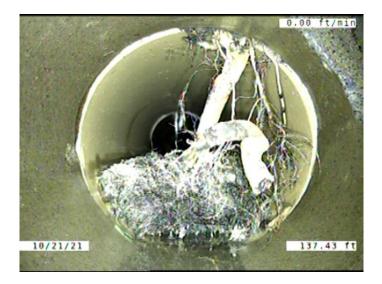
| Code: Description: | B Broken |
|-----------------------|-------------|
| Distance (ft): | 130.0 |
| Structural Grade: | 4 |
| O&M Grade: | 0 |
| Clock Start/From: | 12 |
| Clock To: | 12 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



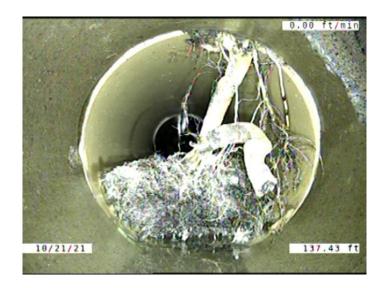
| Code: Description: | ISB Infiltration Stain Barrel |
|-----------------------|----------------------------------|
| Distance (ft): | 131.4 |
| Structural Grade: | 0 |
| O&M Grade: | 1 |
| Clock Start/From: | 3 |
| Clock To: | 5 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | NO |
| Remarks: | |



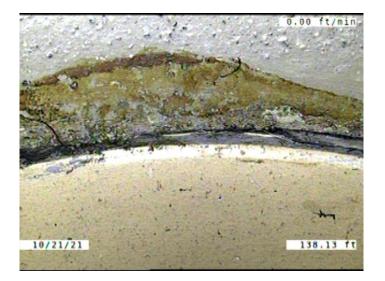
| Code: Description: | TFD Tap Factory Defective |
|--|------------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: | 136.8 0 3 2 |
| 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks: | 4.000 YES Defective |



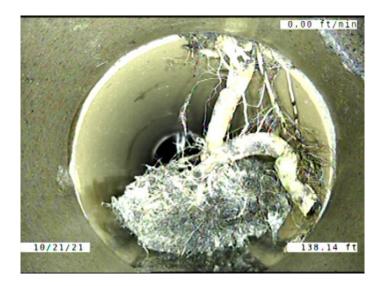
| Code: | RTJ |
|---------------------|------------------------|
| Description: | Roots Tap Joint |
| | |
| | |
| Distance (ft): | 137.4 |
| Structural Grade: | 0 |
| O&M Grade: | 2 |
| Clock Start/From: | 12 |
| Clock To: | 8 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 35.000 |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |
| | |



| | RMJ Roots Medium Joint |
|--|---------------------------|
| Structural Grade:OO&M Grade:3Clock Start/From:7Clock To:31st Value:22nd Value:4Value Percent:1Continuous Index:F | , , |



| Code: Description: | ISJ Infiltration Stain Joint |
|-----------------------|---------------------------------|
| Distance (ft): | 138.1 |
| Structural Grade: | 0 |
| O&M Grade: | 1 |
| Clock Start/From: | 9 |
| Clock To: | 11 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



| Code: Description: | MSA Miscellaneous Survey Abandoned |
|--|---------------------------------------|
| Distance (ft): Structural Grade: | 138.1 |
| O&M Grade: | 0 0 |
| Clock Start/From: Clock To: | |
| 1st Value: 2nd Value: | |
| Value Percent: | |
| Continuous Index: Within 8" of Joint: | NO |
| Remarks: | CAMERA CANT MAKE IT PAST TAP ROOT |