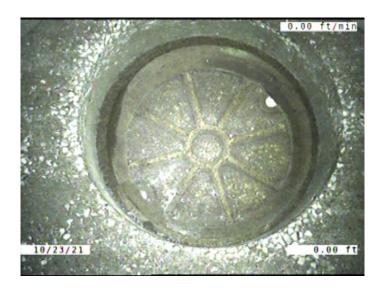
Profile/Photo Observation Report

| | | | | | ROBOTICS |
|-------------------|--------------------|------------------|----------------------|-----------------------------|----------------|
| Date: | 10/23/2021 | Weather: | | Coding: I | PACP 7.0 |
| Pipe Length (ft): | 197.2 | Owner: | City of Hobart | Pre Clean: | Heavy Cleaning |
| P.O.#: | YES502259 | Surveyor: | S. Bucklin | PSR: I | P-404-012-011 |
| Customer: | City of Hobart | Clean Date: | 10/22/2021 | Shape: | C |
| Street: | North Wabash Stre | et | Flow Control: | Not Controlled | |
| City: | Hobart, IN | | Year Renewed: | | |
| Location: | Woods | | Tape/Media #: | | |
| Purpose: | Routine Assessmen | t | Dia/Height: | 8" | |
| Use: | Sanitary Sewage Pi | ре | Material: | VCP | |
| Drain Area: | | | Lining: | None | |
| Category: | NA | | | | |
| Comment: | | | | | |
| Location Details | : | | Direction of Survey: | Upstream | |
| US MH: | M-404-012 | DS MH: M | -404-011 | Total Length Surveyed (ft): | 197.2 |
| D&M Index: | 1.79 | O&M Quick: | 332L | O&M Rating: | 168.00 |
| Structural Index: | 2.00 | Structural Quick | د 2A00 | Structural Rating: | 22.00 |
| Overall Index: | 1.81 | Overall Quick: | 332N | Overall Rating: | 190.00 |

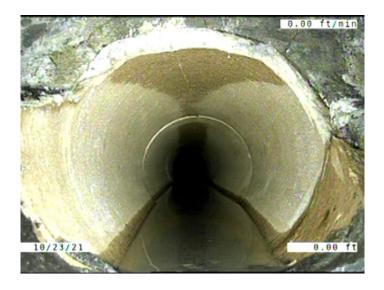
| | | Position | Code | Observation | Video (sec) | Grade |
|------------------|------------|----------|-------------|---------------------------------|-------------|-------|
| м | 404-0 | 11 | | | | |
| | M | .0 | AMH | Manhole | 1 | NA |
| | l I I | .0 | MWL | Miscellaneous Water Level | 68 | NA |
| | | 1.0 | DSF(S01) | Deposits Settled Fine | 83 | M 2 |
| | | 29.0 | TFD | Tap Factory Defective | 194 | M 3 |
| | | 29.8 | DSF(F01) | Deposits Settled Fine | 213 | M 2 |
| | | /42.4 | DAE | Deposits Attached Encrustation | 287 | M 2 |
| | | 46.6 | OBZ(S02) | Obstruction Other | 344 | M 2 |
| | 52.9 | TF | Tap Factory | 389 | NA | |
| | | 63.0 | SSS | Surface Damage Surface Spalling | 442 | S 2 |
| 5 | | 69.8 | MWLS | Miscellaneous Water Level Sag | 482 | S 2 |
| Camera Direction | | 82.6 | RFJ(SO3) | Roots Fine Joint | 557 | M 1 |
| Dir | | 82.6 | DAE | Deposits Attached Encrustation | 571 | M 2 |
| nera | ' | 90.7 | DAE | Deposits Attached Encrustation | 635 | M 2 |
| Can | | 95.0 | ISJ | Infiltration Stain Joint | 672 | M 1 |
| | / | 95.9 | MWLS | Miscellaneous Water Level Sag | 697 | S 2 |
| | | 103.7 | MWLS(S04) | Miscellaneous Water Level Sag | 729 | S 2 |
| 1 | <u> </u> ' | 107.1 | ISJ | Infiltration Stain Joint | 771 | M 1 |
| | | 107.1 | IDJ | Infiltration Dripper Joint | 784 | M 3 |
| | | 107.2 | DSF(S05) | Deposits Settled Fine | 800 | M 2 |

RedZone[®]

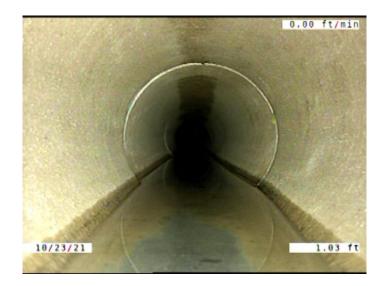
| 112.3 | TF | Tap Factory | 830 | NA |
|-----------|-----------|---------------------------------|------|-----|
| 117.0 | RMJ | Roots Medium Joint | 862 | M |
| 117.1 | ISJ | Infiltration Stain Joint | 892 | M |
| 117.1 | IWJ | Infiltration Weeper Joint | 910 | M |
| 121.9 | MWLS(F04) | Miscellaneous Water Level Sag | 946 | S 2 |
| 125.7 | ISJ(S06) | Infiltration Stain Joint | 998 | M |
| 128.8 | MWLS | Miscellaneous Water Level Sag | 1026 | S 2 |
| /// 132.2 | CL | Crack Longitudinal | 1050 | S 2 |
| ///132.2 | SSS | Surface Damage Surface Spalling | 1089 | S 2 |
| /// 132.2 | RFC | Roots Fine Connection | 1102 | M |
| / 132.7 | TBI | Tap Break-in Intruding | 1117 | M |
| 144.2 | TFC | Tap Factory Capped | 1170 | NA |
| /144.2 | ISJ(F06) | Infiltration Stain Joint | 1183 | M |
| 146.9 | SSS | Surface Damage Surface Spalling | 1229 | S 2 |
| 147.4 | TBI | Tap Break-in Intruding | 1252 | M |
| 151.1 | ISJ | Infiltration Stain Joint | 1308 | M |
| 151.1 | RFJ(F03) | Roots Fine Joint | 1315 | M |
| 155.3 | DAE | Deposits Attached Encrustation | 1350 | M |
| 159.3 | DAE | Deposits Attached Encrustation | 1423 | M |
| 162.3 | DAE | Deposits Attached Encrustation | 1483 | M |
| 166.4 | DAE | Deposits Attached Encrustation | 1548 | M |
| 176.6 | DAE(S07) | Deposits Attached Encrustation | 1621 | M |
| 196.5 | OBZ(F02) | Obstruction Other | 1716 | M |
| 196.5 | DSF(F05) | Deposits Settled Fine | 1723 | M |
| // 196.5 | DAE(F07) | Deposits Attached Encrustation | 1731 | M |
| 197.2 | AMH | Manhole | 1816 | 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-404-011 |



| 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: | |



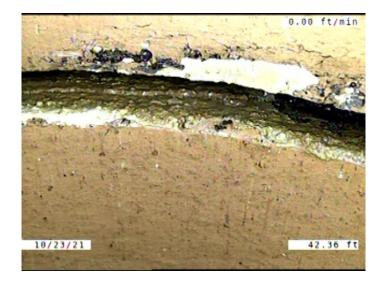
| Code: | DSF |
|---|--|
| Description: | Deposits Settled Fine |
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks: | 1.0 0 2 5 7 5.000 S01 YES |



| Code: | TFD |
|---------------------|------------------------------|
| Description: | Tap Factory Defective |
| | |
| Distance (ft): | 29.0 |
| Structural Grade: | 0 |
| O&M Grade: | 3 |
| Clock Start/From: | 9 |
| Clock To: | |
| 1st Value: | 4.000 |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | ENCRUSTATION AROUND THE CAP. |
| | CONSTANTLY LEAKING WATER |



| Code: | DSF |
|---|---|
| Description: | Deposits Settled Fine |
| 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: | 29.8 0 2 5 7 5.000 F01 YES |



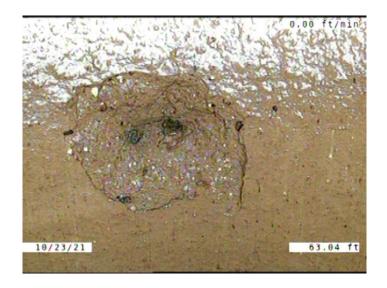
| Code: Description: | DAE Deposits Attached Encrustation |
|-----------------------|---------------------------------------|
| | |
| Distance (ft): | 42.4 |
| Structural Grade: | 0 |
| O&M Grade: | 2 |
| Clock Start/From: | 9 |
| Clock To: | 3 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



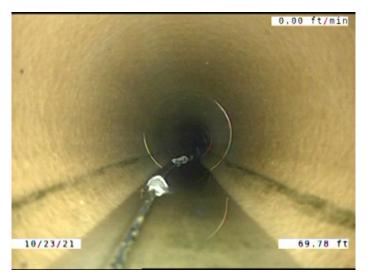
| Code: Description: | OBZ Obstruction Other |
|---|--|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks: | 46.6 0 2 5 9 5.000 502 YES LOOKS LIKE A SEWER RODDER |
| | |



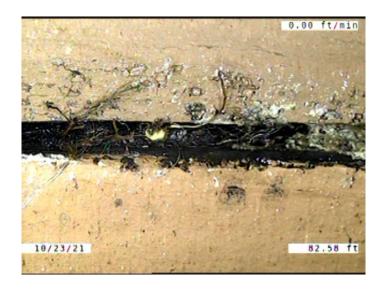
| Code: | TF |
|---------------------|-------------|
| Description: | Tap Factory |
| | |
| Distance (ft): | 52.9 |
| Structural Grade: | 0 |
| O&M Grade: | 0 |
| Clock Start/From: | 2 |
| Clock To: | |
| 1st Value: | 4.000 |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |
| | |



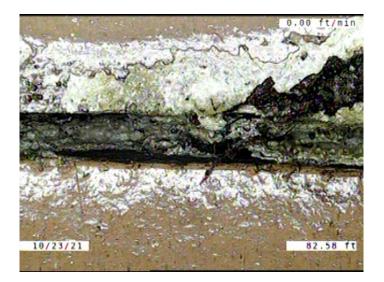
| Code: | SSS |
|---|---------------------------------|
| Description: | Surface Damage Surface Spalling |
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks: | 63.0 2 0 12 YES |



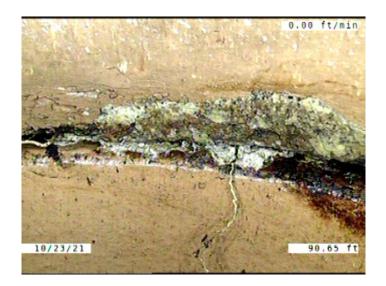
| Code: Description: | MWLS Miscellaneous Water Level Sag |
|-----------------------|---------------------------------------|
| Distance (ft): | 69.8 |
| Structural Grade: | 2 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | |
| Within 8" of Joint: | NO |
| | |



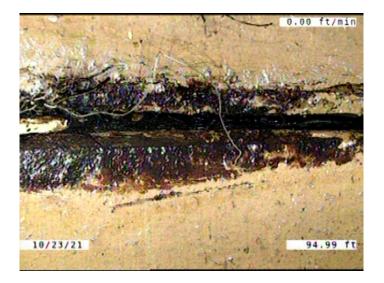
| Code: Description: | RFJ Roots Fine Joint |
|---|--------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: | 82.6 0 1 9 3 |
| Continuous Index: Within 8" of Joint: Remarks: | SO3 YES |



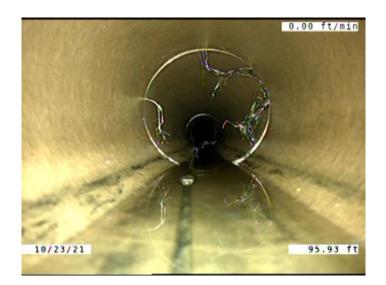
| Code: Description: | DAE Deposits Attached Encrustation |
|-----------------------|---------------------------------------|
| | a a c |
| Distance (ft): | 82.6 |
| Structural Grade: | 0 |
| O&M Grade: | 2 |
| Clock Start/From: | 9 |
| Clock To: | 3 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



| Code: Description: | DAE Deposits Attached Encrustation |
|---|--|
| 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: | 90.7 0 2 9 3 5.000 YES |
| Value Percent: Continuous Index: Within 8" of Joint: | |



| Code: Description: | ISJ Infiltration Stain Joint |
|-----------------------|---------------------------------|
| Distance (ft): | 95.0 |
| 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: | MWLS Miscellaneous Water Level Sag |
|-----------------------|---------------------------------------|
| Distance (ft): | 95.9 |
| Structural Grade: | 2 |
| 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: | |
| | |



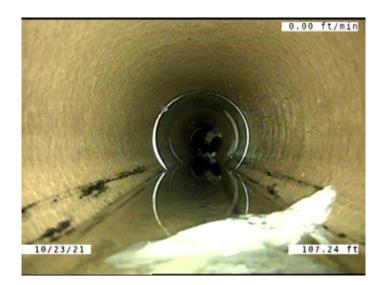
| Code: Description: | MWLS Miscellaneous Water Level Sag |
|-----------------------|---------------------------------------|
| Distance (ft): | 103.7 |
| Structural Grade: | 2 |
| O&M Grade: | 0 |
| Clock Start/From: | |
| Clock To: | |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | S04 |
| Within 8" of Joint: | NO |



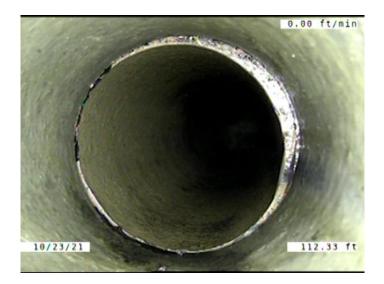
| Code: Description: | ISJ Infiltration Stain Joint |
|---|-----------------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks: | 107.1 0 1 10 3 YES |
| | |



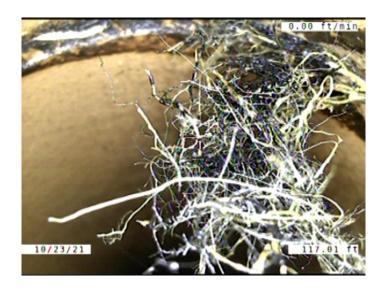
| Code: Description: | IDJ Infiltration Dripper Joint |
|-----------------------|-----------------------------------|
| Distance (ft): | 107.1 |
| Structural Grade: | 0 |
| O&M Grade: | 3 |
| Clock Start/From: | 10 |
| Clock To: | 11 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



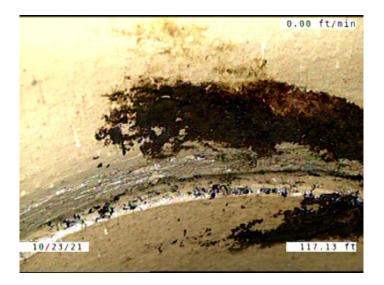
| Code: | DSF |
|---|--|
| Description: | Deposits Settled Fine |
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks: | 107.2 0 2 5 7 5.000 S05 YES |



| Code: Description: | TF Tap Factory |
|-----------------------|-------------------|
| Distance (ft): | 112.3 |
| 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: Description: | RMJ Roots Medium Joint |
|-----------------------|---------------------------|
| Distance (ft): | 117.0 |
| Structural Grade: | 0 |
| O&M Grade: | 3 |
| Clock Start/From: | 10 |
| Clock To: | 3 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



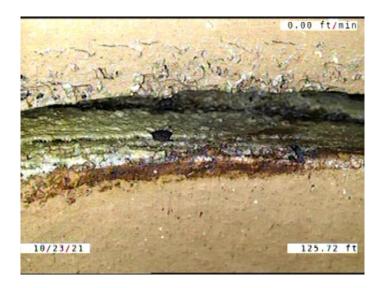
| Code: Description: | ISJ Infiltration Stain Joint |
|-----------------------|---------------------------------|
| Distance (ft): | 117.1 |
| Structural Grade: | 0 |
| O&M Grade: | 1 |
| Clock Start/From: | 9 |
| Clock To: | 3 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



| Code: Description: | IWJ Infiltration Weeper 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: | 117.1 0 2 2 |
| | |



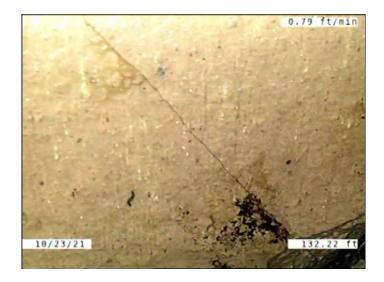
| MWLS Miscellaneous Water Level Sag |
|---------------------------------------|
| 121.9 |
| 2 |
| 0 |
| |
| |
| |
| |
| 5.000 |
| F04 |
| NO |
| |



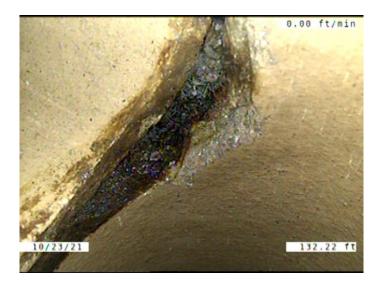
| Code: Description: | ISJ Infiltration Stain Joint |
|---|---|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks: | 125.7 0 1 9 4 S06 YES |
| | |



| Code: Description: | MWLS Miscellaneous Water Level Sag |
|-----------------------|---------------------------------------|
| Distance (ft): | 128.8 |
| Structural Grade: | 2 |
| 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: | CL Crack Longitudinal |
|--|--------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: | 132.2 2 0 8 |
| Within 8" of Joint: Remarks: | NO |



| Code: Description: | SSS Surface Damage Surface Spalling |
|-----------------------|--|
| Distance (ft): | 132.2 |
| Structural Grade: | 2 |
| O&M Grade: | 0 |
| Clock Start/From: | 7 |
| Clock To: | 11 |
| 1st Value: | |

YES

2nd Value: Value Percent: Continuous Index:

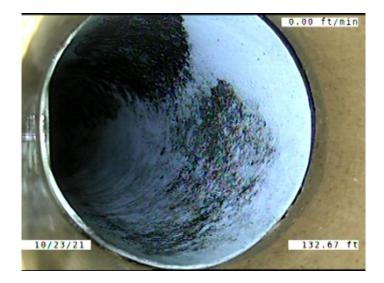
Remarks:

Within 8" of Joint:

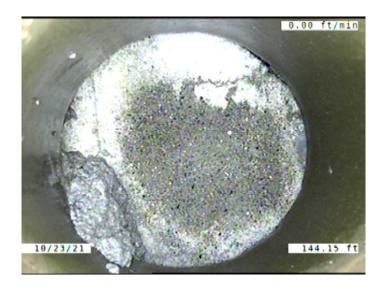


| Code: Description: | RFC Roots Fine Connection |
|---|------------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: | 132.2 0 1 9 11 |
| Remarks: | |

Tuesday, April 25, 2023



| Code: Description: | TBI Tap Break-in Intruding |
|-----------------------|-------------------------------|
| Distance (ft): | 132.7 |
| Structural Grade: | 0 |
| O&M Grade: | 2 |
| Clock Start/From: | 10 |
| Clock To: | |
| 1st Value: | 4.000 |
| 2nd Value: | 1.000 |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |
| | |



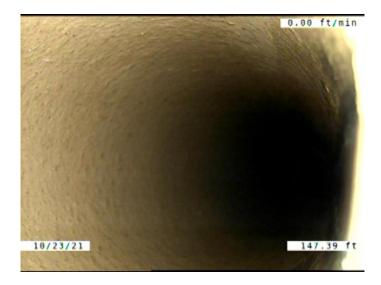
| Code: Description: | TFC Tap Factory Capped |
|---|---------------------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks: | 144.2 0 0 10 4.000 YES |
| | |



| Code: Description: | ISJ Infiltration Stain Joint |
|-----------------------|---------------------------------|
| Distance (ft): | 144.2 |
| Structural Grade: | 0 |
| O&M Grade: | 1 |
| Clock Start/From: | 9 |
| Clock To: | 4 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | F06 |
| Within 8" of Joint: | YES |
| Remarks: | |



| Code: Description: | SSS Surface Damage Surface Spalling |
|---|--|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: | 146.9 2 0 1 4 |
| Remarks: | |



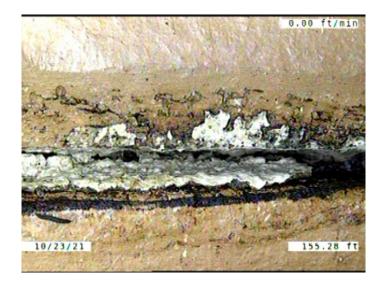
| Code: Description: | TBI Tap Break-in Intruding |
|-----------------------|-------------------------------|
| Distance (ft): | 147.4 |
| Structural Grade: | 0 |
| O&M Grade: | 2 |
| Clock Start/From: | 2 |
| Clock To: | |
| 1st Value: | 6.000 |
| 2nd Value: | 2.000 |
| Value Percent: | |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



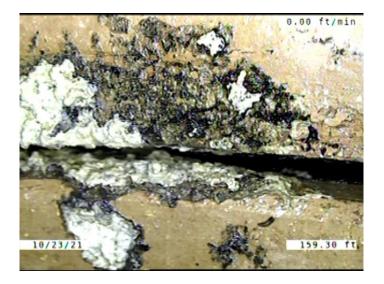
| Code: Description: | ISJ Infiltration Stain Joint |
|--|---------------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: | 151.1 0 1 8 3 |
| Within 8" of Joint: Remarks: | YES |



| Code: | RFJ |
|---------------------|-------------------------|
| Description: | Roots Fine Joint |
| | |
| Distance (ft): | 151 1 |
| Distance (ft): | 151.1 |
| Structural Grade: | 0 |
| O&M Grade: | 1 |
| Clock Start/From: | 9 |
| Clock To: | 3 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | |
| Continuous Index: | F03 |
| Within 8" of Joint: | YES |
| Remarks: | |



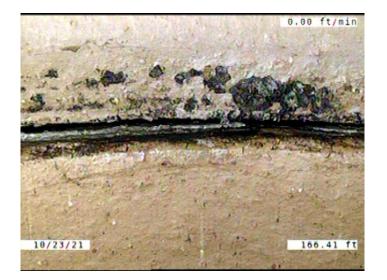
| Code: Description: | DAE Deposits Attached Encrustation |
|---|---------------------------------------|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: | 155.3 0 2 9 11 |
| 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks: | 5.000 YES |



| Code: Description: | DAE Deposits Attached Encrustation |
|-----------------------|---------------------------------------|
| | |
| Distance (ft): | 159.3 |
| Structural Grade: | 0 |
| O&M Grade: | 2 |
| Clock Start/From: | 9 |
| Clock To: | 4 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| Remarks: | |



| Code: Description: | DAE Deposits Attached Encrustation |
|---|---|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: | 162.3 0 2 8 4 5.000 YES |
| Remarks: | |



| Code: Description: | DAE Deposits Attached Encrustation |
|-----------------------|---------------------------------------|
| Distance (ft): | 166.4 |
| Structural Grade: | 0 |
| O&M Grade: | 2 |
| Clock Start/From: | 9 |
| Clock To: | 3 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | |
| Within 8" of Joint: | YES |
| | |



| Code: Description: | DAE Deposits Attached Encrustation |
|---|---|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: | 176.6 0 2 9 3 5.000 \$07 YES |
| Remarks: | |



| Code: | OBZ |
|---------------------|---------------------------|
| Description: | Obstruction Other |
| | |
| | |
| Distance (ft): | 196.5 |
| Structural Grade: | 0 |
| O&M Grade: | 2 |
| Clock Start/From: | 5 |
| Clock To: | 9 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | F02 |
| Within 8" of Joint: | YES |
| Remarks: | LOOKS LIKE A SEWER RODDER |
| | |



| Code: Description: | DSF Deposits Settled Fine |
|---|--|
| Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: | 196.5 0 2 5 7 5.000 F05 YES |
| Remarks: | |



Code:DAEDescription:Deposits Attached Encrustation

| Distance (ft): | 196.5 |
|---------------------|-------|
| Structural Grade: | 0 |
| O&M Grade: | 2 |
| Clock Start/From: | 9 |
| Clock To: | 3 |
| 1st Value: | |
| 2nd Value: | |
| Value Percent: | 5.000 |
| Continuous Index: | F07 |
| Within 8" of Joint: | YES |
| Remarks: | |



| Code: Description: | AMH Manhole |
|-----------------------|----------------|
| Distance (ft): | 197.2 |
| 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-404-012 |