



## Defect Listing

|   |                                 |                             |   |                                       |                              |
|---|---------------------------------|-----------------------------|---|---------------------------------------|------------------------------|
| Pipe Segment Refere...<br><b>D23-1A_D23-1</b> | City<br><b>Oliver Springs</b>   | Street<br><b>S. Duke Dr</b> | Material<br><b>Concrete Pipe (non-...</b> | Location C...<br><b>Light High...</b> | Sewer Use<br><b>Sanitary</b> |
| Upstream MH<br><b>D23-1A</b>                  | Total Length<br><b>225.1</b>    | Year Laid                   | Shape<br><b>Circular</b>                  | Location Details                      |                              |
| DS Manhole<br><b>D23-1</b>                    | Length surveyed<br><b>225.1</b> | Year Renewed                | Height<br><b>6</b>                        | Width<br><b>6</b>                     | Pipe Joint...<br><b>4</b>    |

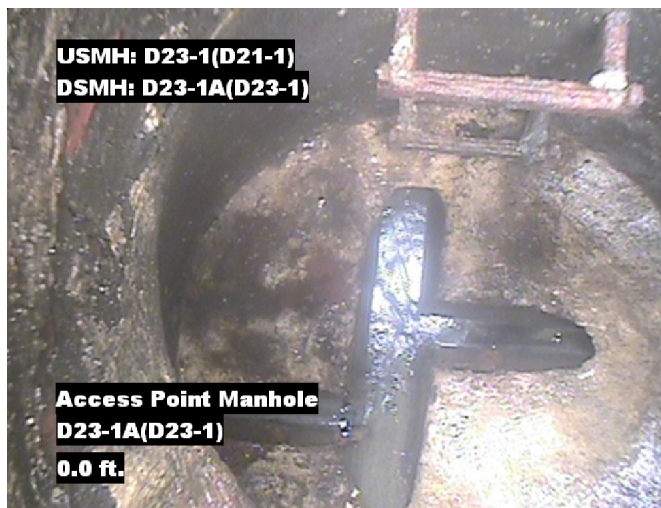
|                    |   |                                |   |
|--------------------|---|--------------------------------|---|
| SPR<br><b>N/A</b>  | MPR<br><b>6</b>                           | PO Number<br><b>4397-03</b>    | Customer<br><b>GRW</b>                      |
| SPRI<br><b>N/A</b> | MPRI<br><b>3</b>                          | Work Order<br><b>4397-02</b>   | Purpose<br><b>Pre-Rehabilitation Survey</b> |
| QSR<br><b>N/A</b>  | QMR<br><b>4121</b>                        |                                |   |
| OPR<br><b>6</b>    | Surveyed By<br><b>Barry Rogers</b>        | Direction<br><b>Upstream</b>   | Date<br><b>20150703</b>                     |
| OPRI<br><b>3</b>   | Certificate Number<br><b>U-1012-16405</b> | Pre-Cleaning<br><b>Jetting</b> | Time<br><b>13:07</b>                        |
|                    | Date Cleaned<br><b>20150703</b>           | End Time<br><b>13:18</b>       | Weather<br><b>Heavy Rain</b>                |
|                    |   |                                | Media label                                 |
|                    |   |                                | Additional Info                             |

| Distance        | Condition            | Cont. Dfct. | Values |     |    | Joint                               | Clock Position |    | Grade |
|-----------------|----------------------|-------------|--------|-----|----|-------------------------------------|----------------|----|-------|
|                 |                      |             | 1st    | 2nd | %  |                                     | At/From        | To |       |
| 0.0 ft.         | Access Point Manhole |             |        |     | 0  | <input type="checkbox"/>            |                |    |       |
| Remarks: D23-1A |                      |             |        |     |    |                                     |                |    |       |
| 0.0 ft.         | Water Level          |             |        |     | 5  | <input type="checkbox"/>            |                |    |       |
| 30.2 ft.        | Water Level Sag      |             |        |     | 15 | <input type="checkbox"/>            |                |    | 2     |
| 46.6 ft.        | Camera Underwater    |             |        |     | 0  | <input type="checkbox"/>            |                |    | 4     |
| 71.5 ft.        | Tap Factory Made     |             | 6      |     | 0  | <input type="checkbox"/>            | 3              |    |       |
| 163.5 ft.       | Tap Factory Made     |             | 6      |     | 0  | <input checked="" type="checkbox"/> | 3              |    |       |
| 184.4 ft.       | Tap Factory Made     |             | 6      |     | 0  | <input type="checkbox"/>            | 9              |    |       |
| 225.0 ft.       | Water Level          |             |        |     | 5  | <input type="checkbox"/>            |                |    |       |
| 225.1 ft.       | Access Point Manhole |             |        |     | 0  | <input type="checkbox"/>            |                |    |       |
| Remarks: D23-1  |                      |             |        |     |    |                                     |                |    |       |

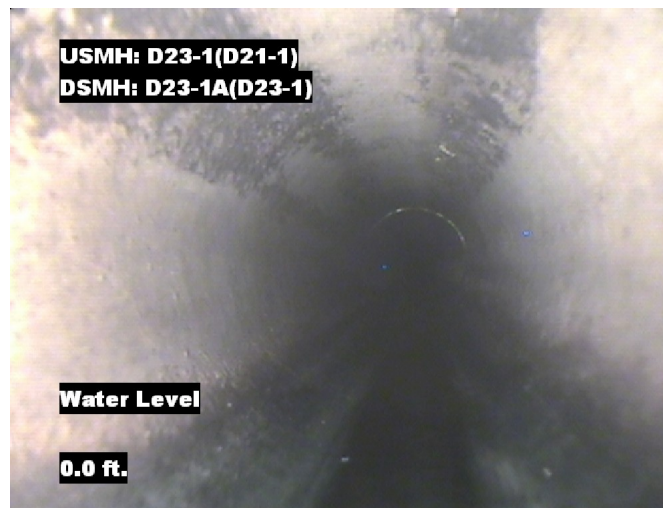


## Image Report 4/Page

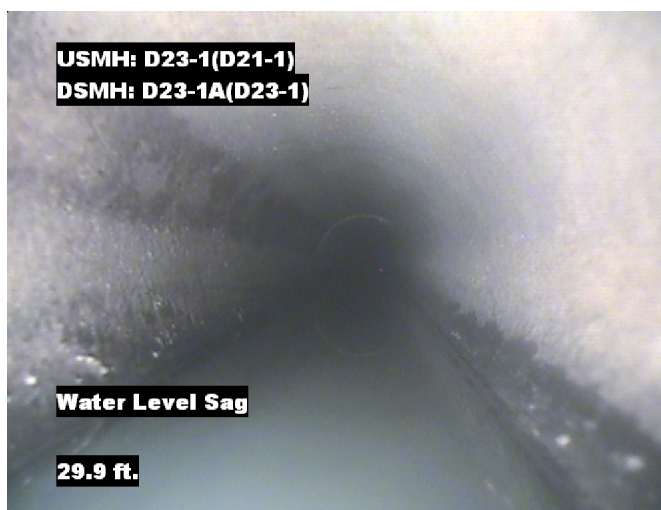
| Pipe Segment Refere... | City                     | Street       | Material               | Location C...    | Sewer Use          |
|------------------------|--------------------------|--------------|------------------------|------------------|--------------------|
| D23-1A_D23-1           | Oliver Springs           | S. Duke Dr   | Concrete Pipe (non-... | Light High...    | Sanitary           |
| Upstream MH<br>D23-1A  | Total Length<br>225.1    | Year Laid    | Shape<br>Circular      | Location Details |                    |
| DS Manhole<br>D23-1    | Length surveyed<br>225.1 | Year Renewed | Height<br>6            | Width<br>6       | Pipe Joint...<br>4 |



Distance: 0.0 ft. Grade: 0  
Condition: Access Point Manhole  
Remarks: D23-1A



Distance: 0.0 ft. Grade: 0  
Condition: Water Level  
Remarks: N/A



Distance: 30.2 ft. Grade: 2  
Condition: Water Level Sag  
Remarks: N/A

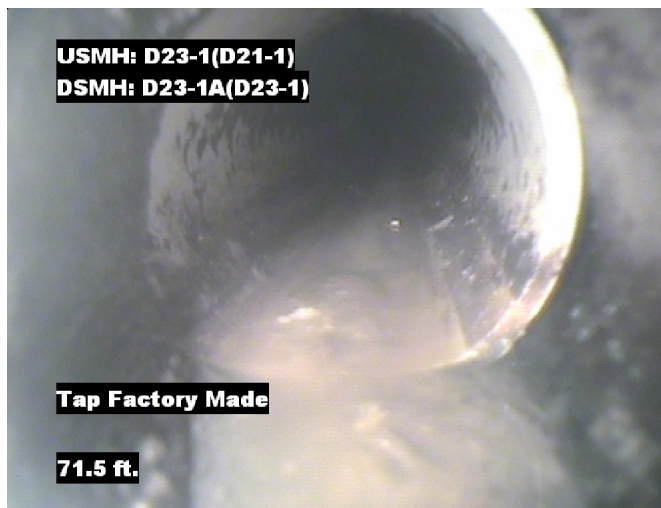


Distance: 46.6 ft. Grade: 4  
Condition: Camera Underwater  
Remarks: N/A

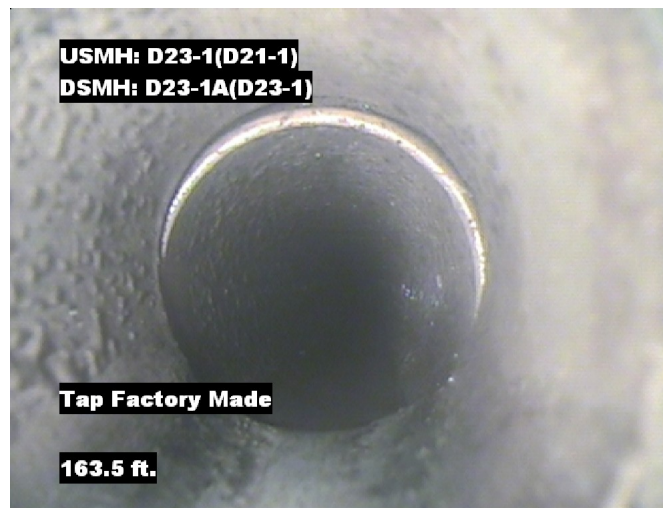


## Image Report 4/Page

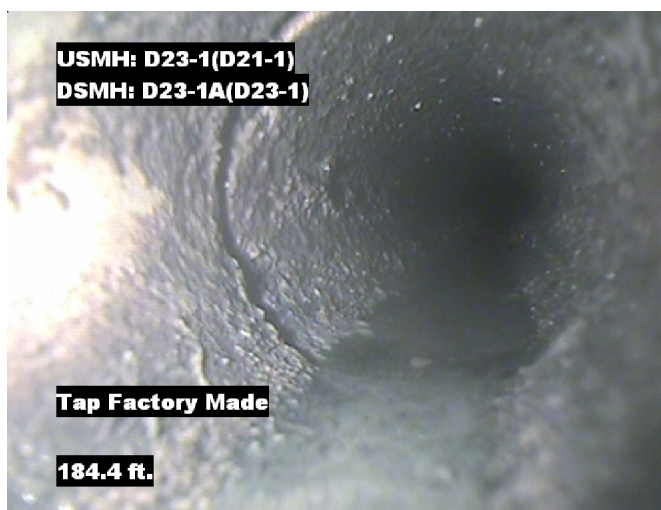
| Pipe Segment Refere... | City                     | Street       | Material               | Location C...    | Sewer Use          |
|------------------------|--------------------------|--------------|------------------------|------------------|--------------------|
| D23-1A_D23-1           | Oliver Springs           | S. Duke Dr   | Concrete Pipe (non-... | Light High...    | Sanitary           |
| Upstream MH<br>D23-1A  | Total Length<br>225.1    | Year Laid    | Shape<br>Circular      | Location Details |                    |
| DS Manhole<br>D23-1    | Length surveyed<br>225.1 | Year Renewed | Height<br>6            | Width<br>6       | Pipe Joint...<br>4 |



Distance: 71.5 ft. Grade: 0  
Condition: Tap Factory Made  
Remarks: N/A



Distance: 163.5 ft. Grade: 0  
Condition: Tap Factory Made  
Remarks: N/A



Distance: 184.4 ft. Grade: 0  
Condition: Tap Factory Made  
Remarks: N/A



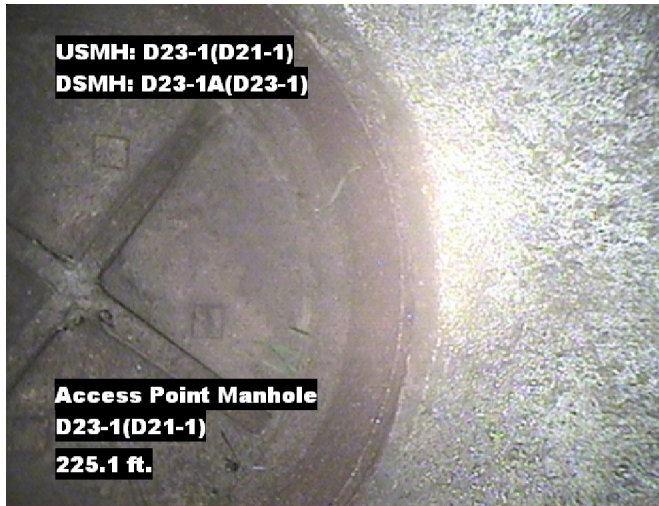
Distance: 225.0 ft. Grade: 0  
Condition: Water Level  
Remarks: N/A





## Image Report 4/Page

| Pipe Segment Refere... | City                   | Street            | Material                      | Location C...        | Sewer Use       |
|------------------------|------------------------|-------------------|-------------------------------|----------------------|-----------------|
| <b>D23-1A_D23-1</b>    | <b>Oliver Springs</b>  | <b>S. Duke Dr</b> | <b>Concrete Pipe (non-...</b> | <b>Light High...</b> | <b>Sanitary</b> |
| <b>Upstream MH</b>     | Total Length           | Year Laid         | <b>Shape</b>                  | Location Details     |                 |
| <b>D23-1A</b>          | <b>225.1</b>           |                   | <b>Circular</b>               |                      |                 |
| <b>DS Manhole</b>      | <b>Length surveyed</b> | Year Renewed      | <b>Height</b>                 | Width                | Pipe Joint...   |
| <b>D23-1</b>           | <b>225.1</b>           |                   | <b>6</b>                      | <b>6</b>             | <b>4</b>        |



Distance: 225.1 ft. Grade: 0  
Condition: Access Point Manhole  
Remarks: D23-1



|                        |                    |              |                        |                           |               |
|------------------------|--------------------|--------------|------------------------|---------------------------|---------------|
| Pipe Segment Refere... | City               | Street       | Material               | Location C...             | Sewer Use     |
| D23-1A_D23-1           | Oliver Springs     | S. Duke Dr   | Concrete Pipe (non-... | Light High...             | Sanitary      |
| Upstream MH            | Total Length       | Year Laid    | Shape                  | Location Details          |               |
| D23-1A                 | 225.1              |              | Circular               |                           |               |
| DS Manhole             | Length surveyed    | Year Renewed | Height                 | Width                     | Pipe Joint... |
| D23-1                  | 225.1              |              | 6                      | 6                         | 4             |
| SPR                    | N/A                | MPR          | 6                      | Customer                  |               |
| SPRI                   | N/A                | MPRI         | 3                      | GRW                       |               |
| QSR                    | N/A                | QMR          | 4121                   | Purpose                   |               |
|                        |                    |              | 4397-02                | Pre-Rehabilitation Survey |               |
| OPR                    | Surveyed By        | Direction    | Date                   | Media label               |               |
| 6                      | Barry_Rogers       | Upstream     | 20150703               |                           |               |
| OPRI                   | Certificate Number | Pre-Cleaning | Time                   | Weather                   |               |
| 3                      | U-1012-16405       | Jetting      | 13:07                  | Heavy Rain                |               |
| Date Cleaned           |                    |              | End Time               | Additional Info           |               |
| 20150703               |                    |              | 13:18                  |                           |               |

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