

Appendix A:

Televising Reports



National Power Rodding

2500 W. Arthington, Chicago, IL 60612
 Tel.: (312) 666-7700 - Fax: (312) 666-5810

RJN

Mason PR

Upstream
18663

Downstream
18546

Surveyors name MCCARTHY	Certificate Number 0000001	System Owner	Survey Customer RJN	Drainage Area St. Mary's	Engineer
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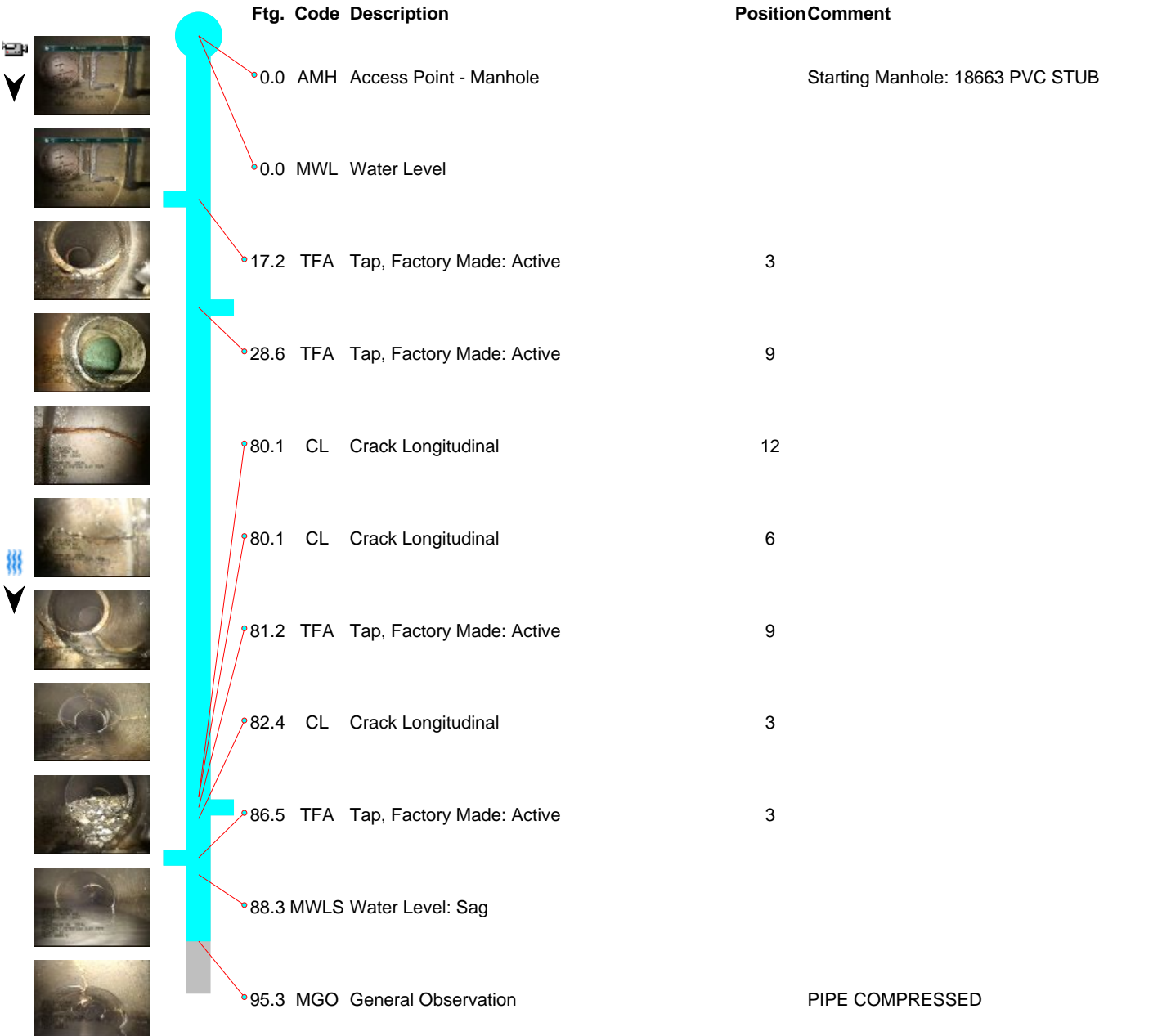
Project CITY OF JOLIET	P/O No.	Date 20160524	Time 09:14	Location (Street Name and number) MASON AVE	Locality JOLIET
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Work Order Job # JOL010-19	Pipeline Segment Reference 18200	Upstream Manhole Number 18663	Rim to Invert 6.6	Grade to Invert	Rim to Grade
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Downstream Manhole Number 18546	Rim to Invert 6.9	Grade to Invert	Rim to Grade	Use of Sewer Sanitary	Direction Downstream	Flow Control	Height 12
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Width	Shape Circular	Material Vitrified Clay Pipe	Ln. Method	Pipe Joint Length	Total Length 280.5	Length Surveyed 100.8	Counter Start DVD	Counter End	Tape / Media Number SM-3
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Purpose Maintenance Related	Sewer Category	Pre-Cleaning Jetting	Cleaned	Weather Dry	Additional Information	TV Truck ID T.V. 194
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National Power Rodding

2500 W. Arthington, Chicago, IL 60612
Tel.: (312) 666-7700 - Fax: (312) 666-5810

RJN

Upstream
18663

Downstream
18546

Surveyors name MCCARTHY	Certificate Number 0000001	System Owner	Survey Customer RJN	Drainage Area St. Mary's	Engineer
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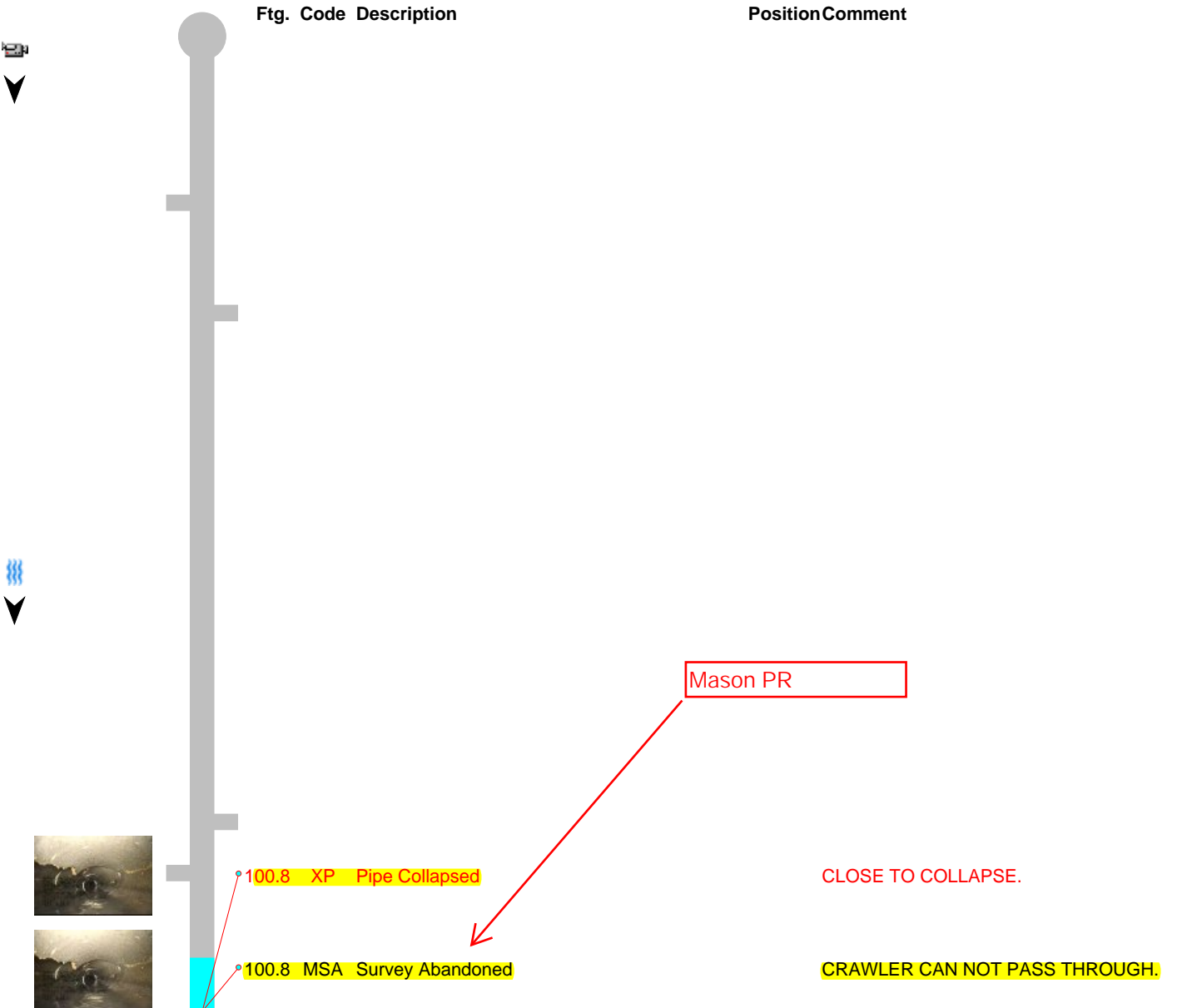
Project CITY OF JOLIET	P/O No.	Date 20160524	Time 09:14	Location (Street Name and number) MASON AVE	Locality JOLIET
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Work Order Job # JOL010-19	Pipeline Segment Reference 18200	Upstream Manhole Number 18663	Rim to Invert 6.6	Grade to Invert	Rim to Grade
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Downstream Manhole Number 18546	Rim to Invert 6.9	Grade to Invert	Rim to Grade	Use of Sewer Sanitary	Direction Downstream	Flow Control	Height 12
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Width	Shape Circular	Material Vitrified Clay Pipe	Ln. Method	Pipe Joint Length	Total Length 280.5	Length Surveyed 100.8	Counter Start DVD	Counter End	Tape / Media Number SM-3
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Purpose Maintenance Related	Sewer Category	Pre-Cleaning Jetting	Cleaned	Weather Dry	Additional Information	TV Truck ID T.V. 194
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National Power Rodding

2500 W. Arthington, Chicago, IL 60612
Tel.: (312) 666-7700 - Fax: (312) 666-5810

RJN

Mason PR

Upstream
18663

Downstream
18546

Surveyors name MCCARTHY	Certificate Number 0000001	System Owner	Survey Customer RJN	Drainage Area St. Mary's	Engineer
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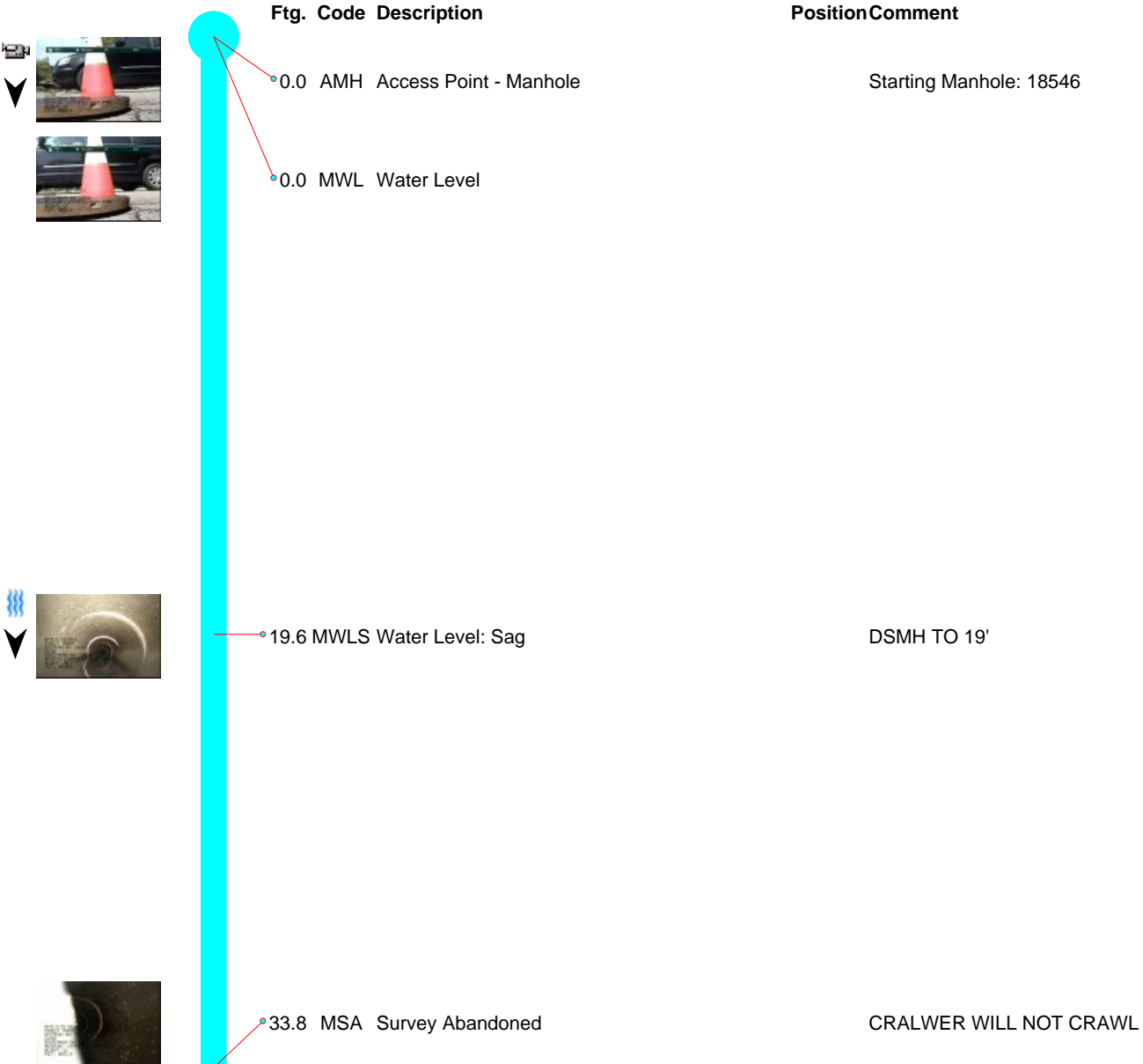
Project CITY OF JOLIET	P/O No.	Date 20160525	Time 10:07	Location (Street Name and number) MASON	Locality JOLIET
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Work Order Job # JOL010-19	Pipeline Segment Reference 18200	Upstream Manhole Number 18663	Rim to Invert 6	Grade to Invert	Rim to Grade
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Downstream Manhole Number 18546	Rim to Invert 7.5	Grade to Invert	Rim to Grade	Use of Sewer Sanitary	Direction Upstream	Flow Control	Height 12
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Width	Shape Circular	Material Vitrified Clay Pipe	Ln. Method	Pipe Joint Length	Total Length 280.5	Length Surveyed 33.8	Counter Start DVD	Counter End	Tape / Media Number SM-3
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Purpose Maintenance Related	Sewer Category	Pre-Cleaning Jetting	Cleaned	Weather Dry	Additional Information	TV Truck ID T.V. 194
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Defect Listing

May PR

Pipe Segment Reference 121805 shot 136 seg 209 post	City joliet il	Street s may st	Material Vitrified Clay Pipe	Location Code	Pipe Use Sanitary Sewage Pipe
Upstream MH 15554	Total Length	Year Constructed 2021	Shape Circular	Location Details	
Downstream MH 15553	Length surveyed 210.7	Year Renewed 2021	Height 12	Width	Pipe Joint Length

SPR 0	MPR 0	PO Number		Customer	
SPRI 0	MPRI 0	Work Order Number		Purpose	
QSR 0000	QMR 0000			Post Rehabilitation Survey	
OPR 0	Surveyed By BRANDON DOBE	Direction Downstream	Date 04/27/2021	Media label	
OPRI 0	Certificate Number U-1113-17837	Pre-Cleaning Light Cleaning	Time 15:03	Weather	
Date Cleaned			End Time 15:11	Additional Info	

Distance	Condition	Cont. Dfct.	Values			Joint	Clock Position		Grade
			1st	2nd	%		At/From	To	
0	Access Point Manhole					<input type="checkbox"/>			
Remarks: 15554									
0	Miscellaneous Water Level				0	<input type="checkbox"/>			
48.3	Tap Factory Activity		6			<input type="checkbox"/>	10		
54.3	Tap Factory Activity		6			<input type="checkbox"/>	2		
73.8	Tap Factory Activity		6			<input type="checkbox"/>	10		
97	Tap Factory Activity		6			<input type="checkbox"/>	2		
121.4	Tap Factory Activity		6			<input type="checkbox"/>	2		
166.8	Tap Factory Activity		6			<input type="checkbox"/>	10		
172.3	Tap Factory Activity		6			<input type="checkbox"/>	2		
210.7	Access Point Manhole					<input type="checkbox"/>			
Remarks: 15553									



National Power Rodding

2500 W. Arthington, Chicago, IL 60612
 Tel.: (312) 666-7700 - Fax: (312) 666-5810

Hacker PR

Upstream
18045

Downstream
18030

Surveyors name: A.MENDEZ Certificate Number: U-609-8999 System Owner: Survey Customer: Drainage Area: Engineer:

Project: P/O No.: Date: 20150309 Time: 12:04 Location (Street Name and number): HACKER Locality: JOLIET

Work Order Job #: JOL010-15 Pipeline Segment Reference: 16677 Upstream Manhole Number: 18045 Rim to Invert: Grade to Invert: Rim to Grade:

Downstream Manhole Number: 18030 Rim to Invert: Grade to Invert: Rim to Grade: Use of Sewer: Sanitary Direction: Downstream Flow Control: Height: 18

Width: Shape: Circular Material: Vitrified Clay Pipe Ln. Method: Pipe Joint Length: Total Length: Length Surveyed: 100 Counter Start: 12755 Counter End: Tape / Media Number: AM-2

Purpose: Maintenance Related Sewer Category: Pre-Cleaning: Not Known Cleaned: Weather: Dry Additional Information: TV Truck ID: TV-214

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: 18045
0.0	MWL	Water Level		
2.5	CM	Crack Multiple	12 to 12	
17.4	TBA	Tap, Break-in / Hammer: Active	2	
51.0	TBA	Tap, Break-in / Hammer: Active	11	
53.0	TBC	Tap, Break-in / Hammer: Capped	1	
66.3	TBA	Tap, Break-in / Hammer: Active	2	
78.7	MMC	Material Change		TO CONCRETE
80.7	TBA	Tap, Break-in / Hammer: Active	9	
81.0	CM	Crack Multiple	12 to 12	
81.0	MSA	Survey Abandoned		out of time



National Power Rodding

2500 W. Arthington, Chicago, IL 60612
 Tel.: (312) 666-7700 - Fax: (312) 666-5810

Hacker PR

Upstream
18045

Downstream
18030

Surveyors name M.KOKIC	Certificate Number U-609-8999	System Owner	Survey Customer	Drainage Area	Engineer				
Project	P/O No.	Date 20150311	Time 08:46	Location (Street Name and number) HACKER	Locality JOLIET				
Work Order Job # JOL010-15	Pipeline Segment Reference 16677	Upstream Manhole Number 18045	Rim to Invert	Grade to Invert	Rim to Grade				
Downstream Manhole Number 18030	Rim to Invert	Grade to Invert	Rim to Grade	Use of Sewer Sanitary	Direction Upstream	Flow Control	Height 18		
Width	Shape Circular	Material Vitrified Clay Pipe	Ln. Method	Pipe Joint Length	Total Length	Length Surveyed 163	Counter Start 12755	Counter End	Tape / Media Number AM-2
Purpose Maintenance Related	Sewer Category	Pre-Cleaning Not Known	Cleaned	Weather Dry	Additional Information	TV Truck ID TV-214			

Ftg.	Code	Description	Position	Comment
163.0	MSA	Survey Abandoned		
162.1	TBI	Tap, Break-in / Hammer: Intruding	3	
160.9	MSC	Dimension/Shape Change		
145.8	D	Pipe Deformed		
140.7	TBI	Tap, Break-in / Hammer: Intruding	2	
129.7	MWL	Water Level		
118.6	RPZ	Point Repair - Other		LOOKS LIKE HOLE WAS COVERED WITH VCP FROM OUTSIDE
93.0	TB	Tap, Break-in / Hammer	12	
93.0	TBI	Tap, Break-in / Hammer: Intruding	3	
73.0	HSV	Hole in Pipe: Soil Visible	11 to 1	
69.2	H	Hole in Pipe	11 to 2	
57.1	TBA	Tap, Break-in / Hammer: Active	10	
53.1	RPZ	Point Repair - Other		LOOKS LIKE HOLE WAS COVERED WITH VCP FROM OUTSIDE
40.3	FM	Fracture Multiple	11 to 1	
40.3	D	Pipe Deformed		
27.5	DAE	Deposits Attached: Encrustation	8	
5.8	FM	Fracture Multiple	11 to 1	
0.0	MWL	Water Level		
0.0	AMH	Access Point - Manhole		

Hacker PR

Starting Manhole: 18030



National Power Rodding

2500 W. Arthington, Chicago, IL 60612
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Bruce PR

Upstream
18041

Downstream
18044

Surveyors name A. LOZADA	Certificate Number U-410-10530	System Owner	Survey Customer	Drainage Area	Engineer
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Project	P/O No.	Date 20150303	Time 11:56	Location (Street Name and number) BRUCE	Locality JOLIET IL.
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Work Order Job # JOL010-15	Pipeline Segment Reference 16678	Upstream Manhole Number 18041	Rim to Invert 5	Grade to Invert	Rim to Grade
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Downstream Manhole Number 18044	Rim to Invert 5	Grade to Invert	Rim to Grade	Use of Sewer Sanitary	Direction Downstream	Flow Control	Height 8
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Width	Shape Circular	Material Vitrified Clay Pipe	Ln. Method Other	Pipe Joint Length	Total Length	Length Surveyed 101	Counter Start 0	Counter End	Tape / Media Number AL- 1
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Purpose Post Rehabilitation Survey	Sewer Category	Pre-Cleaning Heavy Cleaning	Cleaned	Weather Dry	Additional Information	TV Truck ID VV-55
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	Ftg.	Code	Description	Position	Comment
	0.0	AMH	Access Point - Manhole		Starting Manhole: 18041
	0.0	MWL	Water Level		
	5.0	FM	Fracture Multiple	12 to 12	
	6.8	D	Pipe Deformed		
	12.6	D	Pipe Deformed		
	23.7	FM	Fracture Multiple	12 to 12	
	47.3	FL	Fracture Longitudinal	12	
	61.4	FL	Fracture Longitudinal	12	
	66.4	FL	Fracture Longitudinal	12	
	81.4	FM	Fracture Multiple	12 to 12	
	81.4	D	Pipe Deformed		
	88.1	FM	Fracture Multiple	12 to 12	
	93.6	FM	Fracture Multiple	12 to 12	
	97.6	FL	Fracture Longitudinal	12	
	102.0	MSA	Survey Abandoned		

Bruce PR

COLLAPSE

Upstream MH 16648	Downstream MH 16457	Size 8	Material Clay Tile	Total Length 269	City JOLIET
Surveyor's Name P.DIAZ		Certificate Number U-216-07003172	Street Address DORIS AVE	Location Details	
Direction Downstream	Purpose Maintenance Related	Weather	Date 20181009	Time 07:46	Length Surveyed 116.6

Additional Information

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: US MH 16648 8 INCH PIPE
0.0	MWL	Water Level		
5.7	DAZ	Deposits Attached: Other	7 to 5	STAINS
13.2	DAZ	Deposits Attached: Other	7 to 5	STAINS
18.3	DAE	Deposits Attached: Encrustation	7 to 5	
24.6	DAE	Deposits Attached: Encrustation	7 to 5	STAINS
30.3	DAE	Deposits Attached: Encrustation	7 to 5	
30.3	OBZ	Obstacle - Other Objects	12 to 1	PLASTIC
36.7	DAE	Deposits Attached: Encrustation	7 to 5	
42.1	DAE	Deposits Attached: Encrustation	7 to 1	
110.7	MSA	Survey Abandoned		
116.6	BSV	Pipe Broken: Soil Visible	6 to 9	

Doris PR

BROKEN PIPE

Upstream MH 16648	Downstream MH 16457	Size 8	Material Clay Tile	Total Length 269	City JOLIET
Surveyor's Name P.DIAZ	Certificate Number U-216-07003172	Street Address DORIS AVE		Location Details	
Direction Upstream	Purpose Maintenance Related	Weather	Date 20181010	Time 09:15	Length Surveyed 150

Additional Information

Ftg.	Code	Description	Position	Comment
	14.7	TF Tap, Factory Made	3	
	26.3	DAZ Deposits Attached: Other	9 to 3	
	63.6	DAE Deposits Attached: Encrustation	12 to 12	
	68.5	DAE Deposits Attached: Encrustation	9 to 1	
	81.0	TBA Tap, Break-in / Hammer: Active	3	
	89.4	TFA Tap, Factory Made: Active	3	
	96.0	DAE Deposits Attached: Encrustation	9 to 12	
	116.1	DAE Deposits Attached: Encrustation	9 to 3	
	126.6	DAE Deposits Attached: Encrustation	9 to 3	
	130.9	TBA Tap, Break-in / Hammer: Active	3	
	145.9	TFA Tap, Factory Made: Active	3	
	149.6	BSV Pipe Broken: Soil Visible	3	
	149.6	DAE Deposits Attached: Encrustation	9 to 3	
	149.6	DAE Deposits Attached: Encrustation	9 to 3	
	149.6	DAE Deposits Attached: Encrustation	9 to 1	
	150.0	MSA Survey Abandoned		MSA LINE HERE BROKEN PIPE BOXED IN LINE COMPLETE
	0.0	MWL Water Level		
	0.0	AMH Access Point - Manhole		Starting Manhole: DS MH 16457 REVERSE SET UP BOX IT IN 8 INCH PIPE

Doris PR

SOIL, SAND BROKEN PIPE

MSA LINE HERE BROKEN PIPE BOXED IN LINE COMPLETE

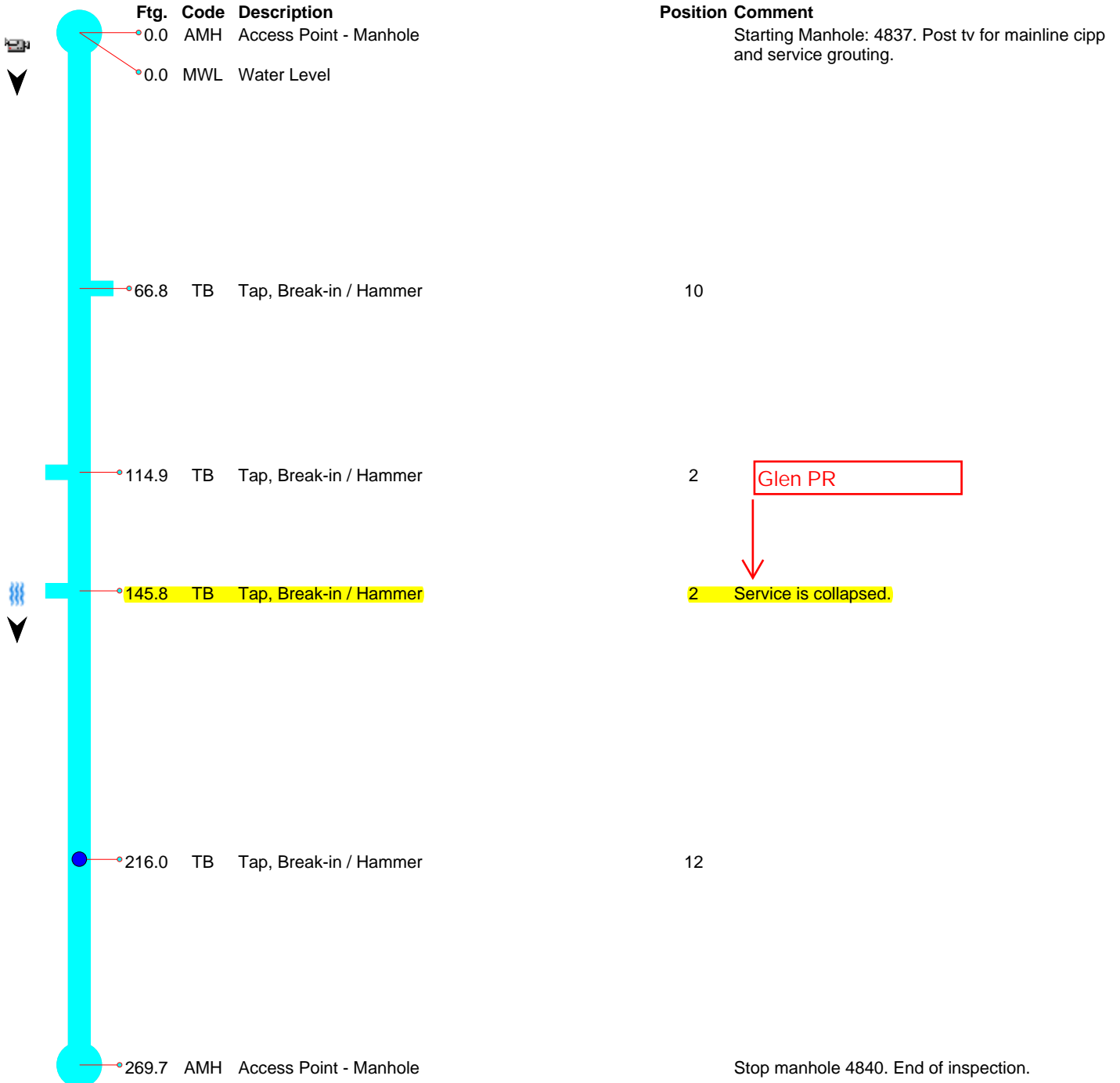
Starting Manhole: DS MH 16457 REVERSE SET UP BOX IT IN 8 INCH PIPE



Top View

Aries Industries
 550 Elizabeth St
 Waukesha, WI 53186
 www.ariesindustries.com

Upstream MH 4837	Downstream MH 4840	Size 8	Material Vitrified Clay Pipe	Total Length 273	City JOLIET
Surveyor's Name M. Sedlacek	Certificate Number U-116-07002807	Street Address Glenn st		Location Details	
Direction Downstream	Purpose Post Rehabilitation Survey	Weather Dry	Date 20190926	Time 10:08	Length Surveyed 269.7
Additional Information					





Upstream MH: 15824
Surveyor's Name: G.DELTORO
System Owner: Performance Pipeline

Downstream MH: 614
Certificate Number: U-1113-17839
Survey Customer: Performance Pipeline, Joliet

Drainage Area:
City: Joliet, IL
Pipe Segment Ref.: Shot 50 Seg 81 POST
Sewer Use: SS
Flow Control:
Material: VCP
Media Number: Shot 50 Seg 81 POST
Pre-Cleaning: J

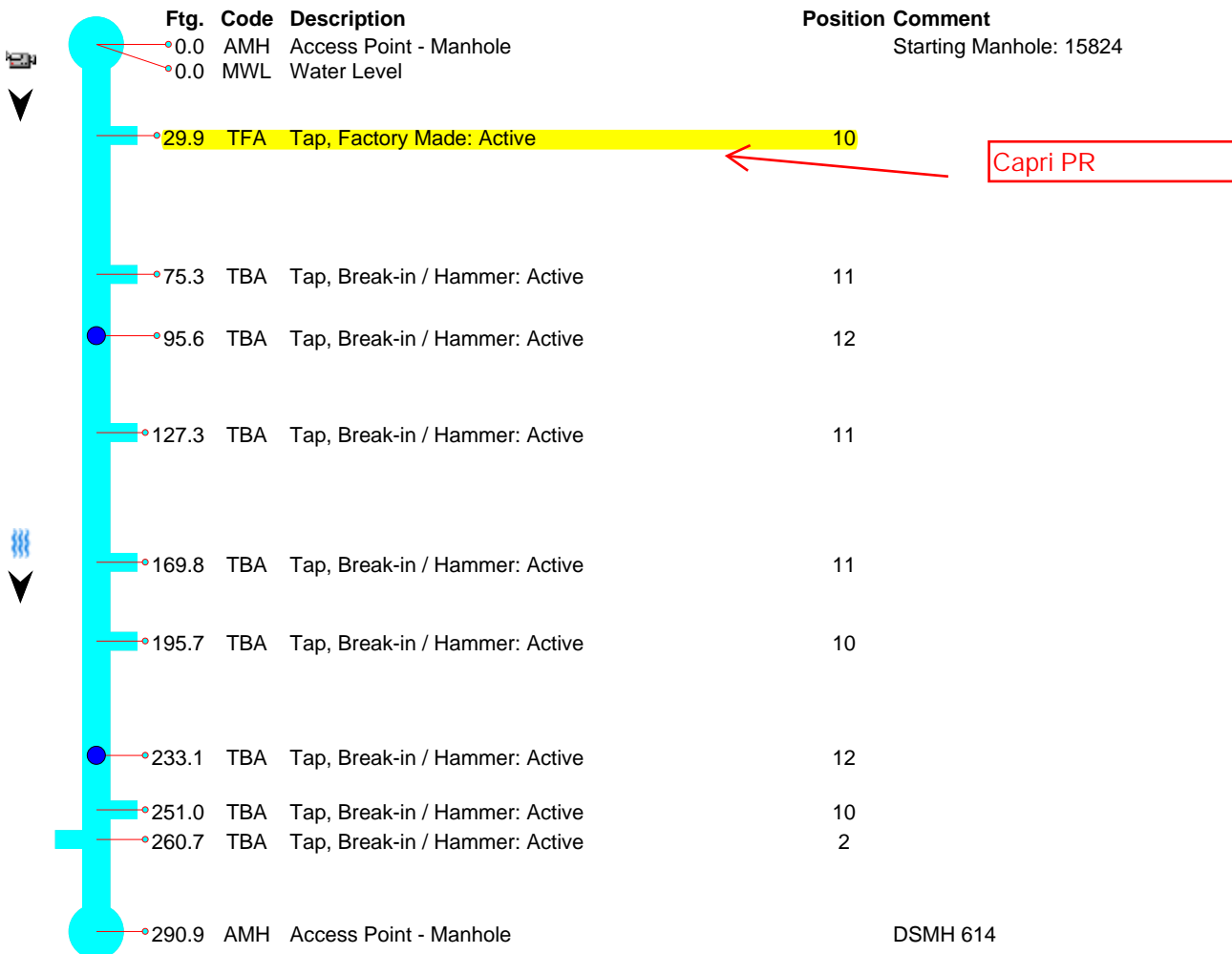
Purchase Order #: 121805
Street Address: Mcdonough Easement
Location Details:

Direction: D
Shape: C
Ln. Method: CP
Purpose: C
Weather: 1

Date: 20200718
Time: 06:01
Cleaned:
Year Laid:
Year Rehab.:

Height: 10
Width:
Joint Length:
Total Length:
Len. Surveyed:
Measurements: U/D
Rim to Invert: /
Grade to Invert: /
Rim to Grade: /
Sewer Category:

Additional Information:





National Power Rodding

2500 W. Arthington, Chicago, IL 60612
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CITY OF JOLIET

Water PR

Upstream
269

Downstream
15284

Surveyors name MCCARTHY	Certificate Number 0000001	System Owner	Survey Customer CITY OF JOLIET	Drainage Area Southside Area	Engineer
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Project	P/O No.	Date 20160722	Time 13:01	Location (Street Name and number) WATER	Locality JOLIET
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Work Order Job # JOL010-19	Pipeline Segment Reference 13264	Upstream Manhole Number 269	Rim to Invert 7	Grade to Invert	Rim to Grade
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Downstream Manhole Number 15284	Rim to Invert 12.9	Grade to Invert	Rim to Grade	Use of Sewer Sanitary	Direction Downstream	Flow Control	Height 10
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Width	Shape Circular	Material Vitrified Clay Pipe	Ln. Method	Pipe Joint Length	Total Length 170.5	Length Surveyed 165.8	Counter Start DVD	Counter End	Tape / Media Number SM-14
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Purpose Maintenance Related	Sewer Category	Pre-Cleaning Jetting	Cleaned	Weather Dry	Additional Information	TV Truck ID T.V. 194
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National Power Rodding

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CITY OF JOLIET

Water PR

Upstream
269

Downstream
15284

Surveyors name MCCARTHY	Certificate Number 0000001	System Owner	Survey Customer CITY OF JOLIET	Drainage Area Southside Area	Engineer
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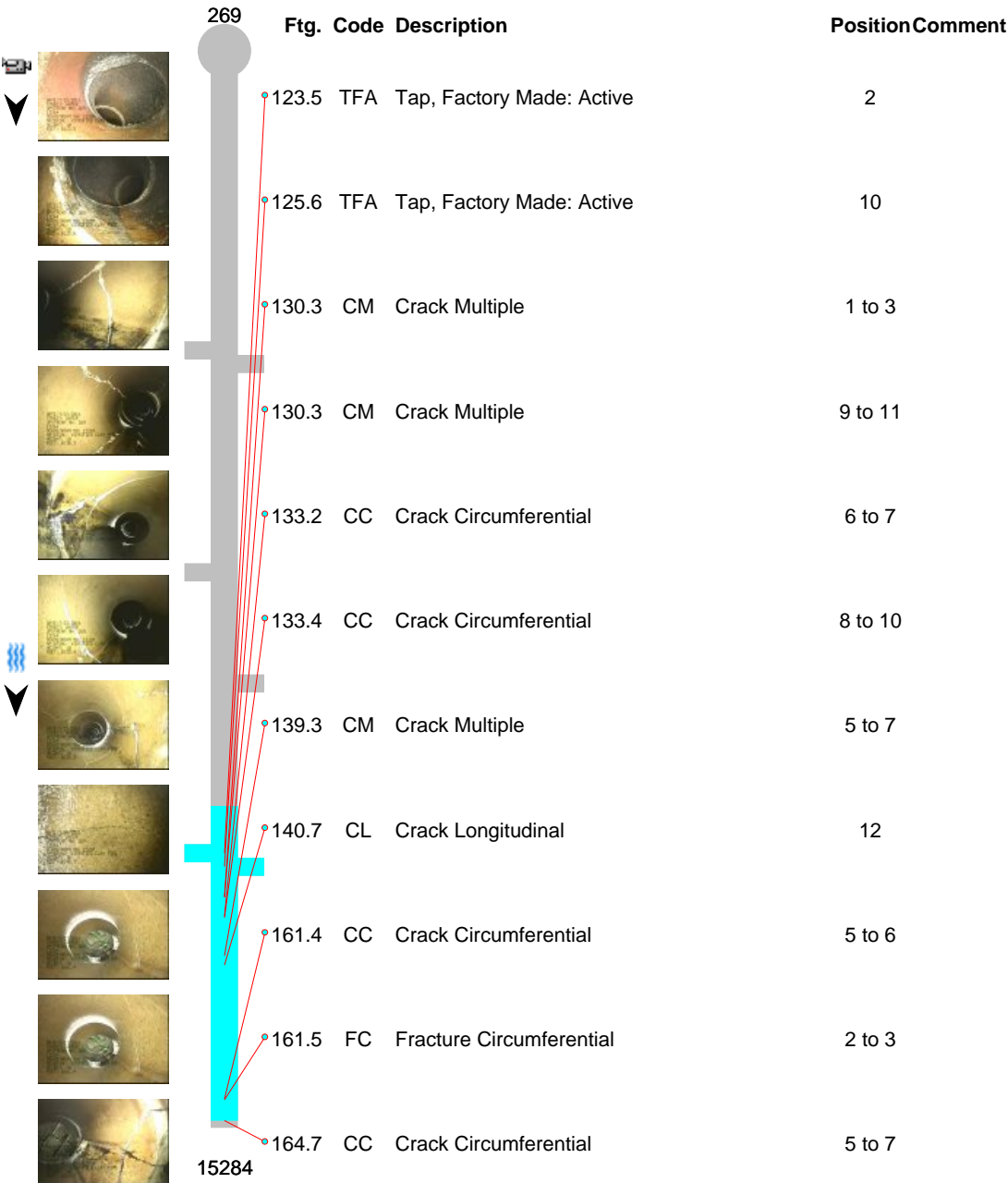
Project	P/O No.	Date 20160722	Time 13:01	Location (Street Name and number) WATER	Locality JOLIET
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Work Order Job # JOL010-19	Pipeline Segment Reference 13264	Upstream Manhole Number 269	Rim to Invert 7	Grade to Invert	Rim to Grade
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Downstream Manhole Number 15284	Rim to Invert 12.9	Grade to Invert	Rim to Grade	Use of Sewer Sanitary	Direction Downstream	Flow Control	Height 10
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Width	Shape Circular	Material Vitrified Clay Pipe	Ln. Method	Pipe Joint Length	Total Length 170.5	Length Surveyed 165.8	Counter Start DVD	Counter End	Tape / Media Number SM-14
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Purpose Maintenance Related	Sewer Category	Pre-Cleaning Jetting	Cleaned	Weather Dry	Additional Information	TV Truck ID T.V. 194
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National Power Rodding

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CITY OF JOLIET

Water PR

Upstream
269

Downstream
15284

Surveyors name MCCARTHY	Certificate Number 0000001	System Owner	Survey Customer CITY OF JOLIET	Drainage Area Southside Area	Engineer
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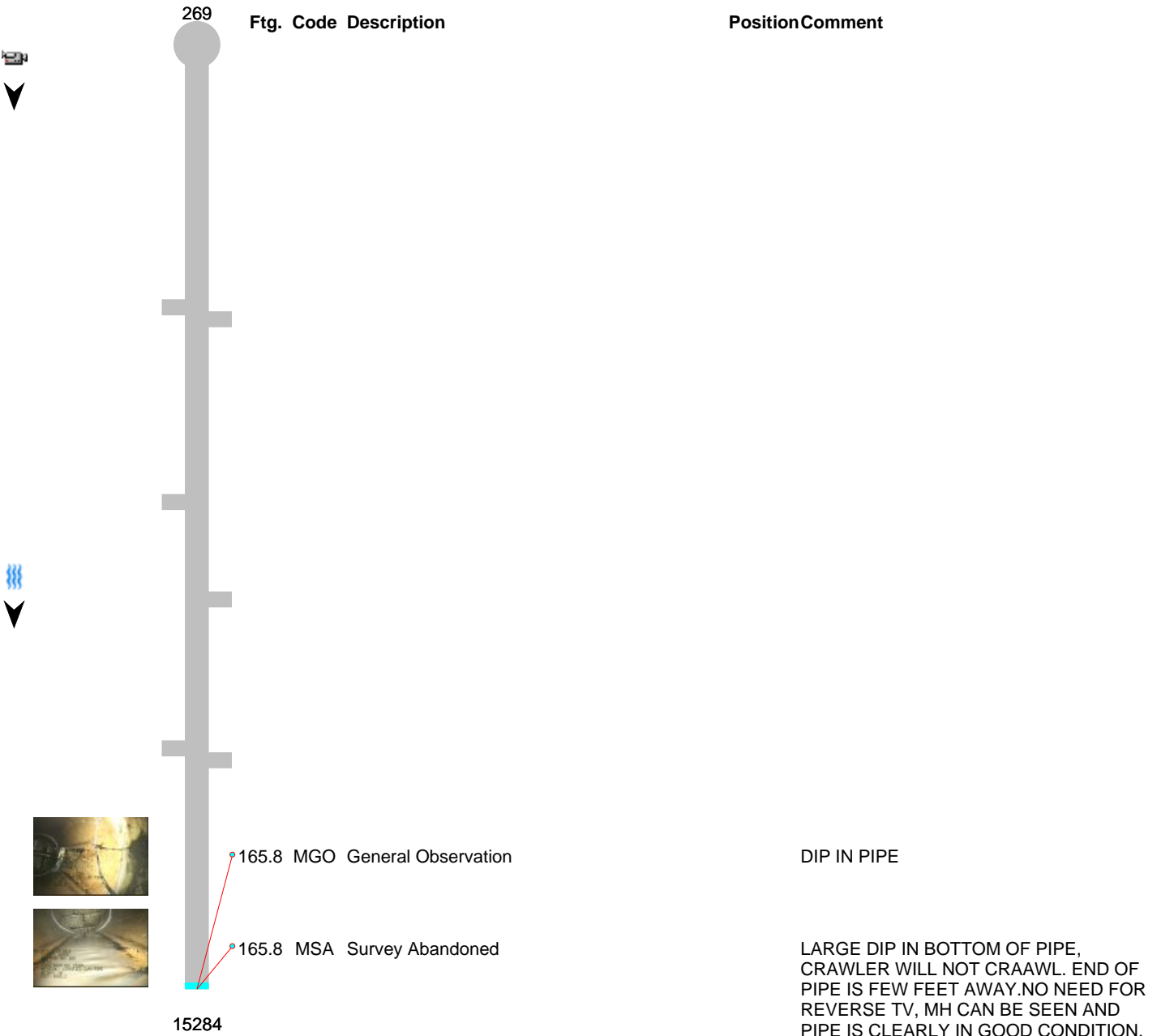
Project	P/O No.	Date 20160722	Time 13:01	Location (Street Name and number) WATER	Locality JOLIET
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Work Order Job # JOL010-19	Pipeline Segment Reference 13264	Upstream Manhole Number 269	Rim to Invert 7	Grade to Invert	Rim to Grade
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Downstream Manhole Number 15284	Rim to Invert 12.9	Grade to Invert	Rim to Grade	Use of Sewer Sanitary	Direction Downstream	Flow Control	Height 10
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Width	Shape Circular	Material Vitrified Clay Pipe	Ln. Method	Pipe Joint Length	Total Length 170.5	Length Surveyed 165.8	Counter Start DVD	Counter End	Tape / Media Number SM-14
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Purpose Maintenance Related	Sewer Category	Pre-Cleaning Jetting	Cleaned	Weather Dry	Additional Information	TV Truck ID T.V. 194
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Michel's Pipe Services
 817 W. Main St. | PO Box 128
 Brownsville, WI 53006
 Ph: (920)583-3132 | Fax:(920)924-4320
 Email: cipp@michels.us | Web: www.michels.us

Surveyors name Emanuel Vega Certificate Number U-0417-07008346 System Owner Joliet Survey Customer CITY OF JOLIET Drainage Area Sheet 1

P/O No. 180309 Pipeline Segment Reference 15216 Date 20180808 Time 13:13 Location (Street Name and number) Glenwood Ave Locality JOLIET

Further Location details Light Highway Upstream Manhole Number 16915 Rim to Invert 6 Grade to Invert Rim to Grade

Downstream Manhole Number 16917 Rim to Invert 6.9 Grade to Invert Rim to Grade Use of Sewer Sanitary Direction Downstream Flow Control Height 12

Width 12 Shape Circular Material VCP Ln. Method Pipe Joint Length Total Length Length Surveyed 18.9 Year Laid Year Rehabilitated Tape / Media Number

Purpose A Sewer Category Pre-Cleaning Jetting Cleaned Weather Dry Additional Information

Distance (Feet)	Code		Continuous defect	Value			Joint	Circumferential Location		Image Ref.	Struct. Grade	O&M Grade	Remarks	
	Group/Descriptor	Modifier/severity		S/M/L	Inches			%	At / From					To
					1st	2nd								
0.0	AMH												Starting Manhole: 16915	
0.0	MWL					5								
3.5	CH4							12	12		5			
7.4	B	SV						6			5			
13.8	B	SV						8			5			
16.5	B	VV						12			5			
18.9	MSA												Pipe is almost collapsed can not crawl any further, do not want to risk getting the camera stuck in line.	

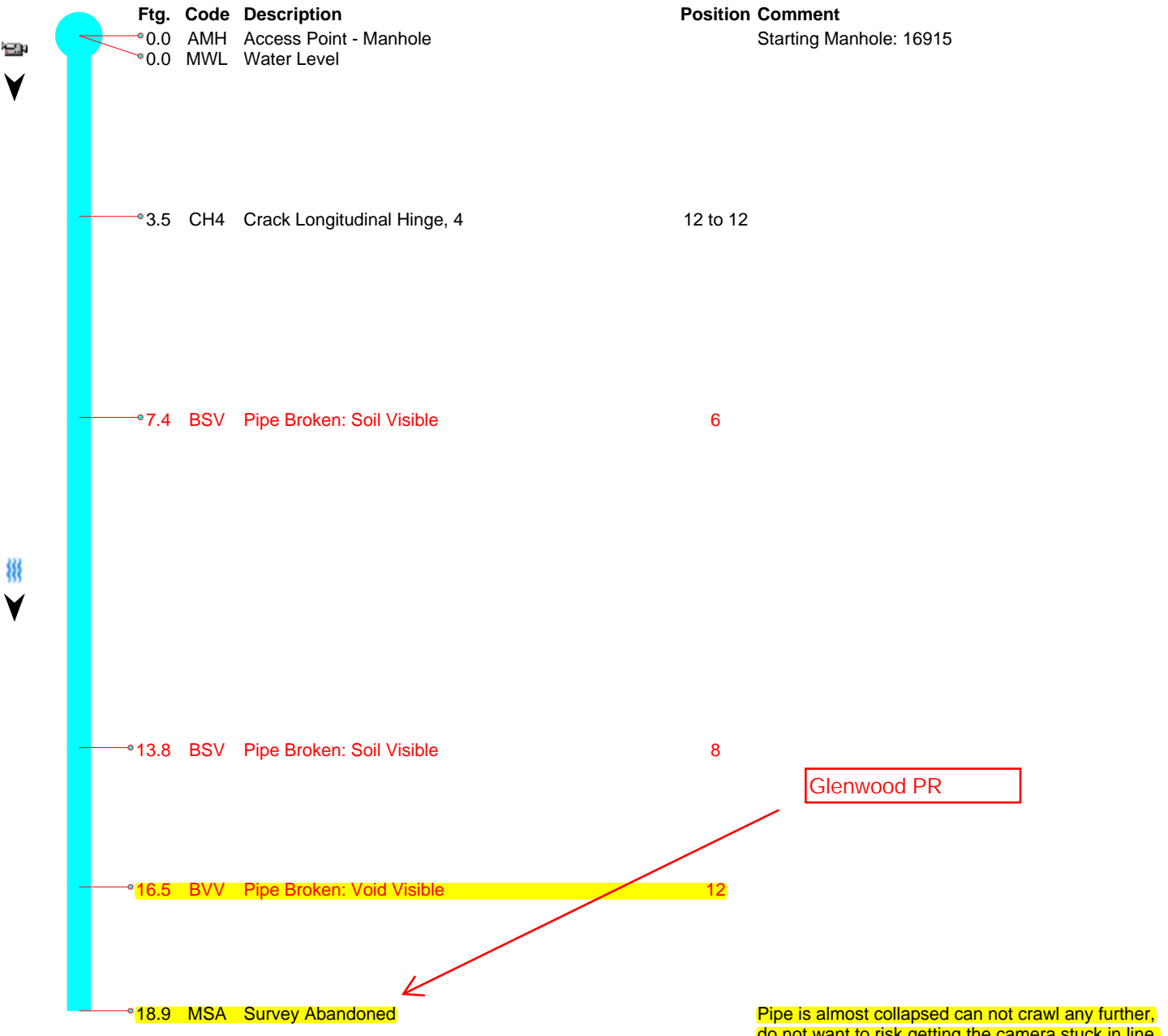
Segment	Structural									O & M						Overall								
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Rating	Quick	Index	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Rating	Quick	Index	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Rating	Quick	Index
Glenwood Ave_16915_16917-Downstream_Downst	0	0	0	0	20	20	5400	5.0	0	0	0	0	0	0	0000		0	0	0	0	20	20	5400	5.0



Michel's Pipe Services
 817 W. Main St. | PO Box 128
 Brownsville, WI 53006
 Ph: (920)583-3132 | Fax:(920)924-4320
 Email: cipp@michels.us | Web: www.michels.us

Surveyors Name Emanuel Vega	Pipe Segment Reference 15216	Customer CITY OF JOLIET	Date 20180808	Time 13:13		
Upstream MH 16915	Rim To Invert (U) 6	Downstream MH 16917	Rim To Invert (D) 6.9	Use of Sewer Sanitary	Shape Circular	
Survey Direction Downstream	Total Length	Length Surveyed 18.9	Pre-Cleaning Jetting	Weather Dry	Width 12	Height 12
Street Glenwood Ave			Location Details Light Highway			
Flow Control			Purpose Maintenance Related			

Additional Information





Michel's Pipe Services
 817 W. Main St. | PO Box 128
 Brownsville, WI 53006
 Ph: (920)583-3132 | Fax:(920)924-4320
 Email: cipp@michels.us | Web: www.michels.us

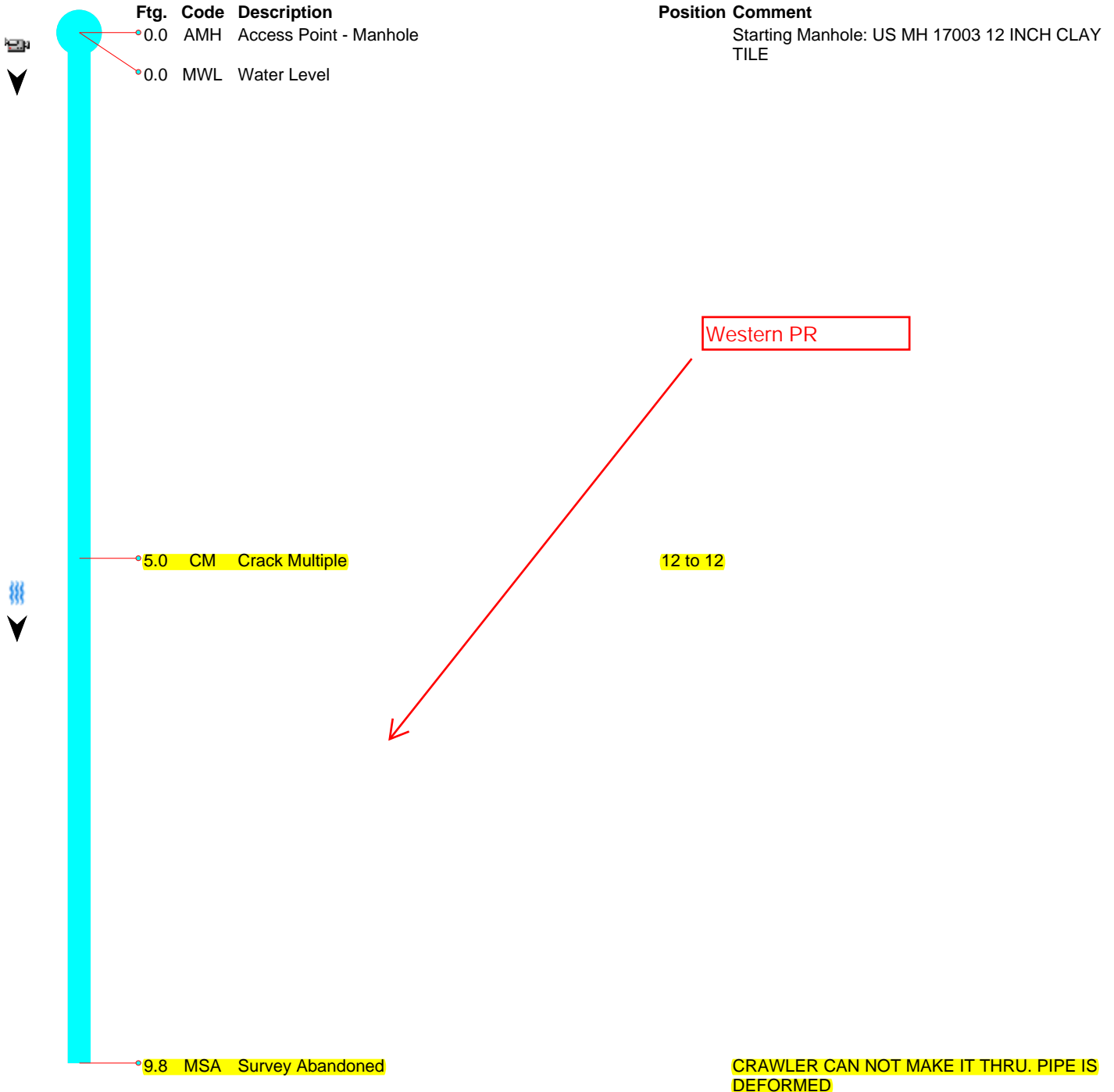
Surveyors Name Emanuel Vega	Pipe Segment Reference 15216	Customer CITY OF JOLIET	Date 20180817	Time 09:53		
Upstream MH 16915	Rim To Invert (U) 6	Downstream MH 16917	Rim To Invert (D) 7	Use of Sewer Sanitary	Shape Circular	
Survey Direction Upstream	Total Length	Length Surveyed 154.4	Pre-Cleaning Jetting	Weather Dry	Width 12	Height 12
Street Glenwood Ave			Location Details Light Highway			
Flow Control			Purpose Maintenance Related			

Additional Information

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: 16917
0.0	MWL	Water Level		
0.0	MGO	General Observation		
0.0	MGO	General Observation		This is cleaning pass #3 on this segment as well as segment 15218
9.3	CH4	Crack Longitudinal Hinge, 4	12 to 12	this is a reverse setup could only crawl in 18.9 ft from upstream MH 16915
33.7	CM	Crack Multiple	1 to 4	
39.0	JOM	Joint Offset (displaced): Medium		
45.4	JOM	Joint Offset (displaced): Medium		
47.9	JOM	Joint Offset (displaced): Medium		
49.4	TBI	Tap, Break-in / Hammer: Intruding	3	
53.5	JOM	Joint Offset (displaced): Medium		
59.9	JOM	Joint Offset (displaced): Medium		
62.2	JOM	Joint Offset (displaced): Medium		
66.0	JOM	Joint Offset (displaced): Medium		
69.4	JOM	Joint Offset (displaced): Medium		
71.6	JOM	Joint Offset (displaced): Medium		
74.1	JOM	Joint Offset (displaced): Medium		
76.1	JOM	Joint Offset (displaced): Medium		
78.1	JOM	Joint Offset (displaced): Medium		
80.4	JOM	Joint Offset (displaced): Medium		
126.2	D	Pipe Deformed		
131.0	BSV	Pipe Broken: Soil Visible	12	
134.9	BSV	Pipe Broken: Soil Visible	11 to 12	
139.2	CS	Crack Spiral	7 to 9	
153.7	FH4	Fracture Longitudinal Hinge, 4	12 to 12	
153.7	BVV	Pipe Broken: Void Visible	12 to 12	
154.4	CH4	Crack Longitudinal Hinge, 4	12 to 12	
154.4	JOM	Joint Offset (displaced): Medium		
154.4	MSA	Survey Abandoned		Pipe too deformed to continue

Glenwood PR

Upstream MH 17003	Downstream MH 17001	Size 12	Material Clay Tile	Total Length 167	City JOLIET
Surveyor's Name PEDRO DIAZ	Certificate Number U-216-07003172	Street Address WESTERN AVE		Location Details	
Direction Downstream	Purpose	Weather	Date 20180822	Time 12:05	Length Surveyed 9.8
Additional Information					





Top View

Aries Industries
 550 Elizabeth St
 Waukesha, WI 53186
 www.ariesindustries.com

Upstream MH 17003	Downstream MH 17001	Size 12	Material Polyvinyl Chloride	Total Length 167	City JOLIET
Surveyor's Name PEDRO DIAZ		Certificate Number U-216-07003172	Street Address WESTERN AVE	Location Details	
Direction Upstream	Purpose	Weather	Date 20180823	Time 08:31	Length Surveyed 139.9

Additional Information

Ftg. Code	Description	Position	Comment
139.9	CH4 Crack Longitudinal Hinge, 4	12 to 12	
139.9	CM Crack Multiple	12 to 12	
139.6	MSA Survey Abandoned		DUE TO PIPE BEING BROKEN AT 6 O'CLOCK THE CAMERA CAN NOT GET THRU. MSA LINE HERE
127.6	CH4 Crack Longitudinal Hinge, 4	12 to 12	
117.9	CM Crack Multiple	12 to 12	
114.0	MWLS Water Level: Sag		
110.9	TB Tap, Break-in / Hammer	2	
98.0	BSV Pipe Broken: Soil Visible	9 to 12	
98.0	JSL Joint Separated (open): Large	9	
98.0	TF Tap, Factory Made		
75.0	CH4 Crack Longitudinal Hinge, 4	12 to 12	
74.4	TFC Tap, Factory Made: Capped	9	
61.1	TB Tap, Break-in / Hammer	2	
51.7	TB Tap, Break-in / Hammer	10	
36.5	TB Tap, Break-in / Hammer	2	
25.0	TB Tap, Break-in / Hammer	10	
13.2	JOM Joint Offset (displaced): Medium		
12.5	CH4 Crack Longitudinal Hinge, 4	12 to 12	
11.5	MMC Material Change		CLAY PIPE
0.0	MWL Water Level		
0.0	AMH Access Point - Manhole		Starting Manhole: DS MH 17001 PVC PIPE 12 INCH LINE

Western PR