

SITE 4

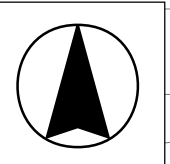
Install 608 lf of 8" Cured-in-Place Liner from MH 5847-451 to MH 5847-448

MH # 5847-451
Approx depth = 10.7 ft

MH # 5847-450
Approx depth = 9.2 ft

MH # 5847-449
(not measured / dog)

MH # 5847-448
(located north of wall)
Approx depth = 8.4 ft



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LEWIS

LEWIS

OLIVER

GLENDALE

ELPYCO

KELLOGG

402

425

447

Aerial View



Television Inspection Master Report

5/2/2007
3:03 PM

US Structure: 5847-451
DS Structure: 5847-450

402 S GLENDALE ST
425 ELPYCO ST

Date Insp: 5/30/2006
Dir Televised: Upstream To Downstream

Basin: E04D

Pipe Information

Shape: Round Length Status: Project No.: E-033
Dia/Ht Width: 8 0 Material: VCP Index:
Length: 214.4 Slope: 0.201 Surface: Rear Easement

Inspection Information

Crew: 692 Percent Full: 10 Tape ID: 5080
Weather: Cloudy Purpose: TV Existing Line Counter Start: 0
Surface Cond: N/A Flow: Normal Flow Counter Stop: 18.42

Obs. VTR

#	Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings			
								Struct	Clean	Remain (gpm)	
1		0.0	US Manhole	5847-451	1		0.000	0	0	0.000	
2		13.0	Joint	Roots	2		0.004	2	4	0.004	
3		16.0	Joint	Roots	2		0.004	2	4	0.004	
4		21.0	East	Wye Service	1		0.000	0	0	0.000	
	4913 E. Lewis - live connection										
5		24.0	Roots	Sealed Off Wye West	1		0.000	0	0	0.000	
6		37.0	Joint	Roots	3		0.008	5	8	0.008	
7		46.0	Joint	Roots	3		0.008	5	8	0.008	
8		48.0	East	Wye Service	2		0.000	0	0	0.000	
	411 S. Elpyco - live connection / roots										
9		49.0	Joint	Roots	2		0.004	2	4	0.004	
10		51.0		Sealed Off Wye West	1		0.000	0	0	0.000	
11		52.0	Joint	Roots	2		0.004	2	4	0.004	
12		55.0	Joint	Roots	2		0.004	2	4	0.004	
13		58.0	Joint	Roots	4		0.010	10	25	0.010	
14		61.0	Joint	Roots	3		0.008	5	8	0.008	
15		62.0	Joint	Infiltration	1		0.000	0	0	0.000	
16		64.0	Joint	Roots	2		0.004	2	4	0.004	
17		67.0	Joint	Roots	3		0.008	5	8	0.008	
18		68.0	Joint	Infiltration	1		0.000	0	0	0.000	
19		70.0	Joint	Roots	4		0.010	10	25	0.010	
20		72.0	East	Wye Service	2		0.000	0	0	0.000	
	415 S. Elpyco - live connection / heavy roots in tap that hang into the main line										
21		73.0	Joint	Roots / HEAVY ROOTS	5		0.030	18	100	0.030	
22		74.0	West	Break-In Conn	1		0.001	0	0	0.001	
	402 S. Glendale - live connection / PVC										
23		81.0	Joint	Roots	2		0.004	2	4	0.004	
24		93.0	Joint	Roots	2		0.004	2	4	0.004	
25		98.0		Sealed Off Wye East	1		0.000	0	0	0.000	
26		101.0		Sealed Off Wye West	1		0.000	0	0	0.000	
27		108.0	Joint	Roots	2		0.004	2	4	0.004	
28		114.0	Joint	Roots	2		0.004	2	4	0.004	
29		117.0	Joint	Roots	2		0.004	2	4	0.004	
30		122.0	East	Break-In Conn	1		0.001	0	0	0.001	
	415 S. Elpyco - live connection / PVC										
31		125.0		Sealed Off Wye West	1		0.000	0	0	0.000	

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Television Inspection Master Report

5/2/2007
3:03 PM

US Structure: 5847-451
DS Structure: 5847-450

402 S GLENDALE ST
425 ELPYCO ST

Date Insp: 5/30/2006
Dir Televised: Upstream To Downstream

Basin: E04D

32	127.0	Crown	Broken Pipe	3	0.010	60	0	0.010
33	130.0	Crown	Broken Pipe	3	0.010	60	0	0.010
34	146.0		Sealed Off Wye East	1	0.000	0	0	0.000
35	149.0		Sealed Off Wye West	1	0.000	0	0	0.000
36	159.0	Invert	Broken Pipe	3	0.010	60	0	0.010
37	169.0	Crown	Crack-Horizontal	3	0.004	5	0	0.004
38	171.0	Invert	Broken Pipe	2	0.008	44	0	0.008
39	173.0	East	Break-In Conn	2	0.002	0	0	0.002
	419 S. Elpyco - live connection							
40	176.0	West	Break-In Conn	1	0.001	0	0	0.001
	406 S. Glendale - live connection							
41	197.0		Sealed Off Wye East	1	0.000	0	0	0.000
42	200.0		Sealed Off Wye West	1	0.000	0	0	0.000
43	212.0	DS Manhole	5847-450	1	0.000	0	0	0.000

Television Inspection Master Report

5/2/2007
3:03 PM

US Structure: 5847-450
DS Structure: 5847-449

425 ELPYCO ST
447 S ELPYCO ST

Date Insp: 5/30/2006
Dir Televised: Upstream To Downstream

Basin: E04D

Pipe Information

Shape: Round Length Status: Project No.: E-033
Dia/Ht Width: 8 0 Material: VCP Index:
Length: 202.6 Slope: 0.197 Surface: Rear Easement

Inspection Information

Crew: 692 Percent Full: 10 Tape ID: 5080
Weather: Cloudy Purpose: TV Existing Line Counter Start: 18.42
Surface Cond: N/A Flow: Normal Flow Counter Stop:

Obs. #	VTR Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings Struct	Clean	Remain (gpm)
1		0.0	US Manhole	5847-450	1		0.000	0	0	0.000
2		9.0	Joint	Roots	2		0.004	2	4	0.004
3		10.0	Invert	Broken Pipe	3		0.010	60	0	0.010
4		11.0	East	Wye Service	1		0.000	0	0	0.000
425 S Elpyco - live connection										
5		13.0	Invert	Broken Pipe	3		0.010	60	0	0.010
6		14.0	West	Break-In Conn	2		0.002	0	0	0.002
420 S. Glendale - live connection										
7		15.0	Joint	Roots	2		0.004	2	4	0.004
8		16.0	Invert	Broken Pipe	3		0.010	60	0	0.010
9		18.0	Joint	Roots	2		0.004	2	4	0.004
10		21.0	Joint	Roots	3		0.008	5	8	0.008
11		22.0	Invert	Broken Pipe	3		0.010	60	0	0.010
12		38.0		Sealed Off Wye East	1		0.000	0	0	0.000
13		41.0		Sealed Off Wye West	1		0.000	0	0	0.000
14		48.0	Invert	Broken Pipe	3		0.010	60	0	0.010
15		60.0	Invert	Broken Pipe	3		0.010	60	0	0.010
16		62.0	East	Wye Service	2		0.000	0	0	0.000
431 S. Elpyco - live connection / roots										
17		63.0	Invert	Broken Pipe	3		0.010	60	0	0.010
18		65.0	West	Wye Service	5		0.000	400	0	0.000
<u>428 S. Glendale - POOR CONDITION...IS THIS ACTIVE OR NOT? NEEDS TESTED BY CONTRACTOR</u>										
19		67.0	Invert	Broken Pipe	3		0.010	60	0	0.010
20		74.0	West	Break-In Conn	1		0.001	0	0	0.001
<u>428 S. Glendale - live connection / PVC / DID THIS REPLACE TAP AT 65'?</u>										
21		75.0	Crown	Broken Pipe	3		0.010	60	0	0.010
22		84.0	Quad 3 / L-Lt	Crack-Horizontal	3		0.004	5	0	0.004
23		85.0	East	Wye Service	2		0.000	0	0	0.000
437 S. Elpyco - live connection										
24		87.0	Invert	Broken Pipe	3		0.010	60	0	0.010
25		88.0		Sealed Off Wye West	1		0.000	0	0	0.000
26		112.0		Sealed Off Wye East	1		0.000	0	0	0.000
27		115.0		Sealed Off Wye West	1		0.000	0	0	0.000

Television Inspection Master Report

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US Structure: 5847-450 425 ELPYCO ST Date Insp: 5/30/2006 Basin: E04D
DS Structure: 5847-449 447 S ELPYCO ST Dir Televised: Upstream To Downstream

28	134.0	Joint	Roots	2	0.004	2	4	0.004	
29	136.0		Sealed Off Wye East	1	0.000	0	0	0.000	
30	139.0	West	Wye Service	1	0.000	0	0	0.000	
434 S. Glendale - live connection									
31	158.0	Joint	Roots	2	0.004	2	4	0.004	
32	160.0	East	Wye Service	2	0.000	0	0	0.000	
443 S. Elpyco - live connection / roots									
33	163.0		Sealed Off Wye West	1	0.000	0	0	0.000	
34	170.0	Quad 3 / L-Lt	Crack-Radial	3	0.004	5	0	0.004	
35	177.0	Quad 4 / U-Lt	Crack-Horizontal	3	0.004	5	0	0.004	
36	187.0		Sealed Off Wye East	1	0.000	0	0	0.000	
37	190.0	West	Wye Service	2	0.000	0	0	0.000	
440 S. Glendale - live connection / roots									
38	198.0	Invert	Broken Pipe	3	0.010	60	0	0.010	
39	202.0	DS Manhole	5847-449	1	0.000	0	0	0.000	

Television Inspection Master Report

5/2/2007
3:03 PM

US Structure: 5847-449
DS Structure: 5847-448

447 S ELPYCO ST
458 S GLENDALE ST

Date Insp: 5/3/2006
Dir Televised: Upstream to Downstream

Basin: E04D

Pipe Information

Shape: Round Length Status: Project No.: E-033
Dia/Ht Width: 8 0 Material: VCP Index:
Length: 192.0 Slope: 0.214 Surface: Rear Easement

Inspection Information

Crew: 692 Percent Full: 10 Tape ID: 5080
Weather: Cloudy Purpose: TV Existing Line Counter Start: 34.39
Surface Cond: N/A Flow: Normal Flow Counter Stop: 51.09

Obs. #	VTR Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings Struct	Clean	Remain (gpm)	
1		0.0	US Manhole	5847-449	1		0.000	0	0	0.000	
2		5.0	Crown	Broken Pipe	3		0.010	60	0	0.010	
3		10.0	East	Wye Service	2		0.000	0	0	0.000	
	447 S. Elpyco - live connection / roots										
4		13.0		Sealed Off Wye West	1		0.000	0	0	0.000	
5		33.0		Sealed Off Wye East	1		0.000	0	0	0.000	
6		37.0	West	Wye Service	1		0.000	0	0	0.000	
	444 S. Glendale - live connection										
7		50.0	Joint	Roots	2		0.004	2	4	0.004	
8		60.0		Sealed Off Wye East	1		0.000	0	0	0.000	
9		63.0		Sealed Off Wye West	1		0.000	0	0	0.000	
10		71.0	Joint	Roots	2		0.004	2	4	0.004	
11		74.0	Joint	Roots	3		0.008	5	8	0.008	
12		77.0	Joint	Roots	2		0.004	2	4	0.004	
13		80.0	Joint	Roots	3		0.008	5	8	0.008	
14		85.0	East	Wye Service	2		0.000	0	0	0.000	
	455 S. Elpyco - live connection / roots										
15		86.0	Joint	Roots	2		0.004	2	4	0.004	
16		88.0		Sealed Off Wye West	1		0.000	0	0	0.000	
17		89.0	Joint	Roots	2		0.004	2	4	0.004	
18		92.0	Joint	Roots	4		0.010	10	25	0.010	
19		95.0	Joint	Roots	3		0.008	5	8	0.008	
20		98.0	Joint	Roots	3		0.008	5	8	0.008	
21		101.0	Joint	Roots	2		0.004	2	4	0.004	
22		104.0	Joint	Roots	3		0.008	5	8	0.008	
23		107.0	Joint	Roots	2		0.004	2	4	0.004	
24		108.0		Sealed Off Wye East	1		0.000	0	0	0.000	
25		110.0	Joint	Roots	2		0.004	2	4	0.004	
26		112.0	West	Wye Service	2		0.000	0	0	0.000	
	450 S. Glendale - live connection / roots										
27		113.0	Invert	Broken Pipe	3		0.010	60	0	0.010	
28		114.0	Joint	Roots	3		0.008	5	8	0.008	

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Television Inspection Master Report

5/2/2007
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US Structure: 5847-449 447 S ELPYCO ST Date Insp: 5/3/2006 Basin: E04D
DS Structure: 5847-448 458 S GLENDALE ST Dir Televised: Upstream to Downstream

29	115.0	Crown	Broken Pipe	3	0.010	60	0	0.010
30	116.0	Joint	Roots	2	0.004	2	4	0.004
31	117.0	Invert	Broken Pipe	3	0.010	60	0	0.010
32	119.0	Joint	Roots	3	0.008	5	8	0.008
33	122.0	Joint	Roots	2	0.004	2	4	0.004
34	125.0	Joint	Roots	2	0.004	2	4	0.004
35	128.0	Joint	Roots	3	0.008	5	8	0.008
36	131.0	Joint	Roots	3	0.008	5	8	0.008
37	135.0	Joint	Roots	4	0.010	10	25	0.010
38	136.0	East / Ball of roots	Possibly Sealed Off Wye	1	0.000	0	0	0.000
39	138.0	Joint	Roots	4	0.010	10	25	0.010
40	139.0		Sealed Off Wye West	1	0.000	0	0	0.000
41	140.0	Joint	Roots	2	0.004	2	4	0.004
42	146.0	Joint	Roots	2	0.004	2	4	0.004
43	149.0	Joint	Roots	2	0.004	2	4	0.004
44	152.0	Joint	Roots	2	0.004	2	4	0.004
45	155.0	Joint	Roots	2	0.004	2	4	0.004
46	158.0	Joint	Roots	2	0.004	2	4	0.004
47	159.0		Sealed Off Wye East	1	0.000	0	0	0.000
48	162.0	West	Wye Service	2	0.000	0	0	0.000
458 S. Glendale - live connection								
49	183.0	East	Wye Service	1	0.000	0	0	0.000
461 S. Elpyco – IS THIS ACTIVE? NEEDS VERIFIED BY CONTRACTOR								
50	186.0	Joint	PVC BEGINS	1	0.000	0	0	
(pipe deflects slightly where PVC begins)								
51	190.0	DS Manhole	5847-448	1	0.000	0	0	0.000