

ALUMINIZED STEEL TYPE 2 SITE VISIT REPORT

DATE OF VISIT: 11/5/2015
 SITE ADDRESS: Natchez Trace Trail, Alabama (mile marker 310.2)
 PEOPLE PRESENT: Mike McGough, NCSPA
 ESTIMATE SERVICE YEARS OF PIPE: 33

DATA



OUTLET SIDE

OVERALL STEEL THICKNESS (MEASURED IN INCHES WITH ULTRASONIC THICKNESS GAUGE)

CROWN OF PIPE (12 O'CLOCK) , 5 MEASUREMENTS IN INCHES				
READING 1	READING 2	READING 3	READING 4	READING 5
0.059	0.057	0.059	0.057	0.057
MEAN THICKNESS: 0.0578		MEDIAN THICKNESS: 0.057		

INVERT OF PIPE (6 O'CLOCK) , 5 MEASUREMENTS IN INCHES				
READING 1	READING 2	READING 3	READING 4	READING 5
0.068	0.06	0.066	0.065	0.06
MEAN THICKNESS: 0.0638		MEDIAN THICKNESS: 0.065		

GAUGE/ SUBSTRATE THICKNESS BASED ON MEASUREMENTS: 16 GAUGE 0.0575

PIPE THICKNESS ANALYSIS			
PERCENT DIFFERENCE:	-10.38%	PERCENT DIFFERENCE:	-14.04%

ALUMINUM COATING THICKNESS (MEASURED IN MICRONS WITH COATING THICKNESS GAUGE)

CROWN OF PIPE (12 O'CLOCK) , 5 MEASUREMENTS IN INCHES				
READING 1	READING 2	READING 3	READING 4	READING 5
18	17	23	27	42
READING 6	READING 7	READING 8	READING 9	READING 10
24	23	23	23	21
MEAN THICKNESS: 25.4		MEDIAN THICKNESS: 23		

INVERT OF PIPE (6 O'CLOCK) , 5 MEASUREMENTS IN INCHES				
READING 1	READING 2	READING 3	READING 4	READING 5
25	10	21	13	20
READING 6	READING 7	READING 8	READING 9	READING 10
17	26	15	15	17
MEAN THICKNESS: 17.8		MEDIAN THICKNESS: 17		

PIPE THICKNESS ANALYSIS			
	BY MEAN		BY MEDIAN
PERCENT LOSS:	29.9%	PERCENT LOSS:	26.1%
ESTIMATED YEARS REMAINING OF ALUMINUM	77		94
EXPECTED TOTAL SERVICE LIFE:	178		194

(YEARS OF SERVICE TO DATE + EXPECTED YEARS OF COATING REMAINING + 0.85 MIL/YEAR FOR THE STEEL SUBSTRATE)



INLET SIDE

OVERALL STEEL THICKNESS (MEASURED IN INCHES WITH ULTRASONIC THICKNESS GAUGE)

CROWN OF PIPE (12 O'CLOCK) , 5 MEASUREMENTS IN INCHES					
READING 1	READING 2	READING 3	READING 4	READING 5	
0.059	0.057	0.059	0.057	0.057	
MEAN THICKNESS:		0.0578	MEDIAN THICKNESS:		0.057

INVERT OF PIPE (6 O'CLOCK) , 5 MEASUREMENTS IN INCHES					
READING 1	READING 2	READING 3	READING 4	READING 5	
0.068	0.06	0.066	0.065	0.06	
MEAN THICKNESS:		0.0638	MEDIAN THICKNESS:		0.065

GAUGE/ SUBSTRATE THICKNESS BASED ON MEASUREMENTS: 16 GAUGE 0.0575

PIPE THICKNESS ANALYSIS			
PERCENT DIFFERENCE:	-10.38%	PERCENT DIFFERENCE:	-14.04%

**Data from OUTLET*

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ALUMINUM COATING THICKNESS (MEASURED IN MICRONS WITH COATING THICKNESS GAUGE)

CROWN OF PIPE (12 O'CLOCK) , 5 MEASUREMENTS IN INCHES					
READING 1	READING 2	READING 3	READING 4	READING 5	
18	17	23	27	42	
READING 6	READING 7	READING 8	READING 9	READING 10	
24	23	23	23	21	
MEAN THICKNESS:		25.4	MEDIAN THICKNESS:		23

INVERT OF PIPE (6 O'CLOCK) , 5 MEASUREMENTS IN INCHES					
READING 1	READING 2	READING 3	READING 4	READING 5	
14	17	18	12	1	
READING 6	READING 7	READING 8	READING 9	READING 10	
8	19	1	4	11	
MEAN THICKNESS:		12.4	MEDIAN THICKNESS:		14

PIPE THICKNESS ANALYSIS			
	BY MEAN	BY MEDIAN	
PERCENT LOSS:	51.2%	PERCENT LOSS:	39.1%
ESTIMATED YEARS REMAINING OF ALUMINUM	31		51
EXPECTED TOTAL SERVICE LIFE:	<u>132</u>		<u>152</u>
(YEARS OF SERVICE TO DATE + EXPECTED YEARS OF COATING REMAINING + 0.85 MIL/YEAR FOR THE STEEL SUBSTRATE)			

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REPORT NOTES

PIPE SIZE	24"
ESTIMATED PIPE SLOPE	4 percent
ESTIMATED FLOW SPEED	