

**ALUMINIZED STEEL TYPE 2 SITE VISIT REPORT**

DATE OF VISIT: 11/5/2015  
 SITE ADDRESS: Natchez Trace Trail, Alabama (mile marker 309.5)  
 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
0.063	0.065	0.064	0.064	0.062
MEAN THICKNESS: 0.0636		MEDIAN THICKNESS: 0.064		

INVERT OF PIPE (6 O'CLOCK) , 5 MEASUREMENTS IN INCHES				
READING 1	READING 2	READING 3	READING 4	READING 5
0.063	0.065	0.064	0.061	0.06
MEAN THICKNESS: 0.0626		MEDIAN THICKNESS: 0.063		

GAUGE/ SUBSTRATE THICKNESS BASED ON MEASUREMENTS: 16 GAUGE 0.0575

PIPE THICKNESS ANALYSIS			
PERCENT DIFFERENCE:	1.57%	PERCENT DIFFERENCE:	1.56%

**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
32	37	43	20	33
READING 6	READING 7	READING 8	READING 9	READING 10
38	39	32		
MEAN THICKNESS: 33		MEDIAN THICKNESS: 35		

INVERT OF PIPE (6 O'CLOCK) , 5 MEASUREMENTS IN INCHES				
READING 1	READING 2	READING 3	READING 4	READING 5
21	15	16	11	17
READING 6	READING 7	READING 8	READING 9	READING 10
14	12	22		
MEAN THICKNESS: 16		MEDIAN THICKNESS: 15.5		

PIPE THICKNESS ANALYSIS			
	BY MEAN		BY MEDIAN
PERCENT LOSS:	51.5%	PERCENT LOSS:	55.7%
ESTIMATED YEARS REMAINING OF ALUMINUM	31		26
EXPECTED TOTAL SERVICE LIFE:	132		127
(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
0.063	0.065	0.064	0.064	0.062
MEAN THICKNESS: 0.0636		MEDIAN THICKNESS: 0.064		

INVERT OF PIPE (6 O'CLOCK) , 5 MEASUREMENTS IN INCHES				
READING 1	READING 2	READING 3	READING 4	READING 5
0.063	0.065	0.064	0.061	0.06
MEAN THICKNESS: 0.0626		MEDIAN THICKNESS: 0.063		

GAUGE/ SUBSTRATE THICKNESS BASED ON MEASUREMENTS: 16 GAUGE 0.0575

PIPE THICKNESS ANALYSIS			
PERCENT DIFFERENCE:	1.57%	PERCENT DIFFERENCE:	1.56%

*\*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
32	37	43	20	33
READING 6	READING 7	READING 8	READING 9	READING 10
38	39	32		
MEAN THICKNESS: 33		<i>*Data from OUTLET</i>	MEDIAN THICKNESS: 33	

INVERT OF PIPE (6 O'CLOCK) , 5 MEASUREMENTS IN INCHES				
READING 1	READING 2	READING 3	READING 4	READING 5
2	7	18	24	15
READING 6	READING 7	READING 8	READING 9	READING 10
19	7	12	10	16
MEAN THICKNESS: 13.2		MEDIAN THICKNESS: 15		

PIPE THICKNESS ANALYSIS			
	BY MEAN	BY MEDIAN	
PERCENT LOSS:	60.0%	PERCENT LOSS:	54.5%
ESTIMATED YEARS REMAINING OF ALUMINUM	22		28
EXPECTED TOTAL SERVICE LIFE:	<u>123</u>		<u>128</u>
(YEARS OF SERVICE TO DATE + EXPECTED YEARS OF COATING REMAINING + 0.85 MIL/YEAR FOR THE STEEL SUBSTRATE)			

DATE OF VIST: 11/5/2015

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**REPORT NOTES**

<b>PIPE SIZE</b>	24"
<b>ESTIMATED PIPE SLOPE</b>	4 percent
<b>ESTIMATED FLOW SPEED</b>	