

**RECEIVED**

**L.B. FOSTER COMPANY**  
**PROCEDURE: SAW-01-2009**

CK'D BY WDL OK'D BY JWC  
11:43 am, Jul 11, 2011  
RESUBMIT \_\_\_\_\_ APPROVED X  
BY CWC, Proj. Mgr. DATE 07/19/11

FABRICATOR L. B. Foster Company TEST DATE December 3, 2009  
PROCESS Submerged Arc Welding (SAW) FILLER METAL CLASSIFICATION F7A2-ENiK-Ni-H8  
ELECTRODES Lincoln LA75 FLUX Lincoln 860, AWS Classification A5.23 (electrode & flux)

(1) DIAMETER 3/32 inches AMPS 340 VOLTS 34 CURRENT & POLARITY DCEP  
(2) \_\_\_\_\_  
(3) \_\_\_\_\_

SHIELDING GAS NA FLOW RATE NA DEW POINT NA  
TRAVEL SPEED 10 IPM MATERIAL SPECIFICATION & THICKNESS ASTM A709, G50, 1 in. Plate  
PREHEAT TEMP. 150 °F INTERPASS TEMP. 450 °F

SPECIMEN	TEST RESULTS			
ALL WELD METAL TENSION (AWMT)	(1)	(2)		
	TENSILE STRENGTH (PSI)	84,209 PSI	84,967 PSI	
	YIELD STRENGTH (PSI)	71,427 PSI	68,481 PSI	
	ELONGATION IN 2" (%)	26.5	25.4	
	REDUCTION IN AREA (%)	58.9	64.1	
SIDE BENDS	1. <u>acceptable</u> 2. <u>acceptable</u> 3. <u>acceptable</u> 4. <u>acceptable</u>			
REDUCTION SECTION TENSION	TENSILE STRENGTH	1. <u>86,844 PSI</u>	LOCATION OF BREAK	1. <u>base metal</u>
		2. <u>89,651 PSI</u>		2. <u>base metal</u>
CHARPY IMPACT (WELD METAL)	( <u>26</u> , <u>34</u> , <u>36</u> , <u>43</u> , <u>25</u> )	AVG. FT-LBS	<u>32</u>	@ <u>-20</u> °F
	( _____ , _____ , _____ , _____ , _____ )	AVG. FT-LBS	<u>-</u>	@ <u>-</u> °F
	<u>ESW &amp; EGW</u>	AVG. FT-LBS	<u>-</u>	@ <u>-</u> °F
CHEMISTRY	C <u>-</u> Mn <u>-</u> P <u>-</u> Cu <u>-</u> Si <u>-</u>			
	Ni <u>-</u> Cr <u>-</u> Mo <u>-</u> V <u>-</u> S <u>-</u>			

REMARKS:

All nondestructive tests conducted by: ABC Testing Incorporated Project: 124009  
All mechanical tests conducted by: ABC Testing Incorporated  
Sample preparation conducted by: Accurate Tool and Machine  
Chemical analysis conducted by: \_\_\_\_\_ Report Number: \_\_\_\_\_  
Radiography: acceptable  
Welded by: Mariano Cepeda Identification number: \_\_\_\_\_  
Welding Witnessed by: \_\_\_\_\_

Test Witness: \_\_\_\_\_ Agency \_\_\_\_\_

Results Reviewed: \_\_\_\_\_ DOT Acceptance \_\_\_\_\_ Date \_\_\_\_\_

STRUCTURAL  
STEEL 72