

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
 Approved
 Returned for Corrections

JA: 3, 2006

Approved as noted

William Doukas, P.E.

Company Name: ARC ENTERPRISES, INC.
 Welding Process(es): GMAW
 Supporting PQR No.(s): _____

WELDING PROCEDURE SPECIFICATION (WPS) YES (X) BY _____
 QUALIFIED BY TESTING _____
 PROCEDURE QUALIFICATION RECORD (PQR) YES ()

OK'D BY _____ OR'D BY JHC
 JAN 20 2010
 RESUBMIT _____ APPROVED
 DATE 01/29/10

Identification # ARC WPS 5M2
 Revision 2 Date 12/5/2005 By SVH
 Authorized By Steve Howard Date 12/5/2005
 Type - Manual () Semi-Automatic (X)
 Machine () Automatic ()

JOINT DESIGN USED Type <u>FILLET</u> Single (X) Double Weld () Backlag YES () NO (X) Backing Material <u>N/A</u> Root Opening <u>0</u> Root Face Dimension <u>N/A</u> Groove Angle <u>N/A</u> Radius (J-U) <u>N/A</u> Back Gouging YES () NO (X) Method <u>N/A</u>		POSITION Position of Groove <u>Fillet</u> <u>1F 2F</u> Vertical Progression () UP () DOWN	
BASE METALS Material Spec <u>A709</u> Type or Grade <u>36</u> <u>50</u> Thickness <u>Groove N/A</u> Fillet <u>UNLIMITED</u> Diameter (Pipe) <u>N/A</u>		ELECTRICAL CHARACTERISTICS Transfer Mode (FCAM) <u>Short Circuiting ()</u> Globular () Spray (X) Current: AC () DCEP (X) DCEN () Pulsed () OTHER: _____	
FILLER METALS AWS Specification <u>A5.18</u> AWS Classification <u>ER70S-7</u> <u>ESAB</u> <u>87 HP</u>		TECHNIQUE Stringer or Weave Bead <u>STRINGER</u> Multi-pass or Single Pass (per side) <u>SINGLE / Multi</u> Number of Electrodes <u>1</u> Electrode Spacing <u>Longitudinal N/A</u> <u>Lateral N/A</u> <u>Angle N/A</u>	
SHIELDING GAS <u>2%O</u> Flux _____ Gas <u>88-2</u> Electrode - Flux (Class) _____ Composition _____ Flow Rate <u>25-40</u> Gas Cup Size <u>5/8</u>		Contact Tube to Work Distance <u>5/8 - 3/4</u> Pooling <u>N/A</u> Interpass Cleaning: _____	
T ≤ 3/4 50 3/4 - 1-1/2 = 70 1-1/2 - 2-1/2 = 150 OVER 2-1/2 = 225		POSTWELD HEAT TREATMENT OK'D BY _____ Temp <u>N/A</u> Time <u>N/A</u> <u>JAN 20 2010</u>	

RESUBMIT _____ APPROVED _____

Pass or Weld Layer(s)	Size S	Filler Metals		Current		Volts	Travel Speed	Date/Int Details
		Class	Diameter	Type & Polarity	Amperes or Wire Feed Speed			
1	3/16	ER70S-7	0.035	DCEP	180-220	25-27	7-8	
1	1/4	ER70S-7	0.035	DCEP	180-220	25-27	5-6	
1	5/16	ER70S-7	0.035	DCEP	180-220	25-27	4-5	
1	3/8	ER70S-7	0.035	DCEP	180-220	25-27	3-4	
1	7/16	ER70S-7	0.035	DCEP	180-220	25-27	+ 2-3	
1	1/2	ER70S-7	0.045	DCEP	270-330	28-30	+ 2-3	

+ Sec 4.14.3 AWS D1.5