

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

Company Name ARC Enterprises, Inc. Identification # ARC WPS 5M2b
 Revision 5 Date 2-14-12 By SVH
 Welding Process(es) GMAW Authorized by STEVE HOWARD Date 12-5-05
 Supporting PQR No.(s) _____ Type - Manual Semi - Automatic
 Machine Automatic

JOINT DESIGN USED Type <u>Fillet</u> Single <input checked="" type="checkbox"/> Double Weld <input type="checkbox"/> Backing <input type="checkbox"/> NO <input checked="" type="checkbox"/> Backing Material _____ 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 <input type="checkbox"/> NO <input type="checkbox"/> Method <u>N/A</u>		POSITION Position of Groove _____ Fillet <u>1F 2F</u> Vertical Progression <input type="checkbox"/>	
BASE METALS Material Spec <u>A709</u> Type or Grade <u>50</u> Thickness Groove _____ Fillet <u>UNLIMITED</u> Diameter (Pipe) _____		ELECTRICAL CHARACTERISTICS Transfer Mode (FCAW) _____ Short Circuiting <input type="checkbox"/> Globular <input type="checkbox"/> Spray <input checked="" type="checkbox"/> Current: AC <input type="checkbox"/> DCEP <input checked="" type="checkbox"/> DCEN <input type="checkbox"/> Pulsed <input type="checkbox"/> OTHER: _____	
FILLER METALS AWS Specification <u>A5.18</u> AWS Classification <u>ER70S-6 Lincoln SuperArc L-56</u>		TECHNIQUE Stringer or Weave Bead <u>STRINGER</u> Multi-pass or Single Pass (per side) <u>SINGLE/MULTI</u> Number of Electrodes _____ Electrode Spacing Longitudinal <u>NA</u> Lateral <u>NA</u> Angle <u>NA</u>	
SHIELDING Flux _____ Gas <u>98% ARGON 2% O₂</u> Composition _____ Electrode - Flux (Class) _____ Flow Rate <u>25-35 cfm</u> Gas Cup Size <u>5/8</u>		Contact Tube to Work Distance <u>5/8" - 3/4"</u> Peening <u>NA</u> Interpass Cleaning: <u>HAND/POWER TOOLS</u>	
preheat; up to 3/4" - 50 degrees F, 3/4" - 1 1/2" - 70 degrees F 1 1/2" - 2 1/2" - 150 degrees F over 2 1/2" - 225 degrees F		POSTWELD HEAT TREATMENT Temp <u>NA</u> Time <u>NA</u>	

WELDING PROCEDURE

Pass or Weld Layer(s)	S	Filler Metals		Current		Volts	Travel Speed	Joint Details
		Class	Diameter	Type & Polarity	Amps or Wire Feed Speed			
1 1	3/16"	ER70S-6	.035"	DCEP	180-220	25-27	7-9	
1 1	1/4"	"	.035"	"	180-220	25-27	5-6	
1 1	5/16"	"	.035"	"	180-220	25-27	4-5	
1 1	3/8"	"	.035"	"	180-220	25-27	3-4	
1 2+	7/16"	"	.035"	"	180-220	25-27	2-3	
1 2+	1/2"	"	.045"	"	270-330	28-30	2-3	