| QW-483 SUGGESTED FORMAT FOR PROCEDUS<br>(See QW-200.2, Section IX, ASME Boiler and Pressu<br>Record Actual Conditions Used to Weld Test Coupe | ire vessel Code)   |
|---|--|
| Company Name: XYZ COMPANY   |  |
| Procedure Qualification Record No.: GMAN  | N-2 Date: 3-29-92  |
| WPS No.: GMAW-2 Welding Process (s): GMAW SHORT CIRCUITII   | NG ARC   |
| Types (Manual, Automatic, Semi-Auto.): <u>SEM</u><br>JOINTS (QW-402)  | ILAUTO   |
| Groove Design of Test Coupon (For combination qualifications, the deposited weld metal thick  |  |
| BASE METALS (QW-403)  | POSTWELD HEAT TREATMENT (QW-407)   |
| Material Spec.: SA 516  | Temperature: NONE  |
| Type or Grade: GR 70  | Time:  |
| P-No.: 1 to P-No.: 1  | Other:   |
| Thickness of Test Coupon: <u>A50"</u> Diameter of Test Coupon: <u>N/A</u> Other:  |  |
| P   | GAS (QW408)  |
| FILLER METALS (QW-404)  | Percent Composition  |
| SFA Specification: 5.18   | Gas(es) (Mixture) Flow Rate  |
| AWS Classification: ER 70 S-2   | Shielding: YES 100%AR 20 CFH   |
| Filler Metal F No.: 6 Weld metal Analysis No.: 1  | Trailing: <u>NONE</u> Backing: NONE  |
| Size of Filler metal: 1/8"  | ELECTRICAL CHARACTERISTICS (QW-409)  |
| Other:  | Current: DC  |
|   | Polarity: RP   |
| Weld Metal Thickness:   | Amps.: 130 Volts: 17 Tungsten Electrode Size: NA                                     |
| POSITION (QW-405)   | Other:   |
| Position of Groove: 3G  | S. 100 100 100 100 100 100 100 100 100 10  |
| Weld Progression (Uphill, Downhill) DOWNHII   | L TECHNIQUE (QW410)  |
| Other:  | Travel Speed: <u>12 IPM</u>  |
| DDFUE AT (OIM 40C)  | String orW eaveBead WEAVE  |
| PREHEAT (QW406)   | Oscillation: NONE  |
| Preheat Temp.:160 DEG_F<br>Interpass temp 650 DEG   | Multipass or Single Pass (per side): MULTIPASS Single or Multiple Electrodes: SINGLE |
| Other:  | Other:   |
|   | (4   |

|  | t (QW-150)                | 7.9                                     |                    | 23            |           | Ultimate   | U                | Itimate      | Type of  |
|--|---------------------------|---|--------------------|---------------|-----------|------------|------------------|--------------|--|
| Specimen         Width           T-1         .750           T-2         .749 |                           |   | 40020000000000     |               |           | Total Load |                  | nit Stress   | Failure &  |
|  |                           | Thickness<br>.450                       |                    | Area          | Lb.       |            |                  | si           | Location   |
|  |                           |   | .337               | 23,000        |           | 8,249      | DF-BM<br>DF-WELD |              |  |
|  |                           |   | .449               |               |           | 23,500     |                  | 9,940        |  |
| 9.0845 - 4.90394   | Gara na motova            | 000000000000000000000000000000000000000 |                    | - 5           |           |            |                  |              |  |
| Suided Ben<br>Type and I   | d Tests (QW<br>Figure No. | <i>l</i> -160)                          |                    | -             | Result    |            |                  |              |  |
| FACE #1  |                           |   |                    |               | PASS      |            |                  |              |  |
| FACE #2  |                           |   |                    |               |           | /4" CORN   | ER CRA           | CK - NO DE   | FECT   |
| ROOT#1   |                           |   |                    |               | PASS      |            |                  |              |  |
| R00T#2   |                           |   |                    |               |           | 1/8" CRAC  | CK               |              |  |
| oughness   | Tests (QW-1               | 70)                                     |                    |               |           |            |                  |              |  |
|  |                           |   |                    | -3            | 1         | mpact Valu | res              |              | 18   |
| Specimen<br>No.  | Notch<br>Location         | Specimen<br>Size                        |                    | Test<br>Temp. | F         | t. Lbs.    | % She            | ar Mils      | Drop Weigh<br>Break (Y/N)  |
| 1  | WELD                      | 10 MM X 10 MM                           |                    | -30°F         | 1.4       | 0 FT LBS   |                  | Š.           |  |
| 2  | WELD                      | 10 MM X 1                               | 0 MM               | -30°F         | 2         | 6 FT LBS   | 02.              |              |  |
| 3  | WELD<br>HAZ               | 10 MM X 10 MM<br>10 MM X 7 MM           |                    | -30°F         |           | 5 FT LBS   | N/A N/A          |              | N/A  |
| 5  | HAZ                       | 10 MM X 7 MM                            |                    | -30°F         | C437.5    | 6 FT LBS   |                  |              |  |
| 5  | HAZ                       | 10 MM X 7                               |                    | -30°F         |           | 5 FT LBS   | 8                | 8            | 8  |
| 3  |                           |   |                    | 3             | 80        |            | 76               | 0            |  |
|  |                           |   |                    | 1             | 8         |            | 18               | 8            |  |
| Comments:  | TEST                      | COUPON WA                               | AS FULLY           | DEOXIDIZ      | ED STEI   | EL.        |                  |              | 48   |
|  | Test (QW-18               | 0)                                      | our seem do were e |               |           |            |                  |              |  |
|  |                           |   |                    |               |           |            | it Metal:        | r es:        | _ No:  |
| nacro R  | esults:                   | 8                                       |                    | <u> </u>      | <u> </u>  | 59         | - 25             | - 2,-        |  |
| Other Tests  |                           |   |                    |               |           |            |                  |              |  |
| ype of Tes   | t:                        |   |                    |               |           |            |                  |              |  |
| )eposit An   | alysis:                   | -                                       |                    |               | ***       |            | - 10             |              | <del></del>  |
| Other:   |                           | DI OUU IS                               | - 37               | 37            |           | CI . I     |                  | 6.00         | N *  |
|  | nme: <u>JOE</u>           |   |                    | 59)           | <u> </u>  | Clock No.  |                  | Stamp        | Color State of the Color of the |
| ests cond  | ucted by:                 | JIMS TEST                               | LAB                | 28            | 88        | - 92       | _ Labor          | atory Test N | 10.: 1234  |
|  | l el                      | ements in thi                           | s record a         |               |           |            |                  | re prepared  | , welded,  |
|  |                           |   |                    |               |           |            |                  |              |  |
|  |                           | ce with the r                           | equiremer          | its of Sect   | ion IX of | the ASME   | Code.            |              |  |
|  | in accordan               |   |                    | nts of Sect   | ion IX of | the ASME   | Code.            |              |  |