

1.0 GENERAL

1.1 A welder qualified under this Standard may perform oxy-acetylene butt welds on 2-inch and smaller pipe with a wall thickness of less than 0.188" in either vertical or horizontal position, and at all design pressure stress levels.

\*\*1.2 Welder must be qualified to perform oxy-acetylene welding on pipe designed to operate at a hoop stress less than 20% of SMYS (refer to Gas Standard D-30).

1.3 Qualification applies only to pipe meeting API 5L or 5LX, or ASTM A53 or A106 specifications.

1.4 Weld procedure, materials and equipment shall be as specified in Standard D-20.

2.0 QUALIFICATION TEST

2.1 Qualification shall be performed with 2" nominal diameter by 0.154" wall thickness by 4.5" minimum length test spools (code 02-2057).

2.2 One test weld shall be performed in the horizontal fixed position, and one in the vertical fixed position.

\*\*2.3 This test may be used to satisfy the butt weld requirement for qualification on pipe designed to operate at a hoop stress less than 20% SMYS (Gas Std. D-30, Para. 2.1.1 (1)) if an additional 2 root bends are tested. G.O. 112 (latest revision) requires that 3 of 4 coupons pass root bend tests for qualification of welders on low stress level pipe.

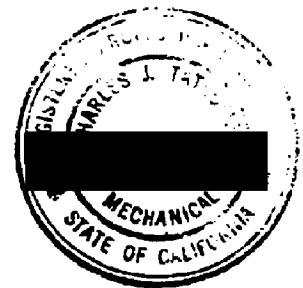
3.0 TEST WELD INSPECTION REQUIREMENTS

3.1 The test welds shall be visually inspected. See Standard D-40 for inspection requirements. Any weld not meeting these requirements shall be failed without performing destructive tests.

3.2 See Page 2 for type and number of destruction tests specimens. Specimens shall be tested in accordance with and meet the requirements of Standard D-31.

\*4.0 REQUALIFICATION

4.1 Welders shall be requalified no later than the last day of the sixth calendar month following the calendar month in which the last previous test was satisfactorily passed. The requalification test is the same as the qualification (Section 2).



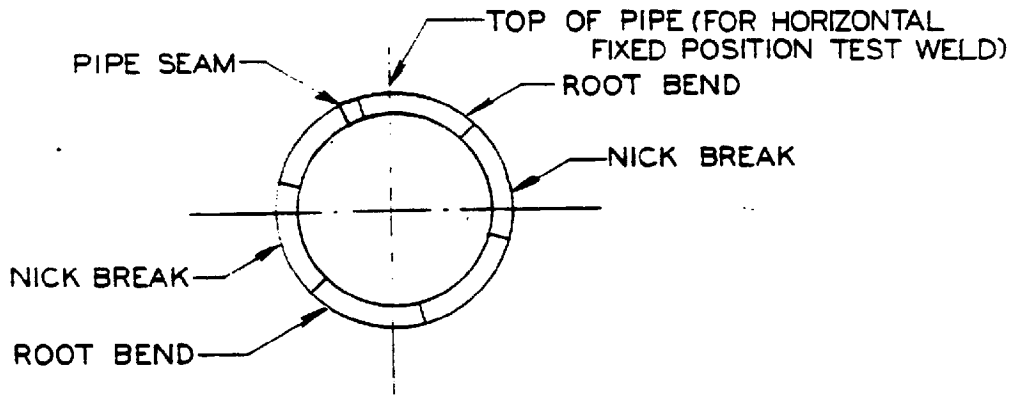
APPROVED BY														
LWH	PAI	2	2-10-81	Added Para. 1.2 & 2.3, Rev'd Para. 4						RTA/PA				
PHH	RCB	1	6-79	Added Sh. 3 & Para. 6						LWH/PAI				
PEI	TET	0	8-20-77	Issue for Use										
JAF	CJT	REV.	DATE	DESCRIPTION	GM	DWN.	CHKD.	SUPV.	APVD.					
GM SUPV. DSGN. DWN. CHKD. O.K. DATE      SCALE					<b>PIPING - DETAILS</b> Oxy-acetylene Welder Qualification for Over 20% of SMYS GAS STANDARD <b>PACIFIC GAS AND ELECTRIC COMPANY</b> SAN FRANCISCO, CALIFORNIA					B/M DWG. LIST SUPSDS SUPSD BY SHEET NO. of 3 SHEETS DRAWING NUMBER REV. 086463      2				
										MICROFILM				

5.0 LIMITATIONS ON WELDER QUALIFICATION

5.1 This test shall be given only to welders who will be making oxy-acetylene butt welds on pipe designed to operate at over 20% of SMYS (limited to 2" and smaller). For general purpose oxy-acetylene welding, qualification is required under D-30.

6.0 RECORDS

- 6.1 Records for all welders who have been qualified under this Standard shall be retained as outlined below.
- 6.2 All Employee Qualification and Requalification records must be retained for a minimum duration of five years.
- 6.3 All Employee Qualification and Requalification records must be retained through temporary lapses in a welder's qualification.
- 6.4 The Record shall be made by filling out Form 75-96 (Gas Standard D-30.1, Page 3).



DESTRUCTIVE TEST SPECIMEN

NOTES:

- 1. PIPE SEAM WELD SHALL BE LOCATED IN AN AREA OTHER THAN IN A SPECIMEN.
- 2. WELD SPECIMENS MUST BE TESTED IN ACCORDANCE WITH AND MEET REQUIREMENTS OF STANDARD D-31. WELDS SHALL PASS BOTH VISUAL AND DESTRUCTIVE TESTS.

\*Paragraph Revised  
 \*\*Paragraph Added

	PG & E CO.	DRAWING NUMBER	REV.
	SHEET 2 OF 3 SHEETS	086463	2
	MICROFILM		

OXY-ACETYLENE WELD TEST REPORT -

DIVISION \_\_\_\_\_

FOR WELDERS ON PIPING SYSTEMS OPERATING AT HOOP STRESSES  
GREATER THAN 20% OF THE SPECIFIED MINIMUM YIELD STRENGTH

(Check Appropriate Box)

CODE MARK \_\_\_\_\_

Passed  Failed

FULL NAME \_\_\_\_\_

DATE OF ANNUAL QUALIFICATION WELD \_\_\_\_\_

SOCIAL SECURITY NO. \_\_\_\_\_

DATE OF INSPECTION OF WELD \_\_\_\_\_

CLASSIFICATION \_\_\_\_\_

DATE OF PREVIOUS ANNUAL QUALIFICATION \_\_\_\_\_

TOWN \_\_\_\_\_

DATE OF 6 MONTH VERIFICATION OF WELDING IN  
QUALIFICATION PROCESS \_\_\_\_\_

Butt Weld 2" Nominal Diameter By 0.154" W.T. By 4.5" Minimum Length Test Spools

"Root Bend" Pipe in Horizontal Fixed Position	PENETRATION			FUSION			POROSITY		SLAG INCLUSION		APPEARANCE			REMARKS	TEST RESULTS
	(G)	(S)	(U)	(G)	(S)	(U)	(P)	(F)	(P)	(F)	(G)	(S)	(U)	(1) - (6)	(P) - (F)
SPECIMEN															
1															
2															
SPECIMEN															
3															
4															

TYPE TEST: NICK BREAK

SPECIMEN		GAS POCKETS			SLAG INCLUSION			FUSION	REMARKS
NO.	LOCATION	NO.	MAX. SIZE	BETWEEN	NO.	LENGTH	BETWEEN		
1									
2									
3									
4									

KEY: Use these abbreviations in POROSITY, SLAG INCLUSION & TEST RESULTS columns:  
 P = Pass F = Fail  
 Use these abbreviations in PENETRATION, FUSION, and APPEARANCE columns:  
 G = Good, S = Satisfactory U = Unsatisfactory  
 Use the following in REMARKS section, as applicable:  
 1 = Undercutting 3 = Excessive weld reinforcements 5 = Lack of Penetration  
 2 = Cold lap 4 = Insufficient weld reinforcement 6 = Burn through

\_\_\_\_\_  
Test Inspector

PG & E CO.	DRAWING NUMBER	REV.
	086463	1
SHEET 3 OF 3 SHEETS	MICROFILM	