Daily Weld Summary Report Job Aid

Guidance Document References:
- **D-40 Weld Inspection**
- **Form FD-40-A**

Level of Use:
- ☐ **Information**
- ☐ **Reference**
- ☐ **Continuous**

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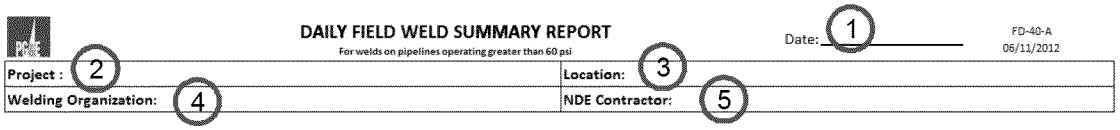
Section 1: Weld Summary Report Header Data



DAILY FIELD WELD SUMMARY REPORT
For welds on pipelines operating greater than 60 psi
Date: 1
FD-40-A
06/11/2012

Project : 2	Location: 3
Welding Organization: 4	NDE Contractor: 5

1 For **Date**, provide the date the weld inspection was completed and this form signed.

2 For **Project**, provide job number AND project name.
Example: *PM number* / L-401-Extension.

3 For **Location**, provide location. For example, mile post marker, street address, print designation or tie-in location.

4 For **Welding Organization**, provide name of internal PG&E organization or name of external company that performed welding.

5 For **NDE Contractor**, provide name of company performing non-destructive examination (NDE).

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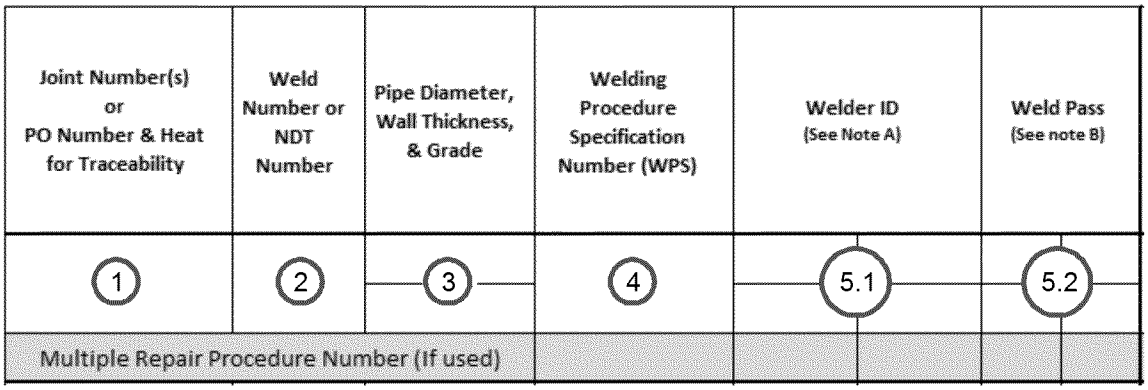
Section 2: Identifying Weld, Procedure, and Welder



1 For **Joint Number or PO Number & Heat**,

1.1 IF existing pipe, THEN enter "Existing" with pipeline number and fitting type.

Example: Existing, L-401 / Save-a-valve A105

1.2 IF new pipe, THEN provide assigned joint number(s) as referenced on "weld map" or job print with heat number and purchase order (PO) number. Example: 1 - 2

or

Provide heat number AND pipe supplier's PO number from original material purchase. Example: PO # 35000912748, Heat # P526/24331

2 For **Weld Number or NDT Number**, provide PG&E-assigned weld number or non-destructive test (NDT) number. This number should also be on "weld map" or job print.

3 For **Pipe Diameter, Wall Thickness, & Grade**, provide diameter of pipe, wall thickness, AND grade of material.
Example: 24" / 0.375 / X60

4 For **Welding Procedure Specification Number (WPS)**, provide WPS.
Example: BW/60-9/M or 111SC-F

5 For **Welder ID and Weld Pass**,

5.1 For **Welder ID**, provide each welder ID according to their welding position on weld, oriented counter-clockwise facing EAST or North, examples on next page.

5.2 For **Weld Pass**, provide Weld Pass Code(s) for each corresponding Welder ID according to their welding position on weld, examples on next page.

Weld Pass Codes: **R**=Root Bead, **H**=Hot Pass, **F**=Filler, **C**=Cap, **A**=Complete Weld

5.3 Do **not** leave blanks. If the value is the same, enter "NA" or a slash ("/"), or repeat the value.

Section 2: Identifying Weld, Procedure, and Welder (Continued)

(Step 5, continued)

5.4 Examples for filling out **Welder ID** and **Weld Pass** fields:

a) One welder completed entire weld (all four quarters of pipe):

1 Welder Crew

Welder ID		Weld Pass	
Welder 1	/	A	/
/	/	/	/

b) One crew of two welders, where each welder completed one half of the weld:

2 Welder Crew

Welder ID		Weld Pass	
Welder 1	Welder 2	A	A
/	/	/	/

c) Two crews of two welders each, where first crew (Welder 1 & 2) performed root bead and hot pass and second crew (Welder 3 & 4) completed filler and cap:

Two (2 Welder) Crews

Welder ID		Weld Pass	
Welder 1	Welder 2	R, H	R, H
Welder 3	Welder 4	F, C	F, C

d) Two crews of one weld each, where Welder 1 completed the entire root bead and hot pass and Welder 2 completed entire filler and cap:

Two (2 Welder) Crews

Welder ID		Weld Pass	
Welder 1	/	R, H	/
Welder 2	/	F, C	/

e) One crew of four welders, where each welder completed one entire quarter of the weld:

Two (2 Welder) Crews

Welder ID		Weld Pass	
Welder 1	Welder 2	A	A
Welder 3	Welder 4	A	A

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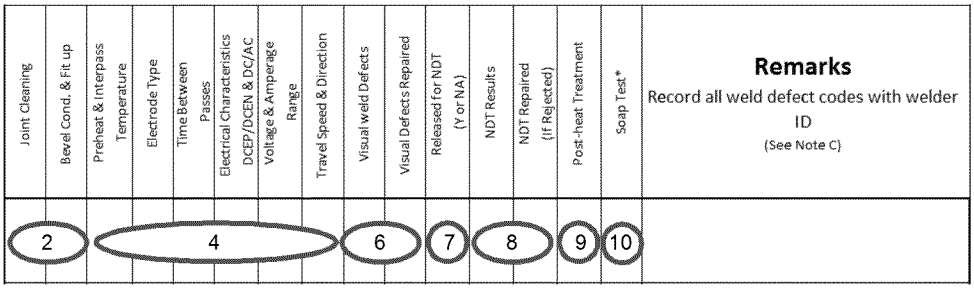
Section 3: Inspection Results



1 Before welding begins, examine weld preparation of pipe and parts to be welded for joint cleanliness, bevel condition, and fit up.

2 For **Joint Cleaning**, **Bevel Conditions**, and **Fit Up**, enter "A" for accepted or "R" for rejected.

2.1 IF **Joint Cleaning** AND **Bevel Conditions** AND **Fit Up** are rejected, do **not** begin the weld until the rejected condition(s) have been corrected.

3 During welding, compare the following measurements to requirements in the Welding Procedure Specification:

- A decrease in the minimum preheat, interpass temp. or post-heat requirement.
- Electrode type and/or shielding gas or flux.
- An increase in maximum time between completion of the root bead and the start of the second bead.
- Electrical characteristics, a change from DCEP to DCEN, or DC to AC.
- Voltage & Amperage ranges.
- Welding travel speed range and travel direction.

4 For **Preheat & Interpass Temperature**, **Electrode Type**, **Time Between Passes**, **Electrical Characteristics**, **Voltage & Amperage Range**, and **Travel Speed & Direction**, enter "A" for accepted when weld meets requirements, or "R" for rejected when weld does **not** meet requirements.

4.1 IF any of these six fields contains an "R" for rejected, THEN

4.1.1 Weld must be cut out.

4.1.2 Enter reason for each rejection with welder ID in Remarks AND state "Cut out.

4.1.3 END of Inspection.

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Section 3: Inspection Results (Continued)

5 IF weld is completed AND all previous inspection criteria is "A" for accepted,

THEN perform a visual inspection of weld as required by Gas Standard D-40, "Weld Inspection". Use the following defects codes listed below for visual inspection:

C = Crack	UA = Unacceptable Appearance
AB = Arc Burn	IP - Incomplete Penetration
WD = Weld Dimensions	IF = Incomplete Fusion
BT = Burn Through	UC = Undercut
P = Porosity	

6 For **Visual Weld Defects**, enter "A" for accepted when weld meets requirements, or "R" for rejected when weld does **not** meet requirements.

6.2 IF there are any visual defect(s), THEN

6.2.1 Enter "R" for rejected.

6.2.2 Enter applicable weld defect code and welder ID for each defect in the Remarks column.

6.2.3 When defect(s) are repaired, THEN re-examine weld for visual defects.

6.2.4 For **Vis. Defects Repaired** enter "A" for accepted when weld meets requirements, or "R" for rejected when weld does **not** meet requirements.

6.2.5 IF there are visual defects, THEN

NOTE

A qualified repair procedure is required to be used whenever repairs are made to a previously repaired area.

a) Enter applicable weld defect code and welder ID for each defect in the Remarks column.

b) Cut out weld and enter "Cut out" in Remarks column OR use a Repair Procedure Specification to repair weld in previously repaired area and fill out next line of form, **Multiple Repair Procedure Number** with new data.

7 For **Released for NDT**,

7.1 IF **no** additional NDT is required, THEN enter "NA" for not applicable, and proceed to Step 9 on the next page.

7.2 IF additional NDT is required, such as radiography (RT), ultrasound (UT), or magnetic particle inspection (MT), THEN enter "Y" for yes, AND hand off weld to NDT personnel.

8 For **NDT Results**, enter "A" for accepted when weld meets requirements, or "R" for rejected when weld does **not** meet requirements.

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Section 3: Inspection Results (Continued)

8.1 IF NDT results are rejected, THEN

8.1.1 Enter "R" for rejected.

8.1.2 Enter applicable NDT defect code and welder ID for each defect in the Remarks column.

NOTE

A qualified repair procedure is required to be used whenever a repair is made to a weld using a process different from that used to make the original weld or when repairs are made to a previously repaired area.

8.1.3 When defect(s) are repaired, THEN hand off weld to NDT personnel.

8.1.4 For **NDT Repaired**, enter "A" for accepted when weld meets requirements, or "R" for rejected when weld does **not** meet requirements.

a) IF NDT Repaired is rejected, THEN

- Cut out weld and enter "Cut Out" with welder ID in Remarks column.

OR

- Use a Repair Procedure Specification to repair AND fill out information on next line of form, "Multiple Repair Procedure Number" with new data.

9 For **Post-heat Treatment**, enter "A" for accepted when weld meets requirements, or "R" for rejected when weld does **not** meet requirements.

NOTE

All pressure-retaining welds must be soap tested at full line pressure or strength tested (hydro-test).

10 For **Soap Test**,

10.1 IF weld was or will be strength tested, THEN enter "ST"

10.2 IF weld was soap tested, THEN enter "A" for accepted when weld meets soap test requirements, or "R" for rejected when weld does **not** meet soap test requirements.

11 WHEN all inspections are complete and form filled out, THEN

11.1 For **Total Welds Visually Inspected**, enter the number of welds that were visually inspected on form. (From one to six, count all weld numbers.)

11.2 For **Total Welds Rejected**, enter the number of welds rejected, indicated by an "R" in the "Visual Weld Defects" column OR in the "NDT Results" column. (from one to six).

11.3 For **Inspector OQ Date or CWI #** , enter date OQ qualified or inspector's CWI number.

11.4 For **ID / Signature**, a qualified weld inspector must print ID AND sign his or her name.