Exam : **API 653**

Title : Aboveground Storage Tank Inspector

Version : DEMO

1.An inspector is reviewing a single-process SMAW procedure qualification for P-No. 1 material. The inspector needs the recorded conditions used to weld the procedure test coupon and the results of testing that coupon.
Which document directly provides this evidence?
A. Welding Procedure Specification (WPS)
B. Welder Performance Qualification (WPQ) record
C. Base-metal material test report
D. Procedure Qualification Record (PQR)
Answer: D
Explanation:
QW-200.2(a) assigns the recorded qualification variables and specimen test results to the PQR.

2.An inspector reviews a single-process SMAW WPS for P-No. 1 material. It uses the organization's own form and lists all essential variables. Applicable nonessential variables are not included or referenced. A single supporting PQR is filed with the WPS, but the WPS contains no reference to it. Toughness qualification is not required.
Which review finding is correct under QW-200.1?
A. The organization's form may be used, and the PQR must be referenced; nonessential variables may be omitted.
B. The organization's form may be used; applicable nonessential variables must be addressed and the supporting PQR must be referenced.
C. The organization's form may be used, and nonessential variables must be addressed; filing the PQR with the WPS satisfies the reference requirement.
D. Form QW-482 must be used; applicable nonessential variables must be addressed and the supporting PQR must be referenced.
Answer: B
Explanation:
QW-200.1(b) requires the WPS to address all applicable essential and nonessential variables and to reference its supporting PQR. Under QW-200.1(d), an organization's own written or tabular form may be used when it includes or references the required information.

3.During a hypothetical single-process SMAW procedure qualification on P-No. 1 material, the current log shows a range of 115 A to 125 A. The production WPS later specifies 90 A to 150
A. The organization elects to include welding current in the PQR.
Under QW-200.2(b), which current range should be entered in the PQR?
A. 90 A to 150 A
B. 115 A to 150 A
C. 90 A to 125 A
D. 115 A to 125 A
Answer: D
Explanation:
The PQR is a historical record of the qualification test. QW-200.2(b) requires any recorded variable to reflect the actual value or range used in welding that coupon. The observed range was 115 A to 125 A.

4.For a hypothetical single-process SMAW procedure qualification on P-No. 1 material, all essential variables were monitored and recorded. Toughness qualification is not required. One nonessential variable was not monitored during welding, and there is no record of its actual value.
What should the organization do with that variable in the PQR?
A. Enter the WPS value because the qualification coupon was intended to follow the WPS.
B. Leave that variable unrecorded in the PQR rather than supply an assumed value.
C. Repeat the qualification solely because every nonessential variable must appear in a PQR.
D. Enter a typical shop value because the variable is nonessential.
Answer: B
Explanation:
This avoids inventing an actual test value for an unmonitored variable.

5.An organization qualifies a single-process SMAW procedure for P-No. 1 material. An external laboratory performs the required specimen tests and signs the PQR as a subcontractor. The organization does not certify the PQR and argues that the laboratory's signature is sufficient.
Under QW-200.2(b), which conclusion is correct?
A. The laboratory's signature is sufficient because it performed the specimen tests.
B. No certification is required when all listed specimen test results are acceptable.
C. The organization must certify the PQR; it may not subcontract that certification function.
D. The welder's signature may replace the organization's certification because the welder made the coupon.
Answer: C
Explanation:
The organization retains responsibility for certifying the PQR accurate.