

Rig-Site Re-Stubbing — A Well Completed, Not Abandoned

A 14" 95-grade high-strength re-stubbing weld at an onshore gas well — **turning a would-be abandonment into a completed producer.**

SCOPE Re-stubbing butt weld	PIPE 14" 95-grade high-strength	LOCATION Onshore — rig-site execution	STANDARD NACE MR0175 · ASME IX
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THE CHALLENGE

During operations at an onshore gas well, a 14" 95-grade high-strength string needed to be re-stubbed — a new section welded on — to allow the well to be completed. The alternative was abandonment.

Re-stubbing is unforgiving. The joint carries the string, so the weld on a high-strength, high-collapse pipe grade must fully match the parent material's performance — qualified to code and proven, with no room for a marginal result.

And it had to be done **at the rig site**, against the clock, on a live well program where the operator was facing the real prospect of losing the well.

WHY IT WAS DIFFICULT

- **High-strength pipe grade.** 95-grade high-strength material is demanding to weld — the procedure must preserve the pipe's strength and collapse rating across the joint without introducing brittle, crack-prone microstructure.
- **Load-bearing joint.** A re-stub weld carries the string. It cannot be a repair-grade result; it must be a qualified structural weld, verified to code.
- **Rig-site, time-critical.** Full qualification — controlled thermal cycle, NDE, hardness verification — executed in the field while the well program waited on the outcome.

THE STAKES

Without a qualified re-stub, the well faced **abandonment** — the loss of the entire investment in drilling and completing it, and the loss of a producer.

A successful, code-verified weld meant the opposite: the well completed and brought on production. The commercial difference between the two outcomes was substantial and direct.

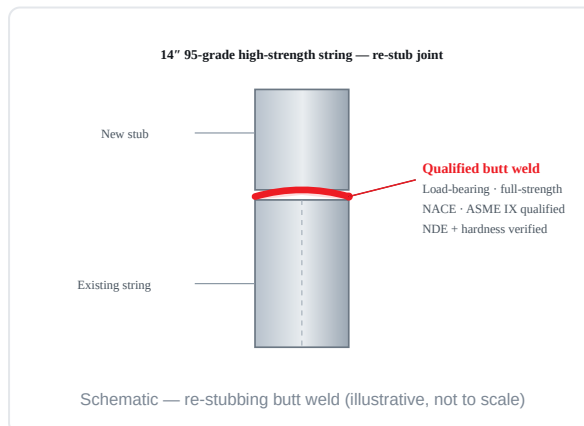
The requirement: a qualified, load-bearing weld on high-strength pipe — right the first time, in the field.

Well saved Completed rather than abandoned	95-grade High-strength pipe, full-strength joint	ASME IX Qualified, load-bearing structural weld	Verified NDE & hardness, fully documented
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THE SOLUTION

IWS treated the re-stub as a **qualified structural weld**, backed by a welding procedure specification (WPS) and supporting procedure and welder qualification records for the 14" 95-grade high-strength joint.

- **Procedure matched to the grade.** Technique and consumables selected to preserve the strength and collapse performance of the 95-grade pipe across the joint, while meeting NACE MR0175 hardness limits.
- **Controlled thermal cycle.** Documented preheat and inter-pass temperature control, with post-weld heat treatment to manage hardness and residual stress in the high-strength material.
- **Rig-site execution.** The full qualified procedure delivered in the field, on the well program's timeline — not deferred to a workshop the schedule could not afford.
- **Verification built in.** NDE (MPI / UT) and hardness verification on the completed joint, producing the records to confirm a sound, load-bearing weld before the string went back in service.



THE RESULT

The re-stub was welded and qualified **at the rig site**, allowing the well to be **completed rather than abandoned**. The completed joint was verified and documented before the string returned to service.

The job became a **benchmark rig-site qualification** of this pipe grade for IWS — and a direct commercial saving, turning a would-be abandonment into a completed producer.

"The choice was a qualified weld or losing the well. We delivered a code-verified, load-bearing joint in the field — and the well was completed."

— IWS PROJECT ENGINEERING

VERIFICATION & RECORDS

- **Procedure qualification** to ASME IX, with WPS and supporting welder and procedure records.
- **Hardness verification** across weld and HAZ within NACE MR0175 limits on the high-strength grade.
- **Controlled thermal cycle** with documented preheat, inter-pass and heat treatment.
- **NDE sign-off** (MPI / UT) confirming a sound, load-bearing joint before service.

"A re-stub carries the string — it has to be right the first time. Ours was, and we had the records to prove it."

— IWS WELDING ENGINEERING

KEY TAKEAWAYS

This case shows what IWS capability is worth in commercial terms: a qualified field weld that saved a well from abandonment.

- **A well saved.** A qualified re-stub turned a probable abandonment into a completed, producing well — a direct and substantial commercial saving.
- **Structural, not repair-grade.** A load-bearing weld on high-strength 95-grade pipe, qualified to code and verified — not a stop-gap.
- **Delivered in the field, on time.** Full qualification at the rig site, on the program's schedule, when a workshop return was not an option.

WHY IT MATTERS

When a well hangs on a single weld, "good enough" is not an option. A qualified, verifiable, load-bearing joint is the difference between a completed producer and a lost investment.

This is why operators turn to IWS when the scope is critical and there is no margin for a marginal weld.