CLAIMS

WHAT IS CLAIMED IS:

1. A high-pressure, high-temperature tieback system comprising:

a production casing tieback tool comprising a ratchet-latch sleeve disposed in a recessed portion of an annular extension of increased wall thickness of the production casing tieback tool; and

a production casing mudline hanger disposed about the production casing tieback tool;

wherein the production casing tieback tool is configured to directly engage the production casing mudline hanger; and

wherein the ratchet-latch sleeve is configured to directly engage a threaded axial segment of a tubular other than the production casing mudline hanger.

2. The high-pressure, high-temperature tieback system of claim 1 wherein the ratchet-latch sleeve is configured to directly engage an intermediate casing tieback tool.

3. The high-pressure, high-temperature tieback system of claim 1 wherein the ratchet-latch sleeve is configured to directly engage an intermediate casing mudline hanger.

4. The high-pressure, high-temperature tieback system of claim 1 wherein the annular extension comprises a raised axial segment of the production casing tieback tool, such that ~~the~~ a radial wall thickness of the recessed portion is greater than or equal to the radial wall thickness of the production casing tieback tool other than the raised axial segment.

5. The high-pressure, high-temperature tieback system of claim 1 wherein the production casing tieback tool further comprises a metal-to-metal seal that is configured to sealingly engage the production casing mudline hanger as a result of the production casing tieback tool being urged downward relative to the production casing mudline hanger.

6. The high-pressure, high-temperature tieback system of claim 5 wherein the production casing tieback tool is urged downward relative to the production casing mudline hanger in response to being rotated relative to the tubular other than the production casing mudline hanger.

7. The high-pressure, high-temperature tieback system of claim 6 wherein the tubular other than the production casing mudline hanger comprises an intermediate casing tieback tool.

8. The high-pressure, high-temperature tieback system of claim 6 wherein the tubular other than the production casing mudline hanger comprises an intermediate casing mudline hanger.

9. A method of stabbing a high-pressure, high-temperature tieback tool into a mudline hanger of a high-pressure, high-temperature well, comprising:

applying motive force to the tieback tool to engage a ratchet-latch sleeve with a threaded surface of a tubular other than the mudline hanger; and

coupling the tieback tool to the mudline hanger by rotating the tieback tool relative to the tubular other than the mudline hanger.

10. The method of claim 9 wherein rotating the tieback tool moves the tieback tool downward.

11. The method of claim 10 wherein moving the tieback tool downward causes a metal-to-metal seal of the tieback tool to seal against an inner surface of the mudline hanger.

12. The method of claim 9 further comprising extracting hydrocarbons from ~~a~~ the high-pressure or high-temperature well through the tieback and the mudline casing.

13. The method of claim 9 wherein the ratchet-latch sleeve is disposed in a recessed portion of an annular extension of increased wall thickness of the tieback tool.