CLAIMS

1. A system, comprising:

an annular wellhead housing, comprising:

a shoulder; and

a first passage extending radially through the wellhead housing from an exterior surface of the wellhead housing to an interior surface of the wellhead housing;

an annular indicator ring disposed axially adjacent to a hanger, wherein the hanger and the indicator ring are configured to couple to a hanger running tool, wherein the hanger running tool comprises an annular recess; and

an indicator assembly configured to extend through the passage, wherein the indicator assembly, when actuated radially inward, is configured to extend into the annular recess of the hanger running tool to indicate that the hanger disposed within the wellhead housing has landed on the shoulder.

2. The system of claim 1, wherein the indicator assembly is configured to contact the indicator ring when the indicator assembly is actuated and the hanger has not landed on the shoulder.

3. The system of claim 1, wherein the first passage comprises an existing test port.

4. The system of claim 1, wherein the indicator assembly comprises:

an annular housing comprising a second passage;

an indicator pin extending through the second passage of the annular housing; and

a spring configured to bias the indicator pin radially outward;

wherein a tip of the indicator pin is configured to contact the annular recess of the hanger running tool when the indicator pin is depressed radially

inward and the hanger has landed on the shoulder, and wherein the indicator pin is configured to contact the indicator ring or the hanger when the indicator pin is depressed radially inward and the hanger has not landed on the shoulder.

5. The system of claim 4, wherein the housing comprises: a first indicator housing, comprising:

a conical surface configured to form a first seal with the first passage of the wellhead housing;

an exterior threaded surface disposed adjacent to the conical surface and configured to interface with an interior threaded surface of the first passage of the wellhead housing;

an annular seal disposed adjacent to the exterior threaded surface and configured to form a second seal with the first passage of the wellhead housing; and

a pressure test port in fluid communication with a volume disposed between the first indicator housing and the wellhead housing.

6. The system of claim 5, wherein the pressure test port is configured to receive a pressure to determine whether the indicator assembly is properly installed and sealed within the first passage of the wellhead housing.

7. An indicator assembly configured to extend through and couple to a test port of a wellhead housing, the indicator assembly comprising:

an annular housing comprising a passage;

an indicator pin extending through the passage of the annular housing; and

a spring configured to bias the indicator pin radially outward;

wherein the indicator assembly, when actuated, is configured to indicate whether a hanger disposed within the wellhead housing has landed on a first shoulder of the wellhead housing, wherein a tip of the indicator pin is configured to contact an annular recess of a hanger running tool when the indicator pin is

depressed radially inward and the hanger has landed on the first shoulder, and wherein the indicator pin is configured to contact an indicator ring or the hanger when the indicator pin is depressed radially inward and the hanger has not landed on the first shoulder.

8. The indicator assembly of claim 7, wherein the annular housing comprises:

a first annular indicator housing comprising a first interior threaded surface; and

a second annular indicator housing comprising a first exterior threaded surface configured to interface with the first interior threaded surface of the first annular indicator housing to couple the second annular indicator housing to the first annular indicator housing.

9. The indicator assembly of claim 8, wherein the indicator pin comprises:

a positive band;

a negative band; and

a stopper portion comprising a second annular shoulder configured to contact the second indicator housing when the spring biases the indicator pin radially outward;

wherein the positive band and the negative band are positioned on the indicator pin such that when the indicator pin is depressed radially inward and the hanger has landed on the first shoulder, the negative band is obscured from view by the second indicator housing, and when the indicator pin is depressed radially inward and the hanger has not landed on the first shoulder, the negative band is not obscured by the second indicator housing.

10. The indicator assembly of claim 9, wherein the positive band and the negative band are visible to a user due to color, texture, text, graphics, or finish, or a combination thereof.

11. The indicator assembly of claim 7, wherein the first indicator housing comprises:

a conical surface configured to form a first seal with the test port of the wellhead housing;

a second exterior threaded surface disposed adjacent to the conical surface and configured to interface with a second interior threaded surface of the test port of the wellhead housing;

an annular seal disposed adjacent to the exterior threaded surface and configured to form a second seal with the test port of the wellhead housing;

a pressure test port in fluid communication with a volume disposed between the first indicator housing and the wellhead housing.

12. The indicator assembly of claim 11, wherein a pressure is applied to the pressure test port to determine whether the indicator assembly is properly installed within the first passage of the wellhead housing.

13. A method, comprising:

coupling an indicator assembly to a wellhead housing of a wellhead assembly, wherein the indicator assembly comprises an indicator pin configured to extend radially through the wellhead housing, wherein the wellhead housing comprises an annular shoulder;

coupling an indicator ring to a hanger running tool;

coupling a hanger to the hanger running tool, wherein the hanger running tool comprises an annular recess configured to receive a portion of the indicator pin when the indicator assembly is actuated and the hanger has landed on the shoulder, and wherein the indicator pin is configured to contact the indicator ring when the indicator assembly is actuated and the hanger has not landed on the shoulder;

running the hanger and the hanger running tool into the wellhead housing;

depressing the indicator pin radially inward;

determining whether the hanger has landed on the shoulder based on how far the indicator pin is depressed before contacting a surface of the wellhead assembly.

14. The method of claim 13, comprising:

applying a pressure to a pressure test port of the indicator assembly; and

removing and reinstalling the indicator assembly if the pressure test port does not hold the applied pressure.

15. The method of claim 13, comprising retrieving and re-running the hanger and the hanger running tool if the hanger has not landed on the shoulder.

16. The method of claim 13, wherein the indicator assembly is coupled to an existing test port of the wellhead housing.

17. The method of claim 13, wherein the indicator assembly comprises:

an annular housing comprising a passage;

the indicator pin extending through the passage of the annular housing; and

a spring configured to bias the indicator pin radially outward.