CLAIMS

What is claimed is:

1. A single trip multi-zone completion system, comprising:

a plurality of completion sections operatively coupled together and extendable within a wellbore, each completion section including:

a base pipe providing an interior and defining one or more perforations at a single axial location to provide fluid communication between the interior and an annulus defined between the completion section and a wellbore wall;

one or more sand screens radially offset from the base pipe such that a flow annulus is defined therebetween; and

a production sleeve movably arranged within the interior of the base pipe between a closed position, where the production sleeve occludes the one or more perforations, and an open position, where the one or more perforations are exposed to allow fluid communication from the flow annulus into the interior; and

a shunt system positioned about the base pipe of each completion section to receive and redirect a gravel slurry flowing in the annulus and thereby provide an alternate flow path for the gravel slurry.

2. The system of claim 1, wherein the one or more sand screens include a first sand screen and a second sand screen axially offset from each other, the completion section further comprising a communication sleeve interposing the first and second sand screens.

3. The system of claim 1, wherein the shunt system is positioned on an exterior of the one or more sand screens and includes at least one transport tube that is open to the annulus at an upper end to receive the gravel slurry.

4. The system of claim 3, wherein the shunt system further comprises a packing tube fluidly coupled to the at least one transport tube at a flow junction.

5. The system of claim 3 or 4, further comprising (i) one or more orifices extending from a sidewall of the at least one transport tube for discharging the gravel slurry into the annulus; or (ii) one or more orifices extending from a sidewall of the packing tube for discharging the gravel slurry into the annulus.

6. The system of claim 3, wherein the one or more sand screens include a first sand screen and a second sand screen axially offset from each other, and the at least one transport tube is a first transport tube extending along a portion of the first sand screen, the shunt system further comprising:

a second transport tube axially offset from the first transport tube and extending along a portion of the second sand screen; and

a jumper tube that fluidly couples the first and second transport tubes.

7. The system of claim 6, further comprising:

a first packing tube coupled to the first transport tube at a first flow junction; and

a second packing tube coupled to the second transport tube at a second flow junction.

8. The system of claim 6 or 7, further comprising: (i) one or more orifices extending from a sidewall of one or both of the first and second transport tubes for discharging the gravel slurry into the annulus; or (ii) one or more orifices extending from a sidewall of one or both of the first and second packing tubes for discharging the gravel slurry into the annulus.

9. The system of claim 1, wherein the shunt system is positioned within the flow annulus and includes at least one transport tube that is open to the annulus at an upper end to receive the gravel slurry.

10. The system of claim 11, further comprising one or more orifices defined in the at least one transport tube and extending radially through the one or more sand screens for discharging the gravel slurry into the annulus.

11. The system of claim 1, wherein (i) at least one of the completion sections is deployed in an open hole section of the wellbore; or (ii) a string of casing is secured within the wellbore, and at least one of the completion sections is deployed in the wellbore adjacent the casing.

12. A method, comprising:

positioning an outer completion string of a single trip multi-zone completion system in a wellbore, the outer completion string including a plurality of completion sections operatively coupled together and each completion section comprising:

a base pipe providing an interior and defining one or more perforations at a single axial location to provide fluid communication between the interior and an annulus defined between the completion section and a wellbore wall;

one or more sand screens radially offset from the base pipe such that a flow annulus is defined therebetween;

a production sleeve movably arranged within the interior of the base pipe between a closed position, where the production sleeve occludes the one or more perforations, and an open position, where the one or more perforations are exposed to allow fluid communication from the flow annulus into the interior; and

a shunt system positioned about the base pipe;

advancing an inner service tool to a first completion section of the plurality of completion sections;

injecting a gravel slurry into a first annulus defined about the first completion section with the inner service tool;

receiving and redirecting a portion of the gravel slurry flowing in the first annulus with the shunt system of the first completion section;

moving the inner service tool to a second completion section of the plurality of completion sections;

injecting the gravel slurry into a second annulus defined about the second completion section with the inner service tool; and

receiving and redirecting a portion of the gravel slurry flowing in the second annulus with the shunt system of the second completion section.

13. The method of claim 12, wherein (i) the shunt system is positioned on an exterior of the one or more sand screens; or (i) the shunt system is positioned within the flow annulus, wherein the shunt system includes at least one transport tube that is open to the annulus at an upper end, the method further comprising receiving the gravel slurry at the upper end of the at least one transport tube.

14. The method of claim 13, wherein the shunt system further comprises a packing tube fluidly coupled to the at least one transport tube at a flow junction, the method further comprising discharging the gravel slurry into at least one of the first and second annuli via one or more orifices extending from a sidewall of the packing tube.

15. The method of claim 13, further comprising discharging the gravel slurry into at least one of the first and second annuli via: (i) one or more orifices extending from a sidewall of the at least one transport tube; or (ii) one or more orifices defined in the at least one transport tube and extending radially through the one or more sand screens.