CLAIMS

What is claimed is:

1. A system for use in a well, comprising:

a tubing section deployed downhole in a wellbore, the tubing section having an internal flow passage exposed to well fluids;

a valve system coupled with the tubing section and comprising a formation isolation valve and a circulating valve operatively coupled together by a mechanical linkage, the formation isolation valve controlling flow along the internal flow passage and the circulating valve controlling flow between the internal flow passage and an exterior of the valve system; and

a pair of hydraulic control lines, the opening and closing of the formation isolation valve and the circulating valve being controlled by the pair of hydraulic control lines and the mechanical linkage.

2. The system as recited in claim 1, wherein the mechanical linkage comprises a collet.

3. The system as recited in claim 1, wherein the mechanical linkage comprises a lost motion mechanism.

4. The system as recited in claim 1, wherein the formation isolation valve comprises a ball valve.

5. The system as recited in claim 1, wherein the circulating valve comprises a sliding sleeve valve.

6. The system as recited in claim 5, wherein the formation isolation valve comprises a ball valve.

7. The system as recited in claim 1, wherein the tubing section extends from an electric submersible pumping system docking station.

8. The system as recited in claim 7, further comprising an electric submersible pumping system docked in the electric submersible pumping system docking station in fluid communication with the tubing section.

9. The system as recited in claim 1, wherein the valve system comprises a shiftable mandrel which may be shifted back and forth via hydraulic inputs applied through the pair of hydraulic control lines.

10. A system for use in a well, comprising:

an upper completion and a shifting tool attached to a lower end of the upper completion, the shifting tool being engageable with a combined formation isolation valve and circulating valve, the shifting tool being operable to selectively open and close the formation isolation valve and the circulating valve.

11. The system as recited in claim 10, wherein the formation isolation valve comprises a ball valve.

12. The system as recited in claim 10, wherein the shifting tool comprises a hydraulic shifting tool.

13. The system as recited in claim 10, wherein the shifting tool comprises an electric shifting tool.

14. The system as recited in claim 10, wherein the shifting tool is retrievable with the upper completion from a borehole.

15. The system as recited in claim 10, wherein the shifting tool may be run into a borehole with the upper completion.

16. A method, comprising:

providing a valve system with a formation isolation valve and a circulating valve;

deploying the valve system downhole into a wellbore on a tubing section; and

operating the formation isolation valve and the circulating valve individually via hydraulic inputs through less than three hydraulic control lines.

17. The method as recited in claim 16, further comprising coupling the formation isolation valve with the circulating valve via a mechanical linkage.

18. The method as recited in claim 17, further comprising forming the mechanical linkage as a collet.

19. The method as recited in claim 17, further comprising forming the mechanical linkage as a lost motion mechanism.

20. The method as recited in claim 16, wherein operating comprises operating the formation isolation valve and the circulating valve with an integrated shifting tool mounted to an upper completion.