CLAIMS

1. A system, comprising:

a first wellbore disposed in a formation, the first wellbore having a pressure imbalance therein causing an influx of formation fluids;

a second wellbore disposed in the formation;

a drill string disposed in the second wellbore, the drill string comprising a drill bit and a logging tool, the logging tool configured to:

detect acoustic energy originating from the influx in the first wellbore; and

generate one or more signals associated with the detected acoustic energy; and

a wellbore ranging module comprising a processor and memory, the wellbore ranging module coupled to the drill string and configured to:

receive, from the logging tool, the one or more signals associated with the detected acoustic energy; and

determine, using the received signals, a direction from the drill bit to the influx of the first wellbore.

2. The system of Claim 1, wherein the wellbore ranging module is further configured to adjust a trajectory of the drill bit based on the determined direction to the influx of the first wellbore.

3. The system of Claim 1, wherein the direction from the drill bit to the influx is determined based at least in part on one of arrival times of P-waves and arrival times of S-waves, the difference between the arrival times of the P-waves and the arrival times of the S-waves, triangulation using the arrival times of the P-waves and the arrival times of the S-waves a plurality of depths in the formation, arrival times of the acoustic energy at two or more receivers of the logging tool, the difference between a first arrival time of the acoustic energy at a first receiver of the logging tool and a second arrival time of the acoustic energy at a second receiver of the logging tool, and arrival times of the acoustic energy at a plurality of depths in the formation.

4. The system of Claim 1, wherein the wellbore ranging module is further configured to determine a distance from the drill bit to the influx.

5. The system of Claim 4, wherein the distance from the drill bit to the influx is determined based at least in part on arrival times of P-waves and S-waves.

6. The system of Claim 4, wherein the distance from the drill bit to the influx is determined based at least in part on a difference between the arrival times of the P-waves and the arrival times of the S-waves.

7. The system of any one of Claims 1-6, wherein the logging tool comprises dipole receivers.

8. The system of any one of Claims 1-6, wherein the logging tool comprises quadrupole receivers.

9. A method, comprising:

detecting, at a logging tool, acoustic energy originating from an influx in a target wellbore;

generating one or more signals associated with the detected acoustic energy; and

determining, using the generated signals, a direction to the influx in the target wellbore.

10. The method of Claim 9, further comprising:

drilling a relief wellbore using a drill string comprising a drill bit; and

adjusting a trajectory of the drill bit in the relief wellbore based at least in part on the determined direction to the influx of the target wellbore.

11. The method of Claim 9, wherein the direction to the influx in the target wellbore is determined based at least in part on one of arrival times of P-waves and arrival times of S-waves, the difference between the arrival times of the P-waves and the arrival times of the S-waves, triangulation using the arrival times of the P-waves and the arrival times of the S-waves a plurality of depths in the formation, arrival times of the acoustic energy at two or more receivers of the logging tool, the difference between a first arrival time of the acoustic energy at a first receiver of the logging tool and a second arrival time of the acoustic energy at a second receiver of the logging tool, and arrival times of the acoustic energy at a plurality of depths in the formation.

12. The method of any of Claims 9-11, further comprising determining a distance to the influx in the target wellbore.

13. The method of Claim 12, wherein the distance to the influx in the target wellbore is determined based at least in part on arrival times of P-waves and S-waves.

14. The method of Claim 12, wherein the distance to the influx in the target wellbore is determined based at least in part on a difference between the arrival times of the P-waves and the arrival times of the S-waves.