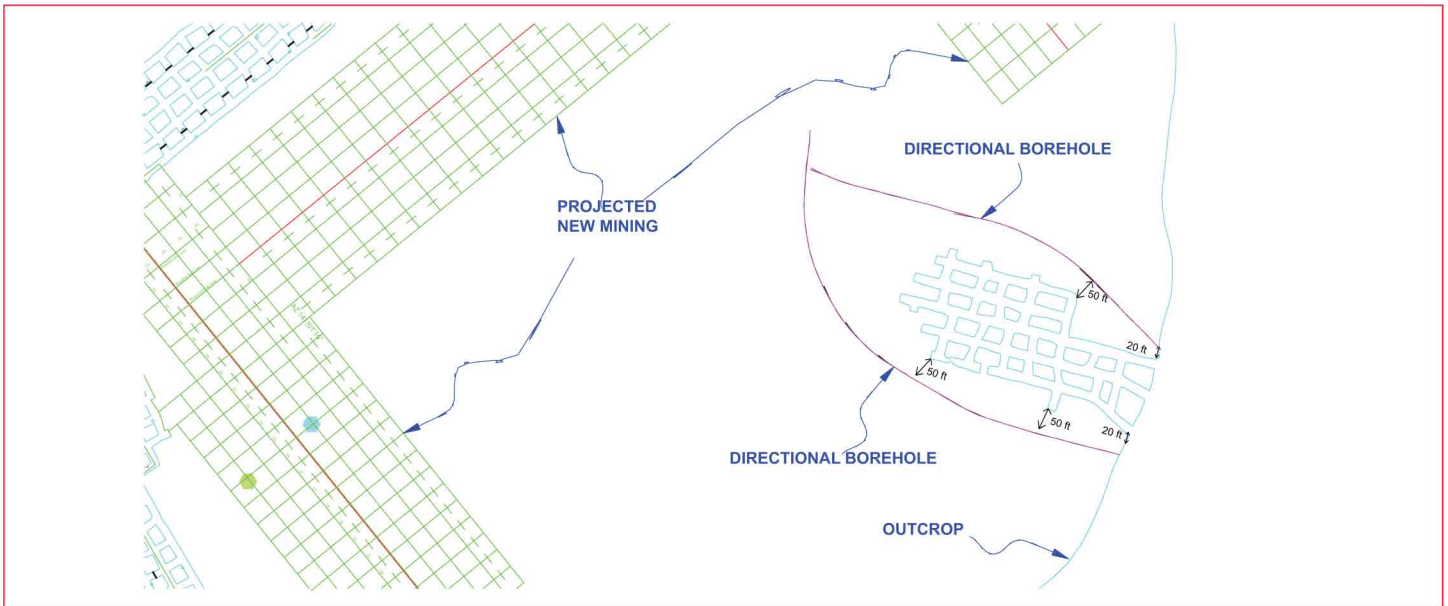


Outcrop Old Works Verification

Old Works Verification Surface Outcrop Boreholes

Where the mined or to-be-mined coalbed outcrops at surface locations, directionally drilled, horizontal boreholes can be drilled from the surface outcrop location(s) to define a path of "solid coal" or "coal in-place" (no workings of the abandoned mine) or to probe into the abandoned mine at one or more locations to more accurately define its location and workings.

- Boreholes can be drilled from outcrop prior to mining to verify "Coal in Place"
- Borehole can also locate selected points in the abandoned mine
- Boreholes drilled from outcrop can be steered to "box-out" the abandoned mine



Abandoned Mine Verification Boreholes

- Drill rig can be setup on the outcrop
- Horizontal boreholes curved to "box out" the abandoned mine
- Boreholes drilled in-seam to prove "coal in place" and act as a know boundary

