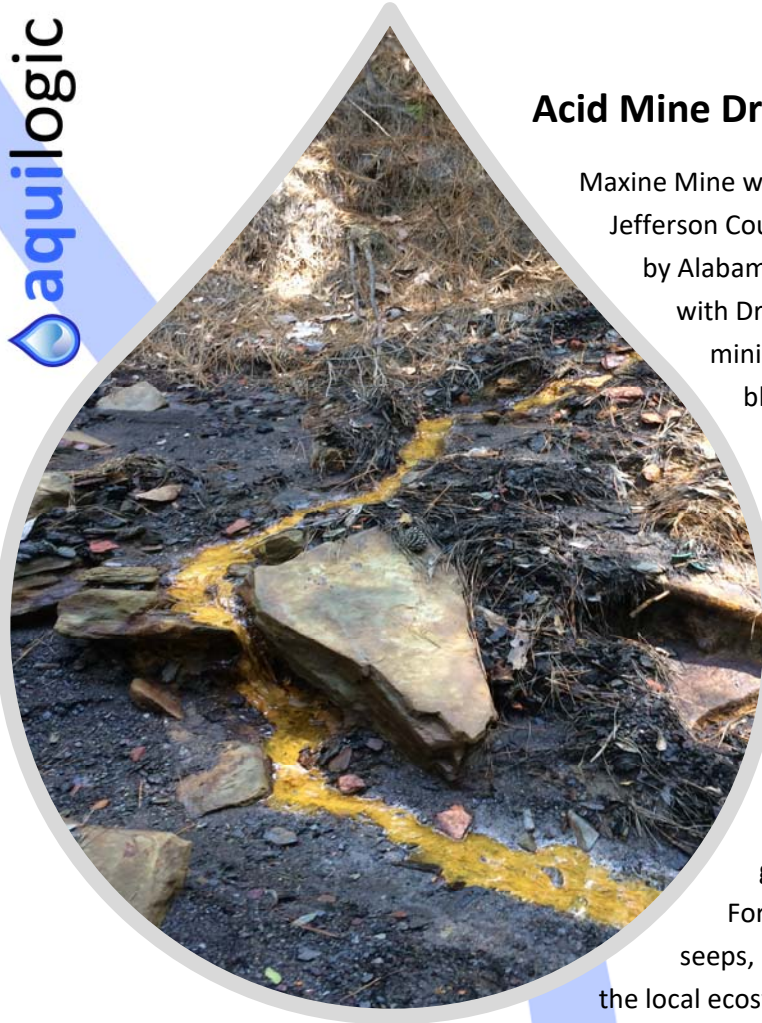


## Acid Mine Drainage Expert Litigation Support



Maxine Mine was a single-pit, underground mine located in Jefferson County, Alabama. The mine was formerly operated by Alabama By-Products Corporation (ABC), which merged with Drummond Company. During mine operations, mining wastes were placed in a spoils pile on top of a bluff along the west bank of the Locust Fork of the Black Warrior River. These spoils are referred to as geologic overburden (GOB). GOB is a solid waste that contains metals and other minerals. Water that drains from the GOB, as surface runoff or groundwater, is acidic and contains elevated concentrations of metals and other dissolved solids, indicative of acid mine drainage (AMD). No significant mitigation measures have been undertaken by Drummond to control the discharge of runoff, groundwater, and GOB sediments into the Locust Fork. Discharges of surface runoff, groundwater seeps, and groundwater into Locust Fork threaten both the local ecosystem and public health.

Black Warrior Riverkeeper has filed a citizen's lawsuit under the Clean Water Act (CWA) and the Resource Conservation and Recovery Act (RCRA) against Drummond Company. The lawsuit relates to ongoing discharges of AMD and/or other pollutants from Drummond's Maxine Mine Site. Black Warrior Riverkeeper, through its legal counsel, has retained **aquilogic** to provide technical consulting services in support of the litigation, and, if necessary, to provide expert testimony at deposition and trial.

**Aquilogic** developed opinions for the lawsuit by compiling information on local conditions, the operational history of the mine, and evaluating water quality criteria and soil quality guidance applicable at the Site. Additionally, **aquilogic** performed a Site inspection and coordinated a field program including geophysical investigations both on land and in the river, soil and GOB sampling, surface water sampling, and groundwater sampling. Using the combined data, **aquilogic** defined the contaminant transport pathways related to sediment, surface water, and groundwater discharges to the Locust Fork of the Black Warrior River.