**Title:** Long-term ecological monitoring of water quality at Abernathy Field Station

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**Abstract:** In this study, ground water samples were collected from Abernathy Field Station in Washington, Pennsylvania, and five different analyses were conducted. Titrimetric, colorimetric, and gravimetric analyses were performed to determine the alkalinity, hardness, iron, phosphorus, and sulfur levels. Abernathy Field Station remains of particular interest due to its close proximity to both a natural gas extraction station and a long wall coal mining operation. These data will contribute to a long term ecological monitoring database, evaluating the evolution of the environment at Abernathy Field Station.