# Hayden Fischer, M.S., P.E., P.G. -



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# **SUMMARY**

Mr. Fischer is a distinguished expert witness at Bryant Consultants, where he has dedicated over 9 years of his professional career, accumulating more than 11 years of civil and geotechnical engineering expertise. His specialized background encompasses hydrology, hydrogeology, and geotechnical investigation, emphasizing numerical modeling and data visualization. His primary contributions are in forensic investigation and hydrology projects.

With a wealth of knowledge, Mr. Fischer excels in various domains, including the following:

- Hydrologic and hydraulic modeling, including watershed delineation, flood event simulation, and drainage design review.
- Drainage and flatwork analysis, such as sloping, clearance, drainage configuration, and code compliance.
- Expansive and collapsible soils analysis and mitigation, including foundation performance.
- Geophysical modeling and analysis, including electrical resistivity, ground-penetrating radar, electromagnetic methods, and seismic reflection/refraction.
- Groundwater monitoring, sampling, and modeling.
- Geospatial analysis and remote sensing.
- Slope stability monitoring and modeling.
- · Automated remote monitoring, including vibration, tilt, settlement, and groundwater.
- Mining material volume and quantity estimation and visualization.

## **EDUCATION**

M.S. in Hydrological Science, Colorado School of Mines, 2014

B.S. in Geological Engineering, Colorado School of Mines, 2013

# PROFESSIONAL EXPERIENCE

#### Principal Engineer, Bryant Consultants - September 2014 - Present

Mr. Fischer is responsible for managing forensic geotechnical, hydrologic, and geophysical field analysis for the firm's many projects. He is also responsible for report preparation and authoring as well as data visualization and analysis on complex soil-structure interaction and drainage investigations. He directs geotechnical, hydrologic, and geophysical field operations as well as data collection and long-term monitoring for the firm. He also oversees company research and development, providing guidance and direction to junior staff. Mr. Fischer also provides day-to-day operations and project management direction to improve company efficiency. He manages the firm's Englewood, Colorado office in the Denver Metro area.

#### **PREVIOUS POSITIONS**

Chief Technical Officer, Denver, CO: June 2018 – 2021 Director of Forensic Engineering, Denver, CO: May 2017 – June 2018 Staff Engineer, Dallas, TX: March 2017 – May 2017 Graduate Engineer, Dallas, TX: September 2014 – March 2017

# PREVIOUS PROFESSIONAL EXPERIENCE

## **Engineering Intern, Tetra Tech**

May 2013 - September 2014, Louisville, Colorado

Mr. Fischer's duties at Tetra Tech included the design of figures and tables to communicate findings from analysis and fieldwork; professional reports, with input in all phases of the process; the oversight of drillers during monitoring well development and cone penetrometer testing (CPT); the dewatering and maintenance of observation and gas recovery wells using nitrogen and compressed-air; participation in low-flow groundwater sampling, analyzing and reporting the results; and, the streamlining of aspects of data entry and analysis through the creation of data parsers and worksheet macros.

## Research Assistant, Geological Engineering Department, Colorado School of Mines

December 2011 - October 2012, Golden, Colorado

During the completion of undergraduate studies, Mr. Fischer worked as a department research assistant conducting research in horizontal directional drilling for a multi-year study; analyzing drilling data gathered during laboratory tests through various rock types; and establishing a correlation between common horizontal directional drilling parameters and changes in lithology.