



Robert J. Beach, EIT
Staff Engineer III

Education

BS, Geological Engineering, Colorado School of Mines, 2010

Registrations/Certifications

Engineer-in-Training, Colorado

Experience Summary

Mr. Beach is a Geological Engineer with over 7 years of engineering experience. Mr. Beach's expertise within the mining industry includes: resident engineering, earthworks design with AutoCAD Civil 3D, planning and executing geotechnical field investigations, construction management, and Quality Assurance (QA) tasks.

Project Experience

Water Facilities / Resources

WILLOW CREEK DAM REHABILITATION PROJECT | TUSCARORA, NEVADA

Provided concrete dam rehabilitation options and recommendations for a nearly 100-year old concrete dam. Additional tasks included compiling plans and specifications, providing resident engineering, and materials QA during construction. (Tierra Group, 2017 to Present)

HOLDEN MINE REMEDIATION PROJECT, MINE WATER TREATMENT PLANT | HOLDEN VILLAGE, WASHINGTON

Conducted QA observations at the water treatment facility include reinforced concrete, high-density polyethylene (HDPE) liner, and mechanical and electrical systems. (MWH, 2015 to 2016)

UPPER WILLIAMS CREEK MUNICIPAL WATER STORAGE PROJECT | LARIMER COUNTY, COLORADO

Performed earthworks modeling in AutoCAD Civil 3D and design of potential material borrow areas, and optimize embankment design. (MWH, 2015)

Tailings Dams

EXISTING TAILINGS STORAGE FACILITY (TSF3) EXPANSION, BARRICK GOLDSTRIKE MINE | CARLIN, NEVADA

Staff Engineer for the Stage 3 dam raise of an existing TSF located between two existing facilities. Provided resident engineer services, including design support during construction, submittal review, and full-time on-site construction oversight. (Tierra Group, 2016 to 2017)

CERRO VERDE MINE | AREQUIPA REGION, PERÚ

Respond to requests for information (RFI) during construction of a starter dam for a TSF. Prepared staged storage and volumetric models utilizing AutoCAD Civil 3D for the TSF. (MWH, 2014 to 2016)

Geotechnical

AMERICAN GYPSUM MINE | GYPSUM, COLORADO

Performed field geotechnical investigations to determine the slope stability characteristics for the proposed open pits. (Tierra Group, 2018)

STIBNITE GOLD PROJECT | STIBNITE, IDAHO

Planned and executed multiple geotechnical field investigations for feasibility level design of a TSF and waste rock disposal facilities. Provided oversight for ongoing geotechnical investigations and reviewed historical data. (Tierra Group, 2017 to Present)

TSF MONITORING, BARRICK GOLDSTRIKE MINE | CARLIN, NEVADA

Installation, data collection, troubleshooting, and analysis of geotechnical instrumentation for multiple TSFs and stormwater management dams. Geotechnical instrumentation includes vibrating wire piezometers, inclinometers, and underdrain flow meters. Prepared quarterly monitoring, semi-annual stability, and annual deposition reports for regulating and permitting. (Tierra Group, 2016 to Present)

CDOT PEAK PERIOD SHOULDER LANE PROJECT | IDAHO SPRINGS, COLORADO

Planned and executed the geotechnical field investigation for the addition of a third traffic lane, East Bound I-70 from Georgetown through Idaho Springs, within the Colorado Rocky Mountains. (Yeh and Associates, 2013 to 2014)

CDOT INTERSTATE 70 TWIN TUNNELS EXPANSION PROJECT | IDAHO SPRINGS, COLORADO

Planned and executed geotechnical investigations for the West Bound I-70 Twin Tunnels Expansion. Installed geotechnical instrumentation including strain gauges and extensometers to monitor rock mass behavior during construction. (Yeh and Associates, 2014)

Environmental / Mine Closure and Reclamation

HOLDEN MINE REMEDIATION PROJECT | HOLDEN VILLAGE, WASHINGTON

Performed Field Engineering on civil aspects of the project including design changes and RFI responses in regards to a barrier wall, groundwater collection system, surface water management, and earthworks. Additionally, developed a disposal plan of hydrocarbon contaminated soils encountered during construction. (MWH, 2015)

WYOMING AML PROJECT | SWEETWATER COUNTY, WYOMING

Project included closure of subsidence, and mine portals relating to abandoned coal mines, as well as hazardous coal spoils, reduction of dangerous high walls, and revegetation activities. (BRS Inc., 2011 to 2013)

SHEEP MOUNTAIN URANIUM PROJECT | FREMONT COUNTY, WYOMING

Project included the development of Sheep Mountain Uranium Mining Project, including prefeasibility studies and preparation of NI 43-101 reports in accordance to Canadian Institute of Mining, Metallurgy and Petroleum (CIM) standards. The project also included maintaining active Department of Environmental Quality (DEQ) – Land Quality Division (LQD) mining permits. (BRS Inc., 2011 to 2013)

Professional Affiliations

Association of Environmental & Engineering Geologists, Rocky Mountain Section, Member

Employment History

CURRENT EMPLOYER	TIERRA GROUP INTERNATIONAL, LTD.
POSITION	Staff Engineer III
YEARS	2016 to Present
EMPLOYER	MWH GLOBAL
POSITION	Civil Engineer
YEARS	2014 to 2016

EMPLOYER	YEH AND ASSOCIATES
POSITION	Geological Engineer
YEARS	2013 to 2014
EMPLOYER	BRS INC.
POSITION	Geological Engineer
YEARS	2011 to 2013
EMPLOYER	CTL THOMPSON
POSITION	Engineering Technician Level II
YEARS	2007 to 2010 (4-year Summer Internship)