Shyanne Wilson
Geological Engineer

Education

BS, Geological Engineering, Colorado School of Mines, 2021

Experience Summary

Ms. Wilson is a Geological Engineer with over 2 years of experience in construction quality assurance (CQA), field investigations, geotechnical testing programs, and detailed design for various projects. Ms. Wilson is proficient in ArcGIS, AutoCAD Civil 3D, gINT, EZ-FRISK, Inclinalysis, MATLAB, and GEOSLOPE (SLOPE/W and SEEP/W).

Project Experience

SOLEDAD TAILINGS STORAGE FACILITY (TSF) EOR SUPPORT, EL MOCHITO | HONDURAS

Modeled conceptual conditions to analyze potential seepage and review design alternatives. (Tierra Group, 2023)

STIBNITE GOLD PROJECT | IDAHO

Provided engineering support through the revision of construction documents and a review of regulatory responses. (Tierra Group, 2023)

SEISMIC HAZARD ANALYSIS, CANDELONES PROJECT | DOMINICAN REPUBLIC

Completed a probabilistic seismic hazard analysis (SHA) and communicated with a third-party consultant to review deterministic SHA requirements. (Tierra Group, 2022)

SEISMIC HAZARD ANALYSIS, EMPIRE STATE MINES | NEW YORK

Completed a probabilistic SHA and communicated with a third-party consultant to review deterministic SHA requirements. (Tierra Group, 2022)

LOW LEVEL OUTLET REPLACEMENT, JD RANCH DAM | NEVADA

Modeled as-built conditions to analyze potential seepage. Optimized a buttress configuration for rehabilitation along the dam face. (Tierra Group, 2022)

NORTH BLOCK TAILINGS DISPOSAL FACILITY (NBTDF), GOLDSTRIKE MINE | NEVADA

Modeled as-built conditions to investigate failure mechanisms and optimize a buttress design to reinforce slope stability. Reviewed inclinometer, InSAR, and laboratory data to verify design assumptions and improve modeling criteria. Reported on analyses and engineering design change requirements. Completed quarterly monitoring reports evaluating the facility's performance. (Tierra Group, 2022 to Present)

HEAP LEACH PAD, GOLDEN MILE PROJECT | NEVADA

Performed a geotechnical investigation, including test pits and boreholes, to assist in designing a Heap Leach Facility. Developed a geotechnical laboratory testing program to evaluate subsurface conditions. Assisted in the facility design using SLOPE/W modeling and simplified deformation calculations. Created drawings in AutoCAD Civil3D to update subsurface conditions and evaluate facility layout. Prepared reports detailing geotechnical conditions. (Tierra Group, 2022)

TAILINGS STORAGE FACILITY 3 (TSF3), GOLDSTRIKE MINE | NEVADA

Reviewed laboratory testing data to evaluate tailings facility performance under geochemical alterations. Created client presentations and reported on geotechnical conditions and mitigation strategies. (Tierra Group, 2022)

MᴄLᴀᴜɢʜʟɪɴ Mɪɴᴇs | Cᴀʟɪғᴏʀɴɪᴀ

Reviewed monitoring data for the Davis Creek Reservoir (DCR) and Tailings Impoundment Facility (TIF), including climate, seismic, survey, and inclinometer data. Prepared quarterly and annual reports detailing facility performance. (Tierra Group, 2021 to Present)

Dʀɪʟʟɪɴɢ Cᴏɴsᴛʀᴜᴄᴛɪᴏɴ Qᴜᴀʟɪᴛʏ Assᴜʀᴀɴᴄᴇ | Wᴀsʜɪɴɢᴛᴏɴ

Recorded boring data for a landfill gas system installation. Reviewed AutoCAD Civil3D drafting to verify survey placement of holes and depth. Provided CQA inspection records and testing frequencies. (Weaver Consultants Group, 2021)

Mᴀᴘᴘɪɴɢ Gʟᴀᴄɪᴀʟ Mᴏᴠᴇᴍᴇɴᴛs | Aʟᴀsᴋᴀ

Tracked historical glacial changes through aerial mapping. Modeled a progression of a glacial area in ArcGIS to present findings to the United States Geologic Survey (USGS). (CSM, 2019)

Employment History

Cᴜʀʀᴇɴᴛ Eᴍᴘʟᴏʏᴇʀ	**Tɪᴇʀʀᴀ Gʀᴏᴜᴘ Iɴᴛᴇʀɴᴀᴛɪᴏɴᴀʟ, Lᴛᴅ.**
Pᴏsɪᴛɪᴏɴ	Geological Engineer
Yᴇᴀʀs	2021 to Present
Eᴍᴘʟᴏʏᴇʀ	**Wᴇᴀᴠᴇʀ ᴄᴏɴsᴜʟᴛᴀɴᴛs ɢʀᴏᴜᴘ**
Pᴏsɪᴛɪᴏɴ	Engineering Technician
Yᴇᴀʀs	2021 to 2021

Language Proficiency

English: Fluent