
AMBER D. FALCONER THOMAS

PRESENT POSITION

Geologist, GIS Specialist

EXPERTISE

- Data research, interpretation, analysis and integration
- Wellsite geology and technical monitoring of drilling operations
- GIS data acquisition, design, creation, integration, quality control, and analysis; preparation of detailed geologic maps, cross sections, and stratigraphic sections
- Development of geospatial databases and 3D models in PETREL
- Coordination with other technicians and analysts in various data development and project support initiatives
- Preparation and presentation of technical and professional reports and databases
- Identification of minerals, rock formations, fault locations, landslides, and stream characteristics
- Experienced in various commercial software: ESRI ArcGIS, Grapher, PETREL and MS Office Suite of products

EDUCATION

GIS Certificate in Environmental Analysis, College of Extended Learning, San Francisco State University, 2013

Registered Geologist-In-Training in the State of California (Certificate Number 317)

Field Course in Geology and Hydrogeology, Southern Oregon University, 2007

B.Sc. in Geology (Distinction), Sonoma State University, 2007

Schlumberger QHSE & Loss Prevention Team Leader, 2012, 2013, 2014

Continuing annual certified completion of 8 Hour HAZWOPER Refresher Training in accordance with Federal OSHA Regulation 29 CFR 1910.120 (2014 Certificate Number 141107528078)

Certified completion of OSHA 40 Hour HAZWOPER Training in accordance with Federal OSHA Regulation 29 CFR 1910.120 (2010 Certificate Number 100320128078)

Association for Women Geoscientists' Outstanding Women Students of 2008

Awarded Woodard Scholarship for Outstanding Field Work, 2007

EXPERIENCE

GeothermEx, Inc., 2007-present

- Creation, integration and manipulation of geo-scientific and geospatial data in ArcGIS and for the preparation of geotechnical maps, including processing, and quality assurance/control of raw collection data; development of 3D model of resource based on surface data and integration of subsurface data from new wells, Ethiopia, 2015.
- Research, evaluation and assessment of province-wide commercial-grade geothermal resources, including development favorability analysis, volumetric assessments and economic assessments, British Columbia, Canada 2015.
- Creation, integration and analysis of geo-scientific and geospatial data for the preparation of cartographic maps, including processing, and quality assurance/control of updated and new GIS data, multiple projects, World-wide, 2013-present.
- Preparation of a state-funded geothermal guidebook including the evaluation and assessment of geothermal drilling procedures, environmental and regulatory considerations for geothermal development, leasing and permitting processes for state and reserved lands, and advancements in drilling technology, Hawaii, 2014
- Research and evaluate the use of passive and active seismic methods in geothermal fields world-wide with an emphasis on mountainous terrains and contribution to field development, World-wide, 2014.
- Preparation of regional and local base maps, geological and geophysical data maps, spatial data creation and manipulation for geothermal exploration project, multiple projects, Western Turkey, 2013, 2014.
- Preparation of regional and local base maps, geological maps, spatial data creation and manipulation of thermal features and design for presentation of data tables for geothermal exploration project, Sumatra, Indonesia, 2013.
- Research and evaluation of U.S. and European government funded small-scale geothermal power plant construction programs, R&D and legal and regulatory framework, 2013.
- Research and assessment of current royalty valuation methods and state and federal bonding requirements for state agency, Western U.S., 2012.
- Research and analysis of royalties and bonds for state owned lands, Hawaii, 2013
- Site-specific evaluation on available temperature, geology, potential reservoir characteristics, geophysical data, potential environmental issues, land use restrictions, site access and infrastructure, and provided recommendations for further development opportunities for public utility district, Washington State, 2012.
- Assist in coordination and field oversight of geophysical survey for geothermal resource modeling for utility district, Lake County, California, 2012.

- Assisted in evaluation and update of Business and Strategic Plans, including drilling history, field development schedules, and internal organization for federal agency, Kenya, 2012-2013.
- State-wide evaluation of geothermal resources and potential commercial opportunities utilizing available geologic, geothermal and well data for public utility district seeking to develop renewable energy, Washington State, 2012.
- Evaluation of application of DOE's Geothermal Electricity Technology Evaluation Model (GETEM) software to new proprietary production technology, Western U.S., 2012.
- Research and evaluation for international O&G company of country-wide thermal, geological, and structural data for potential geothermal development; research and assessment of operating geothermal developers for potential partnership, Turkey, 2012.
- Research and assessment of geothermal potential, including power plant technology applications, permitting and exploration process, environmental impact potential and financial aspects of project for lands owned by the state, Hawaii, 2012.
- Wellsite geology, technical monitoring of drilling operations, and petrologic and petrographic analysis for the drilling of initial exploration well for public utility district, Western Washington State, 2011.
- Research and collection of well data for potential geothermal development, Western Idaho, 2011.
- Re-evaluation and interpolation of downhole temperature surveys for thermal contour mapping, Kenya, 2011.
- Assist with research and comparison of available EGS and O&G field development technologies for international O&G company, 2011.
- Research and evaluation of thermal, geological, and structural data for potential geothermal development for municipal utility agency, Owens Valley, CA, 2011.
- Technical on-site monitoring and reporting of well testing operations for DOE-supported EGS pilot project, including on-site technical and field team liaison, daily operations reporting, logging data collection and real-time analysis, and equipment maintenance, western Nevada, 2010-2013.
- Preparation of well completion reports, Azores, Portugal, 2010-2013.
- Research, resource assessment and report preparation of geothermal prospect, north-western Nevada, 2010.
- Research and assessment of worldwide geothermal opportunities for multiple international companies, 2010.
- Evaluation of lease holdings, terms and conditions for geothermal exploration / exploitation project in Northern Chile, 2010.

- Research, evaluation and assessment of well data from select Northern California gas fields for geothermal co-production potential, 2009.
- Research and assessment of renewable energy laws and regulations, environmental laws, permitting processes, operators and related agencies specific to geothermal for development of guidebook on investments in Turkish geothermal projects, 2009.
- Organization and preparation of DOE grant proposal in conjunction with research, analysis, and evaluation of potentially geopressed reservoirs, Southern Louisiana, 2009.
- Preparation of proposal documents for DOE EGS grants, 2009.
- Research and evaluation of thermal, geological, geochemical, and structural data for potential geothermal activity, Chile, 2009.
- Evaluation and assessment of geological and well data for geothermal potential, Serbia, 2009.
- Research and assessment of thermally active areas for future geothermal prospects and opportunities, northern California, 2009.
- Evaluation of daily drilling and mud logs, southwestern Utah, 2008-2009.
- Research and assessment of geothermal potential as part of government-backed renewable energy project, Eritrea, 2009.
- Research and collection of current data on geothermal fields for world-wide assessment project, Multi-country, 2009.
- Research, assessment and prioritization of geothermal fields: Java, Sumatra, Sulawesi, and Bali, Indonesia, 2008.
- Research and assessment of southern central United States to rank the geothermal resources potential MW capabilities based on heat flow characteristics, Texas, Louisiana, and Arkansas, 2007-2008.
- Wellsite geology and technical monitoring of drilling operations, including on-site technical and field team liaison, drilling consulting for reservoir targets and casing points, and supervision of steam flow testing for 4 successful production wells, The Geysers, California, 2008.
- Integration of temperature and geophysical information into comprehensive summary plots, 2007-2008.
- Collective cataloging and organization of internal scientific data files/library, 2007-2009.
- Organization and compilation of well data from preexisting geothermal operations in preparation for new exploration, The Geysers, California, 2007-2008.
- Student, Field Studies, Southern Oregon University, Ashland, Oregon, Summer 2007.

- Comprehensive geologic and hydrogeologic studies focusing on: active and historic landslides and faults in relation to stability, recognition and assessment; monitoring stream gains and losses as effected by areal rock type and amount of flow; preparation of report on stream changes for ongoing database for the Medford Water Commission and the United States Forest Service utilizing profile measurements, cross-section relations, and stream gauging; mapping and analysis of rock composition, distribution and relationship for all of the previous projects.

PUBLICATIONS

Chabora, E., Zemach, E., Spielman, P., Drakos, P., Hickman, S., Lutz, S., Boyle, K., Falconer, A., Robertson-Tait, A., Davatzes, N.C., Rose, P., Majer, E., and Jarpe, S., 2012. Hydraulic Stimulation of Well 27-15, Desert Peak Geothermal Field, Nevada, USA. Proceedings of the Thirty-Seventh Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, January 30 – February 1, 2012, pp. 647-658.

MEMBERSHIPS

Geothermal Resources Council
Geological Society of America
American Association of Petroleum Geologists
American Geophysical Union

CITIZENSHIP

USA