

Evan Bianco

Biography

Evan Bianco is the Chief Scientific Officer at Agile Geoscience. He is a blogger, freelance geophysicist, entrepreneur, and knowledge-sharing aficionado. He has an MSc in geophysics from the University of Alberta and four years' experience as an industry consultant in Halifax, Nova Scotia. Evan's interests span a range of disciplines from time-lapse seismic in oil sands to geomodeling, seismic rock physics, and geothermal reservoir characterization. Evan tries to teach himself something new every day, and every so often, it proves useful. He can be reached at evan@agilegeoscience.com, or you can follow him on Twitter @EvanBianco.

Presentation Abstract: Improving the Accessibility of the Province's Onshore Subsurface Database: A User-driven Approach

The federal Program for Energy Research and Development (PERD) is identifying areas in eastern Canada worthy of future research into source-rock plays. In late 2011, PERD provided the opportunity to take inventory of the province's publicly available onshore geoscience data. The resulting data-mining exercise grew into the beginnings of an accessible, searchable, queryable, geospatial relational database. Such a resource would enable researchers and industry to explore the province's resource opportunities more efficiently than they can today.

We have merged basic well header information for 133 petroleum wells with other digital and non-digital data. These other data include: well tops, geophysical log curves (as LAS files), core records, drilling reports, cuttings descriptions, production tests, core analysis, and Rock-Eval pyrolysis data. We have also started to integrate outcrop vitrinite reflectance data (from DNR Open File Report 91-012), cross-section illustrations, seismic line locations, gravity and aeromagnetic data, and surface geology maps.

The data are imperfect. A considerable amount of legacy data remains available only in paper format. There are also various unresolved data quality issues, even around fundamental data elements like well coordinates and elevations. There are also 69 mineral exploration wells with petroleum shows and substantial outcrop data that could potentially be included.

In order to be 'open', public data needs to be online, indexed, findable, understandable (human-readable), parsable (machine-readable), and multi-format. The regulatory and user communities need to collaborate to ensure our public data resources meet, and even surpass, these criteria.