#### **CURRICULUM VITAE - Dennis Clifford Arne**

#### **SUMMARY**

- Over 35 years' experience as a geologist and geochemist
- Committed to discovery, good science and an integrated approach to geological problems
- Varied career as a consultant, researcher, university lecturer and government scientist
- Experienced in a range of commodities but with an emphasis on gold and base metals
- Solid grounding in applied geology but with a specialty in exploration geochemistry
- Use of whole-rock geochemical data for alteration vectoring and geometallurgical domaining
- International experience but with most work in either Australia or Canada
- Extensive record of journal publications, government open file reports and technical reports, including NI43-101 technical reports
- Able to act as a competent or qualified person for exploration projects in numerous commodities

### **CONTACT DETAILS**

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#### **PROFESSIONAL AFFILIATIONS**

AIG (RPGeo); PGeo (British Columbia); Assoc. of Applied Geochemists, (Vice-President 2018-19)

#### SOFTWARE COMPETENCY

MapInfo/Discover, Leapfrog Geo, ioGAS, The Spectral Geologist

#### **ACADEMIC RECORD**

Graduate Diploma in Hydrogeology and Groundwater Management 2006
National Centre for Groundwater Management, University of Technology – Sydney, NSW
PhD (Geology) 1986-1990; Melbourne University, Parkville, Victoria Australia
MSc (Geology) 1983-1986; Lakehead University, Thunder Bay, Ontario, Canada
BSc Honours (Geology) 1977-1982; University of Regina, Regina, Saskatchewan, Canada

#### **EMPLOYMENT RECORD**

### 02/18 – present Consulting Geochemist & Director, Telemark Geosciences

Geochemical data compilations, sampling program recommendations and design, training of field crews, implementation of sampling programs, interpretation of results and integration with other data sets; QA/QC program design, implementation and interpretation, laboratory audits; technical reporting, in-house training and short course presentations.

# 07/12 –01/18 Managing Director and Principal Consultant – Geochemistry, CSA Global Canada Geosciences Ltd

Managed the CSA Global office in Vancouver, Canada, including the development of business, staffing, budgeting and corporate affairs prior to re-locating to Australia in late 2017. Responsible for the planning, execution and interpretation of geochemical data for international exploration and resource development programs. Preparation of NI43-101 technical reports and JORC Table 1 public releases. Preparation of standard operating procedures (SOP) for sampling and QA/QC at both the exploration and resource drilling stages based, as well as reviews of QC data. Areas visited include Canada, Suriname, China, Sudan, Colombia, USA, Bulgaria.

# 06/10 – 06/12 Principal Geochemical Consultant, General Manager and Director, Revelation Geoscience Ltd

Consulting duties included evaluation of existing geochemical data, recommendations and planning for further work, conducting orientation surveys, training of field crews, timely interpretation of geochemical data as it becomes available, including field portable XRF data, and integration with geophysical and geological data. Areas of exploration experience included northern Quebec, western Ontario (Red Lake, Thunder Bay), Yukon Territory, British Columbia, Minnesota, Wyoming and Suriname.

# 02/08 – 05/10 Principal Geochemical Consultant, ioGlobal

Responsible for establishing the ioGlobal office in Vancouver in 2009, providing geochemical consulting services to various clients, including Geoscience Victoria, and marketing of data management services to both the exploration and environmental sectors.

# 06/06 – 01/08 Senior Geochemist, Geoscience Victoria, Victorian DPI

Contract position through the Gold Undercover initiative to undertake lithogeochemical orientation studies of central Victorian gold deposits, undertake an orientation soil survey over a deeply buried Au deposit, and compiling hydrogeochemical data obtained by CSIRO for the state of Victoria.

### 01/02 – 01/09 Principal, Alpine Geological & Environmental Services

Principal and sole proprietor undertaking contract work in mineral exploration, engineering geology, environmental geochemistry and hydrogeology in north-eastern Victoria, Australia.

# 07/99 – 12/01 Lecture/Senior Lecturer and Program Chair, Mining Geology, Western Australian School of Mines, Curtin University, Kalgoorlie

Responsible for teaching exploration geochemistry, economic geology and regolith geology at both the undergraduate and graduate level, and for conducting multi-disciplinary field excursions to major mining operations. I also undertook research into Ni-Co laterite deposits, Archean Au mineralization and Pb-Zn mineralization in the Canning Basin, WA.

# 01/95 – 06/99 Lecturer in Applied Geology, Ballarat University

Undergraduate teaching in economic geology, applied geochemistry and field geology, and for the supervision of post-graduate students. I was also a co-manager of AMIRA International P478 on the geochronology and geochemistry of central Victorian gold deposits.

# 1997 – 1998 Sessional lecturer in Economic Geology at Melbourne University

#### 12/93 - 12/94 Research Associate/Assistant Professor, Dalhousie University

Undertook a NSERC-funded research project into the influence of structural deformation on the thermal history of the Sverdrup Basin in Arctic Canada using apatite fission track thermochronology and vitrinite reflectance data.

# 12/92 – 12/93 Killam Post-doctoral Research Fellow, Dalhousie University

Undertook a regional tectonic study on the timing of thrusting on the western margin of the Sichuan Basin, China using fission track thermochronology.

# 06/90 – 11/92 Geoscientist, Geotrack International, Melbourne

Consulting geologist in thermal history reconstruction for the international petroleum industry, including non-exclusive studies in western Canada and offshore UK.

#### 12/89 – 06/90 Research Fellow, University of Melbourne

Studied the exhumation history of the northern Prince Charles Mountains in Antarctica using apatite fission track thermochronology.

1986 - 1989 Demonstrator, Melbourne University (part-time)
 1983 - 1985 Teaching Assistant, Lakehead University (part-time)
 1982 - 1985 Senior Geological Assistant, Esso Minerals (summer employment)

1979 – 1981 Junior Geological Assistant, Saskatchewan Geological Survey