



STAFF PROFILE



Darren L. Smith, M.Sc., P.Geo.
Senior Geologist / Manager

EDUCATION

- Carleton University, Ottawa
 - Bachelor of Science (Hon) Geology / 2003
 - Master of Science in Geology / 2005

EXPERIENCE SUMMARY

Management – Mineral Exploration & Development

Darren's primary role with Dahrouge is high-level project management including program design, implementation, data capture, reporting (NI 43-101, Assessment), land management, corporate disclosure, as well as indigenous peoples and government engagement. Darren has provided technical oversight for PEA, PFS, and FS level project advancement and has setup and monitored complex metallurgical programs.

In late 2009, Darren and his team discovered one of the world's largest REE deposits (Ashram) and has been instrumental in its advancement since this time, with a PEA completed (2012) and ongoing work in support of a PFS. During this time, Darren has also developed an in-depth contact base and knowledge of the REE market and its end-users.

DEPOSIT TYPES

- Carbonatite hosted REE, fluorspar, phosphate, niobium, tantalum, titanium, scandium
- Pegmatite hosted lithium, tantalum, REE
- Lithium brine & clay
- Uranium (various styles)
- Greenstone gold
- VMS & Porphyry style base and precious metals
- Ultramafic Ni-Cu-Co-PGE
- Graphite
- Frac/Silica sand

LANGUAGES

- English (fluent)
- French (intermediate)

SOFTWARE & INSTRUMENTATION

- ArcGIS
- Leapfrog Geo (beginner)
- Fusion (Datamine)
- Nitro-PDF
- ExpertGPS
- Microsoft Office

PROFESSIONAL ASSOCIATIONS

- Ordre des géologues du Québec – Geologist Permit (1968)

INDUSTRY ACTIVITY

- Steering Committee Member – CanmetMINING (NRCan) REE program
- Administrator – CIM Quebec City Branch
- Scientific Committee Member – Element08
- Committee Member for a Client-Inuit Letter of Intent



STAFF PROFILE

Social Framework

Throughout his career, Darren has developed an in-depth experience in consultation, engagement, and dialogue with high-level representatives of various provincial governments (most notably in Quebec), industry leaders, communities, and indigenous groups (Inuit – Makivik/LHC/NV, Naskapi of Kawawachikamach, Cree, Innu, Athabasca Chipewyan, Clearwater River Dene, etc.).

Industry & Academia

Darren has served as Independent Director for several uranium and lithium focused junior mineral exploration companies over his career, and is currently Vice President of Exploration of Gaia Metals Corp, and well as part of the management team for Commerce Resources Corp., and Saville Resources Inc.

Darren has been an invited speaker at several academic and industry workshops and conferences throughout his career and is active in engaging with institutions in support of various student undergraduate and graduate projects (NAIT, Université Laval, Université McGill, L'Institut national de la recherche scientifique - Québec, University of Windsor, etc.). In addition to his public speaking engagements, through his academic and industry collaborations, Darren sits on several industry/governmental committees and has co-authored numerous international and peer reviewed publications throughout his career.

PROFESSIONAL EXPERIENCE:

PROJECT	DETAILS
Rare Earth Elements (various styles), & Fluorspar <i>Canada</i> Project Manager / Senior Geologist <i>2008-Present</i>	<ul style="list-style-type: none">• Manage surface and drill exploration programs, as well as overall project development<ul style="list-style-type: none">○ Logistics, permitting, targetting, field protocols, core logging, data capture, reporting, land management○ Managed remote camp (up to 35 staff)○ Organize various geophysical surveys (gravity, magnetics ...)○ Managed exploration and development budgets of <\$500,000 to over \$10,000,000 CAD annually• Led the team that discovered the Ashram Rare Earth and Fluorspar Deposit in 2009• Ongoing project management through NI 43-101 mineral resource estimate, Preliminary Economic Assessment (PEA), and Prefeasibility Study (PFS) stages• Organize, implement, and monitor complex beneficiation and hydrometallurgical programs for REE and fluorspar• NI 43-101 Technical Reporting, corporate disclosure including news releases, presentations, website reviews



STAFF PROFILE

- Regular interaction with government officials, indigenous groups, and investors (retail and institutional)
- Co-manage engagement & consultation programs with indigenous groups and communities – **recognition through the e3 Plus Award (AEMQ/PDAC) for high level of environmental and social responsibility, and adherence to industry best practices**
- Regular interaction with REE producers, processors, end-users, and market insiders/analysts
- Developed in-depth knowledge of markets, products, and projects advancing globally
 - Strong contact base throughout the rare earth value chain
- Several trips to China, South Korea, Japan, Singapore, Hong Kong, Europe, and USA for meetings with producers, processors, end-users, analysts, and potential investors
- **Invited speaker to several REE industry conferences** (Metal Events, Roskill, CanmetMINING, Quebec Mines, PDAC etc.)
- At company invitation, have attended personalized tours of the Mountain Pass Mine and processing facilities in California, USA, Solvay's rare earth processing and refining facility in Larochelle, France, as well as visited several other developing REE projects

Niobium, Tantalum, & Phosphate

Quebec, Canada

Project Manager / Senior Geologist

2008-Present

- Manage surface and drill exploration programs
 - Logistics, permitting, targetting, field protocols, core logging, data capture, reporting, land management
 - Managed remote camp (up to 35 staff)
 - Managed exploration and development budgets of <\$500,000 to over \$10,000,000 CAD annually
 - Regularly meet with government officials, indigenous groups, & investors
 - Co-manage engagement & consultation programs with indigenous groups and communities – recognition through the e3 Plus Award (AEMQ/PDAC) for high level of environmental and social responsibility, and adherence to industry best practices
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STAFF PROFILE

Gold (greenstone), Copper, Gold, Nickel, Cobalt, Silver, & PGE (VMS & ultramafic)

Quebec, Canada

Project Manager / Senior Geologist / VP Exploration
2017-Present

- Manage/co-manage mineral exploration programs for various projects/clients
 - Logistics, permitting, targetting, field protocols, data capture, reporting, land management
 - Organized geophysical surveys
 - James Bay / Abitibi regions
 - Currently serving as V.P. Exploration of Gaia Metals Corp.

Lithium (pegmatite, brine)

Quebec, Canada

Project Manager / Senior Geologist / VP Exploration
/ Director
2016-Present

- Manage/co-manage surface and drill exploration programs for multiple clients and projects
 - Logistics, permitting, targetting, field protocols, data capture, reporting, land management
 - Organize various geophysical surveys (LiDAR, mag)
- NI 43-101 Technical Reporting of hard rock lithium project
- Organized, implemented, and monitored beneficiation and hydrometallurgical program for pegmatite project
- Managed engagement/consultation programs with indigenous groups and communities
- Site visit of Whabouchi Mine site, Nemaska Lithium
- Currently serving as V.P. Exploration of Gaia Metals Corp., and recently as V.P. Exploration and Director of Lithion Energy Corp. (brine focused, 2016 to 2019)

Graphite

Quebec, Canada

Project Manager / Senior Geologist
2017-2018

- Co-managed surface exploration programs
 - Logistics, permitting, targetting, field protocols, data capture, reporting, land management
- Drill program planning and budgeting
- Organized, implemented, and monitored beneficiation program

Metallurgical Programs for Niobium, Scandium, & Titanium

Nebraska, USA

Project Manager / Senior Geologist
2014-2016

- Organized, implemented, and monitored complex beneficiation and hydrometallurgical programs
 - Proposed innovative processing approaches for producing ferro-niobium from complex ore
 - First to identify scandium as a potentially recoverable pay element – now one of largest Sc projects globally
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STAFF PROFILE

Uranium

(rollfront/Beaverlodge/unconformity/basement)

Canada

Project Manager / Junior through to Senior Geologist
/ Director
2006-2015

- Concurrently managed all aspects of surface and drill exploration programs for various exploration companies over dozens of properties, including the entire Canadian portfolio of Fission Energy Corp. (formerly Strathmore Minerals Corp.)
 - Logistics, permitting, targetting, field protocols, core logging, data capture, reporting, land management
 - Managed remote camp (up to 35 staff)
 - Organized staking, prospecting, radon, MMI and various geophysical surveys
 - Managed exploration of <\$500,000 to over \$10,000,000 CAD annually
- Co-organized/initiated the initial staking and Joint Venture of the PLS Property that would later culminate in the discovery of the Triple R Deposit (aka PLS Deposit) in 2012
- Managed drill program at Waterbury Lake's J-Zone, located along strike of the Roughrider Deposit (discovered by Hathor Exploration)
- Managed engagement/consultation programs with indigenous groups and communities
- Large focus on Athabasca Basin (AB & SK) and surrounding region
- Invited speaker at various industry driven events targetting European investors (2013)
- Served as Director for two junior mineral exploration companies (2013 to 2015)

Gold (lode)

Columbia

Project Manager / Geologist
2012

- Completed NI 43-101 Technical Report on high-grade, structurally controlled lode gold system
- Two site-visits

Gold (BIF), Lead-Zinc (SEDEX, VMS)

Quebec, Canada

Project Manager / Geologist
2012

- Co-managed drill exploration program
 - Logistics, field protocols, data capture, reporting, land management
- Project later acquired by Osisko Mining Inc.

Tantalum & Niobium

British Columbia, Canada

Junior Geologist
2008

- Co-managed surface and drill exploration programs
 - Drill set-up and targetting
 - Data capture, core logging



STAFF PROFILE

PROFESSIONAL DEVELOPMENT:

DESCRIPTION	TYPE	YEAR
• ABCs of REEs	Workshop	2010
• Rare earth element mineralogy, deposit review, and mineral processing	Personalized workshop with Tony Mariano	2011
• Ni-Cu-PGE Deposits in Ultramafic Rocks	PDAC short course	2013
• Mining Disclosure: NI 43-101 fundamentals, best practises, and useful guidance for TSX and TSX Venture issuers	PDAC short course	2015
• Recent developments in mining disclosure standards and compliance issues with NI 43-101	CIM short course	2017
• Co-author of several industry papers regarding rare earth element geology, mineralogy, and mineral processing	Ore Geology Reviews, Flotation '17, World of Metallurgy, Canadian Mineral Processors, Conference of Metallurgists (pending)	2017 to present
• Attendance to various industry talks and events	Oral presentations, round tables, workshops, conferences	2006 to Present
• Invited speaker at various industry events	Carleton University, CIM-Québec, Metal Events, Roskill, MEG Calgary, NAIT, Northern Lights, Kuujuaq Mining Workshop, PDAC	2010 to Present