

Russell Green Osborne

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Professional Summary

Environmental technician with 2+ years running field monitoring programs at an operating coal mine, plus a consulting background in regulatory processes and producer support. I coordinate sampling programs, manage equipment procurement, and prepare compliance reports — and I built the MonitorPro-to-PowerBI data pipeline that connects field results to regulatory deliverables. Active JOHSEC member. Planning relocation to the Smithers / Bulkley Valley area.

Technical Competencies

Environmental Monitoring & Field Programs: Surface water, groundwater, and air quality sampling programs; field inspections and chain of custody; weather station maintenance and procurement; wildlife monitoring; QA/QC protocols; environmental database management

Regulatory Compliance & Reporting: Mines Act and Health, Safety and Reclamation Code for Mines in British Columbia; annual environmental reporting; air quality non-compliance reporting; GIS-based regulatory submissions (ArcGIS Pro, QGIS); BC Agricultural Land Commission application tracking

Data Systems & Analysis: MonitorPro (daily operations, SQL backend, API integration); Python (Pandas, GDAL, arcpy for ETL and automation); PowerBI (Water Quality dashboards connected to live data); Streamlit (custom data visualization applications); Excel/PowerQuery (advanced pivot tables, meteorological analysis)

Tools & Platforms: MS Office Suite (Excel, Word, PowerPoint); SQL (direct database interaction); Linux system administration; OpenDroneMap/Photogrammetry; R, Perl (data analysis and automation)

Professional Experience

Conuma Resources, Environmental Technician

Quintette Mine, Tumbler
Ridge, BC
July 2023 – present

- **Field Programs & Project Coordination:** Execute comprehensive sampling programs across surface water, groundwater, and air quality monitoring networks. Manage field sampling schedules with varying regulatory frequencies, coordinating between field teams and laboratory services. Coordinate contractor onboarding and deployment, establishing MonitorPro as the primary time-series data repository across multiple teams. Led cross-site collaboration to deploy monitoring schedules, improving data transparency and organizational usability. Manage procurement and maintenance of environmental monitoring equipment including weather station network.
- **Regulatory Compliance & Reporting:** Participate in comprehensive annual environmental reporting process, including data processing, summary writing, and visualization development. Prepare monthly and quarterly air quality non-compliance reports with supporting data analysis. Ensure monitoring programs comply with the Mines Act, Health Safety and Reclamation Code for Mines in British Columbia, and other federal and provincial legislation. Create maps and spatial assets for regulatory and internal reporting requirements using ArcGIS Pro and QGIS.
- **Data Systems & Process Improvement:** Built MonitorPro-to-PowerBI integration for live water quality reporting — originally through the SQL backend, then rebuilt against the MonitorPro API. Develop Python ETL scripts using Pandas, GDAL, and arcpy libraries for automated data processing. Build custom Streamlit applications and PowerBI dashboards for internal data visualization and analysis. Proposed and frameworked internal GIS-based reclamation monitoring and tracking system. Identify and resolve legacy data quality issues, improving overall database integrity.
- **Safety Leadership:** Active member of Joint Occupational Health & Safety Committee (JOHSEC), contributing to site-wide safety culture. Maintain weather stations that feed organizational climate data. Execute field sampling with chain of custody protocols and coordinate laboratory submissions.

Greenhall Ag/Tech, Owner/Operator

British Columbia
Jan 2016 – present

- Managed client consulting engagements end-to-end: proposals, deliverables, timelines, and budgets. Built the business from the ground up — client acquisition, project scoping, invoicing, and delivery.
- Worked with agricultural producers on cost reduction strategies and operational efficiency improvements.
- Tracked regulatory applications through BC Agricultural Land Commission process, coordinating documentation and submission requirements.
- Developed UAV photogrammetry pipelines for affordable agricultural and environmental aerial imaging — managed internal R&D project from concept through prototype, testing, and client deployment.
- Provided GIS solutions for water line mapping, fencing cost estimation, and ALR subdivision proposals.

- Various Organizations**, Previous Environmental & Technical Roles Alberta & British Columbia
- **City of Edmonton** — Greening Technician (2013): Implemented local geodatabase with version control; planned and implemented site-specific naturalization plans; implemented experimental bio-swale monitoring system in collaboration with municipal engineers. Jan 2011 – June 2023
 - **Trees Company Enterprises** — Specialist Sales (2017–2018): Developed control and automation systems for agricultural UGV drone prototype; advised producers on controlled-environment production and regulatory compliance.
 - **University of Alberta** — Research Assistant (2011–2012): Supported hydrological monitoring systems research; adapted prototype GPS automation platform for off-road vehicles and legacy agricultural equipment.
 - **Tipi Mountain Native Plants** — Nursery/Maintenance Worker (2014–2015): Native plant propagation; irrigation system installation and repair; biological pest control.

Education

B.Sc (course-work)	University of Alberta , Sustainable Agriculture	Edmonton, AB Sept 2010 – Apr 2014
Diploma	Olds College , Land & Water Resources - Environmental Stewardship	Olds, AB Sept 2007 – June 2009
Certificate	CTP/CATA , Web Design & Maintenance	Calgary, AB Sept 1997 – June 1998

Certifications and Qualifications

Valid Class 5 Driver's License (willing to travel as required)
 Joint Occupational Health & Safety Committee (JOHSEC) Member
 Workplace First Aid & CPR Certification
 AST 1 Avalanche Training Certification
 Pesticide Applicator Certification (2008)
 A+ Equivalent IT Certification (2001)

Key Achievements

At Conuma Resources: Built MonitorPro-to-PowerBI data integration connecting field monitoring results to live regulatory deliverables; led contractor onboarding initiative standardizing data collection across multiple teams; proposed GIS reclamation tracking system; identified and resolved legacy data quality issues; active JOHSEC participation supporting site safety record.

Career Highlights: Speaker at 2019 Columbia Basin Food Summit on agricultural technology innovation; Jason Lang Scholarship recipient (2009) for academic excellence; developed novel UAV and GIS solutions for environmental and agricultural applications.