

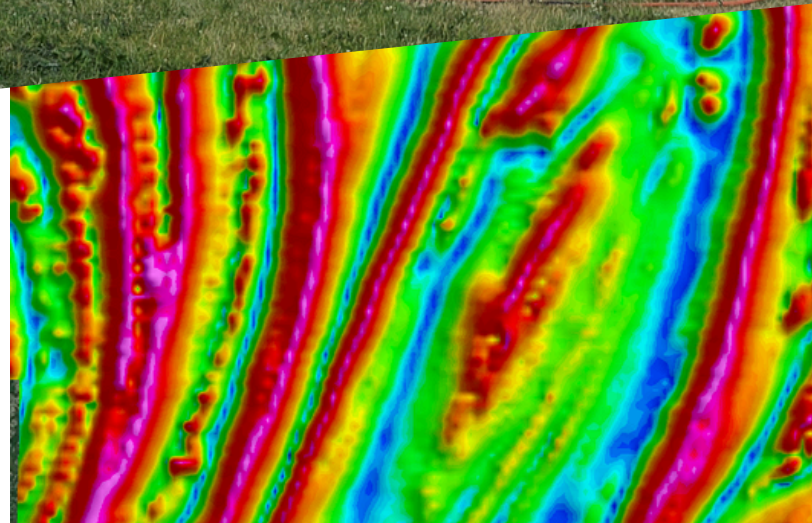


ADVANCED AEROMAGNETIC (MAG) SURVEYS: ENHANCING MINERAL EXPLORATION

At **AXIOM GROUP**, we leverage a wide array of tools and cutting-edge technology to deliver the results you need. Our specialized geophysical surveys provide invaluable insights into subsurface geological structures, essential for advancing mineral exploration projects.

HELICOPTER (MAG) SURVEYS

Magnetic surveys measure the total intensity of the Earth's magnetic field using highly sensitive instruments. These surveys are integral to mineral exploration, offering a detailed examination of geological subsurface structures, thereby enhancing exploration options and decision-making.



DRONE MAGNETIC SURVEYS

Drone magnetic surveys employ unmanned aerial vehicles (UAVs) equipped with sensitive magnetometers. This method adapts the principles of aeromagnetic surveys, providing enhanced accessibility and versatility. Drone magnetic surveys are particularly effective in mineral exploration due to their cost-efficiency and precision. They allow for detailed, high-resolution magnetic data acquisition over complex terrains, crucial for identifying potential mineral deposits and guiding exploration strategies.





HOW IS MAG DATA USED?

- Mineral exploration
- Structural Mapping
- Identifying Magnetic units such as mafic intrusions, hematite and magnetite
- Locating shallow buried metallic objects
- 3D inversions of magnetic datasets
- Drill targeting and pierce point identification
- Integration of geology, geochemistry, and geophysics
- Integration of historical datasets / mapping with current surveys
- Recommendations for future geophysical surveys



Helicopter and UAV System Specifications

Sensitivity	0.0002 nT @ 1 Hz
Resolution	0.001 nT
Gradient Tolerance	Over 50,000 nT/m
Dynamic Range	15,000 to 120,000 nT
Absolute Accuracy	±0.1 nT @ 1Hz
Heading Error	± 0.05 nT

Base Station Specifications

Sensitivity	0.022 nT @ 1 reading per seconds 0.05 nT @ 1 reading every 4 seconds
Resolution	0.01 nT
Gradient Tolerance	Over 10,000 nT/m
Dynamic Range	20,000 to 120,000 nT
Absolute Accuracy	±0.1 nT @ 1Hz

UAV Specifications

Position Accuracy (Vertical)	1 cm +1 ppm
Position Accuracy (Horizontal)	1.5 cm +1 ppm
Max Altitude (ASL)	Up to 7000m (5000 m typical)
Flight Time	55 minutes (35 typical with payload)
Operating Temperature	-20C to 50C

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