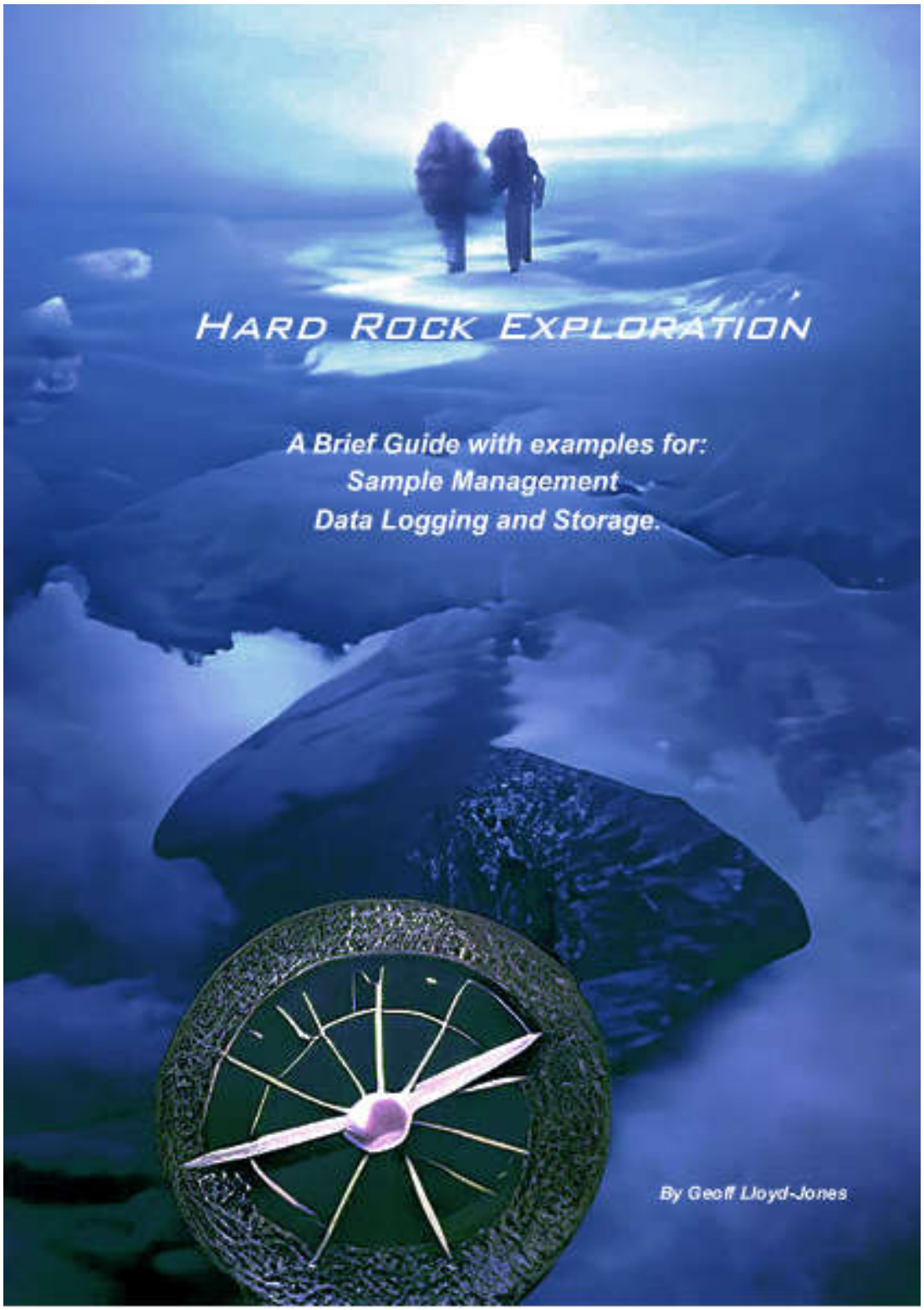
HARD ROCK EXPLORATION
A Brief Guide with examples for:
Sample Management
Data Logging and Storage.
By Geoff Lloyd-Jones

Disclaimer: On Gods Earth there is never only one way of doing anything. This Guide merely offers a range of solid possibilities and accepts no responsibility for how the information contained herein, is used.

Introduction

Geological data collection and management is often overlooked within the education system for geologists. Graduating geologists often find themselves working for established mineral exploration companies fulfilling specific rolls such as field mapping or logging drill core and do not obtain a broader knowledge of the whole system. For example, a geologist may spend two years working on a drill program and never learn about sample management, QA/QC, assay methods or data modeling as these roles were fulfilled by other specialists working for the company. The geologist then finds a new job, in a smaller company and is then expected to implement a broad range of sampling programs from start to finish, including the training of field assistants or junior geologists. Similarly, many new exploration businesses often only implement such systems after some period of trial and error.

This book provides an introduction and a practical guide with examples, for the collection and management of geological data, ranging from site logging to surface sampling and drilling. (This Guide will only touch upon assay Dispatch and assay result management to give a 'heads up' about where and what needs to be addressed as you move forward.

The topics covered are designed to maximize the geologists time in the field and provide data entry and management processes that will minimize the time spent processing and logging the samples. This Guide does not attempt to tell anyone how, what or where samples should be taken.

I also hope to encourage new and small explorations companies to implement systems that will meet their needs; from the initial exploration sorties to large scale sampling programs where the data management and sample processing requirements rapidly multiply.

From a geologists perspective, prior to commencing exploration, it is often useful to standardize how geological and meta-data is to be collected and stored. Experienced geologists will have worked with many data collection systems and will often have their "own way" of doing things or they may have never used a comprehensive logging system before. The following offers some suggestions as to how a system may be setup, presents some suggested sample codes that are database compatible and provides examples of field data entry.

Using the suggestions provided in this Guide will make moving to a large modular system such as Micromine-Geobank or Acquire-GIM Suite etc, at some later point in time; relatively simple and greatly reduce any setup costs. Also, much of the work done in setting up your logging system will still have to be done regardless of the software used for managing, collecting and storing data. What is more, implementing basic database storage should enable immediate use of some of the many, relatively inexpensive 3D geology software currently available.

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