

005055

GRUM DATABASE

INTRODUCTION

The GRUM DDHDB (Diamond Drill Hole DataBase) contains all the pertinent information for GRUM drill holes. During the interval 1983-1984, all the information from this database was reviewed for correctness. All updates and corrections were incorporated into a revised "clean" database. This note discusses the procedures used to update and revise the original database.

Drill hole information for each hole in the DDHDB is organized into several data subsets: collar location (T-data), downhole deviations (R-data), downhole lithologies (L-data), downhole structure (S-data), downhole faults (F-data), and assays (P- and A-data). Updating procedures for each of these data subsets will be considered separately.

Drill Hole Collar Locations (T-data)

Grum drill holes were completed during the interval 1965-1983 using a variety of surface grids for location control. Local coordinates were converted to UTM coordinates consistent with the 1979 Orthophoto Topographic Base established by Northwest Surveys. These coordinate conversions used equations derived from least squares analysis of collar locations reported in both UTM and local coordinates. Spot field checks were made of some of the earlier holes to ascertain that the converted UTM coordinates were correct as listed. Elevations for each of the collars was checked against the 1979 topographic base to ensure that the proper elevation datum was used in the coordinate conversion. All entries in the database were also checked for possible data entry errors.

Drill Hole Downhole Deviations (R-data)

Downhole deviations for drill holes were measured using acid dip, Sperry Sun single shot, and Tropari methods. In some instances deviations were not measured. All original field measurements were checked where possible. Readings based on magnetic north were corrected to True North by adding 33 degrees to the field reading. Downhole distances for the readings were checked against the lithology log to insure that readings were not influenced by strongly magnetic lithologies. Obviously spurious readings were discarded.

If downhole surveys were not measured when the drill hole was completed, deviations were estimated using averages of downhole deviations from nearby drill holes. In this situation nearby drill holes used to calculate a deviation were constrained to be the same size core.

All readings were converted to the format utilized in the DDHDB system. Azimuths directions are reported as degrees ranging from 0 to 360. Zenith angles are reported as degrees ranging from 0 to 180, with straight up being 0 and vertically down being 180.

Drill Hole Downhole Lithologies (L-data)

Downhole distances and lithologic codes in the DDHDB were checked against the original field logs. All edits and updates to the field logs were incorporated into the revised database.

Drill Hole Downhole Structure (S-data)

Downhole distances and structural measurements of foliations and layering were checked against the original field logs. In several instances the recording format for structures did not correspond to the most recent field logging conventions. The original field log data in these cases was converted to the most recent format and entered into the DDHDB in replacement for the earlier entries.

Drill Hole Downhole Faults (F-data)

The fault subfile in the DDHDB was created after field logging had been completed for most of the Grum drill holes. Fault logs had to be created from existing information contained in the field logs. Data from the lithology and structure portions of the field logs was used to write up a fault log for each drill hole. These logs were then entered into the DDHDB.

Drill Hole Assays (P-data and A-data)

All assay intervals were checked against the original field logs for correctness of downhole distances and lithology. The recorded rock type in the assay log was also compared to the rock type contained in the lithology log. Modifiers for the rock type code were changed to reflect the Pb+Zn grade and descriptive information for the assay interval.

In addition the assays for the different elements were checked against the original field estimates (from drill logs) and the rock type. All unreasonable values were verified by referring to the assay certificates. Spot checks were completed to confirm that silver and gold assays were correctly converted from oz/ton to gms/tonne.

Summary

Drill hole data in the Grum DDHDB was reviewed and revised during the time span 1983-1984. Collar location, downhole surveys, lithologies, structural measurements, and assays were checked against the original field logs. All updates and revisions to the field logs were incorporated into the revised DDHDB. Fault logs were constructed from the field logs and entered into the DDHDB. After revisions were completed, the GRUM DDHDB contained the most current and complete drill hole information using the most recent recording and reporting formats within the DDHDB system.