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12.001 Introduction to Geology Spring 2008

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Basic Field Procedures

Planning

Location

Observation

Measurements

Notes and Sketches

Mapping

Geologic relationships

Recording information on a map

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• All exposures ringed by a solid line, colour coded by *formation* with an abbreviated lithological descriptor e.g. f.gr.rd. sstn (= fine grained red sandstone)

Information about what can seen

• All structural data, unless there is too much to fit it all on the map, in which case, representative structural data

Recording exposures

Map A: good features

- Represents exposure shape on the map as accurately as possible, bearing in mind the scale
- Accurate placement of boundary due to accurate recording of observations
- •' V' effect in valley where boundary is inferred

Map B: poor features

- Exposures too blobby and not to scale
- Boundary poorly placed due to above features
- •' V' effect in valley not interpreted

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Inferred contacts...



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All field sheets should have a lithostratigraphic key and all structural symbols used should be explained. The lithostratigraphic key should contain information about lithotype (i.e. not just a list of formation names)

Make sure you write your name on the reverse of each field sheet. The lithostratigraphic key can be on the reverse

A diagram to show how the field sheets fit together is very helpful Images removed due to copyright restrictions.

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Using colors and letters in geologic maps: SIs = Silurian limestone Pv = Permian volcanic rock

Brunton Compass

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