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Palynology of Faroe-Shetland Basin well 209/12-1 between 3467.55 and 3469.85 m

Energy Systems and Basin Analysis Programme Commissioned Report CR/17/082

BRITISH GEOLOGICAL SURVEY

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Palynology of Faroe-Shetland Basin well 209/12-1 between 3467.55 and 3469.85 m

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Summary

As part of Phase 3 of the BGS Faroe-Shetland Consortium project on the Jurassic of the UK sector of the Faroe-Shetland Basin, detailed logging of core from well 209/12-1 was undertaken. Four core samples were taken for palynology between 3467.55 and 3469.85 m in order to provide age determinations and additional facies information. However, the four samples all proved devoid of identifiable palynomorphs, and hence no age assessment is possible. Sample 3 at 3469.84 m probably represents marine deposition.

1 Introduction

As part of detailed sedimentological logging of conventional core from offshore well 209/12-1, four samples between 3467.55 and 3469.85 m were collected for palynological analysis in order to provide biostratigraphical ages and palaeoecological information. The samples were all prepared using standard acid-based techniques. The samples, aqueous residues and microscope slides are held in the BGS collections at Keyworth, Nottingham. The four samples are listed in the Appendix.

2 Palynology

The four samples all proved entirely barren of palynomorphs, hence no age assessment is possible. Only one possible fragment of an indeterminate dinoflagellate cyst was observed in sample 3. This possible dinoflagellate cyst suggests probable marine deposition at 3469.84 m. The organic residues all comprise black macerals indicating high levels of thermal alteration.

3 Conclusions

The four samples all proved devoid of identifiable palynomorphs, and hence no age assessment is possible. Sample 3 at 3469.84 m probably represents marine deposition.

$Appendix-{\it list of samples (measured depths)}.$

| Informal No. | BGS Registration No. | Depth (m) |
|--------------|-----------------------------|-----------|
| 1 | MPA 67701 | 3467.55 |
| 2 | MPA 67700 | 3468.86 |
| 3 | MPA 67699 | 3469.84 |
| 4 | MPA 67698 | 3469.85 |