
Falkland Islands Government

Department of Mineral Resources



Petroleum Operations Notice 4

Application for Consent to Drill Exploration,
Appraisal, and Development Wells – Guidance Notes

Revised April 2016

Any enquiries regarding this Notice should be addressed to:

Department of Mineral Resources
Ross Road
Stanley
Falkland Islands
Tel: # 500 27322
Fax: # 500 27321
E-mail reporting@mineralresources.gov.fk

NOTES:

A. This Notice applies to Exploration, Appraisal, and Development, in Seaward areas.

B. Applications for consent to drill should normally be submitted, by the licence operator, to the addresses in paragraph 8, **not less than 28 calendar days** prior to expected start of operations. See also Notes C and D below. Consent will usually be conditional upon drilling taking place within a year of the date on which it was issued.

In the case of wells where a sidetrack is required to a new Geological target (i.e. not for mechanical reasons), where no sidetrack was planned at the initial consent stage, a separate application must be made following discussion with the Director of Mineral Resources.

The “Basic Well Data” Proforma (see paragraph 1 below) should also be used, with supporting information, in the case of a re-entry after suspension to drill to another target location.

C. Certain licences have conditions attached to them, which are issued either at the time the licence is granted or subsequently by the Governor. Where there is a difference, the licence conditions take precedence over this Guidance Note, and must be adhered to.

In some cases, more than 28 days advance notice may be required by other Government Departments, reflecting the terms of the conditions. If full details of the proposed operation cannot be supplied with the application the reasons for this should be explained. Failure to comply with licence conditions may result in refusal of consent.

D. Attention is drawn especially to the necessity for obtaining consent to locate offshore installations from the Department of Mineral Resources. Positioning of all offshore installations, for the drilling of Exploration and Appraisal wells in addition to Development operations and stacked rigs should be assumed to require consent unless the Department of Mineral Resources has confirmed otherwise in writing. A **minimum of 30 days** notice is required for consent to straightforward drilling operations. Earlier notice will be necessary for operations in busy fishing/shipping areas. It should be made clear in the application if an Exploration or Appraisal well might later be utilised for Development. It should not be assumed that permission to occupy a site for a limited period will necessarily allow future activity on that site. Application should be made to:

Department of Mineral Resources
Ross Road
Stanley
Falkland Islands
Tel: # 500 27322
Fax: # 500 27321
E-mail : reporting@mineralresources.gov.fk

E. Attention is drawn to the contents of **PON 1** (Continental Shelf Operations Notice No. 1) which specifies the information required by the Department of Mineral Resources.

F. Attention is drawn to the contents of **PON 7** which describes the Department of Mineral Resources official well numbering system.

G. Licensees, when applying for consent to drill a well must submit co-ordinates in respect of well locations in degrees of latitude and longitude as defined on UTM Southern Hemisphere Projection, World Geodetic System 1984 (WGS '84). UTM co-ordinates may also be supplied with details of projection details relevant to the co-ordinates supplied.

APPLICATION FOR CONSENT TO DRILL

The following sections describe the information about the proposed well which should comprise the application.

1. Basic Well Data should be supplied on the attached Proforma. Photocopied forms may be utilised.
2. Prospect Summary Sheet (see attached Proforma). Photocopied forms may be utilised. Plates should be in black and white, as they may be photocopied. One sheet should be submitted for each major reservoir target. The scale of the map should be shown, and the direction of North indicated if not the usual top of the form. At least two reference Latitudes and two reference Longitudes should be annotated.
3. Seismic Depth Map and Representative Seismic Section A depth map should be provided at an appropriate scale (1:10,000, 1:25,000 or 1:50,000) on top of or near to the prospective horizon[s], with the surface and planned bottom hole locations indicated, where applicable. One or two representative seismic sections, preferably through the well location, are also required.
4. Synopsis briefly describing the geological rationale and objectives of drilling the well.
5. Sampling/Coring/Logging and Testing Programme
This should include information on:
 - (i) frequency of cuttings samples collection;
 - (ii) objectives of the coring programme (including intervals to be cored. . If no coring is planned, give reasons. NOTE: It is expected that Exploration wells will be cored in the reservoir section if there are shows. A terminal core should also be cut if age dating or lithology is uncertain. All Appraisal wells must be cored in the reservoir section.
 - (iii) side-wall coring programme and equipment type.
 - (iv) Details of the type and scope of mud logging service to be provided.
 - (v) The formation evaluation objectives and the means proposed to achieve these. A description of the logging programme (both open and cased hole) for each casing depth plus any intermediate survey point should be included. Data on the expected formation water and mud filtrate salinities should also be provided.
Conditional logging runs should be included and the conditions noted (eg. where shallow gas is expected).

NOTE: Exploration and Appraisal wells are expected to be *thoroughly* logged at intermediate levels as well as over target horizon[s].

 - (vi) An indication of the mud type and proposed weight of mud for each casing interval.
 - (vii) Details of proposed well testing operations

NOTE: Section 62 of the Offshore Minerals Ordinance 1994 requires a licensee to obtain the prior consent of the Governor to any venting of gas. A licensee must also obtain the Governor's consent to flaring gas in accordance with the terms of his licence. A well test producing from any one interval over a period in excess of 4 days is considered to be a long term test. Testing will not usually be permitted for periods which, in aggregate, exceed 90 days.

6. Other Relevant Information

- (i) Details of estimated pore pressures in all permeable and porous formations, and estimated formation fracture initiation and propagation gradients at all casing shoes. This information may be presented in graphical or tabular form if preferred. The offset wells used to obtain this information should be indicated. Please indicate if the proposed Exploration or Appraisal well is in an area of High Pressure and/or High Temperature, i.e. where the undisturbed bottom hole temperature at prospective reservoir depth or total depth is greater than 149°C (300°F) and the maximum anticipated pore pressure of any porous formation to be drilled through exceeds 18000 newton/metre²/metre (Pascals/metre) (0.8 psi/ft).
- (ii) Details of the mud type and proposed weight of mud for each interval to be drilled.

NOTE: Casing setting depths will be recorded on the Prospect Summary Sheet. However, if there is a large range of uncertainty in the possible depths, this should be indicated. Well design criteria and drilling programme details are required by the Department of Mineral Resources.

7. Shallow Hazards and Hydrogen Sulphide

- (i) It should be clearly indicated if there is a possibility of shallow gas at the drilling site. A brief summary of the site survey could be included.
- (ii) If there is a possibility of Hydrogen sulphide at any horizon in the well, this would be identified. However, note that the Health and Safety Executive (HSE) require to be informed of any incident involving H₂S, Shallow Gas, or HP/HT.

8. Please send completed application forms and required information to:

Department of Mineral Resources
Ross Road
Stanley
Falkland Islands
Fax: +(500) 27321

Attn: Dr. D. McCarthy

British Geological Survey
Murchison House
West Mains Road
Edinburgh
Scotland EH9 3LA

Fax: # 131 668 2683

E-mail reporting@mineralresources.gov.fk

E-mail davemcc@bgs.ac.uk