

MINISTRY OF ENERGY AND ENERGY INDUSTRIES

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ALL PETROLEUM COMPANIES OPERATING IN THE REPUBLIC OF TRINIDAD AND TOBAGO

SUBJECT

INFORMATION REQUIREMENTS OF THE MINISTRY OF ENERGY AND ENERGY INDUSTRIES

ALL DATA ACQUIRED AS A RESULT OF PETROLEUM OPERATIONS IN TRINIDAD AND TOBAGO MUST BE SUBMITTED TO THE MINISTRY OF ENERGY AND ENERGY INDUSTRIES AS FAR AS IT IS POSSIBLE IN DIGITAL FORMAT

- 1. Data required prior to the drilling of **EXPLORATORY WELLS**. This data is to be submitted online to the Ministry's Energy Data Hub via the Energy Sector Private Network (eSPN). Until further notice, a hard copy of the online form is to be printed, signed and submitted by regular mail to the Director, Resource Management Division, 2nd Floor, Moonan Building, Frederick Street, Port of Spain.
 - 1.1 Detailed written geological justification must accompany the DRL-2 form on submission. This report should indicate primary and secondary (if any) objectives, the expected stratigraphic section, descriptions of the major structural features and all relevant maps and cross-sections (including seismic sections)
 - 1.2 An Operations Plan which includes the following must accompany the DRL 2: Casing Programme including alternative strategies anticipated in the event of plug-backs, stuck pipe etc. Pore pressure plot, showing formations to be penetrated including subnormally and abnormally pressured zones
 - 1.3 Detailed Mud Programme

- 1.4 Comprehensive Well Evaluation Programme including electric logs, mud logs, coring and well testing programmes.
- 1.5 Cementing Programme
- 1.6 Bit Programme
- 1.7 Hole Deviation Programme including map showing plan view and cross-sectional view, equipment to be used and special precautions/procedures
- 1.8 BOP Equipment and special precautions programmed to minimize risk of blow-out
- 1.9 General discussion of drilling problems anticipated and techniques to be adopted to solve these problems
- 1.10 Detailed discussion of special equipment or technology to be used
- 1.11 Anticipated cost details
- 1.12 Drilling Time graph
- 1.13 Rig specifications
- 1.14 Reserves expected to be proved up or developed
- 1.15 In the event of the usage of specialized geological and petroleum consultancy services for geochemical paleo, palynology, and other specialized geological and reservoir engineering analyses, the Ministry of Energy and Energy Industries must be informed of the consultants, their capabilities and the nature of the services to be provided for the company. The consultancy services would include the contractors (or in-house capability) who provide services such as mud logging and drill stem testing for the continuous monitoring of the drilling operations
- 2. The Contract Management staff of the Ministry must be advised on a daily, or as soon as available basis, the following information:
 - 2.1 Well site geological reports
 - 2.2 Mud logs
 - 2.3 Preliminary palaeontological reports

- 2.4 Actual drilled depth of marker horizons
- 2.5 In the case of deviated holes, the computed results of the directional surveys
- 2.6 Preliminary results of sidewall and full bore core analyses
- 2.7 Copies of all logs electric, radioactive, sonic, dipmeter etc, within one (1) working day after the completion of survey
- 2.8 Preliminary results of all formation test, DST'S production test.

3. **SAMPLES**

The following samples must be submitted to the Senior Petroleum Engineer (Data) at regular intervals during the drilling operations. Samples will only be accepted at the Core Repository on Fridays and the SPE (data) must be informed in writing when samples are to be sent.

- 3.1 Washed and dried samples of ditch cuttings
- 3.2 Samples of all cores taken.

THE FOLLOWING INFORMATION SHOULD BE SUBMITTED TO THE DIRECTOR, CONTRACT MANAGEMENT, 2nd Floor, Moonan Building, 116 Frederick Street, Port of Spain.

4. **DRILLING PROGRAMMES (Development Wells)**

In addition to information required on the DRL2, the following must be appended:

- 4.1 Pore pressure plot
- 4.2 Reserves expected to be proved up or developed
- 4.3 Hole deviation programme including plan view, cross-sectional view, equipment to be used such as mud-motor and any special precautions to be taken
- 4.4 Details of BOP equipment and any special precautions programmed to minimize risk of blow out
- 4.5 Expected cost of well
- 4.6 Drilling time graph

- 4.7 General discussion of drilling problems anticipated and steps to be taken to mitigate those problems
- 4.8 Details of any special equipment or technology to be utilized
- 4.9 If shallow, fresh-water sands are to be penetrated, state any precautions that will be adopted to prevent contamination of fresh-water sands
- 4.10 If the proposed well is part of an Enhanced recovery project, include a surface location map showing nearby wells and pattern, as well as a cross-section map.

5. AMENDMENT TO DRILLING PROGRAMME

If any major changes to the originally approved drilling programme are planned, an amended programme or a written request must be submitted to the Ministry of Energy for approval

- 6. Information to be submitted after approval of <u>ALL</u> drilling programmes to the Contract Management Division
 - 6.1 DRL 3 (spud report)
 - 6.2 Daily Drilling Report, including details of mud properties, bits used, bottom-hole assembly, BOP tests and fire-drills, time allocation and well cost data (daily and cumulative)
 - These reports must reach the Director, Contract Management by noon of the day on which the Daily Drilling Report is prepared.
 - All wireline logs, MWD logs, mud logs and computer-generated logs must reach the Ministry within one working day after their being run or generated
 - 6.4 DRL 4 (monthly summary).

7. INITIAL COMPLETIONS

- 7.1 A completion programme must be submitted for approval prior to the completion of any well. This includes zones to be plugged or wells to be abandoned on initial completion.
- 7.2 DRL 5 (completion report).

8. WORKOVERS

The following supportive information must be submitted with each W.O.1.

- 8.1 Well-bore schematic showing work programmed
- 8.2 Cost estimate of workover
- 8.3 Economic justification in the case of recompletions and abandonments
- 8.4 Date of last Bottom Hole Pressure survey and results of analysis, including IPR curves if available
- 8.5 Production curve showing production trends before workover and future trends (a) if no workover is done and (b) assuming a successful workover.
- 8.6 If the well is part of an EOR project, a discussion of the well's significance to the scheme must be presented including a description of the relevant pattern, a surface location map showing nearby wells and a cross-section illustrating its position relative to nearby wells. Also required is a discussion of the impact of high temperatures and pressures on the precautions that will be taken to minimize risk of blowouts.
- 9. Regarding workovers <u>not</u> requiring the Ministry of Energy approval, a monthly summary of those workovers must be submitted with relevant information including:
 - 9.1 Well number and type of workover performed
 - 9.2 Date workover was started/completed
 - 9.3 Number of winch hours/rig hours spent
 - 9.4 Cost of workover
 - 9.5 Cumulative number of workovers done for the month as well as total cost for the month.

10. SAFETY

- 10.1 Technical information and specifications of the drilling rig and associated safety and fire fighting equipment
- 10.2 A summary report of the safety performance of the rig during the last year of active operations. Additionally, the company will be required to comply with the "Code of Practice for Drilling and Production Rigs Operating in Trinidad and Tobago 1990"

- 10.3 The rig shall be made available for a safety inspection prior to the commencement of drilling operations
- 10.4 Details of the Company's Safety Policy, Practices and Procedures
- 10.5 A hazard survey report which should provide information that will identify geo-hazards thereby enabling drilling operations to be conducted safely
- 10.6 All accidents must be reported to the Operations Section of the Ministry.

11. ENVIRONMENT

- 11.1 The Company's Environmental Policy and its Oil Spill Contingency Plan. (Each company will be required to be a member of the National Oil Spill Contingency Plan)
- 11.2 All physical losses of oil must be reported to the Ministry immediately upon discovery
- 11.3 Pollution resulting from such losses must be satisfactorily remedied and the area restored to a condition that meets the approval of the Ministry. Reasonable compensation must also be paid to any affected third party.

12. DESIGN

12.1 Design data for production facilities shall be submitted for approval. Additionally all production facilities are subject to periodic inspection by the Ministry.

13. FINAL REPORTS (Exploration Wells)

In addition to the submission of the DRL-5 form, the following information must be submitted as soon as available:-

- 13.1 For deviated holes deviation plot and co-ordinates of well bore at markers and the objective horizons
- 13.2 Final reports of core and sample data analyses
- 13.5 Final reports from all the consultants/specialists employed e.g., geochemical, paleontological etc.
- 13.6 Composite logs
- 13.7 Any other data generated as a result of drilling, testing etc

- 13.8 Production reports to be submitted include PROD 1, PROD 1a, PROD 2, PROD 3 and PROD 4
- 13.9 The following is a list of the submission dates of forms to the, Ministry of Energy and Energy Industries:
 - DRL 2 21 days before commencement of drilling
 - DRL 3 Within 2 days following commencement of drilling
 - DRL. 4 Fifth working day following end of calendar
 - DRL 5
 - Section 1 15 days following completion of well
 - DRL 5
 - Section 11 Within 21 days after completion
 - WO 1 21 days before commencement of workover
 - WO 2 Within 15 days following end of work
 - WO 3 Seventh working day following end of calendar month
 - PROD.1 <u>Tenth</u> working day following end of calendar month
 - PROD.1A Tenth working day following end of calendar month
 - PROD. 2 <u>Tenth</u> working day following end of calendar month

PROD.	. 3	Tenth working day following end of calendar month
PROD.	4	Last working day of the month following month for which data is reported
STK1		Tenth working day following end of calendar month
STK.1A.		Tenth working day following end of calendar month
STK11		Tenth working day following end of calendar month
STK 8		Within four working days following discovery of physical loss
FAC.	1	On completion of new gathering stations
FAC.	2	30 th April and 31st December each year
FAC.	3	On completion of new fiscalization facilities
FAC	4	30th April and 31st October each year
Misc.	1	Within 72 hours of the accident. All serious accidents must be reported verbally immediately after they occur
Misc.	2	December 31 st following cut-off date
Misc	3	Fifteen working days following end calendar month

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