DEPARTMENT OF THE INTERIOR

MINERALS MANAGEMENT SERVICE (MMS)

FIELD OPERATIONS REPORTER'S HANDBOOK

Revision 01 (November 4, 2002)

GENERAL GUIDELINES

For Use With Outer Continental Shelf (OCS) Reporting Forms:

Form MMS-123, Application for Permit to Drill (APD)

Form MMS-123S, Supplemental APD Information Sheet

Form MMS-124, Application for Permit to Modify (APM)

Form MMS-125, End of Operations Report (EOR)

Form MMS-133, Well Activity Report (WAR)

Form MMS-144, Rig Movement Notification Report

Foreword

This Field Operations Reporter's Handbook is designed to aid the person filling out the above forms which are required for requesting approval and reporting upon certain operations addressed in the operating regulations at 30 CFR Part 250. The forms and this handbook are oriented toward the automated processing of data both by the reporting companies and the agency. Use of computer generated forms by the reporter is encouraged.

NOTE: Forms with an issue date of **October 1, 2002** are the most current and are to be used. The character length and format as given in this handbook is to be followed. Copies of the forms will be distributed separately for inclusion into the handbook. Users are cautioned to read carefully the data definitions in this handbook. The definitions used in this handbook are often the same as those in the Production Auditing and Accounting System (PAAS) Reporters Handbook, but not in all cases.

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WELL ACTIVITY REPORT (WAR)
(Formally WEEKLY ACTIVITY REPORT)
(Form MMS-133)

The reporting guidelines for this form are described in the following manner:

- Form Overview (also see General Guidelines)
- Completion of Form with a Description of Data Elements

FORM OVERVIEW

INTRODUCTION

The purpose of the Well Activity Report (WAR) is for the applicant to provide to the appropriate MMS district office a means for submitting the actual work procedures and relevant well information for ongoing well operations to ensure compliance with an approved application(s).

WHO MUST FILE

Any operator of a lease or unit on the Federal OCS who drills, completes, performs a workover, or abandons a well pursuant to a properly approved exploration or development and production plan.

WHEN TO FILE

The WAR form is filed on a weekly work interval basis or when the operation has been completed. If the operation is completed, then checkmark the last well activity report box at the top on the first page. The form should be submitted within 7 days of the conclusion of the prior weekly work interval.

HOW AND WHERE TO FILE

Submit original copy of Form MMS-133 to the appropriate district office as shown in Appendix A.12. As qualified, in accordance with 30 CFR 250.196, items on this form shall not be available for public inspection without the consent of the lessee for the same periods

as those provided in paragraph (b) of this section or until the well goes on production, whichever is earlier. See Appendix A.11.

COMPLETION OF FORM WITH A DESCRIPTION OF DATA ELEMENTS

This section identifies the information which is required to complete the WAR. The section is divided into two topics organized as follows:

GENERAL INFORMATION contains information used by MMS for identification of the operator and reported well.

ENGINEERING INFORMATION contains the parameters and procedures encountered while performing operations on the well. This would include:

Current Wellbore Information
Wellbore Historical Information
Casing / Liner / Tubing Record
Open Hole Tools, Mudlogs, and Directional Surveys
Identity Other Open Hole Data Collected
Well Activity Summary

GENERAL INFORMATION

1. API WELL NUMBER (10 characters - NNNNNNNNNN)
Enter the basic 10-character API composite Well Number assigned by MMS on the approved APD, Form MMS-123, in accordance with API Bulletin D12A.

2. OPERATOR NAME
Enter the legal company name as given by the lease documents or approved Designation of Operator form (Form MMS-1123) on file with MMS.

3. WELL NAME (5 characters - AANNN)
Enter the **current** MMS/operator identification name/number for the well. See Appendix A.8. The term **"current"** means entering the present status of the well prior to approval.

4. SIDETRACK NO. (2 characters - NN)
Enter the current Sidetrack number for the well at the end of the reporting period.
See Appendix A.8.

5. BYPASS NO. (2 characters - NN)
Enter the current Bypass number for the well at the end of the reporting period.
See Appendix A.8.

6. CONTACT NAME/CONTACT TELEPHONE NUMBER
Enter the name and telephone number, including area code, of the company representative for MMS to contact in case a question or problem arises concerning data on the form.

7. RIG NAME OR PRIMARY UNIT (e.g., wireline unit, coil tubing unit, etc.)
Enter the name of the rig or primary unit to be used to complete, workover, or abandon a well. For wireline and coil tubing units simply state "wireline" or "coil tubing".

8. WATER DEPTH (Surveyed) (5 characters – NNNNN)
Enter the distance, in feet, from the mean sea level to the seafloor mud line at the well location.

9. ELEVATION AT KB (Surveyed) (3 characters – NNN)
Enter the elevation of the well, in feet, measured from the rotary kelly bushing to mean sea level.

ENGINEERING INFORMATION

10. CURRENT WELLBORE INFORMATION

SURFACE

Lease No. (6 characters - ANNNNN)
Enter MMS's assigned identification number for the lease at the surface location. See Appendix A.1.

Area Name (2 characters - AA or NA)
Enter the alpha code of the Operating Area at the surface location of the well. See Appendix A.4.

Block No. (5 characters - ANNNN)
Enter the number of the block at the surface location of the well.

BOTTOM

Lease No. (6 characters - ANNNNN)
Enter MMS's assigned identification number for the lease at the actual/proposed bottom location. See Appendix A.1.

Area Name (2 characters - AA or NA)
Enter the alpha code of the Operating Area at the actual/proposed bottom location of the well. See Appendix A.4.

Block No. (5 characters - ANNNN)
Enter the number of the block at the actual/proposed bottom location of the well.

Wellbore (2 characters - NN)
The original hole is identified using a wellbore code (the 11th and 12th digit of the API No.) of "00". For every sidetrack or bypass wellbore drilled after the original hole (except well deepening to the original intended target), the WB code is incremented by 1 and assigned sequentially. The last existing wellbore is designated as the Current Wellbore.
(Example: 00; 01; 02; etc.)

Start Date (8 characters - YYYYMMDD)
Enter the date that the wellbore was started/spud. For the original wellbore (00), the start date is the spud date, i.e. the date that drilling begins below the drive pipe. For sidetrack and/or bypass wellbores (01, 02, etc.), the start date is the date that drilling begins after kicking off a cement plug or exiting casing.

TD Date (8 characters - YYYYMMDD)
For wellbores that were previously drilled to Total Depth (TD), enter the TD Date from the prior drilling operation. If you are currently drilling the wellbore, then this field is only to be filled out when TD is reached and you have finished "making hole."

OP Status (3 characters - AAA)
Enter the status of the current wellbore at the ending date of the reporting period.

Operational Status Type Codes

Note: Operational Status Type Codes utilized in Item 10 "Current Wellbore Information" of this form are not the same status codes outlined in Appendix A.6, Borehole Status Codes, which are utilized when filing the End of Operations Report, (EOR) Form MMS-125. These operational codes only indicate the temporary status of the wellbore during the intended operation.

The following are Operational Status code entries along with the definitions of the each:

PND (Pending to Drill) indicates that pre-spud operations are being carried out. This code is utilized during rigging up operations on a new wellbore, sidetrack or bypass. When the wellbore is spudded, then the status should be changed DRL.

DRL (Drilling) indicates that drilling operations on the wellbore are in progress. When total depth is reached, enter TD Date and change status to the next planed operation.

DSI (Drilling Shut-in) indicates that drilling operations on the wellbore have been interrupted **prior to reaching total depth**. Operator plans to return for further operations. A TD Date is not entered.

ST (Plug back to Sidetrack) indicates that the wellbore is being plug backed or was plugged back for sidetrack or bypass operations.

TA (Temporarily Abandoned) indicates that the wellbore has been drilled to total depth and is being temporarily abandoned and the operator plans to return at a later date.

PA (Permanently Abandoned) indicates that permanent abandonment operations on the well are being conducted or have been finished. This operation may or may not include casings being cut.

COM (Initially Completed) indicates that the wellbore is being or has been **initially completed** for production.

WO (Workover) indicates that the wellbore is being worked over or has been worked over. This status is used for operations that **do not change the configuration** of the wellbore, i.e. casings perforations are not changed. This would include tubing changes, washing sand from wellbore, acidizing, etc. Upon finishing a workover, the status remains as an operational WO and **does not** revert to **COM**. After performing this operation, a Form MMS-125 **is not required.**

REC (Recompletion) indicates that the wellbore is being recompleted or has been recompleted. This status **does not changes the configuration** of the wellbore, i.e. the existing perforations remain the same. This would include reperfortating the existing interval without extending the existing perforations. Upon finishing a recompletion, the status remains REC and **does not** revert to **COM**. After performing this operation, a Form MMS-125 **is not required.**

MPF (Modify Perforations) indicates that the wellbore perforations are being modified or has been modified. This status **does change the configuration** of the wellbore, i.e. changes to the existing perforations are modified. This would include adding additional perforations to an existing interval or squeezing (abandoning) a portion of an existing interval. Upon finishing this operation, the status remains MPF and **does not** revert to **COM**. After performing this operation, a Form MMS-125 **is required**. The Status Code entry on the MMS-125 form would be **COM** as taken from Appendix A.6.

CHZ (Change Zones) indicates that a zone change is being performed or has been performed on a wellbore. This status **changes the configuration** of the wellbore by adding a new zone(s) (perforated interval) to the wellbore and/or abandoning a zone. Generally, this status changes the completion code of the wellbore, e.g. S1 to S2 or D1/D2 to D1/D3. Operations conducted under this status would include changing tubing completions in a wellbore, e.g. dual to single and visa-versa. Upon changing zones, the status remains CHZ and **does not** revert to COM. After performing this operation, a Form MMS-125 **is required**. The Status Code entry on the MMS-125 form would be **COM** as taken from Appendix A.6.

End Date (8 characters - YYYYMMDD)
Enter the date that the wellbore operation was finished. This date will be used as the official concluding date of the operational status. This date is left blank if any operations on the wellbore are still in progress.

MD (Measured Depth) (5 characters - NNNNN)
Enter the measured depth (in feet) of the well **at the close of the reporting period**, measured from the kelly bushing to the bottom of the wellbore. When the well is drilled to total depth, a TD Date is then entered.

TVD (True Vertical Depth) (5 characters - NNNNN)
Enter the true vertical depth (in feet) of the well **at the close of the reporting period,** measured as the vertical distance from the kelly bushing to the horizontal plane of the bottom of the wellbore. When the well is drilled to total depth, a TD Date is then entered.

MW (Mud Weight, PPG) (4 characters - NN.N)
Enter the weight of the drilling mud or completion fluid expressed in pounds per U.S. gallon (ppg) **at the end of the reporting period**.

Last BOP Test Date (8 characters – YYYYMMDD)
Enter the date of the last BOP test performed.

Last BOP Test Pressure Low/High (3 characters - NNN/5 characters - NNNNN)
Enter the Low/High ram test pressure (annular pressure need not be indicated). When the Stump Test is the last test, indicate that in Item 15, "Well Activity Summary".

11. WELLBORE HISTORIAL INFORMATION

Wellbore (2 characters - NN)
Wellbores previous to the current wellbore listed in Item 10 are contained within this section. The original hole is identified using a wellbore code (the 11^{th} and 12^{th} digit of the API No.) of "00". For every sidetrack or bypass wellbore drilled after the original hole (except well deepening to the original intended target), the WB code is incremented by 1 and assigned sequentially.
(Example: 00; 01; 02; etc.)

Bottom Lease (6 characters - ANNNNN)
Enter MMS's assigned identification number for the lease at the bottom location.
See Appendix A.1.

Start Date (8 characters - YYYYMMDD)
Enter the date that the wellbore was started/spud. For the original wellbore (00), the start date is the spud date, i.e. the date that drilling begins below the drive pipe. For sidetrack and/or bypass wellbores (01, 02, etc.), the start date is the date that drilling begins after kicking off a cement plug or exiting casing.

TD Date (8 characters - YYYYMMDD)
Enter Date the wellbore was drilled to total depth (TD).

Plugback Date (8 characters - YYYYMMDD)
Enter Date the wellbore was permanently abandoned.

Final MD (5 characters - NNNNN)
Enter the measured depth that the wellbore was drilled to total depth (TD).

Final TVD (5 characters - NNNNN)
Enter the true vertical depth that the wellbore was drilled to total depth (TD).

12. CASING / LINER / TUBING RECORD

Note: This section need only be filled out in the case of a new drill or sidetrack/bypass operation. Additionally, tubing changes on existing wellbores must be entered. Entries in this section should reflect the tubular arrangement of the current wellbore listed in Item 10 at the end of the reporting period. If a wellbore is created and abandoned within a weekly interval, then a supplemental page should be attached showing the Tubular entries for that wellbore.

Tubular Type
Indicate the type of tubular, i.e., casing, liner, or tubing utilized.

Hole Size (IN)(6 characters – NN.NNN)
Enter nominal diameter (in inches) of the borehole drilled.

Size (IN)(6 characters – NN.NNN)
Enter the nominal diameter (in inches) of the casing.

Weight (#/Feet)(5 characters – NNN.N)
Enter the nominal casing weight in pounds per foot.

Grade (7 characters AAA-NNN)
Enter the casing grade in API standard designation.

Test Pressures (psi)(5 characters – NNNNN)
Enter the test pressure of the casing/liner/tubing test in pounds per square inch (psi).

Shoe Test (EMW)(4 characters – NN.N)
Enter the pressure or formation integrity test (PIT/FIT) or leak off test (LOT) of the shoe in equivalent mud weight pounds per gallon (ppg).

Setting Depth Top/Bottom (MD)(5 characters – NNNNN)
Enter the top/bottom measured depth (in feet) at which the casing/liner is set.

Cement Quantity (Cubic Feet)
Enter the total volume (in cubic feet) of cement used in cementing the string of casing/liner.

13. OPEN HOLE TOOLS, MUDLOGS, AND DIRECTIONAL SURVEYS

List all open hole logging tools, lithologic description logs (i.e. mudlogs, litho logs, formation evaluation logs), and directional surveys run in the borehole. See **Appendix A.9** to complete Items 13 and 14.

Service Company – Enter the full name of the Service Company (for example Baker Atlas INTEQ, Pathfinder, Schlumberger, Gyro Data, Ramco) that performed the open hole activity.

Date Operations Completed – Enter the date operations were **completed** for each tool run during the course of the well operations. (8 characters - YYYYMMDD)

Tool Logging Method – Enter either W for wireline or MWD/LWD for measurement while drilling and logging while drilling.

Log Tool Code – Also known as Log Tool Model. Please provide the Tool Code or Tool Model for each tool or combination of tools run in the borehole for every logging run completed this reporting period. This code must be consistent with the Petroleum Open Software Corporation (POSC) Practical Well Log Standard Version 1 (see **Appendix A.10**). If a Tool Code is not listed, please supply the Tool Code. Be sure to list the Tool Codes associated with any formation tests. If no logging operations (wireline or MWD/LWD) were conducted this reporting period put **"NO LOGS RUN"**.

Directional Surveys should be identified as "Dir".
Lithologic description logs and mudlogs should be identified as "Mud". No Tool Logging Method needs to be identified for mudlogs.

Interval Depth (MD) Top Bottom – Enter the measured depth of the top and bottom of each tool run reported this period. Top will be the shallowest interval measured and Bottom will be the deepest interval measured.

14. IDENTIFY OTHER OPEN HOLE DATA COLLECTED

Place a check or "X" in the appropriate box. All Vertical Seismic Profile run during the reporting period should be reported as a Velocity Survey.

15. WELL ACTIVITY SUMMARY

Provide a brief report describing daily operations completed including any significant well problems and associated remedies. Also include verbals given by the MMS with time and personnel data involved in the exchange. If appropriate, include date rig, wireline unit or coil tubing unit moved on and off location. Kickoff points (MD) for STs and BPs are extremely useful and are critical to resolving problems with directional surveys. Test pressure of equipment should be noted with a brief description of operations, i.e. RU/RD equipment, setting plugs, displacing fluids, perforating, bailing sand, fishing, acidizing, etc.