

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT**

NTL No. 2016-N07

Effective Date: November 29, 2016

NATIONAL NOTICE TO LESSEES AND OPERATORS OF FEDERAL OIL, GAS, AND SULFUR
LEASES, OUTER CONTINENTAL SHELF

Well Records Submittal

Purpose

This Notice to Lessees and Operators (NTL) supersedes NTL Nos. 2010-G02, 2010-P03, and related guidance on this subject. Pursuant to 30 CFR 250.103, the Bureau of Safety and Environmental Enforcement (BSEE) is issuing this NTL to clarify and provide more detail about how to submit well records required by the Records and Reporting regulations at 30 CFR 250.740 – 250.745 (new section numbers as of July 28, 2016)¹ for all OCS Regions, including:

- specific well records you² must submit,
- submittal dates for the various well records,
- locations where you must send these well records,
- Region-specific requirements for well records submittal, and
- utilization of eWell, BSEE's electronic well permitting system.

A summary of notable updates from previous guidance on this topic can be found in Attachment 3 of this NTL.

BSEE assigns each well a unique 12-digit U.S. Well Number, formerly known as an API Number, based on the numbering system managed by the Professional Petroleum Data Management (PPDM) Association, and then collects, verifies, and stores data according to well number. BSEE uses well records submitted by lessees/operators to make informed regulatory decisions based on your timely submittal of complete and accurate well records. See 30 CFR 250.740 for information about what records you must keep. For purposes of this NTL, the "submittal date" is the original date the records are due to the appropriate office.

Authority

The Records and Reporting provisions in Subpart G—Well Operations and Equipment, 30 CFR §§ 250.740 – 250.746, set forth BSEE's regulatory requirements for what well records you must keep and for how long, and what records you must submit. While many specific requirements are set forth in the regulatory sections, BSEE recognizes that additional submittals may be needed to ensure that

¹Effective July 28, 2016, pursuant to the issuance of the Blowout Preventer Systems and Well Control rule, *see* 81 Fed. Reg. 25887 at 25926 (April 29, 2016), BSEE revised and renumbered the regulations previously published at 30 CFR 250.466, 250.468 and 250.469. The current renumbered citations are 30 CFR 250.740, 250.742, and 250.743.

² "You" is defined at 30 CFR 250.105 as "a lessee, the owner or holder of operating rights, a designated operator or agent of the lessee(s), a pipeline right-of-way holder, or a State lessee granted a right-of-use and easement." Additionally, the lessee, operator (if one has been designated), and the person that actually performs an activity (which includes contractors) to which a particular provision of a regulation, lease, permit, or plan applies are jointly and severally responsible for complying with that provision. (See, 81 Fed. Reg. at 25904, *citing* 30 CFR 250.146(c)).

operations remain consistent with the conservation of natural resources and protection of safety and the environment on the OCS as industry practices and new technologies evolve. Accordingly, these sections anticipate that additional, more specific, information may be needed and, as described below, this NTL serves to clarify and provide additional information about what is required under these regulatory sections, pursuant to 30 CFR 250.103.

Section 250.740 provides what records you must keep, including where and over what periods of time you must keep them, and what information you must include in these records. In addition to the types of information outlined in subsections (a) – (f), subsection (g) requires you to submit

[a]ll other information required by the District Manager as appropriate to ensure compliance with the requirements of this section and to enable BSEE to determine that the well operations are consistent with conservation of natural resources and protection of safety and the environment on the OCS.

This NTL includes more detailed information on these requirements, including other information required by the District Managers pursuant to subsection (g).

Section 250.742 lists general categories of records you must submit, and notes that each Region will provide specific instructions for submitting well logs and surveys. As a matter of efficiency, instructions applicable to each Region are provided in this NTL.

Section 250.743 requires you to submit well activity reports (WARs) and records of operations on Form BSEE-0133 and explains certain Region-specific submission requirements. This NTL provides additional information concerning formatting and how to submit your records, as well as additional Region-specific instructions regarding the frequency of submissions.

Section 250.745 outlines additional records the District Manager or Regional Supervisor may require you to submit, including well records required to be kept pursuant to 30 CFR 250.740, certain service company reports, and other reports and records of operations. In addition, subsection (b) authorizes the District Manager or Regional Supervisor to require you to submit paleontological information and states that the Regional Supervisor may issue an NTL detailing the specifics for submission of such information. This NTL provides additional information concerning the requirements outlined in 30 CFR 250.745.

I. Well Records to Submit

This section explains what types of well records are to be submitted under various circumstances.

A. Well Log Data

For each wellbore in which these data were collected, submit:

1. Log Curve Data: Submit all¹ of the following curve types and log images in final form, if the data were obtained in the open-hole² portion of a wellbore, sidetrack, or bypass:

- Acoustic or Sonic
- Bulk Density
- Caliper
- Conductivity
- Density Correction
- Dipmeter (computed)

- Gamma Ray
- Nuclear Magnetic Resonance³
- Tension
- Equivalent circulation density
- Formation Tester⁴
- Slide Indicator
- Resistivity/Induction
- Mudlogs
- Porosity
- Rwa
- Rate of Penetration
- Spontaneous Potential
- Neutron
- Borehole Image
- Temperature
- Photoelectric

Please note the following related to Log Curve Data:

¹The curve types and log images that are to be submitted include, but are not limited to, those presented on this list. If any additional log data are acquired from the well, they should be submitted.

²Please note that the Alaska OCS Region requires all logs run, including any cased-hole logs and field prints.

³ Both digital and image Nuclear Magnetic Resonance (NMR) vector curve data are to be submitted. The curve types to be submitted include, and are not necessarily limited to:

- Quality Control Curves
- Computed Curves
- T2 Bin Distributions

Quality control curves include cable speed, tension, down hole force, bad hole flags, noise flags, etc.

Due to NMR file sizes and complexities, digital and image NMR data are to be submitted on separate physical media (separate from other well log data) to BSEE's logging contractor, A2D Technologies. Also, NMR data file and tool code nomenclature should clearly identify these data as NMR-related. BSEE encourages you to have the acquiring service company submit the completed log data set directly.

⁴ For purposes of this NTL, a Formation Tester is any logging tool that collects pressure data and/or fluid samples from the borehole. Summary Print log images, pressure gradient plots, and preliminary sample analysis must be submitted. All subsequent detailed reports (*i.e.*, PVT Analysis) generated from the samples collected from the borehole must be submitted in a timely manner (see Attachment 1).

Submit the above-mentioned log curve types associated with the following generic log types, including:

- Measurement or logging while drilling (MWD/LWD),
- Wireline well logs, and
- High-resolution data, if acquired.

The offices where the data are to be sent are listed in Attachment 1 of this NTL.

Note: Do not submit digital data for Formation Tester, Borehole Image, and Computed Dipmeter to A2D Technologies. For mudlog specifications, see Part I, Section H of this NTL. You will be required to submit an image file for mudlogs to A2D Technologies. You do not need to submit well log data for

workover or recompletion operations to BSEE unless the District Manager or Regional Supervisor requires submittal of this data for a specific well.

Although API Recommended Practice (RP) 31A, *Standard Form for Hardcopy Presentation of Downhole Well Log Data*, is not incorporated by reference in BSEE regulations, you may use it for guidance on providing complete and accurate well information.

If the original presentations are generated in color (e.g., NMR, borehole imaging), submit color images. Include MWD/LWD, wireline generated well logs, and mudlogs. Consistent with current practice, for the Gulf of Mexico and Pacific OCS Regions you only need to submit field prints and/or cased-hole logs in special circumstances, as requested by BSEE. For the Alaska OCS Region, submit all field prints and cased-hole logs.

BSEE encourages you to have the acquiring service company submit the completed log data set directly.

2. Well Log Image File: For logs that require digital curve data, submit image files in one of the formats listed below of composite logs comparable to the digital curve data. For logs that do not require digital curve data (Formation Tester, Borehole Image, and Computed Dipmeter), submit an image file in the formats listed below. For Formation Tester type logs, the summary logs will suffice. For mudlog specifications, see Part I, Section G of this NTL. If logging data from more than one logging vendor are collected in a borehole, you may submit either an image of the logging data from all vendors composited into a single set of logs or a set of images of the composited logs from each individual vendor. Detailed 5-inch image logs must be composited, but individual runs do not need to be spliced.

For all vertical wells, as defined in 30 CFR 250.461, submit image files for:

- Measured depth (MD) 1-inch correlation and 5-inch formation evaluation logs and
- Any additional scales you obtained.

For all non-vertical wells, as defined in 30 CFR 250.461, submit image files for:

- True vertical depth (TVD) 1-inch correlation and 5-inch formation evaluation logs,
- Measured depth (MD) 1-inch correlation and 5-inch formation evaluation logs, and
- Any additional scales you obtained.

Image File Formats: If the original log is in color, submit the image file in color.

(1) The following image file formats are preferred:

- Computer Graphic Metafile (CGM) version 1-4
- Baker Metafile
- Schlumberger PDS (PDS files are usually for one logging run; any borehole with multiple runs should submit composited file format)
- Halliburton CGM
- Weatherford DPK

(2) If the preferred formats listed above are not available, submit the image file in the Tag Image File Format (TIFF) with the following specifications:

Black and White TIFF Images:

- Header tags as per TIFF standard
- Resolution – 200 dpi
- Compression – CCITT group IV
- Tiling – No

Color TIFF Images:

- Header tags as per TIFF standard
- Resolution – 200 dpi
- Palette color – 256 colors
- File format LZW Compressed TIFF
- Tiling – No

Clearly label each well log image with its associated U.S. Well Number, bottomhole lease number, well name, well name suffix, log type, scale and depth domain (MD or TVD). Pursuant to 30 CFR 250.745, do not submit duplicate image copies, field print images, or images of separate interim runs, unless requested by BSEE Gulf of Mexico OCS or Pacific OCS Regions; however, for wells not completed during the Alaska OCS drilling season, submit all available data at the end of the drilling season following normal submittal procedures outlined herein.

3. Digital (Vector) Well Log Data: Submit composite digital curve data (one value per curve for each depth value) in the Canadian Well Log Society Log ASCII Standard (LAS), Version 2.0 format, Digital Log Interchange Standard (DLIS), or Log Interchange Standard (LIS) format. Ensure that the curve data are in an MD composite layout, including full headers for each wireline and MWD/LWD logging run and curve description for all curves. Ensure that all required log curves (see Part I, Section A.1 of this NTL) represented on the log image file are included in the digital curve file. If you collect logging data from more than one logging vendor in a single borehole, submit a separate set of composited log curves from each individual vendor. Do not splice digital curves from different vendors to form a set of composited log curves.

(a) Full header information, including the following:

- The 12-digit U.S. Well Number
- Bottomhole lease number
- Bottomhole area and block
- Well name
- Well name suffix

(b) Information for each tool run, including the following:

- Borehole fluids
- Mud information
- Casing information
- Depth interval
- Filtrate resistivity and temperatures
- Bottomhole or maximum recorded temperature

- (c) Full logging tool parameters (matrix values), position of logging tool (*i.e.*, centered or eccentric), tool calibration records, and logging engineer's comments, adequate curve description; and
- (d) Tool-specific and service provider-specific curve and parameter mnemonics (names and abbreviations) maintained as originally acquired.

Submit digital and image logs on CD or DVD ROM (read-only memory). Digital and image logs may be submitted on the same CD or DVD.

B. Directional Surveys

For each wellbore in which these data were collected, submit one digital copy of the final composite directional survey. For the Digital Directional Survey format, see NTL No. 2009-N10.

- Submit, on CD or DVD ROM, these survey results coded in ASCII.
- According to 30 CFR 250.461(d)(2), "You must correct all surveys to Universal-Transverse-Mercator-Grid-north or Lambert-Grid-north after making the magnetic-to-true-north correction."
- In the Alaska and Pacific OCS Regions, the required datum is NAD83.

For the Gulf of Mexico and Pacific OCS Regions, do not submit copies of separate interim runs to BSEE. Send final composites only. If your use of more than one vendor prevents the consolidation of the separate surveys within a well, submit the final composite survey from each vendor.

For wells not completed during the Alaska OCS Region drilling season, submit all available data at the end of the drilling season following normal submittal procedures outlined herein.

BSEE encourages you to have the acquiring service company submit the completed directional surveys directly.

C. Velocity Profiles and Surveys

For each wellbore in which these data were collected, submit:

1. Vertical Seismic Profiles: Submit the results from *all borehole seismic data* (in cased or uncased holes), as well as concurrently run directional surveys for *both vertical and directional* wells, if they are different from directional surveys referred to in Part I, Section B of this NTL. Submit, on CD or DVD ROM, *digitally* recorded data in industry standard formats (LAS, DLIS, ASCII, CGM, TIFF, JPG, SEG Y, DOC), that include, but are not limited to:

- The Normal Incidence VSP;
- The Acoustic Log Calibration Report;
- Final VSP and Corridor stacks for 2D data and final stacked and migrated volume for 3D VSP data (and include the processing report);
- The composite plot with VSP, Corridor stacks, synthetic seismogram, and well logs;

- Any referenced information within the report correlative with the acquisition, such as 2-way time indexed depths and velocities, survey parameters, digital images, and computed survey data and directional survey; and
- If acquired, BSEE format time/depth pairs.

BSEE encourages you to have the acquiring service company submit the completed data and surveys directly.

2. Velocity Surveys (Time-Depth Pairs/Checkshots): Submit, on CD or DVD ROM, one digital copy coded in ASCII BSEE format (see Attachment 2 of this NTL). The report should include, or be annotated with, the following:

- The 12-digit U.S. Well Number
- Well name and number
- Well name suffix
- Contractor or service provider
- Contact name (phone number or e-mail address)

Note: The digital format has been modified to expand the columns for True Vertical Depth and One-Way Travel Time from five to eight to include two decimal places for each column.

BSEE encourages you to have the acquiring service company submit the completed surveys directly.

D. Detailed Analysis of Percussion Sidewall; Rotary Sidewall; Conventional Cores/Reports and Related Information; Wireline Formation Tests; and Drill Stem Tests

For each wellbore in which these data were collected, submit:

1. Percussion Sidewall; Rotary Sidewall; Conventional Cores/Reports and Related Information: As soon as the final and/or revised reports and/or data become available to you, submit one digital copy of the entire, detailed report on CD or DVD ROM in the original digital format (*i.e.* Word, Excel, JPEG, CGM, TIFF). Any data acquired in a log format should be submitted as a log image. Such reports include, but are not limited to, the following:

- | | |
|--|---|
| • Standard analyses for porosity, permeability, and oil/water saturation | • Compaction analyses |
| • Capillary pressure studies | • Laser grain size analyses |
| • Scanning electron microscopy | • Stressed brine porosity and permeability analyses |
| • Thin section description, analysis, and interpretation | • Rock mechanic studies |
| • X-ray diffraction analyses | • Water extraction and core gamma logs |
| | • Core photos |

In addition, provide one copy of all studies you performed on the core(s) for the purpose of describing and characterizing the reservoir architecture through detailed stratigraphic or depositional analyses. In certain situations, BSEE may require that you submit preliminary or interim reports.

BSEE encourages you to have the acquiring service company submit the completed reports and data directly.

2. Wireline Formation Tests and Drill Stem Tests: Submit, on CD or DVD ROM, one copy of the wireline formation tests and drill stem tests, including any logs (summary logs are acceptable) and associated lab results, in the original digital format (*i.e.*, Word, Excel, JPEG, CGM, TIFF). Any data acquired in a log format should be submitted as a log image.

BSEE encourages you to have the acquiring service company submit the completed reports and data directly.

E. Geochemical Analyses/Reports and Information

Submit one copy of the Geochemical Analyses/Reports and Information in the original digital format (*i.e.*, Word, Excel, JPEG, CGM, TIFF) if you conducted any geochemical analyses/reports, including internal company or external contractor interpretation reports on:

- Cuttings,
- Sidewall or conventional cores, and
- Fluid samples from the well.

The term “sample” encompasses:

- Hydrocarbon gases, specifically methane through pentanes and C6+ hydrocarbons;
- Non-hydrocarbon gases (carbon dioxide, hydrogen sulfide, argon, helium, and radon); and
- Any liquid hydrocarbons (such as condensate, crude, and bitumen) encountered by the well in cuttings or shows and from any other well sampling or fluid testing.

The analyses, reports, and interpretations to be submitted include, but are not necessarily limited to, the following types of data:

- Total organic carbon
- Rock-eval pyrolysis
- Thermal chromatography-gas chromatography
- Bulk pyrolysis & hydrous pyrolysis
- Gas chromatography
- Pyrolysis/gas chromatography
- Complete saturated biomarker & aromatic hydrocarbon analysis by GCMS
- Polycyclic aromatic hydrocarbons
- Stable isotope analyses of carbon & hydrogen
- Compound-specific isotope ratio mass spectrometry
- Isotope ratio mass spectrometry
- Kerogen isolation & bitumen separation
- Organic petrography
- Vitrinite reflectance
- Elemental analysis of kerogen

In addition, submit all data and reports on geochemical characterization of produced oils, including:

- All whole-oil GC, GC MS on oils,
- SARA (or SARA – Saturate, Aromatic, resin, and asphaltene),
- Isotopes on the fractions,
- Molecular and isotopic analyses of C1-C5 hydrocarbons metals data for oils, and

- Any other geochemical data used from production samples intended for reservoir characterization studies, such as PVT data.

Submit, on CD or DVD ROM, *digitally* recorded data in industry standard formats. BSEE encourages you to have the acquiring service company submit the Geochemical Analyses/Reports and Information directly.

F. Detailed Paleontological Reports and Information

As soon as the final and/or revised paleontological information and/or data become available to you, submit one copy in digital format of the entire, detailed paleontological report(s), chart(s), striplog(s), checklist(s), and any other paleontological records. In certain situations, BSEE may require that you submit preliminary or interim reports. Include the following:

- The range of samples taken,
- A sample analysis identifying fossils and lithology by MD,
- A summary and interpretation (based on identification of foraminifera, nannofossils, or other microfossils) of all biostratigraphic markers, zones, tops, or local markers,
- A description of paleontological ecological zones with water depth at the time of deposition (*e.g.*, Middle Shelf/Neritic 20-100 meters, Outer Shelf/Neritic 100-200 meters),
- Sequence analysis interpretations based on histograms of faunal abundance,
- Identification of all rock units by depth to the top of relative chronostratigraphic stages (*e.g.*, Upper Pleistocene, Middle Miocene, or Lower Oligocene), and
- A biostratigraphic chart noting the relative ages of the biostratigraphic zones you used in the detailed paleontological reports.

Submit, on CD or DVD ROM, one copy of the detailed paleontological report in the original digital format (*i.e.*, Word, Excel, JPEG, CGM, TIFF). BSEE encourages you to have the acquiring service company submit the detailed paleontological reports directly.

G. Mudlogs and Reports

Submit one image copy of the following types of Mudlogs, if acquired:

- Physical Formation Log
- Pore Pressure Log
- Engineering Log
- Show Report Log

Image File Formats for Mudlogs: If the original log is in color, submit the image file in color.

(a) The following image file formats are preferred:

- Geologix - geo draft file (.gdf)
- Geologix - output data file (.odf)

(b) If the preferred formats listed above are not available, submit the image file in the Tag Image File Format (TIFF) with the following specifications:

Black and White TIFF Images:

- Header tags as per TIFF standard
- Resolution – 200 dpi
- Compression – CCITT group IV
- Tiling – No

Color TIFF Images:

- Header tags as per TIFF standard
- Resolution – 200 dpi
- Palette color – 256 colors
- File format LZW Compressed TIFF
- Tiling – No

Submit one copy of the following types of Mudlogs reports, if collected:

- Show reports – composite into one file
- Mud reports – composite into one file
- End of Well reports – composite into one file
- Daily Drilling reports – composite into one file

Submit, on CD or DVD ROM, digitally recorded data in industry standard formats. BSEE encourages you to have the acquiring service company submit the mudlogs and reports directly.

H. End of Operations Report (Form BSEE-0125) and Attachments

Submit End of Operations Report (Form BSEE-0125) and the required attachments.

I. Additional Information

The Alaska OCS Regional Office requires the submittal of washed and dried drill cuttings. Submit these data directly to the Alaska OCS Regional Office; their address can be found in Attachment 1.

II. How and When to Submit Well Records

BSEE uses the Well Activity Report (Form BSEE-0133 or e-Well) and Open Hole Report (Form BSEE-0133S or e-Well) to track well activity; therefore, it is crucial that you submit a complete and accurate report to the appropriate BSEE District or Regional Office in a timely manner. We will treat delinquent and/or incomplete reports in the same manner as delinquent and/or incomplete well data, and such violations may result in BSEE pursuing further enforcement actions.

You should submit one copy of the digital data on a CD or DVD in a *read-only* format. Each CD or DVD should be properly labeled with the Area, Block, OCS, Well Number, Well Suffix, U.S. Well Number, and the data type (*i.e.*, Paleo Report, Conventional Core Report, Vertical Seismic Survey, *etc.*). Additionally, as stated above in Part I, Section A.1., digital and image NMR data are to be submitted on separate physical media and nomenclature for NMR data files and tool codes should clearly identify them as NMR datasets.

BSEE recognizes that you need adequate time to submit complete and accurate well records. If you

are unable to submit records within the timeframes specified in this section or in Attachment 1, you should request an extension with supporting justification. If you fail to submit the required records within the timeframe specified or to request an extension, BSEE may pursue enforcement actions. For wells in the Gulf of Mexico and Pacific Regions, send your request to the Office of Technical Data Management, and for wells in the Alaska Region, send your request to the office that approved your APD. The following four sections divide well records into four groups, each identifying the timeframes for submittal of the records, in accordance with instructions provided by each Region.

A. Well Log Data, Directional Surveys, Velocity Surveys, Analyses of Percussion Sidewall Cores, Wireline Formation Test Logs, Drill Stem Tests and Mudlogs/Reports

The following are required to be submitted:

- Well log data,
- Directional surveys,
- Velocity surveys (time/depth pairs),
- Percussion sidewall analysis of cores,
- Wireline formation tests logs (summary log),
- Drill stem tests (initial report), and
- Mudlogs and Reports.

Submit these materials within 30 days of the “Date Operations Completed” of the last logging run (MWD/LWD or wireline) that you report in Item 7 of the Open Hole Report (Form BSEE-0133S) or the Well Data Inventory of the eWell Open Hole Report for each 12-digit wellbore, sidetrack, and/or bypass. **Note:** “Date Operations Completed” for MWD/LWD is when the data is retrieved from the drill string.

BSEE recognizes that in certain situations (*e.g.*, hole or mechanical problems), it is not practical to submit individual sidetrack or bypass data for short penetrated intervals. In those cases, you may request an extension from the Office of Technical Data Management for Gulf of Mexico and Pacific OCS Regions’ wells, and the office which approved your APD for Alaska OCS Region wells, for the timely submittal of such data.

For wells not completed during the Alaska OCS drilling season, Alaska OCS Region instructs you to submit all available data at the end of the drilling season following normal submittal procedures outlined herein.

B. Detailed Paleontological, Detailed Rotary Sidewall and Conventional Core Analyses, and Vertical Seismic Profile Reports and Information

For each wellbore in which these data were collected, you must submit:

- Detailed paleontological reports and information,
- Detailed rotary sidewall and conventional core analyses/reports and information, and
- Detailed vertical seismic profile reports.

Submit these within 90 days after the “TD DATE” you report in Item 10 of the Well Activity Report (Form BSEE-0133) or the Wellbore Information on the eWell Well Activity Report. Submit these well

records when the report is completed, even if the report is generated by you and/or a third party (*i.e.*, academic partners, non-lessee partners, and/or consultants) years after the wellbore is completed. For wells not completed during the Alaska OCS drilling season, submit all available data at the end of the drilling season following normal submittal procedures outlined herein.

C. Geochemical Analyses and PVT Analysis of Fluid Samples

Submit geochemical analyses and/or PVT Analysis of Fluid Samples for each wellbore in which these data were collected. Submit these materials within 120 days after the “TD DATE” that you report in Item 10 of the Well Activity Report (Form BSEE-0133) or the Wellbore Information on the eWell Well Activity Report. Submit these well records when the report is completed, even if the report is generated by you and/or third party (*i.e.*, academic partners, non-lessee partners, and/or consultants) years after the wellbore is completed. For wells not completed during the Alaska OCS drilling season, submit all available data at the end of the drilling season following normal submittal procedures outlined herein.

D. End of Operations Report (Form BSEE-0125)

For each wellbore, you must submit an End of Operations Report (Form BSEE-0125) and all its attachments. Submit this information within 30 days after the “END DATE” you report in Item 10 of the Well Activity Report (Form BSEE-0133) or the Wellbore Information on the eWell Well Activity Report.

Pursuant to 30 CFR 250.745, BSEE may request that you submit well logging data, directional surveys, velocity profiles and surveys, percussion sidewall analyses of cores, wireline formation tests, and drill stem tests before the 30-day limit (as noted above in Section II.A) when we determine that circumstances warrant such action. When we determine that circumstances so warrant (before the respective 90-day or 120-day limits as noted above in Sections II.B and II.C), we may also request that you submit preliminary reports of analytical data, namely:

- Geochemical analyses/reports and information,
- PVT analyses of fluid samples,
- Detailed paleontological reports and information,
- Detailed rotary sidewall core analysis and information, and
- Detailed conventional core analysis and information.

III. Where to Submit Well Records

You must submit digital well records for all wells that have reached total depth on or after November 29, 2016 to either (see Attachment 1 for details about which data types should be sent to which address):

Bureau of Safety and Environmental Enforcement

Office of Technical Data Management
(TDM)

1201 Elmwood Park Blvd.

MS GE573E

New Orleans, LA 70123

Office telephone: (504) 736-2887

Fax: (504) 736-2857

A2D Technologies

d/b/a TGS Geological Products
and Services

1010 Common Street, Suite 2040

OR Attn: BSEE Well Records

New Orleans, LA 70112

Office telephone: (504) 524-3450

Fax: (504) 524-3454

To facilitate smooth handling of the data, please submit complete sets of documents and data to the appropriate designated locations. BSEE TDM in New Orleans receives and loads certain well records for all BSEE Regions.

The “Well Records Submission Summary” in Attachment 1 of this NTL provides an overview of the various well records, including which entity receives which well records and the addresses and contact numbers of the appropriate BSEE Regional Offices, District Offices, and A2D Technologies. We strongly recommend that you provide a transmittal letter when you submit any well records. This transmittal should contain the following information:

- Operator’s Name
- Operator’s Contact Name and Telephone Number
- Bottomhole Location: Area/Block/Lease/Well Name and Number/ U.S. Well Number
- Date Well Records Sent
- Detailed List of Well Records

It is your responsibility to ensure that BSEE or A2D Technologies (pursuant to Attachment 1) receive all well data and information within the specified periods. If we notify you of deficient and/or delinquent data, we may pursue further enforcement actions. If you choose to use a third-party to submit well data, it remains your responsibility to ensure that the data are timely received by BSEE and A2D Technologies. Realizing that you may need time beyond the specified deadlines to prepare unique data or information, we will consider the granting of an extension on an individual basis. We will address any untimely or deficient data submittal at your yearly performance review or through other appropriate and timely measures.

IV. Well Naming and Numbering

It is important that you show the U.S. Well Number and well name assigned by the BSEE District or Regional Office on all well records you submit to us. You can find these on the approved Application for Permit to Drill (Form BSEE-0123) for the original hole, sidetracks, and/or bypasses or on the BSEE Web site at:

http://www.data.bsee.gov/homepg/data_center/well/api/master.asp

Paperwork Reduction Act of 1995 Statement: The Office of Management and Budget (OMB) has approved the information collection requirements and assigned OMB Control Numbers 1014-0018 for the Part 250 subpart D regulations and 1014-0028 for the Part 250 subpart G regulations. This NTL does not impose any additional information collection requirements subject to the Paperwork Reduction Act of 1995.

BSEE Contact: If you have any questions on this NTL, you may contact the BSEE TDM in New Orleans by e-mail at tdm@bsee.gov or by telephone at (504) 736-2719.

A handwritten signature in blue ink, appearing to read 'Douglas Morris', with a long horizontal flourish extending to the right.

Douglas Morris
Chief, Office of Offshore Regulatory Programs

Attachments

Attachment 1 Well Records Submission Summary

Record types to be submitted:	Submit to:			Submit required information within:
	BSEE TDM	BSEE District/Region	A2D	
Image File of the Final Composite Well Logs Comparable to the Digital Copy.			X	30 days after "DATE OPERATIONS COMPLETED" on Form BSEE-0133S.
Image File of the Final Composite Borehole Image, Nuclear Magnetic Resonance, Computed Dipmeter, and Formation Tester Logs.			X	30 days after "DATE OPERATIONS COMPLETED" on Form BSEE-0133S.
Image File of the Final Composite Mudlog and One Digital Copy of the Final Composite Reports			X	30 days after "DATE OPERATIONS COMPLETED" on Form BSEE-0133S.
Digital Data of the Final Composite Well Logs (including Nuclear Magnetic Resonance)			X	30 days after "DATE OPERATIONS COMPLETED" on Form BSEE-0133S.
One Digital Copy of the Final Composite Directional Survey.	X			30 days after "DATE OPERATIONS COMPLETED" on Form BSEE-0133S.
One Digital Copy of the Final Composite Velocity Survey.	X			30 days after "DATE OPERATIONS COMPLETED" on Form BSEE-0133S.
One Digital Copy of Percussion Sidewall Core Analysis Reports, Wireline Formation Tests Results, and Drill Stem Test.	X			30 days after "DATE OPERATIONS COMPLETED" on Form BSEE-0133S.
One Digital Copy of the Final Vertical Seismic Profile Report.	X			90 days after "TD DATE" on Form BSEE-0133.
One Digital Copy of Detailed Paleontological Reports.	X			90 days after "TD DATE" on Form BSEE-0133.
One Digital Copy of Detailed Conventional Core or Rotary Sidewall Core Analysis Report.	X			90 days after "TD DATE" on Form BSEE-0133.
One Digital Copy of the Final PVT or Fluid Sample Analysis Report.	X			120 days after "TD DATE" on Form BSEE-0133.
One Digital Copy of Geochemical Analyses and/or Reports.	X			120 days after "TD DATE" on Form BSEE-0133.
One Public Information Copy and Two Complete Copies of the End of Operations Report (Form BSEE-0125)		X		30 days after "END DATE" on Form BSEE-0133.
Washed and Dried Drill Cuttings (AKOCS Only)		X		As requested by AKOCS.
Cased-hole Logs (AKOCS Only)		X		As requested by AKOCS.
Field Prints of all Logs (AKOCS Only)		X		As requested by AKOCS.

All digital data is to be submitted on CD or DVD ROM.

"Date Operations Completed" for MWD/LWD is when the data is retrieved from the drill string.

Addresses

BSEE GOMR District Offices

New Orleans District

800 W. Commerce Rd., Suite 300
New Orleans, LA 70123-3392
Telephone: (504) 734-6740
Fax: (504) 734-6741

Houma District

3866 Highway 56
Houma, LA 70363
Telephone: (985) 853-5884
Fax: (985) 879-2738

Lafayette District

201 St. Patrick St., Suite 200
Lafayette, LA 70506
Telephone: (337) 289-5100
Fax: (337) 354-0008

Lake Charles District

One Lakeshore Drive
Suite 300
Capital One Tower
Lake Charles, LA 70629
Telephone: (337) 437-4600
Fax: (337) 437-8377

Lake Jackson District

4005 Technology Dr., Suite 2090
Angleton, TX 77515
Telephone: (713) 286-2300
Fax: (979) 864-3675

BSEE Gulf of Mexico OCS Region

Office of Technical Data Management (TDM)

1201 Elmwood Park Boulevard
Mail Stop GE 573E
New Orleans, LA 70123-2394
Telephone: (504) 736-2887
Fax: (504) 736-2857
E-mail: tdm@bsee.gov

BSEE Pacific OCS Regional Office

760 Paseo Camarillo, Suite 102
Camarillo, CA 93010
Telephone: (805) 384-6359
Fax: (805) 383-6213

BSEE Alaska OCS Regional Office

3801 Centerpoint Dr., Suite 500
Anchorage, AK 99503-5820
Telephone: (907) 334-5300
Fax: (907) 334-5302

A2D Technologies

d/b/a TGS Geological Products and Services

1010 Common Street, Suite 2040
Attn: BSEE Well Records
New Orleans, LA 70112
Telephone: (504) 524-3450
Fax: (504) 524-3454

A2D Technologies is contracted by BSEE to verify and store digital Wireline, MWD, and LWD well log data on behalf of BSEE pursuant to 30 CFR 250.742.

Attachment 2

Velocity Surveys Digital Exchange Format

Definition of terms

1. A record consists of 80 bytes, including the carriage-return and line-feed (HEX 'ODOA').
2. A file is a group of header records and data records physically separated by an inter-record gap (a blank record) and terminating with a control Z (HEX '1A').

Specifications for digital reporting of data on CD or DVD ROM.

1. Suitable for any IBM PC computer or compatible.
2. ASCII mode standard.
3. A file cannot span multiple discs.
4. A disc may contain numerous velocity surveys.
5. The CD/DVD label should identify each wellbore with a 12-digit U.S. Well Number, Lease Number, Well Name/Number, and Well Name Suffix.
6. The label should identify the name, address, and telephone number of the person to contact if problems occur when the data are loaded.

Subdivision of contents

1. A velocity survey will contain header record(s), data record(s), and terminate with an end-of-file marker.
2. Header records should precede the first data record in the file. There should be a set of header records for each borehole with a unique 12-digit U.S. Well Number.
3. As many data records as necessary may be used within a file.

Format for headers

The header records format should consist of the following items. Identify each header record with an "H" as the first character of the record, a blank space, and then the relevant data. There should be a set of header records for each borehole with a unique 12-digit U.S. Well Number. Header lines should not exceed 80 columns (characters). Also, enter a <carriage return> after the last column used in each header record in lieu of blank spaces.

Header #1 - This is a mandatory formatted first header record.

- Header Record ID - The letter H to identify the record as a header record in column 1, followed by a space in column 2.

- U.S. Well Number (12 numeric characters available beginning in column 3) - The 12-digit unique identifier to a wellbore assigned by the BSEE District or Regional Office. The full 12-digit identifier that identifies the well and the wellbore, as prescribed by the PPDM Association, appears in *The US Well Number Standard* published June 2014. This data element occupies columns 3 through 14, followed by a space in column 15.
- Date Survey Conducted (six numeric characters available beginning in column 16) - The year, month, and day (in format YYYYMMDD) the final survey was conducted. This data element occupies columns 16 through 23. End with a <carriage return>.

An example header record on line 1 would read: **H 608123456701 20050113**<carriage return>.

Optional header records

In addition to the mandatory, formatted first header record, it is strongly recommended that other relevant information pertaining to the conditions under which the survey was conducted be included in the header section. Examples of other header records are:

Type of Survey - The method used to conduct the velocity survey, *e.g.*, Borehole seismic analysis, seismic acquisition tool, vertical seismic profile, *etc.*

Example: **H Survey Type Check Shot**<carriage return>

Contractor - The name of the company (up to 78 characters beginning in column three) that conducted the survey.

Example: **H Marine Surveys**<carriage return>.

Total Depth of Well - The total measured depth of the well in feet.

Example: **H TD 13700**

Other recommended record headers would include the following:

1. Area Code of the block at the bottomhole location (2 characters in format AA);
2. Block Number of the block at the bottomhole location (6 characters in format ANNNNA);
3. Bottomhole Lease Number (6 characters in format ANNNNN);
4. Well Name/Number (5 characters);
5. Well Name Suffix (eight characters in format AANNAANN) - The name submitted that identifies the borehole as a sidetrack (*e.g.*, ST01BP00) or bypass (*e.g.*, ST01BP01). The original borehole suffix would be stated as ST00BP00.

An example header record containing these items would read:

H HI 999 G99999 SD001 ST01BP00 <carriage return>.

Format for data records

Each survey data record should contain information recorded at a given measurement point in the wellbore. Provide a data record for each measurement point. Arrange survey data records beginning from surface to the bottom of the wellbore.

Item	Column	Format	Description
1.	1-8	NNNNN.NN	TVD: The vertical distance, in feet, from sea level to the measurement point. Use a zero in column 1 when the depth is less than 10000 feet. Spaces or commas should not be used.
2.	9-16	NNNNN.NN	One-Way Travel Time: The one-way vertical travel time in milliseconds, corrected to sea level.
3.	17-80		Unused space for future use.

Complete file format recommended for velocity surveys

H APN# NNNNNNNNNN DD (Date Velocity Run)
H Type of Survey
H Survey Company
H Total Depth
H Area Code, Block#, Lease#, Well Name, Well
Data Records – (Depth) NNNNN.NN (One-Way Travel) NNNNN.NN

Generic example of the format for velocity surveys

H 608123456701 20050113
H Check Shot
H Marine Surveys
H TD 10271
H HI 999 G99999 SD001 ST01BP00

00119.3300023.44
08881.3301233.44
09381.3301287.44
09881.3301338.44
10271.3301378.44

Attachment 3

Summary of Notable Updates for NTL 2016-N07

- In the opening sections and throughout the NTL, we provide updated section references to relevant provisions in the Code of Federal Regulations (CFR).
- In the opening section, we referenced the change that the PPDM Association made from “API Number” to “U.S. Well Number.”
- In Section I.A.1, we delineated the types of logs required in all Regions, and stated that all logs run in the wellbore are required by the Alaska OCS Region.
- In Section I.A.1, we delineated the types of Quality Control Curves which must accompany submitted NMR data.
- In Sections I.A.2, I.B, II.B, and II.C, we delineated special procedures for data submittal for Alaska OCS Region wells not completed during the drilling season.
- In Section I.B, we noted that the required datum for Alaska and Pacific OCS Regions directional surveys are NAD83.
- In Section I.C.1, we identify the need for a processing report to accompany final VSP and Corridor stacks for 2D data and final stacked and migrated volume for 3D VSP data.
- Sections I.D and I.G have been consolidated to present all core, wireline formation test, and drill stem test data submittal requirements in one section.
- In Section I.I., we added that the Alaska OCS Regional Office requires washed and dried drill cuttings to be submitted directly to that Office.
- In Section III, we updated the name of the BSEE Office of Technical Data Management (formerly the MMS Technical Data Management Section) and notified lessees and operators that the TDM receives and loads certain well data types for all BSEE Regions. The summary of these data types can be found in Attachment 1.
- In Section IV, we updated the BSEE contact for questions regarding this NTL.
- In Attachment 1 (Well Records Submission Summary), we added that the Alaska OCS Regional Office requires Washed and Dried Drill Cuttings, Cased-hole Logs, and Field Prints of Logs to be submitted directly to that Office.
- In Attachment 1 (Addresses), we present current contact information for all BSEE Regions and Gulf of Mexico Districts.