Frequently Asked Questions

Directive 059: Drilling and Completion Data Submission

March 2018

Companies are to use the Digital Data Submission (DDS) system when submitting summary drilling, completion, reconditioning, and abandonment data and OneStop when submitting daily operations reports and fracture service company reports. This document addresses questions related to DDS submissions. For queries related to OneStop, see the quick reference guides on tour report submission, amendment, and compliance.

General Inquiries

Q1. Where can I find a list of the business associate codes?

A1. A list of these codes can be found on the AER website and is updated monthly.

Q2. What are the duties of the DDS administrator?

A2. The administrator is responsible for new company account creation only, but can also assist with password resets for the company administrators if necessary. If you are experiencing account issues, please contact your company administrator. For all other DDS inquiries, navigate to the appropriate section in the DDS system for appropriate contact information. For example, to acquire contact information for the Well Data Services department, navigate to AER > Submissions and click on "Well Drilling Completion Data." The contact information will appear on the right-hand side.

Submission Requirements

Q3. How do I submit an amendment request?

A3. An amendment request can be submitted through the DDS system. To locate the amendment request form, proceed to AER > Submissions > Well Drilling Completion Data > Submit Well Drilling and Completion Data. The "Submit Amendment" option is on the submenu. When submitting an amendment request, enter a valid licence number and a unique well identifier (UWI) in the input boxes. Describe the amendment request in the text box in as much detail as possible. Identify if the amendment is to add, delete, or change and include from/to codes and values. Be sure to indicate which amendments apply to which UWI when submitting a request for multiple UWIs under the same licence. Be sure to include all required information, such as date, cementing information, casing types, completion dates, and all interval top and base depths.

Q4. On my DDS drilling and completion data submission, what is the submitter reference?

A4. The submitter reference is a reference number or phrase chosen by the submitter for your personal record keeping. Some commonly used options are re-entry op, workover, person's name, or UWI of well. Note that the field has a limit of 12 characters. It is an optional field.

Q5. What is the difference between the spud date and the notification of well drilling activity?

A5. Your spud date is the day your bit hits the ground or when an existing well is re-entered. A well drilling activity notification is submitted within 12 hours of starting to drill to set surface casing, starting to drill to licensed depth, or resuming drilling of a non-abandoned well.

Q6. We have only done preliminary work (conductor or surface casing) and then rigged off. When is a DDS drilling data submission required?

A6. No submission is required if only conductor has been set unless it runs to a depth of 30 metres or greater. If surface casing has been set and the rig has left the site, then the well is considered to be preset. For preset wells, a well drilling and completion data submission is required within 30 days from when the presetting operation ended. However, if drilling is resumed to licensed total depth (TD) within 30 days of the completion of the presetting operation, all drilling data (i.e., preset and to TD) can be submitted within 30 days of the end of the drilling operation.

Q7. What are the operation start and end dates on a submission?

A7. The operation start date is the date the rig moves onto the site. If the operation uses more than one rig, then report the date the first rig moves on site. The operation end date is the date the rig moves off the site. If the operation uses more than one rig, then report the date the last rig leaves the site. Once the submission has been accepted, these dates cannot be changed.

Casing and Cementing

Q8. In which sections would I report a slotted liner?

A8. The uncemented slotted liner is recorded in two areas. It is recorded in the Casings section as a liner, and in the Completions section as code 7. The interval reported in Completions is from the shoe of the last casing to the shoe of the liner. When reporting in the Casings section, the cement interval is to be recorded as code 91 (uncemented slotted liner) with an interval from the liner top to the liner base. This operation may be followed by an open hole completion. For example, a slotted liner could be reported in the Casings section with an interval from 600 m to 1100 m, reported as a liner (code 5) with cementing code 91 (uncemented slotted liner). It would then be reported under the Completions section as a slotted liner (code 7) with an interval from shoe of lasted cemented casing to shoe of liner (1100 m).

Completions

Q9. How do I report jetted or radial drilling in a well drilling data submission?

A9. A jet completion is reported as code 5. Shots per metre are not required. Radial drilling is currently also being reported as a code 5.

Q10. Where can the currently reported completion information be verified?

A10. Petrinex has an option to query wells. This option displays the well information for drilling (except for casing and cementing data) and completions. For copies of the original daily reports, please contact the AER's Core Research Centre, and for copies of well summaries, contact AER Information Services.

Q11. What is the gross completion interval (GCI) when the wellbore has an open hole?

A11. The GCI is reported from the shoe of the last cemented casing to the total depth of the wellbore.

Packing Devices

Q12. Where do I record a packer or bridge plug with no cement?

A12. Packing devices are set on the drilling occurrence in the Packer Data section.

Example: If a packer is set in the /2 and /3 producing event, both packers must be recorded in the Packer Data section of the /0 drilling occurrence. If a re-entry, your drilling occurrence will now be the /2.

Q13. How would I correctly report a code 55?

A13. A code 55 is used for nonroutine abandonment where there is not enough room between perforated intervals to place a packing device capped with 8 metres of cement (code 53), or a packing device capped with 3 metres of resin-based gypsum cement (code 57). This requires AER approval from Well Operations.

A code 55 may also be used for segregation, and in this case would be reported under the Packer Data section as a packer code 2. No AER approval is required for this.

Q14. How is the setting and pulling of a device reported in the Packer Data section?

A14. The setting or pulling of retrievable isolation devices (such as packers, cement retainers, and uncemented bridge plugs) can be reported through a completion data submission in the Packer Data section. The exception is if they are out of date or depth order. Packing devices are to be set from deepest depth to shallowest depth and pulled from shallowest depth to deepest depth.

Status Questions

Q15. There are two perforated zones and both will be self-declared commingling. How many events do I need?

A15. A single event would be required if the zones have been tested without segregation. If the zones have been tested separately (with segregation), two events are required to be set up. If the bottom zone was tested separately, then both zones were retested together, a single event could be set up.

Q16. What is the difference between "abandon" and "abandon zone"?

A16. The status "abandon zone" is applied when you have correctly isolated a zone. The status "abandoned" is applied to the well when all the downhole zones have been properly abandoned, and the surface abandonment has been completed and reported through the DDS system.

Q17. In a re-entry operation of an abandoned well, what is reported as the spud date?

A17. The spud date is the moment the cap is cut from the wellhead.

Q18. In a re-entry operation of an abandoned well, what is reported as the finish drilling date?

A18. The finish drilling date would be that date you completed drilling through any isolation devices within the wellbore. If a window is milled in the casing and a new hole is drilled, this would be a new leg and would require its own information to be added on the next available event sequence.

Hydraulic Fracturing Fluid and Water Source Reporting

Q19. I can't find the answer to my question. What do I do?

A19. Consult the Well Drilling Completion Data Submission user guide available through the DDS system under AER > Submissions > Well Drilling Completion Data > Fracture Fluid Composition Data. Alternatively, call the Well Data Services help line at 403-297-8696 (option 2) or send an email to WellDataServices@aer.ca.

Q20. Can I validate an XML or a CSV file before submission?

A20. Yes. Under "Fracture Fluid Composition Data," click on "Validate and Submit Fracture Fluid by File." Browse your computer for the XML or CSV file that you want to validate. Select the file and click the Validate button.

Under "Fracture Fluid Water Source Data," click on "Validate and Submit Water Source by File." Browse your computer for the XML or CSV file that you want to validate. Select the file and click the Validate button.

Q21. Can I view my previous submissions?

A21. Yes. You can view previously submitted fracture fluid and water source data through "Save or Submit Fracture Fluid by Form" or "Save or Submit Water Source by Form." You need to enter a valid well licence number to view the submitted data through the form screens. Progress through the screens to the Submission & Print screen if you wish to print the submission report (composition & water source) or cover sheet (composition only). Note that only submissions made under the current login can be viewed.

Q22. I made a mistake. Can I amend my submission?

A22. Yes. Data regarding fracture fluid composition and water source data can now be amended. The tabs are available under DDS Well Drilling Completion Data Submission System > Fracture Fluid Composition Data and Fracture Fluid Water Source Data.

Q23. Are there any limits to how many wells and intervals for which I can submit data?

A23. The system enables you to submit fracture fluid composition data for up to 50 wells (i.e., unique well identifiers [UWIs]) per well licence. Note that data for well events greater than nine can only be submitted by form. Up to 100 intervals can be submitted either by file or by form per UWI. Each component can have up to a maximum of 50 ingredients. Up to 50 water sources can be submitted either by file or by form per UWI.

Q24. Can I submit data for more than one licence in the same file?

A24. No. You can only submit data for one licence per file or submission.

Q25. When do I get warning messages versus error messages? Is it okay to submit with warning messages? What do the error and warning messages mean?

A25. Warning messages will only appear on form submissions. Error messages may appear on form and file submissions.

An error message and red exclamation marks (if you are submitting by form) will appear if the data submission has not fulfilled all the business rules for submissions. An error message will prevent submission of the data.

A warning message will appear when the data entered may need to be reviewed prior to submission. A warning message alone will not prevent submission of the data.

For an explanation of the error and warning messages, go to DDS Well Drilling Completion Data > Fracture Fluid Composition Data or Fracture Fluid Water Source Data > Business Rules worksheet.

Q26. What if the maximum concentration of all the ingredients in the additive or hydraulic fracture fluid does not add up to 100%?

A26. An error message will appear and the submission will not be allowed.

Q27. Why do I have to use the web form when submitting data for well event sequences greater than nine?

A27. Currently it is not possible to submit fracture fluid composition or water source data for well event sequences greater than nine via an XML or CSV file. The AER anticipates having this capability in the future, but industry will still need to submit the fracture intervals for these event sequences through the form.

Q28. Is my entered data saved?

A28. For fracture fluid composition entered through the form, each item that has been saved will be shown as part of the saved submission. The data will be saved for 14 days from the date of last modification. Data that have not been modified or submitted within 14 days of the last modification will be deleted. The same applies for fracture fluid water source data entered through the form. To submit the data by form, you must proceed to the “Submission & Print” page and click the Submit button. File submissions are only submitted when the Submit button is clicked.

Q29. Why should I use a particular method for submission (CSV or XML file or form)?

A29. Submitting the data by batch file (i.e., CSV or XML) is the easiest and most efficient way of submitting the data. However, you must follow the prescribed formats or the data will not be accepted. For CSV file submission, you may also use the CSV generator tool, which enables

users to input the data into an Excel spreadsheet and then save it as a CSV file prior to submission. The CSV generator tool was developed in Excel 2010, so if you are using a previous version of Excel, some of the functionality will not work (e.g., dropdown menus for cell contents generated from the "lists" sheet). However, you should still be able to generate a CSV file. If you are not able to generate an XML or CSV file, you can submit the data using the form.

Q30. What is the accepted format for data submissions?

A30. XML file submissions must follow the XML schema. For fracture fluids composition data, click on the "Validate and Submit Fracture Fluid by File" submenu, then the "Fracture Fluids Data XML Schema" link. For water source data, click on the "Validate and Submit Water Source by File" submenu, then the "Water Source Data XML Schema" link. CSV samples and generators are also available for both fracture fluid composition and water source data under the submenus.

Q31. For how many days are my submissions saved?

A31. Fourteen days from the last date the entered data was modified but not submitted.

Q32. What is the order of submission? Why can't I see fracture fluid composition or water source data on the form?

A32. Fracture intervals must be submitted and accepted first. Once submitted, the fracture intervals will appear on the associated UWI record in the fracture fluid composition form. The UWI will only appear on the fracture fluid water source data form once the fracture fluid composition data have been submitted. If no water was used as a carrier fluid, no UWIs will appear on the form as no water source data are required.

Q33. What does the term fracture scenario mean?

A33. A fracture scenario indicates the hole configuration and inclination angle (i.e., vertical, directional, or horizontal).

Q34. What if my service provider is not listed?

A34. Consult the Well Drilling Completion Data Submission user guide, section B.6, "Adding an Item to the Reference Table," for the process to add unlisted service providers to the system reference tables.

Q35. What if I can't see the well drilling completion menu?

A35. You probably have not been assigned the DDS role "Submit Well Drilling and Completion Data." Please contact your DDS administrator and have them assign the role to you. Note that to be able to submit fracture fluid composition and water source data, you must also have the "Submit Fracturing Fluids" role. To amend fracture fluid composition and water source data, you must also have the "Amend Frac Fluids" role.

Q36. What if I have multiple water sources?

A36. Multiple sources per UWI can be submitted. There are fourteen water source types. Select all that are applicable. Up to 50 water sources can be submitted per UWI.

Q37. In what units should carrier fluid and water source volumes be reported?

A37. Both carrier fluid volume and water source volume should be reported in cubic metres (m^3). It is important to report these volumes in cubic metres as other units such as litres will affect the statistical analysis of the data.

Q38. Do I need to submit cover sheets?

A38. Cover sheets are no longer required.

Q39. Which specific reports do I need to submit after making an electronic submission for fracture fluid composition and water source data?

A39. For fracture fluid composition data submissions, a copy of the job report from the service company that executed the fracturing operation and daily completion tour reports from the licensee are required. There is no need to submit a report for the water source data.

Q40. When I make a data amendment, do I need to submit additional reports?

A40. There is no requirement to submit a copy of the water submission report. For fracture fluid composition data, if there is no difference from the reports submitted when the original submission was made, then the reports do not have to be resubmitted. However, if there is a difference, then a revised copy of the reports must be submitted. You may choose to print the submission report and retain it for your company records.

Q41. How do I enter fracture fluid data for more than 9 event sequences?

A41. You will use the web form for this operation. For wells with more than nine event sequences, additional data entry fields will appear below the listing of event sequences 0–9. In these fields, you can enter the well UWI (i.e., 10 and up), well name, total depth, and finish drill date. The fracture fluid data can be added after the fracture intervals have been added on following screens.

Q42. Can I amend fracture fluid and water source data for more than 9 events by file submissions?

A42. No. Fracture fluid and water source data for more than 9 events can only be amended via the web form; you cannot amend data for more than 9 events using file submissions (CSV or XML).

Q43. What if there is no named water body listed?

A43. On the submission form, a list is automatically generated of the officially named water bodies within a 200 m radius of the latitude and longitude entered. If there is no named water body within the 200 m radius, then "Unknown water body" will be auto-populated. For CSV and XML submissions, enter "Unknown water body."

Q44. How should surface water and groundwater sources be submitted when there is no authorization ID?

A44. In those situations, you may leave the "Diversion Authorization Type" and "Diversion Authorization ID" fields blank and submit all of the remaining information.

Q45. Do I need to submit data for diagnostic fracture injectivity tests?

A45. The AER currently has no requirement for the submission of diagnostic fracture injectivity test data. Therefore, these data should not be reported as codes 41 (Fracture) or 42 (Multi-Stage Fracture) on DDS when completion data are being submitted.

Q46. We have several hydraulic fracture operations in which fracture ports were opened and no fracture fluid was pumped. Do these unfractured ports have to be reported as per *Directive 059*?

A46. In such situations, report any port that has been opened but not fractured using code 5 (Hydrajet perforation) not code 42 on DDS.

If a code 42 has already been reported, please request an amendment via DDS to have the code 42 changed to a code 5. This will remove the interval from noncompliance reports where a fracture fluid composition submission is expected because the code 42 exists.

Q47. I am getting an error when trying to submit an amendment by file (CSV or XML) for a well for which I know a valid submission exists. The error message says "No submission with status SUBMITTED found for Submission ID: XXXXXX."

A47. The first thing to check is whether you have an amendment in progress that was initiated through a form amendment. If a user has an amendment in progress (saved amendment) for fracture fluid composition data, they cannot go in and amend by file window and try to submit an amendment for the same submission ID. They have to either submit the amendment by form or cancel the amendment. If they cancel the amendment, the system will reset and they can start afresh and submit by either form or file. To view data statuses regarding amendments, view the well data under "Amend Fracture Fluid By Form" or "Amend Water Source By Form." The status will be shown as "Saved Amendment" if an amendment is in progress. To cancel the saved amendment, go to the "Amend & Print" page and click "Cancel."

Q48. Our properties are very close to the SK and BC border, and many of our water sources are located outside Alberta. How can the data for these water sources be submitted?

A48. In DDS under "Save or Submit Water Source By Form," enter the licence number, then go to the Water Source Data tab. In the Water Type field, select Municipal Water, then enter the source latitude and longitude coordinates and click Verify. This will populate DLS Location, Major Basin, and Major Subwatershed with "Out of Alberta." In the Name of Supplier, Start Date of Diversion, End Date of Diversion, and Total Volume fields, enter the appropriate information and click Save.

Q49. We have wells for which the water-based carrier fluid was bought in packed form from a chemical distribution company and contains a mix of water and other chemicals (e.g., potassium chloride [KCl], methanol, etc.) and which is not listed as one of the sources on the drop down options on the DDS system. How is this water source to be reported?

A49. In the near future, the AER will make efforts to add this category of water source as an option on a drop down list. In the interim, the KCl, methanol, or other chemicals, as well as the water, should be reported as ingredients in the water-based carrier fluid. The water supplier should be reported using the central water distribution facility. The latitude/longitude can be taken as the location of the manufacturer or the distribution source within Alberta.

Q50. In order to make a water source submission through the DDS, what source should I reference as my water source (surface water location) in a case where there were several intake points along a river course and the water gets aggregated in a central distribution facility before being used at the well site for the fracturing operation?

A50. The very last point or location from which the water was sourced, which in this case is the central distribution facility, should be used as the water source.

Q51. What are the most common sources of error during the validation process of a CSV file when a batch file submission is being made?

A51. The most common errors include the following:

- Non-alignment of licence number, UWI (drilling events only), fracture date, type, interval top and interval base with interval data on AER system.
- Failure to include all leading zeroes from well licence numbers.
- Reversion to a single 0 in the "le" column (there needs to be a leading zero; e.g. 00, 02, etc.).
- Failure to exclude leading zeroes on LSD, section, township, range, or meridian.
- Failure to include all trailing zeroes on data that requires a specific number of decimal places (e.g., volumeWeight).

Note that some of these errors are caused by Excel autoformatting features. When editing a CSV file in Excel, keep it open while you try to validate and submit it. Also, viewing the file in Notepad will reveal the data in its final form, which may make apparent, errors that were not visible in Excel. Do not edit a CSV file in Notepad. Do all edits in Excel or another application capable of editing and saving CSV files.

Q52. How can I be sure that my hydraulic fracturing composition data has been submitted after a DDS submission is made?

A52. A confirmation email is sent to the submitter once the submission is made. This e-mail contains the submission ID, the name and contact details of the submitter, the UWI, and the well licence number. See A21 above for instructions on how to view a previous submission.

Q53. How can I obtain the latitude/longitude of my water source location?

A53. Latitude and longitude can be obtained through the use of a handheld GPS, GIS applications, or public sources (e.g., Google Earth). Please ensure that the coordinates are referenced to North American Datum 83 (NAD83) and are in decimal degrees.

Q54. *Directive 059* states that the submission of fracture composition data is due 30 days after the end of the operation. Does that mean the last operation on the rig or the last date of the fracture operation?

A54. The language in *Directive 059* will be updated to clarify this issue. Fracture composition data is expected 30 days after the date of the last fracture operation. Data to be submitted includes fracture interval, fracture fluid composition, and fracture fluid water source (if a water-based carrier fluid was used).

Q55. Can an incorrectly submitted fracture interval be deleted when fracture fluid composition data is attached to the UWI?

A55. Yes. The deletion can be completed by requesting an amendment through the DDS system under AER > Submissions > Well Drilling Completion Data > Submit Amendment. When the fracture interval is deleted, the attached fracture fluid composition and water source data will also be deleted and will have to be resubmitted.

Q56. Can I delete an entire fracture fluid composition or water source submission using the "Amend by Form" function?

A56. Yes. For composition, on the Completions tab, select one of the intervals included in the submission to be deleted, click the Update button and when the screen refreshes, click the Save button. Navigate to the Amend & Print page and click the Delete Submission button. To proceed with the deletion, click OK in the confirmation dialog box. For water source submissions, the process is the same as above, but using the "Amend Water Source by Form" function and the Water Source Data tab.