General Well Data File – All Alberta

Layout Document

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**Alberta Energy Regulator**General Well Data File – All Alberta  
Layout Document

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# Introduction

## Overview

This document describes the data and layout of records in the General Well Data File. This file, which is updated weekly, contains current and historical data on oil, gas, oil sands, and water wells in Alberta.

## Problem Resolution

If you encounter problems with this product, please email [inquiries@aer.ca](mailto:inquiries@aer.ca). Please identify the problem as one or more of the following:

* problems related to the distribution of data
* problems relate to data
* other problems

## Available Formats

This product is available as a TXT file.

## Right

The AER retains the proprietary rights on all data sold.

Purchasers and subscribers of this product are permitted to use the data file to select and process data for internal or client use and to release to their clients copies of small portions of the file that result from specialized data retrievals. Copying an entire file or a large portion of a file for resale is not permitted.

Arrangements may be made to obtain a copy or an update service for an entire file or a large portion of a file from another subscriber, provided the supplier receives approval from Information Services at the AER ([InformationRequest@aer.ca](mailto:InformationRequest@aer.ca)) before data are transferred. The fee for granting this service will be a maximum of 75 per cent of the current rate for purchasing the file directly from the AER.

## Confidentiality

All files and programs are processed to exclude confidential data. Data are made available once they have been released from confidential status.

## Disclaimer

The AER

* makes no representation, warranties, or guarantees, expressed or implied, for the fitness of the data file with respect to intended use;
* accepts no responsibility for any inaccuracies, errors, or omissions in the data file;
* accepts no responsibility for any costs incurred by a company to convert, install, or improve the data file; and
* makes no guarantee to the continuing availability of any data or the consistency of the format of transferred data.

# File Specification

## General File Description

|  |  |
| --- | --- |
| Availability | Weekly |
| Sort sequence | Ascending order by LOC-DESC/RECORD TYPE |
| File key | LOC-DESC |
|  | * TOWNSHIP * MERIDIAN * RANGE * SECTION * LEGAL SUBDIVISION * LOCATION EXCEPTION * EVENT SEQUENCE |
|  | UPDATE FLAG  RECORD TYPE |

Notes:

For wells classified as “confidential” or “confidential below a formation,” only record types 005, 010, 035, 040, 045, and 070 will be released.

Record type 025 will contain only the six most current DST-FLUID-CODE, DST-FLUID-RECOVRD, and DST-FLUID-UNITS.

Record type 010 cannot contain both a field/pool and an oil sands area/deposit

Record type 005 is mandatory and will always exist; all other record types are optional and will only exist if data was submitted in the past week.

# Record Types, Elements and Descriptions

|  |  |  |
| --- | --- | --- |
| Record Type | Element name | Element description |
| Appears in all record types | CPA-ID / UWI ID- Loc-DescTownshipMeridianRangeSectionLSDLoc-ExceptionEvent-Sequence | Unique identifier for the well assigned by the AER to a licensed well event. |
| Appears in all record types | Record-Code | A number that uniquely identifies the type of information within this file. |
| 005 | Licence-No   * Licence-Prefix * Licence-Sequence * Licence-Suffix | Unique number identifying the licence. |
| 005 | Licence-Sec-Code | The section of oil and gas regulation under which the application for a well licence was made. |
| 005 | Licence –Date | Date licence was issued. |
| 005 | SH-Loc-Desc   * SH-Township * SH-Meridian * SH-Range * SH-Sec * SH-LSD | Identifies the surface hole location. |
| 005 | SH-North-South-Code | Indicates the north-south direction from the surface hole to the location of the start of the current interval. Examples are:   |  |  |  | | --- | --- | --- | |  |  | 'N' - North (from south boundary) | |  |  | 'S' - South (from north boundary) | |
| 005 | SH-North-South-Dist | The distance from the reference section boundary to the surface location. |
| 005 | SH-East-West-Code | Indicates the direction from the reference section boundary to the surface location. Examples are:   |  |  |  | | --- | --- | --- | |  |  | 'E' - East (from west boundary) | |  |  | 'W' - West (from east boundary) | |
| 005 | SH-East-West-Dist | The distance from the reference section boundary to the surface location (metres). |
| 005 | SH-Actual-Latitude | The actual latitude of the surface hole. |
| 005 | SH-Actual-Longitude | The actual longitude of the surface hole. |
| 005 | Area-Office-Code | The code used to identify field centres, formerly known as area offices. |
| 005 | Licence | Unique number identifying the licence. |
| 005 | Agent-Code | A code which uniquely identifies another business associate that has been named in accordance withthe Oil and Gas Conservation Act (OGCA) to act as an agent of the current licensee. If a licensee isnot a resident within the Province of Alberta an agent who is a resident within the province of Alberta is required. The agent will be held accountable if the licensee is unable or unwilling to fulfill its responsibilities. |
| 005 | Licence-Proj-Frmtn-Code | The formation code of the projected terminating formation for the well. |
| 005 | AER -Class-Code | The AER Classification of the proposed well. |
| 005 | Conf-Flag | The appropriate confidential code of the proposed well. |
| 005 | Well-Conf-Form-Depth | Depth of the formation below which the well is confidential (metres). |
| 005 | Conf-Form-Code | The formation below which a well is initially confidential. |
| 005 | Conf-Rel-Date | Date confidential information can be released to the general public. |
| 005 | Surf-Rgt-Owner-Ind | Indicates the type of surface rights ownership. |
| 005 | Head-Lessor-Mnl-Right-Ind | Indicates the type of head lessor for the mineral rights (eg. crown, freehold). |
| 005 | Agreement-No | The DOE identifier for the mineral lease agreement. |
| 005 | Agreement-Exp-Date | Date that the approval will expire if certain conditions are not met. For instance, a well licence will expire if the well has not been spudded within one year of approval date. |
| 005 | Scheme-Appr-No | The scheme approval number of the experimental, primary, or commercial crude bitumen scheme that the proposed facility is part of. |
| 005 | Scheme-Expiry-Date | The expiry date for the approved scheme. This date is only required for experimental schemes. |
| 005 | Surf-Aband-Code | Indicates whether the well licence surface abandonment data record has been inactivated (Y) or not (N). Inactivation is equivalent to a logical delete. |
| 005 | Surf-Aband-Date | The date that this set of abandonment and reclamation cost estimates became effective. |
| 005 | Licence-Status | Current status of the licence. Reflects the administrative process of the licence such as Issued, amended, cancelled, abandoned, etc. |
| 005 | Licence-Status-Date | Date the current licence status took effect. |
| 005 | Operator-BA-ID | A code which uniquely identifies a business associate. |
| 010 | Well-Name | The official well name as it appears on the well licence or an amendment thereof. |
| 010 | Field Code | Unique identifier for the field. |
| 010 | Pool Code | Unique identifier for the pool. |
| 010 | OS-Area- Code | Unique identifier for the oil sands area. |
| 010 | OS-Dep- Code | Unique identifier for the oil sands deposit. |
| 010 | BH-North-South-Code | |  |  | | --- | --- | | Indicates the direction from the reference section boundary to the bottom hole location. |  | | ‘N’ – North (from south boundary) |  |  | | ‘S’ – South (from north boundary) |  |  | |
| 010 | BH-North-South-Dist | The distance from the reference section boundaryto the bottom hole location (metres). |
| 010 | BH-East-West-Code | Indicates the direction from the reference section boundary to the bottom hole location.   |  |  |  | | --- | --- | --- | | ‘W’ – West (from east boundary) |  |  | | ‘E’ – East (from west boundary) |  |  | |
| 010 | BH-East-West-Dist | The distance from the reference section boundary to the bottom hole location (meters). |
| 010 | BH-Actual-Latitude | The actual latitude of the bottom hole. |
| 010 | BH-Actual-Longitude | The actual longitude of the bottom hole. |
| 010 | Ground Elevation | The elevation above sea level at which point the hole was drilled. |
| 010 | KB-Elev | The elevation of the kelly bushing measured as meters above mean sea level. |
| 010 | Well-Total-Depth | The original measurement system for the total depth fmeasurement. |
| 010 | TV-Depth | The approved projected true vertical depth (TVD) to the nearest meter if the well is expected to deviate from vertical as specified on the licence application. |
| 010 | PB-Depth | Depth of the point that the well was plugged back to when setting the casing or completing the well. Measured as meters from the kelly bushing. |
| 010 | Spud-Date | Date drilling operations commence for the well. |
| 010 | Fin-Drl-Date | Date that the drilling operations to reach total depth for the well were completed. |
| 010 | Rig-Rlse-Date | Date the drilling rig was released from operations at the well site. |
| 010 | On-Prod-Date | Date that production was first reported for the production string. |
| 010 | Drill-Contr-Code | A code which uniquely identifies the business associate who is the contractor responsible for drilling the well. |
| 010 | Rig-No | A name or number which identifies the contractors rig that has been or will be used to drill the well. |
| 010 | On-Inj-Date | Date that injection was first reported for the production string. |
| 015 | GEO-Revised-Date | The date this geological pool was last updated. |
| 015 | Log-TVD-Code | Indicates whether depth measurements for the log have been corrected to true vertical depth (TVD). |
| 015 | Frrmtn-Code | A numerical formation code of the well. |
| 015 | Frmtn-Depth | The formation depth of the well. |
| 015 | Qual-Code | Code indicating quality of data and evaluation. |
| 015 | Desc-Code | The full description of a particular reference value. |
| 20 | Log-Run-Number | Unique run number for each Log Type as assigned by the licensee. These numbers are not necessarily sequential. Odd values (1,3,5...) are used for logs indicating measured depth. Even numbers (2,4,6...) are used for logs adjusted to true vertical depth. |
| 20 | Log-Run-Date | The date the log run occurred. |
| 20 | Log-Type-Code | The type of well log. A well log is the product of a survey operation consisting of one or more curves characterizing the properties of the subsurface strata. |
| 20 | Log-Intrvl-Top | The top of the logged interval contained within the file. This measurement is taken along the well path. |
| 20 | Log-Intrvl-Base | The base of the logged interval contained within the file. This measurement is taken along the well path. |
| 25 | DST-Test-Code | Indicates the test code. |
| 25 | DST-Test-No | A sequential number that uniquely identifies the different instances of drill stem fluids recovered from a DST test. |
| 25 | DST-Test-Sub-Code | Uniquely identifies a specific well test submission for a specific interval within a well. |
| 25 | DST-Test-Company | Code identifying the service company that performed the test. |
| 25 | DST-Date | The Original\_Test\_Due\_Date is the date the test is due. This date is checked as well as the fulfillment status to determine if compliance enforcement is required. |
| 25 | DST-Misrun-Flag | Indicates whether the test succeeded or the reason for failure of the test. |
| 25 | Intrvl-Top | The True Vertical Midpoint Depth between the Resource Interval Top Depth and Resource Interval Base Depth to the nearest metre. |
| 25 | DST-Intrvl-Base | The measured distance from the surface to the bottom of an interpreted interval. Bottom depth must be greater to the Top Depth. Bottom depth can be the same as the next interval's top depth. Bottom depth cannot overlap any other interval. |
| 25 | Record-Depth | Measured depth of the test recorder. |
| 25 | DST-Stat-Press | The status of the reference value, where applicable. |
| 25 | Fin-Flow-Press | Measured final flowing pressure at wellhead. |
| 25 | Valve-Open-Time | The time interval valve was open. |
| 25 | Gas-Surface-Time | Time required for gas to flow to the surface once well started flowing during test. Immediate flow to surface = 0 minutes. |
| 25 | Max-Gas-Flow | The maximum gas flow rate during the test (usually a one hour flow rate converted to a daily gas flow rate). |
| 25 | Fin-Gas-Flow | The final gas flow rate during the test (usually a one hour flow rate converted to a daily gas flow rate). |
| 25 | Oil-Surface-Time | Length of time for oil to flow to the surface once well started flowing during test. Zero means immediate flow. |
| 25 | Max-Oil-Flow | The maximum oil flow rate during the test (usually a one hour flow rate converted to a daily oil flow rate). |
| 25 | Wtr-Surface-Time | Length of time required for water to flow to the surface once well started flowing during test. Zero means immediate flow. |
| 25 | Max-Wtr-Flow | The maximum water flow rate during the test (usually a one hour flow rate converted to a daily oil flow rate). |
| 25 | Pipe-Int-Diam | Diameter of the borehole or inside diameter of the drill pipe. |
| 25 | Cushion-Length | The length of cushion present during the drill stem test. |
| 25 | Cushion-Type-Code | Type of cushion used during the drill stem test. |
| 25 | DST-Fluid | A type of fluid recovered as part of the drill stem test per sequence |
| 25 | DST-Fluid-Record | Units of measurement used to record the volume of the fluid recovered from the drill stem test. |
| 25 | DST-Fluid-Units | Units of measurement used to record the volume of the fluid recovered from the drill stem test. |
| 30 | Obs-No | A sequential observation number used to uniquely identify each drill stem test within a given time period. |
| 30 | Occ-Type-Code | When the Occurrence Type is 'Lost Circulation', the estimate of the volume of fluid lost during the incident in cubic metres (m3). |
| 30 | Occ-Opr-Prog-Code | DDS entry code for operation in progress when incident began. |
| 30 | Occ-Date | Date that the occurrence (event) occurred. |
| 30 | Occ-Depth | The total well depth or the depth in mKb of the tool when the event or problem began. |
| 30 | Occ-Mud-Density | The density of the fluid in the wellbore when the event began in kilograms per cubic metre (Kg/m3). |
| 30 | Occ-Cntrl-Date | The date the event or problem was brought under control. |
| 30 | Occ-Cntrl-Depth | The total well depth or the depth in mKb of the tool when the event was controlled. |
| 30 | Occ-Fnl-Mud-Density | When the Control Method is 'Mud', the density of the fluid in the wellbore when the event was controlled in kilograms per cubic metre (Kg/m3). (Final mud density n/a. Found control mud density. |
| 30 | Occ-Water-Flow-Rate | When the Occurrence Type is 'Water Flow', the estimate of the volume of water lost during the incident in cubic metres (m3) per day. |
| 30 | Occ-Lost-Circln-Vol | When the Occurrence Type is 'Lost Circulation', the estimate of the volume of fluid lost during the incident in cubic metres (m3). |
| 35 | Dir-Drill-Start-Date | Date when directional drilling operation started. |
| 35 | Dir-Drill-Depth | The depth at which directional drilling commenced. |
| 35 | Dir-Drill-Reason-Code | The reason that the well was directionally drilled. |
| 40 | Casing-Date | The date that casing is set (finished cementing). |
| 40 | Casing-Code | Casing code being reported as described in Directive 59 for data submission purposed through DDS. |
| 40 | Casing-Size | Number identifying, in chronological sequence, each change in casing size from larger to smaller. Each additional string of casing or liners is nested inside the previous string. |
| 40 | Shoe-Set-Depth | Depth of the casing shoe measured from the kelly bushing. That is, the depth at which the bottom of the casing was landed. |
| 40 | Liner-Top-Depth | The top depth of the liner measured in metres from the kelly bushing and the depth at which the liner was hung. Field will have a value greater than 0 only when there is a liner in the wellbore. |
| 40 | Casing-Density | The linear density of the casing string or liner measured in Kilograms per metre. |
| 40 | Casing-Steel-Process | A 3-character string that describes the steel processes. If mutliple grades are run on the same casing string, the steel process of the highest grade is reported. |
| 40 | Casing-Yield-Strength | A 3-character string that describes the yield strength of the casing. If multiple grades are run on the same casing string, the yield strength of the highest grade is reported. |
| 45 | Cement-Obs-No | A sequential number that identifies each cementing operation in chronological order. |
| 45 | Cement-Stage-No | Sequential number assigned to each application (stage) of cement supplied to secure the casing. |
| 45 | Cement-Unit-Code | The unit of measure used for the cement volume. |
| 45 | Cement-Amount | The volume of cement pumped into the well for each cementing job. |
| 45 | Cement-Type-Code | Identifies the particular type of cement and additives used during the cementing operation. |
| 50 | Core-No | A sequential number assigned to each core cut from the well, in the chronological order that they are cut. |
| 50 | Core-Date | Date interval was cored or date of coring operation. |
| 50 | Core-Interval-Top | Top of interval analyzed for a core analysis / sieve analysis report. |
| 50 | Core-Interval-Base | Base of interval analyzed for a core analysis / sieve analysis report. |
| 50 | Core-Fluid-Code | Fluid code indicating what fluid was present during the cutting operation for the core. |
| 50 | Core-Code | Code identifying the type of coring procedure used to extract the core. |
| 50 | Core-Length | Describes the length of the plug samples taken |
| 55 | Packer-Ind | Indicates the date by which an Annual Packer Test must be submitted in accordance with Directive 051: Injection and Disposal Wells - Well Classifications, Completion, Logging, and Testing Requirements. |
| 55 | Obs-No | A sequential number identifying each perforation or treatment operation which occurred for the well in chronological order. |
| 55 | PT-Date | Date the packer test was performed. |
| 55 | PT-Code | Production tubing code. |
| 55 | Intrvl-Top (perf/treatment record) | The measured depth from the surface to the top of the interval for which well fracture or treatment operation has occurred. |
| 55 | Intrvl-Base (perf/treatment record) | The measured depth from the surface to the base on the interval for which well fracture or treatment operation has occurred. |
| 55 | PT-Shots | Number of perforation shots - holes shot through the casing - per metre. |
| 65 | Pba-Date | Date that plugback operations occurred |
| 65 | Pba-Run-Type | Type of plug used in plugback operation. |
| 65 | Data-Ind-Intrvl-Top | Indicates whether the top depth of the plugback was actually measured or was estimated. |
| 65 | Intrvl-Top (plug/abandonement record) | Measured depth from the kelly bushing to the top of the plugback interval. |
| 65 | Intrvl-Base (plug/abandonement record) | Measured depth from the kelly bushing to the base of the plugback interval. |
| 65 | Pba-Cement-Amt | The volume of cement pumped into the well to complete the plugback. |
| 70 | Well-Stat-Date | The effective date of the status. |
| 70 | Well-Stat-Code | The current status of the order. |
| 75 | Initial-Compl-Intrvl-Top | Start or effective date of the net completion interval. An interval where a well open perforations for production. Usually there is one set of open perforations for a production string that penetrate one zone. However, a single production string can have many completion intervals and a completion interval can span many formations. |
| 75 | Initial-Compl-Intrvl-Bot | Start or effective date of the net completion interval. An interval where a well open perforations for production. Usually there is one set of open perforations for a production string that penetrate one zone. However, a single production string can have many completion intervals and a completion interval can span many formations. |
| 80 | Update-Flag | Will always contain a ‘D’ for deletion |

## Record Elements

### Record Type: 005 (Licensing-Data)

Information about the licensee. The licensee is the holder of a facility, pipeline, or well licence in the AER’s records and includes a trustee or receiver-manager of property of a licensee.

Record length: 229

Estimated number of records: 1

| Element number | Element name | Starting  position | Length | Format | Comments |
| --- | --- | --- | --- | --- | --- |
| 1 | KEY-GENERAL |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
| 2 | RECORD-CODE | 15 | 3 | 9(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
| 3 | LICENCE-NO |  |  |  |  |
|  | LICENCE -PREF | 19 | 1 | X |  |
|  | LICENCE -SEQ | 20 | 7 | 9(7) |  |
|  | LICENCE -SUFF | 27 | 1 | X |  |
|  | TAB-FILLER | 28 | 1 | X |  |
| 4 | LICENCE -SEC-CODE | 29 | 7 | 9(3).9(3) |  |
|  | TAB-FILLER | 36 | 1 | X |  |
| 5 | LICENCE -DATE | 37 | 8 | 9(8) |  |
|  | TAB-FILLER | 45 | 1 | X |  |
| 6 | SH-LOC-DESC |  |  |  |  |
|  | SH-TOWNSHIP | 46 | 3 | 9(3) |  |
|  | SH-MERIDIAN | 49 | 1 | 9 |  |
|  | SH-RANGE | 50 | 2 | 9(2) |  |
|  | SH-SEC | 52 | 2 | 9(2) |  |
|  | SH-LSD | 54 | 2 | 9(2) |  |
|  | TAB-FILLER | 56 | 1 | X |  |
| 7 | SH-NORTH-SOUTH-CODE | 57 | 1 | X |  |
|  | TAB-FILLER | 58 | 1 | X |  |
| 8 | SH-NORTH-SOUTH-DIST | 59 | 6 | 9(4).9 |  |
|  | TAB-FILLER | 65 | 1 | X |  |
| 9 | SH-EAST-WEST-CODE | 66 | 1 | X |  |
|  | TAB-FILLER | 67 | 1 | X |  |
| 10 | SH-EAST-WEST-DIST | 68 | 6 | 9(4).9 |  |
|  | TAB-FILLER | 74 | 1 | X |  |
| 11 | SH-ACTUAL-LATITUDE | 75 | 10 | S9(2).9(6) | Always a positive number, zero filled |
|  | TAB-FILLER | 85 | 1 | X |  |
| 12 | SH-ACTUAL-LONGITUDE | 86 | 11 | S9(3).9(6) | Always a negative number |
|  | TAB-FILLER | 97 | 1 | X |  |
| 13 | AREA-OFFICE-CODE | 98 | 2 | 9(2) |  |
|  | TAB-FILLER | 100 | 1 | X |  |
| 14 | LICENCE | 101 | 5 | X(5) |  |
|  | TAB-FILLER | 106 | 1 | X |  |
| 15 | AGENT-CODE | 107 | 5 | X(5) |  |
|  | TAB-FILLER | 112 | 1 | X |  |
| 16 | LICENCE -PROJ-FRMTN-CODE | 113 | 4 | 9(4) |  |
|  | TAB-FILLER | 117 | 1 | X |  |
| 17 | AER -CLASS-CODE | 118 | 2 | 9(2) | See appendix 4 for AER descriptions. |
|  | TAB-FILLER | 120 | 1 | X |  |
| 18 | CONF-FLAG | 121 | 1 | 9 | See appendix 6 for Confidential Flag status |
|  | TAB-FILLER | 122 | 1 | X |  |
| 19 | WELL-CONF-FORM-DEPTH | 123 | 7 | 9999.99 |  |
|  | TAB-FILLER | 130 | 1 | X |  |
| 20 | CONF-FORM-CODE | 131 | 4 | 9(4) |  |
|  | TAB-FILLER | 135 | 1 | X |  |
| 21 | CONF-REL-DATE | 136 | 8 | 9(8) |  |
|  | TAB-FILLER | 144 | 1 | X |  |
| 22 | SURF-RGT-OWNER-IND | 145 | 1 | 9 |  |
|  | TAB-FILLER | 146 | 1 | X |  |
| 23 | HEAD-LESSOR-MNL-RIGHT-IND | 147 | 1 | 9 | See appendix 11 for value descriptions. |
|  | TAB-FILLER | 148 | 1 | X |  |
| 24 | AGREEMENT-NO | 149 | 15 | X(15) | If multiple exist, most recent is displayed. |
|  | TAB-FILLER | 164 | 1 | X |  |
| 25 | AGREEMENT-EXP-DATE | 165 | 8 | 9(8) | If multiple exist, most recent is displayed. |
|  | TAB-FILLER | 173 | 1 | X(1) |  |
| 26 | SCHEME-APPR-NO | 174 | 6 | X(6) |  |
|  | TAB-FILLER | 180 | 1 | X |  |
| 27 | SCHEME-EXPIRY-DATE | 181 | 8 | 9(8) | In YYYYMMDD format |
|  | TAB-FILLER | 189 | 1 | X |  |
| 28 | SURF-ABAND-CODE | 190 | 2 | 9(2) | If multiple exist, most recent is displayed. |
|  | TAB-FILLER | 192 | 1 | X |  |
| 29 | SURF-ABAND-DATE | 193 | 8 | 9(8) | If multiple exist, most recent is displayed. |
|  | TAB-FILLER | 201 | 1 | X(1) |  |
| 30 | LICENCE-STATUS | 202 | 12 | X(12) | See appendix 5. |
|  | TAB-FILLER | 214 | 1 | X |  |
| 31 | LICENCE-STATUS-DATE | 215 | 8 | 9(8) |  |
|  | TAB-FILLER | 223 | 1 | X |  |
| 32 | OPERATOR-BA-ID | 224 | 4 | X(4) |  |

### Record Type: 010 (Drilling-Occurrence-Data)

Lost circulation: depth and interval, density and volume of fluid lost, and amount and types of materials used. Water, gas, or oil kick: depths, shut-in and circulating pressures, influx volume, and control procedures.

Record length: 220

Estimated number of records: 1

| Element number | Element name | Starting  position | Length | Format | Comments |
| --- | --- | --- | --- | --- | --- |
| 1 | KEY-GENERAL |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
|  | RECORD-CODE | 15 | 3 | 9(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
| 2 | WELL-NAME | 19 | 36 | X(36) |  |
|  | TAB-FILLER | 55 | 1 | X |  |
| 3 | FIELD-CODE | 56 | 4 | 9(4) |  |
|  | TAB-FILLER | 60 | 1 | X |  |
| 4 | POOL-CODE | 61 | 7 | 9(7) |  |
|  | TAB-FILLER | 68 | 1 | X |  |
| 5 | OS-AREA-CODE | 69 | 4 | X(4) |  |
|  | TAB-FILLER | 73 | 1 | X |  |
| 6 | OS-DEP-CODE | 74 | 7 | 9(7) |  |
|  | TAB-FILLER | 81 | 1 | X |  |
| 7 | BH-NORTH-SOUTH-CODE | 82 | 1 | X |  |
|  | TAB-FILLER | 83 | 1 | X |  |
| 8 | BH-NORTH-SOUTH-DIST | 84 | 7 | S9(4).9 |  |
|  | TAB-FILLER | 91 | 1 | X |  |
| 9 | BH-EAST-WEST-CODE | 92 | 1 | X |  |
|  | TAB-FILLER | 93 | 1 | X |  |
| 10 | BH-EAST-WEST-DIST | 94 | 7 | S9(4).9 |  |
|  | TAB-FILLER | 101 | 1 | X |  |
| 11 | BH-ACTUAL-LATITUDE | 102 | 9 | 9(2).9(6) | Always a positive number. |
|  | TAB-FILLER | 111 | 1 | X |  |
| 12 | BH-ACTUAL-LONGITUDE | 112 | 11 | 9(4).9(6) | Always a negative number. |
|  | TAB-FILLER | 123 | 1 | X |  |
| 13 | GROUND-ELEVATION | 124 | 6 | 9(4).9 |  |
|  | TAB-FILLER | 130 | 1 | X |  |
| 14 | KB-ELEV | 131 | 8 | S9(4).99 | Always a positive value, zero filled. |
|  | TAB-FILLER | 139 | 1 | X |  |
| 15 | WELL-TOTAL-DEPTH | 140 | 8 | S9(4).99 | Always a positive value, zero filled. |
|  | TAB-FILLER | 148 | 1 | X |  |
| 16 | TV-DEPTH | 149 | 7 | 9(4).99 |  |
|  | TAB-FILLER | 156 | 1 | X |  |
| 17 | PB-DEPTH | 157 | 8 | S9(4).99 | Always a positive value, zero filled. |
|  | TAB-FILLER | 165 | 1 | X |  |
| 18 | SPUD-DATE | 166 | 8 | 9(8) |  |
|  | TAB-FILLER | 174 | 1 | X |  |
| 19 | FIN-DRL-DATE | 175 | 8 | 9(8) |  |
|  | TAB-FILLER | 183 | 1 | X |  |
| 20 | RIG-RLSE-DATE | 184 | 8 | 9(8) |  |
|  | TAB-FILLER | 192 | 1 | X |  |
| 21 | ON-PROD-DATE | 193 | 8 | 9(8) |  |
|  | TAB-FILLER | 201 | 1 | X |  |
| 22 | DRILL-CONTR-CODE | 202 | 5 | X(5) |  |
|  | TAB-FILLER | 207 | 1 | X |  |
| 23 | RIG-NO | 208 | 4 | X(4) |  |
|  | TAB-FILLER | 212 | 1 | X |  |
| 24 | ON-INJ-DATE | 213 | 8 | X(8) |  |

### Record Type: 015 (Tops & Markers-Data)

The formation markers interpreted for a specific well.

Record length: 47

Estimated number of records: 2

| Element number | Element name | Starting  position | Length | Format | Comments |
| --- | --- | --- | --- | --- | --- |
| 1 | KEY-GENERAL |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
|  | RECORD-CODE | 15 | 3 | 9(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
|  | GEO-REVISED-DATE | 19 | 8 | 9(8) |  |
|  | TAB-FILLER | 27 | 1 | X |  |
| 2 | LOG-TVD-CODE | 28 | 1 | 9 |  |
|  | TAB-FILLER | 29 | 1 | X |  |
| 3 | FRMTN-CODE | 30 | 4 | 9(4) |  |
|  | TAB-FILLER | 34 | 1 | X |  |
| 4 | FRMTN-DEPTH | 35 | 7 | 9(4).9(2) |  |
|  | TAB-FILLER | 42 | 1 | X |  |
| 5 | QUAL-CODE | 43 | 2 | 9(2) |  |
|  | TAB-FILLER | 45 | 1 | X |  |
| 6 | DESC-CODE | 46 | 2 | 9(2) |  |

### Record Type: 020 (Log-Data)

Well log data is used for quantitative and qualitative analysis of the rocks and fluids traversed by the log. These data can then be used to determine the petrophysical properties and reservoir properties of those rocks and fluids.

Record length: 52

Estimated number of records: 1

| Element number | Element name | Starting  position | Length | Format | Comments |
| --- | --- | --- | --- | --- | --- |
| 1 | KEY-GENERAL |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
| 2 | RECORD-CODE | 15 | 3 | 9(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
| 3 | LOG-RUN-NUMBER | 19 | 2 | 9(2) |  |
|  | TAB-FILLER | 21 | 1 | X |  |
| 4 | LOG-RUN-DATE | 22 | 8 | 9(8) |  |
|  | TAB-FILLER | 30 | 1 | X |  |
| 5 | LOG-TYPE-CODE | 31 | 4 | 9(4) |  |
|  | TAB-FILLER | 35 | 1 | X |  |
| 6 | LOG-INTRVL-TOP | 36 | 8 | S9(4).9(2) | Always a positive value, zero filled. |
|  | TAB-FILLER | 44 | 1 | X |  |
| 7 | LOG-INTRVL-BASE | 45 | 8 | S9(4).9(2) | Always a positive value, zero filled. |

### Record Type: 025 (DST/Wireline-Sampler Data)

Drill stem test: test number; interval; valve open time; gas, oil, or water to surface times and flow rates; recovered volumes; pressure data (chart and times).Wireline tests: test number, depth, duration, and recovery pressure data and times.

Record length: 178

Estimated number of records: 1

| Element number | Element name | Starting  position | Length | Format | Comments |
| --- | --- | --- | --- | --- | --- |
| 1 | KEY-GENERAL |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
| 2 | RECORD-CODE | 15 | 3 | 9(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
| 3 | DST-TEST-CODE | 19 | 1 | 9 |  |
|  | TAB-FILLER | 20 | 1 | X |  |
| 4 | DST-TEST-NO | 21 | 2 | 9(2) |  |
|  | TAB-FILLER | 23 | 1 | X |  |
| 5 | DST-TEST-SUB-CODE | 24 | 1 | 9 |  |
|  | TAB-FILLER | 25 | 1 | X |  |
| 6 | DST-TEST-COMPANY | 26 | 15 | X(15) |  |
|  | TAB-FILLER | 41 | 1 | X |  |
| 7 | DST-DATE | 42 | 8 | 9(8) |  |
|  | TAB-FILLER | 50 | 1 | X |  |
| 8 | DST-MISRUN-FLAG | 51 | 1 | 9 |  |
|  | TAB-FILLER | 52 | 1 | X |  |
| 9 | INTRVL-TOP | 53 | 8 | S9(4).9(2) | Always a positive value, zero filled. |
|  | TAB-FILLER | 61 | 1 | X |  |
| 10 | DST-INTRVL-BASE | 62 | 8 | S9(4).9(2) | Always a positive value, zero filled. |
|  | TAB-FILLER | 70 | 1 | X |  |
| 11 | RECORD-DEPTH | 71 | 7 | 9(4).9(2) |  |
|  | TAB-FILLER | 78 | 1 | X |  |
| 12 | DST-STAT-PRESS | 79 | 6 | S9(5) | Always a positive value, zero filled. |
|  | TAB-FILLER | 85 | 1 | X |  |
| 13 | FIN-FLOW-PRESS | 86 | 6 | S9(5) | Always a positive value, zero filled. |
|  | TAB-FILLER | 92 | 1 | X |  |
| 14 | VALVE-OPEN-TIME | 93 | 4 | S9(3) | Always a positive value, zero filled. |
|  | TAB-FILLER | 97 | 1 | X |  |
| 15 | GAS-SURFACE-TIME | 98 | 4 | S9(3) |  |
|  | TAB-FILLER | 102 | 1 | X |  |
| 16 | MAX-GAS-FLOW | 103 | 7 | S9(4).9 | Always a positive value, zero filled. |
|  | TAB-FILLER | 110 | 1 | X |  |
| 17 | FIN-GAS-FLOW | 111 | 7 | S9(4).9 | Always a positive value, zero filled. |
|  | TAB-FILLER | 118 | 1 | X |  |
| 18 | OIL-SURFACE-TIME | 119 | 4 | S9(3) |  |
|  | TAB-FILLER | 123 | 1 | X |  |
| 19 | MAX-OIL-FLOW | 124 | 7 | S9(4).9 | Always a positive value, zero filled. |
|  | TAB-FILLER | 131 | 1 | X |  |
| 20 | WTR-SURFACE-TIME | 132 | 4 | S9(3) | Always a positive value, zero filled. |
|  | TAB-FILLER | 136 | 1 | X |  |
| 21 | MAX-WTR-FLOW | 137 | 7 | S9(4).9 | Always a positive value, zero filled. |
|  | TAB-FILLER | 144 | 1 | X |  |
| 22 | PIPE-INT-DIAM | 145 | 7 | S9(4).9 | Always a positive value, zero filled. |
|  | TAB-FILLER | 152 | 1 | X |  |
| 23 | CUSHION-LENGTH | 153 | 7 | S9(4).9 | Always a positive value, zero filled. |
|  | TAB-FILLER | 160 | 1 | X |  |
| 24 | CUSHION-TYPE-CODE | 161 | 1 | 9 |  |
|  | TAB-FILLER | 162 | 1 | X |  |
| 25 | DST-FLUID | 163 | 3 | 9(3) |  |
|  | TAB-FILLER | 166 | 1 | X |  |
| 26 | DST-FLUID-RECOVRD | 167 | 8 | 9(5).9(2) |  |
|  | TAB-FILLER | 175 | 1 | X |  |
| 27 | DST-FLUID-UNITS | 176 | 3 | X(3) |  |

### Record Type: 030 (Tour-Occurrence-Data)

This table contains occurrences of events that took place during the drilling process, such as, Loss of Circulation of fluid or other events.

Record length: 90

Estimated number of records: 1

| Element number | Element name | Starting  position | Length | Format | Comments |
| --- | --- | --- | --- | --- | --- |
| 1 | KEY-GENERAL |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
| 2 | RECORD-CODE | 15 | 3 | 9(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
| 3 | OBS-NO | 19 | 2 | 9(2) |  |
|  | TAB-FILLER | 21 | 1 | X |  |
| 4 | OCC-TYPE-CODE | 22 | 2 | 9(2) | See appendix 1. |
|  | TAB-FILLER | 24 | 1 | X |  |
| 5 | OCC-OPR-PROG-CODE | 25 | 2 | 9(2) |  |
|  | TAB-FILLER | 27 | 1 | X |  |
| 6 | OCC-DATE | 28 | 8 | 9(8) |  |
|  | TAB-FILLER | 36 | 1 | X |  |
| 7 | OCC-DEPTH | 37 | 8 | S9(4).9(2) | Always a positive value, zero filled. |
|  | TAB-FILLER | 45 | 1 | X |  |
| 8 | OCC-MUD-DENSITY | 46 | 5 | S9(4) |  |
|  | TAB-FILLER | 51 | 1 | X |  |
| 9 | OCC-CNTRL-DATE | 52 | 8 | 9(8) |  |
|  | TAB-FILLER | 60 | 1 | X |  |
| 10 | OCC-CNTRL-DEPTH | 61 | 8 | S9(4).9(2) | Always a positive value, zero filled. |
|  | TAB-FILLER | 69 | 1 | X |  |
| 11 | OCC-FNL-MUD-DENSITY | 70 | 5 | S9(4) | Always a positive value, zero filled. |
|  | TAB-FILLER | 75 | 1 | X |  |
| 12 | OCC-WATER-FLOW-RATE | 76 | 8 | S9(4).99 | Always a positive value, zero filled. |
|  | TAB-FILLER | 85 | 1 | X |  |
| 13 | OCC-LOST-CIRCLN-VOL | 85 | 8 | S9(4).99 | Always a positive value, zero filled. |

### Record Type: 035 (Tour-Direction-Drilling-Data)

Provides information about directional drilling that took place with the start and end dates of each drilling event.

Record length: 41

Estimated number of records: 1

| Element number | Element name | Starting  position | Length | Format | Comments |
| --- | --- | --- | --- | --- | --- |
| 1 | KEY-GENERAL |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
| 2 | RECORD-CODE | 15 | 3 | 9(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
| 3 | OBS-NO | 19 | 2 | 9(2) |  |
|  | TAB-FILLER | 21 | 1 | X |  |
| 4 | DIR-DRILL-START-DATE | 22 | 8 | 9(8) |  |
|  | TAB-FILLER | 30 | 1 | X |  |
| 5 | DIR-DRILL-DEPTH | 31 | 8 | S9(4).9(2) | Always a positive value, zero filled. |
|  | TAB-FILLER | 39 | 1 | X |  |
| 6 | DIR-DRILL-REASON-CODE | 40 | 2 | 9(2) |  |

### Record Type: 040 (Tour-Casing-Data)

Provides information about casing used in the well such as type, density, grade of steel, steel strength, etc

Record length: 72

Estimated number of records: 1

| Element number | Element name | Starting  position | Length | Format | Comments |
| --- | --- | --- | --- | --- | --- |
| 1 | KEY-GENERAL |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
| 2 | RECORD-CODE | 15 | 3 | 9(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
| 3 | OBS-NO | 19 | 2 | 9(2) |  |
|  | TAB-FILLER | 21 | 1 | X |  |
| 4 | CASING-DATE | 22 | 8 | 9(8) |  |
|  | TAB-FILLER | 30 | 1 | X |  |
| 5 | CASING-CODE | 31 | 2 | 9(2) |  |
|  | TAB-FILLER | 33 | 1 | X |  |
| 6 | CASING-SIZE | 34 | 6 | S9(3).9 | Always a positive value, zero filled. |
|  | TAB-FILLER | 40 | 1 | X |  |
| 7 | SHOE-SET-DEPTH | 41 | 8 | S9(4).9(2) | Always a positive value, zero filled. |
|  | TAB-FILLER | 49 | 1 | X |  |
| 8 | LINER-TOP-DEPTH | 50 | 8 | S9(4).9(2) | Always a positive value, zero filled. |
|  | TAB-FILLER | 58 | 1 | X |  |
| 9 | CASING-DENSITY | 59 | 6 | S9(3).9 | Always a positive value, zero filled. |
|  | TAB-FILLER | 65 | 1 | X |  |
| 10 | CASING-STEEL-PROCESS | 66 | 3 | X(3) |  |
|  | TAB-FILLER | 69 | 1 | X |  |
| 11 | CASING-YIELD-STRENGTH | 70 | 3 | X(3) |  |

### Record Type: 045 (Tour-Cementing-Data)

This data is related to the Casing information but provides information about the where the cementing was done and the amount of cement used.

Record length: 38

Estimated number of records: 1

| Element number | Element name | Starting  position | Length | Format | Comments |
| --- | --- | --- | --- | --- | --- |
| 1 | KEY-CEMENT-DATA |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
| 2 | RECORD-CODE | 15 | 3 | 9(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
| 3 | OBS-NO | 19 | 2 | 9(2) |  |
|  | TAB-FILLER | 21 | 1 | X |  |
| 4 | CEMENT-OBS-NO | 22 | 1 | 9 |  |
|  | TAB-FILLER | 23 | 1 | X |  |
| 5 | CEMENT-STAGE-NO | 24 | 1 | 9 |  |
|  | TAB-FILLER | 25 | 1 | X |  |
| 6 | CEMENT-UNIT-CODE | 26 | 2 | 9(2) |  |
|  | TAB-FILLER | 28 | 1 | X |  |
| 7 | CEMENT-AMOUNT | 29 | 7 | S9(4).9 | Always a positive value, zero filled. |
|  | TAB-FILLER | 36 | 1 | X |  |
| 8 | CEMENT-TYPE-CODE | 37 | 2 | 9(2) |  |

### Record Type: 050 (Tour-Cores-Cut-Data)

The data provides information about the Cores that were cut during the drilling process at various intervals.

Record length: 61

Estimated number of records: 1

| Element number | Element name | Starting  position | Length | Format | Comments |
| --- | --- | --- | --- | --- | --- |
| 1 | KEY-GENERAL |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
| 2 | RECORD-CODE | 15 | 3 | 9(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
| 3 | CORE-NO | 19 | 3 | 9(3) |  |
|  | TAB-FILLER | 22 | 1 | X |  |
| 4 | CORE-DATE | 23 | 8 | 9(8) |  |
|  | TAB-FILLER | 31 | 1 | X |  |
| 5 | CORE-INTERVAL-TOP | 32 | 7 | 9(4).9(2) |  |
|  | TAB-FILLER | 39 | 1 | X |  |
| 6 | CORE-INTERVAL-BASE | 40 | 7 | 9(4).9(2) |  |
|  | TAB-FILLER | 47 | 1 | X |  |
| 7 | CORE-FLUID-CODE | 48 | 2 | 9(2) |  |
|  | TAB-FILLER | 50 | 1 | X |  |
| 8 | CORE-CODE | 51 | 2 | 9(2) |  |
|  | TAB-FILLER | 53 | 1 | X |  |
| 9 | CORE-LENGTH | 54 | 8 | S9(4).9(2) | Always a positive value, zero filled. |

### Record Type: 055 (Tour-Perforation/Treatment)

Data Interval, type, and number

Record length: 57

Estimated number of records: 2

| Element number | Element name | Starting  position | Length | Format | Comments |
| --- | --- | --- | --- | --- | --- |
| 1 | KEY-GENERAL |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
| 2 | RECORD-CODE | 15 | 3 | 9(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
| 3 | PACKER-IND | 19 | 1 | 9 | 1 = Perf & Treatment Data  2 = Packer Data |
|  | TAB-FILLER | 20 | 1 | X |  |
| 4 | OBS-NO | 21 | 3 | 9(3) |  |
|  | TAB-FILLER | 24 | 1 | X |  |
| 5 | PT-DATE | 25 | 8 | 9(8) |  |
|  | TAB-FILLER | 33 | 1 | X |  |
| 6 | PT-CODE | 34 | 2 | 9(2) | If PACKER-IND = 1, see appendix 2 (operation type)  If PACKER-IND = 2, see appendix 3 (packer codes) |
|  | TAB-FILLER | 36 | 1 | X |  |
| 7 | INTRVL-TOP | 37 | 8 | S9(4).9(2) | Always a positive value, zero filled. |
|  | TAB-FILLER | 45 | 1 | X |  |
| 8 | INTRVL-BASE | 46 | 8 | S9(4).9(2) | Always a positive value, zero filled. |
|  | TAB-FILLER | 54 | 1 | X |  |
| 9 | PT-SHOTS | 55 | 3 | S9(2) | Always a positive value, zero filled. |

### Record Type: 065 (Tour-Plug/Abandonment-Data)

Plug number, interval, plug setting, amount of cement and additives, slurry weights, time and depth the plug is felt, and drilled-out depth. Abandonment: details such as cutting of casing, cement cap, or welding on plate.

Record length: 63

Estimated number of records: 3

| Element  number | Element name | Starting  position | Length | Format | Comments |
| --- | --- | --- | --- | --- | --- |
| 1 | KEY-GENERAL |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
| 2 | RECORD-CODE | 15 | 3 | 9(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
| 3 | OBS-NO | 19 | 2 | 9(2) |  |
|  | TAB-FILLER | 21 | 1 | X |  |
| 4 | PBA-DATE | 22 | 8 | 9(8) |  |
|  | TAB-FILLER | 30 | 1 | X |  |
| 5 | PBA-RUN-TYPE | 31 | 2 | 9(2) |  |
|  | TAB-FILLER | 33 | 1 | X |  |
| 6 | DATA-IND-INTRVL-TOP | 34 | 1 | X |  |
|  | TAB-FILLER | 35 | 1 | X |  |
| 7 | INTRVL-TOP | 36 | 8 | S9(4).9(2) | Always a positive value, zero filled. |
|  | TAB-FILLER | 44 | 1 | X |  |
| 8 | INTRVL-BASE | 45 | 8 | S9(4).9(2) | Always a positive value, zero filled. |
|  | TAB-FILLER | 53 | 1 | X |  |
| 9 | CEMENT-UNIT-CODE | 54 | 2 | 9(2) |  |
|  | TAB-FILLER | 56 | 1 | X |  |
| 10 | PBA-CEMENT-AMT | 57 | 7 | S9(4).9 | Always a positive value, zero filled. |

### Record Type: 070 (Well-Status-History-Data)

Previous well status; a combination of status elements: fluid, mode, type, and structure.

Record length: 37

Estimated number of records: 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element number | Element name | Starting position | Length | Format | Comments |
| 1 | KEY-GENERAL |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
| 2 | RECORD-CODE | 15 | 3 | 9(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
| 3 | WELL-STAT-DATE | 19 | 8 | 9(8) |  |
|  | TAB-FILLER | 27 | 1 | X |  |
| 4 | WELL-STAT-CODE | 28 | 8 | 9(8) | See Appendix 7, 8, 9, 10  2017: removed the last 2 digits, which are obsolete and  now use the default 00 |

### Record Type: 075 (Well-Completion-Data)

Completion data per well: packers, perforations, fracturing.

Record length: 33

Estimated number of records: 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element number | Element  name | Starting  position | Length | Format | Comments |
| 1 | KEY-GENERAL |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
| 2 | RECORD-CODE` | 15 | 3 | 9(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
| 3 | INITIAL-COMPL-INTRVL-TOP | 19 | 7 | 9(4).99 |  |
|  | TAB-FILLER | 26 | 1 | x |  |
| 4 | INITIAL-COMPL-INTRVL-BOT | 27 | 7 | 9(4).99 |  |

### Record Type: 080 (Wells-Deletion-Date)

Provides a list of wells that were deleted from our system; these UWI no longer exist and are usually as a result of a UWI change.

Record Length: 19

Estimated number of records: 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element  number | Element  name | Starting  position | Length | Format | Comments |
| 1 | KEY-GENERAL |  |  |  |  |
|  | CPA-ID |  |  |  |  |
|  | LOC-DESC |  |  |  |  |
|  | TOWNSHIP | 1 | 3 | 999 |  |
|  | MERIDIAN | 4 | 1 | 9 |  |
|  | RNGE | 5 | 2 | 99 |  |
|  | SEC | 7 | 2 | 99 |  |
|  | LSD | 9 | 2 | 99 |  |
|  | LOC-EXCEPTION | 11 | 2 | XX |  |
|  | EVENT-SEQ | 13 | 1 | 9 |  |
|  | TAB-FILLER | 14 | 1 | X |  |
| 2 | RECORD –CODE | 15 | 3 | X(3) |  |
|  | TAB-FILLER | 18 | 1 | X |  |
| 3 | UPDATE-FLAG | 19 | 1 | X | D (delete) |

1. Occurrence (Incident) Type

|  |  |
| --- | --- |
| Code | Description |
| 10 | Kick |
| 20 | Blow |
| 30 | Blowout |
| 40 | Lost Circulation |
| 50 | Water Flow |
| 99 | No Incident ENCT |

1. Operation Type

|  |  |
| --- | --- |
| Code | Description |
| 01 | Bullet Perforation |
| 02 | Jet Perforation |
| 03 | Selective Bullet Perforation |
| 04 | Selective Jet Perforation |
| 05 | Abrasa-Jet Perforation |
| 06 | Permeator Perforation |
| 07 | Slotted Liner or Casing |
| 08 | Open-Hole Completion |
| 09 | Casing Vent Production |
| 11 | Acid Wash- No Pressure |
| 12 | Acid Squeeze - Press Used |
| 21 | Condensate Squeeze |
| 22 | Visqueeze |
| 23 | Chemical Squeeze |
| 24 | Alcohol Squeeze |
| 31 | Nitrogen Treatment |
| 32 | Steam Injection |
| 33 | Gravel Pack |
| 41 | Fractured |
| 43 | Multi Stage Fracture – Port CL |
| 50 | Resin-Gypsum Squeeze or Plug |
| 51 | Cement Plug |
| 52 | Cement Squeeze |
| 53 | Bridge Plug Capped W/Cement |
| 54 | Casing Patch (Over Perfs) |
| 55 | Bridge Plug No Cement Required |
| 56 | Remedial Casing |
| 57 | Packing Dev CPD W/Res-GYP CEM |

1. Packer Codes

|  |  |
| --- | --- |
| Code | Description |
| 01 | Packer |
| 02 | Bridge plug |
| 03 | Cement retainer |
| 04 | Through tubing packer |
| 05 | Through tubing packing device |
| 98 | Historical |

1. AER Classification Codes

|  |  |
| --- | --- |
| AER code | AER description |
| 0 | Development |
| 01 | Development Service |
| 02 | Outpost |
| 03 | Re-entry |
| 04 | Deeper Pool Test |
| 05 | New Pool Wildcat |
| 06 | New Field Wildcat |
| 09 | Other |
| 10 | Experimental |
| 11 | Evaluation (Oil Sands) |
| 12 | Test Hole |
| 13 | Evaluation |
| 20 | Development Incentive Exploratory Well (IEW) |
| 21 | Development Service IEW |
| 22 | Outpost IEW |
| 24 | Deeper Pool Test IEW |
| 25 | New Pool Wildcat IEW |
| 26 | New Field Wildcat IEW |
| 29 | Other IEW |
| 30 | Development Exploratory Gas Well (EGW) |
| 31 | Development Service EGW |
| 32 | Outpost EGW |
| 34 | Deeper Pool Test EGW |
| 35 | New Pool Wildcat EGW |
| 36 | New Field Wildcat EGW |
| 39 | Other EGW |
| 40 | Exploratory |

1. Licence Status

|  |  |
| --- | --- |
| Licence status | Description |
| Abandoned | The well under this licence has been permanently dismantled in a manner prescribed by AER regulations. |
| Amended | A licence for which the terms or conditions have been updated at the licensee’s request. |
| Cancelled | A licence for which construction or drilling has not commenced within a specific period, usually one year, of licence issuance. |
| Issued | A licence that has been granted for a specific site. |
| Re-entered | An abandoned well that a new licensee has taken over and plans to recomplete (the new licensee is issued a new well licence number for the same wellbore). |
| RecCertified | A licensed well that has been reclaimed according to the requirements of Alberta Environment and Parks. |
| RecExempt | A licensed well that Alberta Environment and Parks has exempted from meeting reclamation requirements (e.g., overlapping sites, “grandfathered” exemptions, sites not within Alberta Environment and Parks jurisdiction ) |
| Rescinded | A well licence that has been made obsolete or removed. |
| Suspension | The temporary cessation of all operations and subsequent monitoring at a well in a manner prescribed by the AER. |

1. Confidential Flag

|  |  |
| --- | --- |
| **Confidential status** | **Description** |
| 1 | Non-confidential |
| 2 | Confidential |
| 3 | Confidential Below |

1. Well Status Code ‘Fluid’ Table

|  |  |  |
| --- | --- | --- |
| **Value** | **Short Description** | **Description** |
| 0 | N/A | Not Applicable |
| 1 | CR-OIL | Crude Oil |
| 2 | GAS | *Gas* |
| 3 | OIL | Oil |
| 4 | G-W | Gas-Water |
| 5 | UND | Undesignated |
| 6 | WATER | Water |
| 7 | BRINE | Brine |
| 8 | WASTE | Waste |
| 9 | SOLV | Solvent |
| 10 | STEAM | Steam |
| 11 | AIR | Air |
| 12 | SYN-CR | Synthetic Crude |
| 13 | CO2 | Carbon Dioxide |
| 14 | POLYM | Polymer |
| 15 | N2 | Nitrogen |
| 16 | LPG | Liquid Petroleum Gas |
| 17 | CR-BIT | Crude Bitumen |
| 18 | COND | Condensate |
| 19 | OXYGEN | Oxygen |
| 20 | ACID-G | Acid Gas |
| 22 | CBMOT | Coalbed Methane-Coals & OTH Lith |
| 23 | CBMCLS | Coalbed Methane-Coals Only |
| 24 | SHGOT | Shale Gas & Other Sources |
| 25 | SHG | Shale Gas Only |
| 26 | CBMSOT | CBM & Shale & Other Sources |
| 31 | HELIUM | Helium |
| 50 | AN AMM | Anhydrous Ammonia |
| 51 | CR O/B | Crude Oil/BIT |
| 52 | NAPHTH | Naphtha |
| 53 | PROPNE | Propane |
| 54 | BUTANE | Butanes |
| 55 | ETHANE | Ethane |
| 56 | ETH + | Ethane Plus |
| 57 | PENT + | Pentanes Plus |
| 58 | DIESEL | Diesel Oil |
| 59 | ALKH2O | Alkaline Water |
| 60 | MICLAR | Micellar |
| 61 | SKIM O | Skim Oil |
| 62 | SK EM | Skim Emulsion |
| 63 | AMMNIT | Ammonium Nitrate |
| 64 | SRCWTE | Source Water |
| 65 | SAND | Sand |
| 66 | ENTGAS | Entrained Gas |
| 98 | MISC | Miscellaneous |

1. Well Status Code ‘Mode’ Table

|  |  |
| --- | --- |
| **Value** | **Description** |
| 0 | Not Applicable |
| 1 | Suspended |
| 2 | Abandoned |
| 3 | Abandoned Zone |
| 4 | Abandoned & Re-Entered |
| 5 | Capped |
| 6 | Potential |
| 7 | Drilled and Cased |
| 8 | Junked & Abandoned |
| 9 | Closed |
| 10 | Flowing |
| 11 | Pumping |
| 12 | Gas Lift |
| 13 | Testing |
| 14 | Abandoned & Whipstocked |
| 15 | Drilling and Completing |
| 16 | Test Completed |
| 17 | Preset |

1. Well Status Code ‘Type’ Table

|  |  |
| --- | --- |
| **Value** | **Description** |
| 0 | Not Applicable |
| 1 | Reproducer |
| 2 | Storage |
| 3 | Injection |
| 4 | Disposal |
| 5 | Observation |
| 6 | Training |
| 7 | Experimental |
| 8 | Farm |
| 9 | Industrial |
| 10 | Cyclical |
| 11 | Source |
| 12 | Steam Assis Gravity Drain |
| 14 | Linked to a Cavern |

1. Well Status Code ‘Structure’ Table

|  |  |
| --- | --- |
| **Value** | **Description** |
| 0 | Not Applicable |
| 2 | Dual Zone |
| 3 | Triple Zone |
| 4 | Four Zone |
| 5 | Commingled |
| 6 | Drain |

1. Head-Lessor-MNL-Right-Ind

|  |  |
| --- | --- |
| **Value** | **Description** |
| 0 | Null |
| 1 | Alberta Crown |
| 2 | Freehold |
| 3 | Both |