

Well Production Data File

All Alberta

Layout Document

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Alberta Energy Regulator

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1 Introduction

1.1 Overview

This document describes the physical characteristics and data contents of the Well Production Data File-All Alberta file. The files include all production and injection data by month for all Alberta wells from 1962 to present. Amendments are applied as they occur. Control data are current. Control data file includes selected control data (well name, field and pool codes interpretation etc.).

1.2 New Subscribers

To become a subscriber of this product please email your request specifying product name and subscription frequency to <u>informationrequest@aer.ca</u> you will be asked to provide a letter of intent at the time of order.

1.3 Problem Resolution

If you encounter problems with this product, please email <u>informationrequest@aer.ca</u>. Please identify the problem as one or more of the following:

- problems relating to the subscription or distribution
- problems relating to data
- other problems

1.4 Available Formats

This product is comprised of 2 TXT files (CONTROL.TXT and PRDHIST.TXT). Product is zipped prior to being uploaded to FTP site.

1.5 Confidentiality

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

1.6 Disclaimer

The AER

- makes no representation, warranties, or guarantees, expressed or implied, for the fitness of the data files with respect to intended use;
- accepts no responsibility for any inaccuracies, errors, or omissions in the data files;
- accepts no responsibility for any costs incurred by a company to convert, install, or improve the data files; and

• makes no guarantee to the continuing availability of any data or the consistency of the format of transferred data.

2 File Specification

File	Well Control Data Detail File					
Availability	Monthly					
Sort Sequence	Ascending Order by Record Type and Well Identifier					
	- Record Type					
	- Well Identifier					
	- Township					
	- Meridian					
	- Range					
	- Section					
	- Legal Subdivision					
	- Location Exception					
File Key	- Event Sequence					

Notes:

This file provides current control data for any well that has ever reported production or injection volumes. All wells that are on the historical production/injection fluid data file will have control data on this file.

Some control data is represented by 'code tables'. Notes in the comments column of the record description will refer the user to the appendix section of the document, where the current valid values can be found.

Since tables are expected to be dynamic, updates to the appendices will be made as needed and will be forwarded to subscribers with the next update to the data files.

File	Well Production/Injection History Detail File
Availability	Monthly
Sort Sequence	Ascending Order by Record Type and Well Identifier
File Key	- Record Type

- Well Identifier

- Township
- Meridian
- Range
- Section
- Legal Subdivision
- Location Exception
- Event Sequence

Notes:

This file contains details of fluid production and/or injection activity (other activities such as flare, vent are not included in this product) for all wells in the Province of Alberta. Monthly and annual data are included for all wells operating since 1962 (see note in the introduction section of this manual).

This file contains data from 1962 to present.

Fluid data units of measurement depend on the fluid code:

- liquids are reported in cubic metres
- gases are reported in thousands of cubic metres

3 Record Types

3.1 Well Control Data Detail File- Well Control Data

No.	Element Name	Start	Length	Format	Description
1	RECORD TYPE CODE	1	1	9	Value is '1'
	TAB FILLER	2	1	Х	
2	WELL IDENTIFIER	3	13	X(13)	TWP-M-RG-SC-LS-LE-E
	TAB FILLER	16	1	Х	
3	WELL NAME	17	36	X(36)	The official well name as it appears on the well licence or an amendment thereof.
	TAB FILLER	53	1	Х	
4	UNIT CODE	54	5	X(5)	Mar 2012 - Element padded with blanks. DOE no longer provides data to AER.
	TAB FILLER	59	1	Х	
5	UNIT NAME	60	50	X(50)	Mar 2012 - Element padded with blanks. DOE no longer provides data to AER.
	TAB FILLER	110	1	Х	
6	UNIT PRODUCT CODE	111	3	X(3)	Mar 2012 - Element padded with 000.0000000. DOE no longer provides data to AER.
	TAB FILLER	114	1	Х	

7	UNIT OIL INTEREST PERCENT	115	11	9(3).9(7)	Mar 2012 - Element padded with 000.0000000. DOE no longer provides data to AER.
	TAB FILLER	126	1	Х	
8	UNIT GAS INTEREST PERCENT	127	11	9(3).9(7)	Mar 2012 - Element padded with 000.0000000. DOE no longer provides data to AER.
	TAB FILLER	138	1	Х	
9	FIELD CODE	139	4	9(4)	Unique identifier for the field.
	TAB FILLER	143	1	Х	
10	FIELD NAME	144	20	X(20)	Legal or common given name of the field.
	TAB FILLER	164	1	Х	
11	FIELD ABBREVIATION	165	8	X(8)	Common abbreviated field name.
	TAB FILLER	173	1	Х	
12	POOL CODE	174	7	9(7)	Unique identifier for the pool.
	TAB FILLER	181	1	Х	
13	POOL NAME	182	21	X(21)	Legal or common given name of the pool.
	TAB FILLER	203	1	Х	
14	POOL ABBREVIATION	204	13	X(13)	Common abbreviated pool name.
	TAB FILLER	217	1	Х	
15	BATTERY CODE	218	11	X(11)	Most current battery for well. A unique identifier for a battery or facility reporting production, injection or other volumetric

					activities
	TAB FILLER	229	1	х	
16	BATTERY TYPE CODE	230	2	X(2)	Type classifying the facility according to its physical equipment or principle service performed. See appendix #1
	TAB FILLER	232	1	Х	
17	BATTERY OPERATOR CODE	233	4	X(4)	A code which uniquely identifies the busines associate that is identified as the operator fo this facility.
	TAB FILLER	237	1	Х	
18	AREA OFFICE OF BATTERY	238	2	9(2)	The code used to identify the AER field centers or area offices. See appendix #2
	TAB FILLER	240	1	Х	
19	FIELD OR OS AREA OF BATTERY	241	4	X(4)	Field or area office code.
	TAB FILLER	245	1	х	
20	FACILITY CODE	246	11	X(11)	Code to uniquely identifying the reporting facility.
	TAB FILLER	257	1	х	
21	FACILITY TYPE CODE	258	2	X(2)	Type classifying the facility according to its physical equipment or principle service performed. See appendix #3
	TAB FILLER	260	1	х	
22	FACILITY OPERATOR	261	4	X(4)	A code which uniquely identifies the busines associate that submits production data to the AER.

	TAB FILLER	265	1	Х	
	AREA OFFICE OF	266	2		The code used to identify the AER field centers or area offices. See appendix #2
23	FACILITY			9(2)	centers of area offices. See appendix #2
	TAB FILLER	268	1	Х	
24	FIELD OR OS AREA OF	269	4	X(4)	
	FACILITY				Field or area office code.
	TAB FILLER	273	1	V	
				Х	The recovery mechanism type used for
25	RECOVERY	274	2	9(2)	production. See appendix #4
	MECHANISM TYPE				
	CODE				
	TAB FILLER	276	1	х	
26	PROJECT CODE	277	3	9(3)	
20	TAB FILLER	280	U	0(0)	
	TAB FILLER	200	1	Х	
27	BLOCK CODE	281	3	9(3)	The number that uniquely identifies a production block within a pool. Blocks are used for administering production allowable
	TAB FILLER	284	1	х	
28	PROD SPACING UNIT	285	3	9(3)	
	CODE				Defaulted to 000
	TAB FILLER	288	1	Х	
29	INTEGRATED SCHEME	289	3	9(3)	The type of scheme. Always 000
	CODE				The type of scheme. Always 000

	TAB FILLER	292	1	х	
30	WELL STATUS CODES				Comprised of fluid, mode, type and structure
	FLUID CODE	293	2	9(2)	The primary fluid produced by the productio string. See appendix #5
	TAB FILLER	295	1	Х	
	MODE CODE	296	2	9(2)	The mode of operation (status) of the production string. See appendix 6.
	TAB FILLER	298	1	х	
	TYPE CODE	299	2	9(2)	The purpose of the production string. See appendix 7.
	TAB FILLER	301	1	Х	
	STRUCTURE CODE	302	2	9(2)	If a well is capable of production from more than one zone each production string will be assigned a structure code indicating that more than one zone has been completed a whether those zones have been commingle See appendix 8.
	TAB FILLER	304	1	Х	
	FILLER	305	2	X(2)	Defaulted to 00.
	TAB FILLER	307	1	х	
31	WELL STATUS DATE	308	8	9(8)	The effective date for the well status.
	TAB FILLER	316	1	х	
32	GAS WELL LIQUIDS CODE	317	2	9(2)	The type of liquid hydrocarbon that is produced by this production string if it is classified as a gas well. These liquids are typically classified as either condensates or

					crude oil. See appendix 9.
	TAB FILLER	319	1	х	
33	GROUPED WELL FLAG	320	1	х	Defaulted to 'N'
	TAB FILLER	321	1	х	
34	PSEUDO WELL FLAG	322	1	х	Defaulted to 'N'.
	TAB FILLER	323	1	х	
35	GROUPED TOTAL FLAG	324	1	Х	Defaulted to 'N'
	TAB FILLER	325	1	х	
36	PENDING S-4 FLAG	326	1	Х	Defaulted to 'N'
	TAB FILLER	327	1	х	
37	PA FLUID CODE	328	2	9(2)	Defaulted to 00
	TAB FILLER	330	1	х	
38	PA MODE CODE	331	2	9(2)	Defaulted to 00
	TAB FILLER	333	1	Х	
39	PA TYPE CODE	334	2	9(2)	Defaulted to 00
	TAB FILLER	336	1	Х	
	FILLER	337	6	X(6)	Defaulted to six spaces
		343	1	х	

	TAB FILLER				
40	ALLOWABLE TYPE CODE	344	2	9(2)	Describes whether the well is subject to restrictions on the amount of production allowed within a month (allowable) and, if so, which type of allowable is used as the basis for allowable surveillance. See appendix #10
	TAB FILLER	346	1	х	
41	CRUDE OIL DENSITY CODE	347	2	9(2)	Density of crude oil produced by this production string. See appendix #11
	TAB FILLER	349	1	х	
42	OFF TARGET FLAG	350	1	Х	Indicates that the production string is subject to production penalties due to the fact that it is not in the correct location (target).
	TAB FILLER	351	1	х	
43	PENALTY RELIEF FLAG	352	1	Х	A production string is subject to an allowable on their production will have the allowable production reduced further depending on the amount of gas and/or water produced but no conserved. If the gas and/or water are conserved, penalty relief will indicate that the allowable should not be further reduced (relief from the production penalty). See appendix 12.
	TAB FILLER	353	1	х	
44	SPECIAL PENALTY BASE FLAG	354	1	Х	Defaulted to space
	TAB FILLER	355	1	х	
45	CONTROL WELL FLAG	356		х	Defaulted to 'N'

	TAB FILLER	357	1	Х	
46	CONTROL WELL CREDITS FLAG	358	1	Х	Defaulted to space
	TAB FILLER	359	1	х	
47	PSU SURPLUS FLAG	360	1	Х	Production Spacing Unit Flag Defaulted to 'N'
	TAB FILLER	361	1	х	
48	SPECIAL PSU FLAG	362	1	Х	Special Production Spacing Unit Flag Defaulted to 'N'
	TAB FILLER	363	1	Х	
48	FILLER	364	6	X(6)	Defaulted to spaces
	TAB FILLER	370	1	Х	
49	WELL CONFIDENTIALITY INDICATOR	371	1	9	Type of confidentiality assigned to the well. Non-Confidential, Confidential or Confidentia below.
	TAB FILLER	372	1	х	
50	ON PRODUCTION DATE	373	8	9(8)	Date that production was first reported for th production string.
	TAB FILLER	381	1	х	
51	ON INJECTION DATE	382	8	9(8)	Date that injection was first reported for the production string.
	TAB FILLER	390	1	х	
52	DISPOSAL/INJECTION	391	4	9(4)	The classification of an injection or disposal well.

	DISPOSAL/INJECTION APPROV. AMEND. CODE	395	1	Х	Number identifying the Disposal or Injectior Approval assigned to this production string.
	TAB FILLER	396	1	х	
53	APPROVED WELLHEAD PRESSURE	397	5	9(5)	Defaulted to 00000
	TAB FILLER	402	1	Х	
54	RATED WELLHEAD PRESSURE	403	5	9(5)	Defaulted to 00000
	TAB FILLER	408	1	Х	
55	SET GAS/OIL RATIO	409	5	9(5)	Derived Gas Oil Ratio (GOR). Defaulted to 00000
	TAB FILLER	414	1	Х	
56	SET GOR TEST DATE	415	6	9(6)	Derived Gas Oil Ratio (GOR) test date. Defaulted to 000000
	TAB FILLER	421	1	Х	
57	SET GOR EXEMPTION CODE	422	2	X(2)	Defaulted to spaces
	TAB FILLER	424	1	Х	
58	SATELLITE BATTERY				An identifier for a satellite installation connected to a battery or facility. Defaulted to zeroes.

	TOWNSHIP	425	3	9(3)	
	MERIDIAN	428	1	9	
	RANGE	429	2	9(2)	
	SECTION	431	2	9(2)	
	LEGAL SUBDIVISION	433	2	X(2)	
	TAB FILLER	435	1	Х	
59	PRODUCTION TESTING FREQUENCY	436	2	X(2)	Mar 2012 – no longer populated. two spaces

3.2 Well Control Data Detail File- Control Audit Record

No.	Element Name	Start	Length	Format	Comments
1	RECORD TYPE	1	1	9(1)	Value is '2'
	TAB FILLER	2	1	Х	
2	RECORD COUNT	3	5	9(5)	Total count of control records.

3.3 Well Production/Injection History Detail File- Injection History

No.	Element Name	Start	Length	Format	Comments
1	RECORD TYPE CODE	1	1	9	Value is '1'
	TAB FILLER	2	1	Х	
2	WELL IDENTIFIER	3	13	X(13)	TWP-M-RG-SC-LS-LE-E
	TAB FILLER	16	1	Х	
3	FLUID YEAR	17	4	9(4)	The year production or injection was reported.
	TAB FILLER	21	1	Х	
4	PRODUCTION HOURS	22	3	9(3)	Occurs 12 times – hours displayed for each

					month of the year
	TAB FILLER		1	х	
5	SEPARATOR PRESSURE	70	5	9(5)	Mar 2012 – no longer collected or populated Occurs 12 times
	TAB FILLER		1	х	
6	INJECTION HOURS	142	3	9(3)	Occurs 12 times – hours displayed for each month of the year
	TAB FILLER		1	х	
7	INJECTION PRESSURE	190	5	9(5)	Mar 2012 – no longer collected or populated Occurs 12 times
	TAB FILLER		1	Х	
8	SUB-RECORD-COUNT	262	2	9(2)	
	TAB FILLER	264	1	х	
	Elements 9 through 13 occur up to 8 times, see note below.				Occurs 8 times
9	FLUID INJECTION OR PRODUCTION CODE	237	1	Х	
	TAB FILLER		1	Х	

10	FLUID TYPE CODE	2	9(2)	The type of fluid produced. See appendix 13.
	TAB FILLER	1	Х	
11	FLUID ANNUAL VOLUME	10	9(8).9	The cumulative amount for the year up to and including the month for the prod string/activity type/fluid type.
	TAB FILLER	1	Х	
12	FLUID CUMULATIVE VOLUME	11	9(9).9	The cumulative amount of fluid for the lifetime of the Field and Pool up to and including the given month/year.
	TAB FILLER	1	Х	
13	FLUID VOLUME MONTH	9	9(7).9	The total quantity of the fluid produced for this month. Occurs 12 times
	TAB FILLER	1	х	

Note: Elements numbered 9-13 occur up to 8 times, that is:

FLUID1 INJECTION OR PRODUCTION CODE, FLUID1 TYPE CODE, FLUID1 ANNUAL VOLUME, FLUID1 CUMULATIVE VOLUME, FLUID1 VOLUME MONTH 01...FLUID1 VOLUME MONTH 12 ... up to... FLUID8 INJECTION OR PRODUCTION CODE, FLUID8 TYPE CODE, FLUID8 ANNUAL VOLUME, FLUID8 CUMULATIVE VOLUME, FLUID8 VOLUME MONTH 01...FLUID8 VOLUME MONTH 12)

No.	Element Name	Start	Length	Format	Comments
1	RECORD TYPE	1	1	9	Value is '2'
	TAB FILLER	2	1	Х	
2	RECORD COUNT	3	7	9(7)	Total count of record type '2' records.

3.4 Well Production/Injection History Detail File- Fluid Audit Record

Value	Description
1	Crude oil - Test
2	Crude oil - Group
3	Crude oil - Temporary
4	Crude oil - Proration
5	Crude oil - Permanent Single
6	Crude oil - Fieldgate/Satellite
7	Gas - Test
8	Gas - Group
9	Gas - Proration - SE Alta only
10	Gas - Proration - Effluent Measurement
11	Gas - Single
12	Crude bitumen - Group
13	Crude bitumen - Proration
14	
	Crude bitumen - Single
15	Crude bitumen - Temporary

Appendix 1 Battery Type Code Table

Value	Description
02	Whitecourt
03	Wainwright
04	Calgary
05	Bonnyville
06	Drayton Valley
07	Edmonton
08	Medicine Hat
09	Red Deer
10	Grande Prairie

Appendix 2 AER Area Office Code Table

Value	Description
СР	Crude Pipeline
СТ	Central Treating Plant
D	Distributors
GP	Gas Plants
IN	Injection
NP	NGL Pipeline
R	Refinery
SC	Sulphur Consignee
TE	Terminals
TR	Transporters
WP	Waste Plants

Appendix 3 Facility Type Code Table

Value	Description
00	Natural Depletion
	·
10	Solvent Food
20	Water Flood
21	Water Flood Historical
22	Water Flood Historical
23	Water Flood Historical
24	Water Flood Historical
25	Water Flood Historical
26	Water Flood Historical
27	Water Flood Historical
40	Gas Flood
50	Partial Gas Flood
70	Water & Solvent Flood

Appendix 4 Recovery Mechanism Type Code Table

Appendix 5 Well Status Code 'Fluid' Table

Value	Description
00	Not Applicable
01	Crude Oil
02	Gas
06	Water
07	Brine
08	Waste
09	Solvent
10	Steam
11	Air
13	Carbon Dioxide
15	Nitrogen
16	Liquified Petroleum Gas
17	Crude Bitumen
20	Acid Gas
22	Coalbed Methane-Coals&Oth Lith
23	Coalbed Methane-Coals Only
24	Shale Gas & Other
25	Shale Gas Only
26	Cbm&Shale&Other Sources
31	Helium
50	Anhydrous Ammonia

51	Crude Oil/BIT
52	Naphtha
53	Propane
54	Butane
55	Ethane
56	Ethane Plus
57	Pentanes Plus
58	Diesel Oil
59	Alkaline Water
60	Micellar
61	Skim Oil
62	Skim Emulsion
63	Ammonium Nitrate
64	Source Water
65	Sand
66	Entrained Gas
98	Miscellaneous

Value	Description
00	Not Applicable
01	Suspended
02	Abandoned
03	Abandoned Zone
04	Abandoned & Re-Entered
06	Potential
07	Drilling & Cased
08	Junked & Abandoned
09	Closed
10	Flowing
11	Pumping
12	Gas Lift
13	Testing
14	Abandoned & Whipstocked
15	Drilling & Completing
16	Test Completed
17	Preset

Appendix 6 Well Status Code 'Mode' Table

Value	Description
00	Not Applicable
01	Reproducer
02	Storage
03	Injection
04	Disposal
05	Observation
06	Training
07	Experimental
08	Farm
09	Industrial
10	Cyclical
11	Source
12	Steam Assisted Gravity Drain
14	Linked To A Cavern

Appendix 7 Well Status Code 'Type' Table

Appendix 8 Well Status Code 'Structure' Table

Value	Description
00	Not Applicable
02	Dual Zone
03	Triple Zone
04	Four Zone
05	Commingled
06	Drain

Value	Description
0	Not applicable
1	Condensate
2	Oil
3	Condensate/Oil
4	Unconfirmed

Appendix 9 Gas Well Liquids Code Table

Value	Description
0	Standard Allowable
1	Good Production Practice
2	Selective MRL
3	Special Allowable
4	Gas Allowable
5	Not Applicable
6	Special Rate Control Well

Appendix 10 Allowable Type Code Table

Value	Description	
0	Not applicable	
1	Light-Medium Crude Oil	
2	Heavy Crude	

Appendix 11 Crude Oil Density Code Table

Value	Description	
	Not applicable	
В	Both Gas & Water Credits	
G	Gas Credits	
W	Water Credits	

Appendix 12 Penalty Relief Flag

Value	Description
02	Gas
03	Oil
05	Undesignated
06	Water
08	Waste
09	Solvent
10	Steam
11	Air
13	Carbon Dioxide
14	Polymer
15	Nitrogen
16	Liquid Petroleum Gas
18	Condensate
19	Oxygen
20	Acid Gas
31	Helium
50	Anhydrous Ammonia
51	Crude Oil/Bitumen
52	Naphtha
53	Propane
54	Butane
55	Ethane
56	Ethane Plus
57	Pentane Plus
60	Micellar
61	Skim Oil
62	Skim Emulsion

Appendix 13 Volumetric Fluid Code

63	Ammonium Nitrate
64	Source Water
65	Sand
66	Entrained Gas
67	Brackish Water