Mineable Oil Sands Well Data File

Layout Document

October 2019

**Alberta Energy Regulator**Mineable Oil Sands Well Data File

October 2019

Published by
**Alberta Energy Regulator**
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# Introduction

## Overview

Basic interpreted and non-interpreted data for non-confidential wells located in and around the Athabasca Oil Sands Surface Mineable Area.

## Problem Resolution

If you encounter problems with this product, please email informationrequest@aer.ca and outline in detail the problem.

## Available Format

This product is available as a TXT file.

## Confidentiality

All files and programs 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

|  |  |
| --- | --- |
| Availability | Annually |
| Sort Sequence | Ascending order of BHID (Bottom hole identifier) |
| File Structure | The Mineable Oil Sands Well Data is located in three different files. The three files are:header2017.csv Header Informationtops2017.csv Formation Topsdetails2017.csv Detailed Interpreted/Non-Interpreted DataThe file structure is comma delimited. The common field in each file is the BHID (drill hole identifier). The format of the BHID is based on the CPA-ID where applicable; otherwise it is the operator drillhole number. An explanation of the CPA-ID is as follows:AA/15-20-091-10W4/0 LE/LSD-SC-TWP-RG-M/ESLE - Location exception code is used to distinguish between holes drilled in the same LSD and the order they were drilled. Each hole would have a different LE (e.g., AA, AB, AC, etc.).LSD - Legal SubdivisionSC - SectionTWP - TownshipRG - RangeM - MeridianES - Event sequence code indicates the chronological sequence of a significant drilling and/or completion of a drill hole, which yields a separate and unique set of data. Most Oil Sands drill holes will have an Event Sequence Code of 0. |
| File Description | Basic interpreted and non-interpreted data for approximately 15 400 non-confidential wells located in and around the Athabasca Oil Sands Surface Mineable Area. The information is subject to updates and changes on an ongoing basis. Updates to the files will be made annually each February. The use of this data is strictly at the discretion of the user and the AER accepts no liability for the information contained in the files. |

# Fields and Descriptions

## File Name: Header File (header2017.csv)

Record Type: Comma Delimited Fields, Order Listed Below

|  |  |
| --- | --- |
| **Field** | **Description** |
| BHID | Unique drill hole identifier |
| CPA-ID | Unique Well Identifier |
| X83 | Drillhole Collar – UTM Easting – NAD 83 Datum |
| Y83 | Drillhole Collar – UTM Northing – NAD 83 Datum |
| LAT | Drillhole Collar – Latitude – NAD 83 Datum |
| LONG | Drillhole Collar – Longitude – NAD 83 Datum |
| ELEV | Drillhole Collar - Elevation |
| DATE | Finished Drilling Date |
| BHNAME | Operator, Property, Hole Type, Modified CPA-ID |
| TYPE | Data Type e.g. Logs/Core/Strip/No Data |
| CC | Drillhole Confidence Code ( −1 to 6; see appendix 1) |
| TD | Total Depth |

## File Name: Formation Tops File (tops2017.csv)

Record Type: Comma Delimited Fields, Order Listed Below

|  |  |
| --- | --- |
| **Field** | **Description** |
| BHID | Unique drill hole identifier |
| CPA-ID | Unique well identifier |
| BODDEPTH | Depth to base of Drift, formation code 10 |
| WABDEPTH | Depth to top of Wabiskaw Formation, formation code 3060 |
| MCMDEPTH | Depth to top of McMurray Formation, formation code 3280 |
| BHLDEPTH | Depth to top of Beaver Hill Lake Formation, formation code 7440 |

## File Name: Detailed Data File (details2017.csv)

Record Type: Comma Delimited Fields, Order Listed Below

|  |  |
| --- | --- |
| **Field** | **Description** |
| BHID | Unique drill hole identifier |
| CPA-ID | Unique Well Identifier |
| X83 | Interval Easting – UTM – NAD 83 Datum |
| Y83 | Interval Northing – UTM – NAD 83 Datum |
| Z | Midpoint Elevation of Interval |
| FROM | Depth to Start of Interval |
| TO | Depth to End of Interval |
| LENGTH | Length of Interval ( To – FROM ) |
| CORGR | Weight % Bitumen – Core Analysis |
| CALEGR | Weight % Bitumen – Geophysical Log Calculated or Grade Range Estimates (Strip Logs) |
| GRADE | CORGR with CALEGR merged to fill missing intervals |
| SHALE | Geophysical Log Calculated % Shale content |
| POROSITY | Geophysical Log Calculated Porosity |
| WATER | Geophysical Log Calculated % Water Content |

NOTE: Intervals have been subdivided so that CORGR intervals match with CALEGR intervals for merging data into the GRADE field.

1. Drillhole Confidence Codes

|  |  |
| --- | --- |
| **Code** | **Description** |
| — | Confidence not assigned |
| −1 | Very Poor or No Data, Strip Logs, Not For Use |
| 0 | No Core Data or Short Holes |
| 1 | Core Recovery less than 40% over McMurray Formation |
| 2 | Core Recovery 40% to 50% over McMurray Formation |
| 3 | Core Recovery 50% to 60% over McMurray Formation |
| 4 | Core Recovery 60% to 75% over McMurray Formation |
| 5 | Core Recovery 75% to 90% over McMurray Formation |
| 6 | Core Recovery 90% to 100% over McMurray Formation |

1. Formation Codes

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CODE** | **FORMATION** | **CODE** | **FORMATION** | **CODE** | **FORMATION** | **CODE** | **FORMATION** |
|  |  |  |  |  |  |  |  |
| 1 | None Identified | 2560 | Colony | 5020 | Schooler Creek | 7200 | Leduc |
| 3 | Infill No Tops | 2620 | Grand Rapids | 5060 | Baldonnel | 7280 | Duvernay |
| 10 | Base Of Drift | 2640 | Spirit River | 5080 | Charlie Lake | 7320 | Cooking Lake |
| 1060 | Edmonton | 2660 | Notikewin | 5100 | Boundary | 7400 | Majeau Lake |
| 1240 | Bearpaw | 2680 | McLaren | 5160 | Halfway | 7430 | Muskwa |
| 1260 | Belly River | 2700 | Waseca | 5200 | Doig | 7440 | Beaverhill Lake |
| 1270 | Judith River | 2715 | Falher | 5240 | Montney | 7480 | Moberly |
| 1300 | Oldman | 2760 | Sparky | 5560 | Belloy | 7500 | Christina  |
| 1320 | Foremost | 2780 | Wainwright | 6040 | Stoddart | 7520 | Calumet |
| 1340 | Basal Belly River | 2800 | Clearwater FM | 6050 | Taylor Flat | 7540 | Firebag |
| 1400 | Lea Park | 2810 | Clearwater SS | 6060 | Kiskatinaw | 7560 | Swan Hills |
| 1420 | Pakowki | 2860 | General Pet. | 6080 | Golata | 7580 | Slave Point |
| 1480 | Wapiabi | 2880 | Rex | 6100 | Rundle | 7620 | Fort Vermilion |
| 1580 | Milk River | 2900 | Wilrich | 6120 | Debolt | 7700 | Elk Point |
| 1600 | Colorado | 2940 | Lloydminster | 6280 | Livingstone | 7720 | Watt Mountain |
| 1640 | Medicine Hat | 3000 | Glauconitic | 6300 | Turner Valley | 7780 | Gilwood |
| 1660 | Bad Heart | 3020 | Cummings | 6380 | Elkton | 7810 | Sulphur Point |
| 1700 | Cardium | 3040 | BlueSky | 6400 | Shunda | 7820 | Muskeg |
| 1760 | Cardium SS | 3060 | Wabiskaw | 6420 | Pekisko | 7850 | Zama |
| 1800 | Blackstone | 3100 | Lower Mannville | 6440 | Banff | 7860 | Prairie Evaporite |
| 1820 | Kaskapau | 3120 | Ostracod Zone | 6460 | Bakken | 7880 | Keg River |
| 1840 | Jumping Pound | 3160 | Ostracod SS | 6480 | Exshaw | 7890 | Keg River SS |
| 1860 | 2nd White Specs | 3170 | Bantry Shale | 6580 | Wabamun | 7900 | Methy |
| 1900 | Doe Creek | 3220 | Dina | 6600 | Big Valley | 7920 | Winnipegosis |
| 1920 | Dunvegan | 3260 | Gething | 6660 | Stettler | 7930 | Lower Keg River |
| 1960 | Shaftsbury | 3280 | McMurray | 6680 | Crossfield | 7940 | Chinchaga |
| 2060 | Base Fish Scales | 3300 | Moulton | 6700 | Winterburn | 7960 | Contact Rapids |
| 2120 | Bow Island FM | 3320 | Sunburst | 6740 | Trout River | 8000 | Cold Lake |
| 2130 | Bow Island SS | 3360 | Ellerslie | 6780 | Graminia | 8020 | Ernestina |
| 2140 | Viking FM | 3440 | Cutbank | 6800 | Blueridge | 8040 | Lotsberg |
| 2180 | Viking SS | 3460 | Taber | 6820 | Kakisa | 8060 | Basal Red Beds |
| 2200 | Provost | 3480 | Cadomin | 6860 | Calmar | 9000 | Cambrian |
| 2220 | Hamilton Lake | 3500 | Detrital | 6940 | Arcs | 9030 | Lynx |
| 2280 | Peace River | 4020 | Kootenay | 6960 | Nisku | 9210 | Pika |
| 2300 | Paddy | 4080 | Nikanassin | 7020 | Jean Marie | 9220 | Eldon |
| 2320 | Cadotte | 4140 | Fernie | 7040 | Woodbend | 9300 | Stephen |
| 2360 | Joli Fou | 4200 | Swift | 7080 | Camrose | 9400 | Cathedral |
| 2380 | Harmon | 4240 | Rierdon | 7100 | Ireton | 9460 | Mount Whyte |
| 2420 | Basal Colorado | 4280 | Sawtooth | 7120 | Fort Simpson | 9760 | Granite Wash |
| 2440 | Blairmore | 4320 | Rock Creek | 7160 | Grosmont | 9800 | Pre-Cambrian |
| 2480 | Mannville | 4400 | Poker Chip | 7170 | Lower Ireton | 9999 | Total Depth |
| 2500 | Upper Mannville | 4440 | Nordegg |  |  |  |  |