

Canadian Crude Quick Reference Guide



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| | Grade | Name | Acronym | Seasonality | Sample Site | API (deg) | Sulfur (wt%) | TAN (mgKOH/g) | MCR (wt%) | Viscosity at 15°C/60°F (cSt) ¹ | Vapor Pressure (psi) ² |
|------------------------------------|------------------------|----------------------------|----------|-------------|-------------|-----------|--------------|---------------|-----------|---|-----------------------------------|
| Conventional | Medium Sour | Midale | MSM | | Cromer | 29.9 | 2.29 | 0.19 | 5.37 | 14.3 | 10.3 |
| | Heavy Sour | Bow River North | BRN | | Hardisty | 21.4 | 2.82 | 0.80 | 9.92 | 145 | 7.85 |
| | | Bow River South | BRS | | Milk River | 22.9 | 2.74 | 0.33 | 8.17 | - | - |
| | | Fosterton | F | Y | Regina | 20.9 | 3.24 | 0.23 | 9.61 | 148 | 6.67 ^{RVP} |
| | | Lloyd Blend | LLB | Y | Hardisty | 20.9 | 3.51 | 0.81 | 9.63 | 220 | 6.38 |
| | | Seal Heavy | SH | Y | Edmonton | 20.7 | 4.75 | 1.82 | 9.23 | 135 | 7.41 |
| | | Smiley-Coleville | SC | Y | Kerrobert | 20.3 | 3.03 | 0.97 | 9.45 | 197 | 4.93 ^{RVP} |
| Wabasca Heavy | WH | Y | Edmonton | 20.0 | 4.13 | 1.06 | 8.80 | 178 | 6.44 | | |
| Unconventional | Dilbit | Access Western Blend | AWB | Y | Edmonton | 21.8 | 3.92 | 1.69 | 10.69 | 209 | 8.88 |
| | | Christina Dilbit Blend | CDB | Y | Hardisty | 21.6 | 3.85 | 1.53 | 10.33 | 189 | 7.31 |
| | | Cold Lake | CL | Y | Hardisty | 21.0 | 3.78 | 0.97 | 10.42 | 208 | 8.88 |
| | | Western Canadian Select | WCS | Y | Hardisty | 20.9 | 3.50 | 0.94 | 9.75 | 219 | 8.40 |
| | Dilsynbit | Albian Heavy Synthetic | AHS | | Edmonton | 19.2 | 2.44 | 0.50 | 13.00 | 176 | 9.20 |
| Synthetic | Light Synthetic | CNRL Light Sweet Synthetic | CNS | | Edmonton | 35.1 | 0.07 | - | ND | 3.82 | 4.55 |
| | | Husky Synthetic Blend | HSB | | Hardisty | 31.7 | 0.10 | - | ND | 12.0 | 4.24 |
| | | Long Lake Light Synthetic | PSC | | Hardisty | 37.6 | 0.09 | - | ND | 5.54 | 2.25 |
| | | Premium Albian Synthetic | PAS | | Edmonton | 32.0 | 0.05 | - | ND | 9.56 | 0.70 |
| | | Suncor Synthetic A | OSA | | Edmonton | 32.6 | 0.17 | - | ND | 7.45 | 4.51 |
| | | Syncrude Sweet Premium | SSP | | Edmonton | 32.4 | 0.17 | - | ND | 9.89 | 4.15 |
| | Heavy Low Resid | Suncor Synthetic H | OSH | | Hardisty | 19.4 | 3.08 | 3.53 | 0.76 | 98.5 | 1.99 |
| Pooled Crudes - Ex Superior | Heavy Sour | Conventional Heavy | CHV | Y | Superior | 20.7 | 3.58 | 1.06 | 9.47 | - | - |
| | | Premium Conventional Heavy | PCH | Y | Superior | 21.3 | 3.13 | 0.78 | 9.95 | - | - |
| | Synbit | Synbit Blend | SYB | | Superior | 20.4 | 3.14 | 1.48 | 8.27 | - | - |
| | Medium Sour | Medium Sour Blend | MSB | | Superior | 32.7 | 1.83 | 0.30 | 4.81 | - | - |
| | Light Sour | Light Sour Blend | LSB | | Superior | 37.7 | 1.03 | 0.16 | 3.03 | 5.88 | - |
| | Light Sweet | Mixed Sweet Blend | MSW | | Superior | 39.5 | 0.41 | 0.17 | 1.90 | 5.02 | 11.78 |
| | Light Synthetic | Hardisty Synthetic Crude | HSC | | Superior | 32.9 | 0.12 | - | 0.14 | 8.54 | - |
| | | Premium Synthetic | PSY | | Superior | 33.3 | 0.09 | - | 0.15 | 11.1 | - |
| | Synthetic Sweet Blend | SYN | | Superior | 33.0 | 0.17 | - | 0.14 | 8.2 | - | |

"ND" indicates a value below the minimum detection limit

"-" indicates no available data

Results based on averages from Jan. 1, 2011 to May 31, 2015 from crudemonitor.ca, calculated on July 8, 2015

1 Viscosity based on regression calculations of Enbridge 2014 Crude Oil Characteristics

2 VCPR 4:1 @ 100°F based on Enbridge 2014 Crude Oil Characteristics, converted from kPa to psi

Visit <http://www.crudemonitor.ca> for up-to-date information

[See the Enbridge 2014 Crude Oil Characteristics report for more info on how viscosity and Vapor Pressure are obtained](#)

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| | Grade | Name | Acronym | [IBP x 375°F] | | | [375°F x 650°F] | | | [650°F x 980°F] | | | [980°F +] | | | Assay Date |
|-----------------------------|-----------------|----------------------------|---------|---------------|-----------|--------------|-----------------|-----------|--------------|-----------------|-----------|--------------|-----------|-----------|--------------|------------|
| | | | | Vol % | API (deg) | Sulfur (wt%) | Vol % | API (deg) | Sulfur (wt%) | Vol % | API (deg) | Sulfur (wt%) | Vol % | API (deg) | Sulfur (wt%) | |
| Conventional | Medium Sour | Midale | MSM | 28.57 | 59.1 | 0.10 | 26.68 | 34.8 | 1.41 | 25.89 | 19.7 | 2.90 | 18.86 | 3.5 | 4.90 | Jul-13 |
| | Heavy Sour | Bow River North | BRN | 22.08 | 71.3 | 0.05 | 13.91 | 29.6 | 1.25 | 27.61 | 14.8 | 2.44 | 36.40 | 2.0 | 4.64 | Dec-13 |
| | | Bow River South | BRS | 18.56 | 64.3 | 0.11 | 23.25 | 32.1 | 1.38 | 28.39 | 18.4 | 2.82 | 29.80 | 3.5 | 4.85 | Jul-13 |
| | | Fosterton | F | 17.17 | 64.0 | 0.07 | 22.97 | 32.1 | 1.74 | 27.44 | 18.9 | 3.23 | 32.42 | 3.5 | 5.07 | Mar-12 |
| | | Lloyd Blend | LLB | 20.34 | 72.8 | 0.05 | 17.88 | 28.8 | 1.26 | 21.42 | 17.6 | 2.76 | 40.36 | 4.4 | 5.82 | May-11 |
| | | Seal Heavy | SH | 25.04 | 67.4 | 0.17 | 17.36 | 29.0 | 2.52 | 21.36 | 15.0 | 4.55 | 36.24 | 2.2 | 7.38 | Mar-13 |
| | | Smiley-Coleville | SC | 18.61 | 70.1 | 0.06 | 19.13 | 28.5 | 1.52 | 26.99 | 16.5 | 2.96 | 35.27 | 3.3 | 4.69 | Jul-13 |
| | | Wabasca Heavy | WH | 19.29 | 64.8 | 0.09 | 20.37 | 29.3 | 1.98 | 26.11 | 15.9 | 3.94 | 34.23 | 3.1 | 6.68 | Apr-13 |
| Unconventional | Dilbit | Access Western Blend | AWB | 27.84 | 75.7 | 0.03 | 11.91 | 29.3 | 1.30 | 22.90 | 15.3 | 3.26 | 37.35 | 1.6 | 6.29 | Apr-15 |
| | | Christina Dilbit Blend | CDB | 27.42 | 74.4 | 0.03 | 12.32 | 29.1 | 1.35 | 24.61 | 15.2 | 3.32 | 35.65 | 1.9 | 6.21 | Mar-13 |
| | | Cold Lake | CL | 22.04 | 74.2 | 0.06 | 15.21 | 28.7 | 1.53 | 21.88 | 16.2 | 3.22 | 40.87 | 3.0 | 6.09 | Jul-14 |
| | | Western Canadian Select | WCS | 20.09 | 73.8 | 0.04 | 17.30 | 29.1 | 1.30 | 26.59 | 16.5 | 2.92 | 36.02 | 2.5 | 5.68 | Jun-13 |
| | Dilsynbit | Albian Heavy Synthetic | AHS | 27.20 | 72.6 | 0.02 | 7.18 | 28.7 | 1.43 | 29.94 | 12.7 | 2.14 | 35.68 | - | 4.03 | Mar-14 |
| Synthetic | Light Synthetic | CNRL Light Sweet Synthetic | CNS | 26.58 | 60.9 | ND | 52.15 | 30.8 | 0.03 | 21.27 | 20.4 | 0.26 | - | - | - | Jul-12 |
| | | Husky Synthetic Blend | HSB | 15.83 | 70.4 | 0.06 | 41.03 | 31.3 | 0.02 | 43.14 | 23.5 | 0.18 | - | - | - | Oct-11 |
| | | Long Lake Light Synthetic | PSC | 28.74 | 60.6 | ND | 41.66 | 34.2 | 0.02 | 29.60 | 27.2 | 0.19 | - | - | - | Sep-12 |
| | | Premium Albian Synthetic | PAS | 12.03 | 49.5 | ND | 61.91 | 31.7 | 0.02 | 26.06 | 23.8 | 0.08 | - | - | - | Dec-12 |
| | | Suncor Synthetic A | OSA | 24.98 | 65.4 | ND | 39.32 | 30.9 | 0.06 | 35.70 | 20.0 | 0.41 | - | - | - | Aug-11 |
| | | Syncrude Sweet Premium | SSP | 22.62 | 61.0 | ND | 39.03 | 32.4 | 0.02 | 38.35 | 20.1 | 0.43 | - | - | - | Apr-11 |
| | Heavy Low Resid | Suncor Synthetic H | OSH | 11.02 | 67.1 | 0.03 | 11.36 | 23.1 | 2.43 | 73.66 | 13.8 | 3.32 | 3.96 | 10.8 | 4.126 | Dec-13 |
| Pooled Crudes - Ex Superior | Heavy Sour | Conventional Heavy | CHV | 17.49 | 69.0 | 0.10 | 18.74 | 28.4 | 1.76 | 23.52 | 16.3 | 3.25 | 40.25 | 3.75 | 5.516 | Oct-14 |
| | | Premium Conventional Heavy | PCH | 23.48 | 74.9 | 0.04 | 16.11 | 30.5 | 1.08 | 24.60 | 16.8 | 2.44 | 35.81 | 3.31 | 4.903 | Mar-15 |
| | Synbit | Synbit Blend | SYB | 14.94 | 67.2 | 0.04 | 23.53 | 30.9 | 0.75 | 28.38 | 16.8 | 2.74 | 33.15 | 1.99 | 6.06 | Nov-14 |
| | Medium Sour | Medium Sour Blend | MSB | 33.69 | 65.4 | 0.08 | 24.97 | 36.0 | 0.96 | 22.97 | 21.8 | 2.20 | 18.37 | 8.25 | 4.193 | Sep-14 |
| | Light Sour | Light Sour Blend | LSB | 37.94 | 64.0 | 0.03 | 27.97 | 35.9 | 0.58 | 23.03 | 22.0 | 1.58 | 11.06 | 8.1 | 3.70 | Mar-14 |
| | Light Sweet | Mixed Sweet Blend | MSW | 36.26 | 64.9 | 0.02 | 26.76 | 37.8 | 0.17 | 23.75 | 25.3 | 0.51 | 13.23 | 13.9 | 1.42 | Aug-14 |
| | Light Synthetic | Hardisty Synthetic Crude | HSC | 20.80 | 62.0 | ND | 37.91 | 32.1 | 0.02 | 41.29 | 22.3 | 0.28 | - | - | - | Nov-14 |
| | | Premium Synthetic | PSY | 16.86 | 57.8 | ND | 49.74 | 31.8 | 0.02 | 33.40 | 22.8 | 0.22 | - | - | - | Jan-15 |
| Synthetic Sweet Blend | | SYN | 23.62 | 64.5 | ND | 41.37 | 31.9 | 0.04 | 35.01 | 20.5 | 0.37 | - | - | - | Apr-15 | |

"ND" indicates a value below the minimum detection limit

"-" indicates no available data

Visit <http://www.crudemonitor.ca> for up-to-date information

| °F | to | °C |
|-----|----|-----|
| 375 | | 190 |
| 650 | | 343 |
| 980 | | 527 |

Results from the most recent assay data at crudemonitor.ca

Table created on July 8, 2015

Distillation by ASTM D2892/ D5236 (TBP)

Sulfur by ASTM D4294, Density by ASTM D4052, D5002 and ASTM D70