



2025 Crude Characteristics
No. 56

2025 CRUDE CHARACTERISTICS

The 2025 Crude Characteristics Booklet is a summary of selected chemical and physical properties of crude oils and condensates moved in the Enbridge Pipelines Inc. (Enbridge)/Enbridge Energy Partners, L.P. system. Samples were collected over a limited period of time and may or may not be representative of shipments over the entire year.

Density at 15C, Vapour Pressure, Sulphur by Weight and Viscosity results at 10, 20, 30, 40 and 45C were tabulated.

The pieces of data were accumulated as follows:

- 1- Incoming streams were sampled upon first point of receipt into Enbridge custody, or injection onto Enbridge Mainline, or first comingle point.
- 2- Samples are tested at Edmonton and Superior Enbridge labs, as well as external laboratories.
- 3- All available test results for Density, Vapour Pressure, Sulphur and Viscosity are compiled, analyzed, and averaged to obtain Crude Characteristics results.
 - Heavy Viscosity data is compiled from samples tested during the lowest reference temperature time period.
- 4- Spot commodities are excluded from crude characteristics testing.
- 5- Vapour Pressure (1) All crude oils are reported as the VPCR4 @ 37.8oC, results are an annual average,
(2) All condensates are reported as DVPE

2025 Crude Characteristics

Product Identifier	Crude Type (Long Name)	Total Sulphur (% by wt.)	Vapour Pressure (kPa)	Density (kg/m3)	Viscosity (cSt) at Specified Temperature (degree Celsius)				
					10.00	20.00	30.00	40.00	45.00
AHS	ALBIAN HEAVY SYNTHETIC	2.98	69.4	930.7	248	125	70.0	40.0	32.0
AMH	Albian Muskeg River Heavy	4.22	62.3	922.1	238	128	71.0	47.0	38.0
AVB	ALBIAN VACUUM BOTTOMS	3.34	30.6	937.0	210	104	56.9	32.3	25.7
AWB	ACCESS WESTERN BLEND	4.08	68.6	919.1	282	162	84.0	53.0	47.0
BCH	BP CONVENTIONAL HEAVY BLEND	3.04*	62.8	927.5*	283	145	82.1	50.3	40.3
BHB	BOREALIS HEAVY BLEND	3.96	50.7	924.4	270	143	83.0	47.0	38.0
BR	BOW RIVER	3.59	69.2	927.0	225	120	70.0	43.0	35.0
CAL	CENTRAL ALBERTA PIPELINE	1.05	88.6	843.5	7.81	5.95	4.64	3.66	3.35
CAM	AMOCO CONDENSATE	0.04	69.1	724.4	0.910	0.820	0.730	0.520	0.500
CDB	CHRISTINA LAKE DIL-BIT BLEND	3.85	65.2	921.9	297*	154*	88.0*	54.0*	44.0*
CFT	FORT SASKATCHEWAN CONDENSATE	0.03	92.5	676.4	0.600	0.550	0.490	0.460	0.420
CGB	GIBSON CONDENSATE	0.08*	92.5	689.3*	0.660*	0.600*	0.550*	0.500*	0.480*
CGL	CONDENSATE GIBSONS LIGHT	0.03	91.9	687.7	0.550	0.510	0.470	0.450	0.420
CHV	CONVENTIONAL HEAVY	3.34	65.7	925.7	230	122	72.0	45.0	39.0
CL	COLD LAKE	3.79	64.0	925.4	281	148	85.0	54.0	43.0
CNS	CNRL LIGHT SWEET SYNTHETIC BLEND	0.15	33.9	866.1	9.33	6.75	5.09	3.97	3.54
CNX	CANADIAN NATURAL HIGH TAN	3.98	64.8	922.3	302	158	90.0	55.0	46.0
CPM	PEMBINA CONDENSATE	0.07	62.9	760.5	1.22	1.07	0.950	0.830	0.780
CPR	PEACE PIPE CONDENSATE	0.08	57.1	758.4	1.48	1.29	1.13	0.990	0.930
CRL	RANGELAND CONDENSATE	0.16	77.3	745.7	1.15	1.02	0.900	0.800	0.760
CRW	CONDENSATE BLEND	0.09	63.0	749.8	1.25*	1.09*	0.960*	0.850*	0.800*
CSW	CENTRAL ALBERTA SWEET	0.42	87.5	824.9	4.39	3.52	2.86	2.38	2.12
CWH	CLEARWATER HEAVY	4.21	63.6	925.9	193	112	66.0	42.0	34.0
F	FOSTERTON	3.64	56.3	918.9	226	122	71.0	44.0	36.0
FD	FEDERATED	0.36	83.1	821.5	4.92	3.89	3.12	2.55	2.33
FRB	FORT HILLS DILBIT	4.06	57.5	928.6	292	157	90.0	55.0	44.0
HSB	HUSKY SYNTHETIC BLEND	0.22	59.7	856.0	11.5	8.11	5.97	4.59	4.06
HSC	HARDISTY SYNTHETIC CRUDE	0.27	62.7	847.6	7.60	5.70	4.39	3.49	2.91
ISB	IMPERIAL SOUR BLEND	0.58	59.2	858.4	15.2	7.21	5.40	4.73	4.23
KDB	KEARL LAKE DILBIT	3.97	64.2	924.2	261	144	82.0	48.0	38.0
KSW	KINDER MORGAN SWEET	0.36*	66.6	816.8*	4.58*	3.69*	2.95*	2.33*	2.11*
LLB	LLOYDMINSTER BLEND	3.44	64.3	924.2	283	148	85.3	53.8	42.5
LLK	LLOYDMINSTER KERROBERT	3.24	71.6	923.3	196	107	63.0	40.0	32.6

* Results from 2024 Crude Characteristics.

n/a = Test was not done.

2025 Crude Characteristics

Product Identifier	Crude Type (Long Name)	Total Sulphur (% by wt.)	Vapour Pressure (kPa)	Density (kg/m3)	Viscosity (cSt) at Specified Temperature (degree Celsius)				
					10.00	20.00	30.00	40.00	45.00
LSB	LIGHT SOUR BLEND	1.15	84.3	834.8	5.61	4.34	3.41	3.08	2.51
M	MIDALE BLEND	2.05	73.4	858.9	12.4	8.52	6.17	4.73	4.22
MBL	HARDISTY LIGHT	1.94	75.9	846.9	11.9	8.67	6.57	5.13	4.57
MCG	ICG LIGHT SOUR	1.11	85.2	832.4	6.16	4.71	3.70	2.96	2.67
MGL	GIBSON LIGHT	0.47	83.6	819.1	4.88	4.11	3.07	2.51	2.29
MGS	GIBSON SOUR	1.31	84.7	837.2	10.4	7.61	5.77	4.35	4.01
MJT	MOOSE JAW TOPS	1.87	67.0	836.5	4.06	3.24	2.63	2.10	1.98
MLS	TUNDRA LIGHT SOUR	1.06	90.2	833.2	6.09	4.64	3.66	2.93	2.66
MM	MANITOBA MEDIUM	2.11	92.1	856.7	12.2	8.55	6.11	4.75	4.23
MML	MANITOBA LIGHT	1.09	89.1	832.9	6.06	4.60	3.62	2.92	2.65
MPR	PEACE PIPE LIGHT	0.39	87.2	808.6	4.16	3.33	2.68	2.19	1.99
MSB	MEDIUM SOUR BLEND	1.80	83.3	831.3	6.26*	4.79*	3.73*	3.02*	2.74*
MSE	SECURE ENERGY LIGHT SWEET	0.29	85.6	838.7	10.1	6.76	5.04	3.99	3.60
MSM	WESTSPUR MIDALE	2.11	82.3	861.0	11.8	8.46	6.21	4.81	4.34
MST	MANITOBA SWEET - TUNDRA	0.47	83.6	818.4	3.79	3.05	2.51	2.09	1.93
MSY	LIGHT SMILEY	0.31	85.3	839.1	10.2	6.71	4.96	3.97	3.56
NSA	PREMIUM NEWGRADE SYNTHETIC	0.07	48.9	844.6	4.80*	3.75*	3.01*	2.48*	2.26*
OCC	SUNCOR-CRACKED C	3.95	13.7	931.6	31.0	19.2	12.7	8.30	7.10
OSA	SUNCOR - A	0.20	44.8	861.6	7.37	5.46	4.20	3.33	2.98
OSC	SUNCOR - C	0.23	22.3	884.2	24.7	15.9	10.8	7.76	6.66
OSH	SUNCOR-OSH	3.26	19.8	937.2	152	75.0	42.0	26.0	21.0
OSM	SUNCOR M	0.16	23.3	858.4	5.84	4.50	3.52	2.82	2.57
OSN	SUNCOR - N	0.01	53.7	730.0	0.820	0.740	0.670	0.610	0.590
P	PEMBINA	0.32	85.9	821.1	7.21	4.88	3.72	2.92	2.63
PAS	PREMIUM ALBIAN SYNTHETIC	0.11	24.3	865.9	9.56	6.93	4.85	4.05	3.61
PBS	PINE BEND SPECIAL	3.24	38.4	927.8	244	127	73.0	45.0	36.0
PCH	PREMIUM CONVENTIONAL HEAVY	3.10	62.4	928.5	289	153	88.0	54.0	43.0
PDH	LONG LAKE HEAVY DILBIT BLEND	4.17	63.3	924.2	268	141	81.0	50.0	41.0
PSR	PLAINS MIDSTREAM SWEET REGINA	0.43	87.8	810.0	3.04	2.52	2.11	1.80	1.67
PSY	PREMIUM SYNTHETIC	0.14	24.5	866.5	8.83	7.00	5.26	4.09	3.65
PXB	PETROCHINA BLEND	2.62	29.7	931.7	211	112	62.0	40.0	33.0
RA	RAINBOW LIGHT	0.41	80.8	829.5	6.02	4.51	3.64	2.94	2.73
RSW	RANGELAND SWEET	0.26	84.6	813.2	4.24	3.40	2.75	2.26	2.07

* Results from 2024 Crude Characteristics.

n/a = Test was not done.

2025 Crude Characteristics

Product Identifier	Crude Type (Long Name)	Total Sulphur (% by wt.)	Vapour Pressure (kPa)	Density (kg/m ³)	Viscosity (cSt) at Specified Temperature (degree Celsius)				
					10.00	20.00	30.00	40.00	45.00
SC	SMILEY COLEVILLE HEAVY	3.15	64.9	926.1	247	129	76.0	47.8	39.6
SES	SOUTH EAST SASK	1.21	88.8	838.0	7.19	5.26	4.01	3.16	2.85
SH	SEAL HEAVY	5.14	53.2	928.1	243	130	78.0	48.2	39.2
SHD	SURMONT HEAVY DILBIT	4.22	61.3	923.5	256	138	90.0	47.9	38.6
SLD	SOUTHERN LIGHTS DILUENT	0.01	98.2	660.8	0.500	0.460	0.380	0.340	0.330
SPR	PEACE PIPE SOUR	1.23	85.9	822.4	4.80	3.30	2.55	2.26	2.07
SSP	SYNCRUDE SWEET PREMIUM	0.18	39.0	857.4	9.79	7.07	5.30	4.11	3.65
SSX	SHELL SYNTHETIC LIGHT	0.15	46.4	858.9	16.0	11.0	7.92	5.94	5.20
SW	MIXED BLEND SWEET	0.32	86.3	826.8	6.37	4.72	3.66	2.98	2.78
SYB	SYNBIT BLEND	2.90	30.8	932.0	269	127	73.0	52.0	44.0
SYN	SYNTHETIC SWEET BLEND	0.17	39.0	862.1	8.58	6.30	4.81	3.77	3.37
UHC	U.S. HIGH SWEET - CLEARBROOK	0.20	81.7	807.0	3.06	2.55	2.12	1.80	1.65
UHL	U.S. HIGH SWEET - LEWISTON	0.42**	67.3	805.0**	4.28	3.03	2.39	1.95	1.81
WCB	WESTERN CANADIAN BLEND	2.98	35.6	923.5	275	145	83.0	51.4	41.4
WCS	WESTERN CANADIAN SELECT	3.72	63.7	925.7	287	151	96.0	56.0	45.0
WDB	WESTERN CANADA DILBIT	4.13	50.2	923.4	240	128	74.0	47.0	38.0
WH	WABASCA HVY	4.46	58.9	926.5	240	133	74.0	48.0	39.0

* Results from 2024 Crude Characteristics.

n/a = Test was not done.