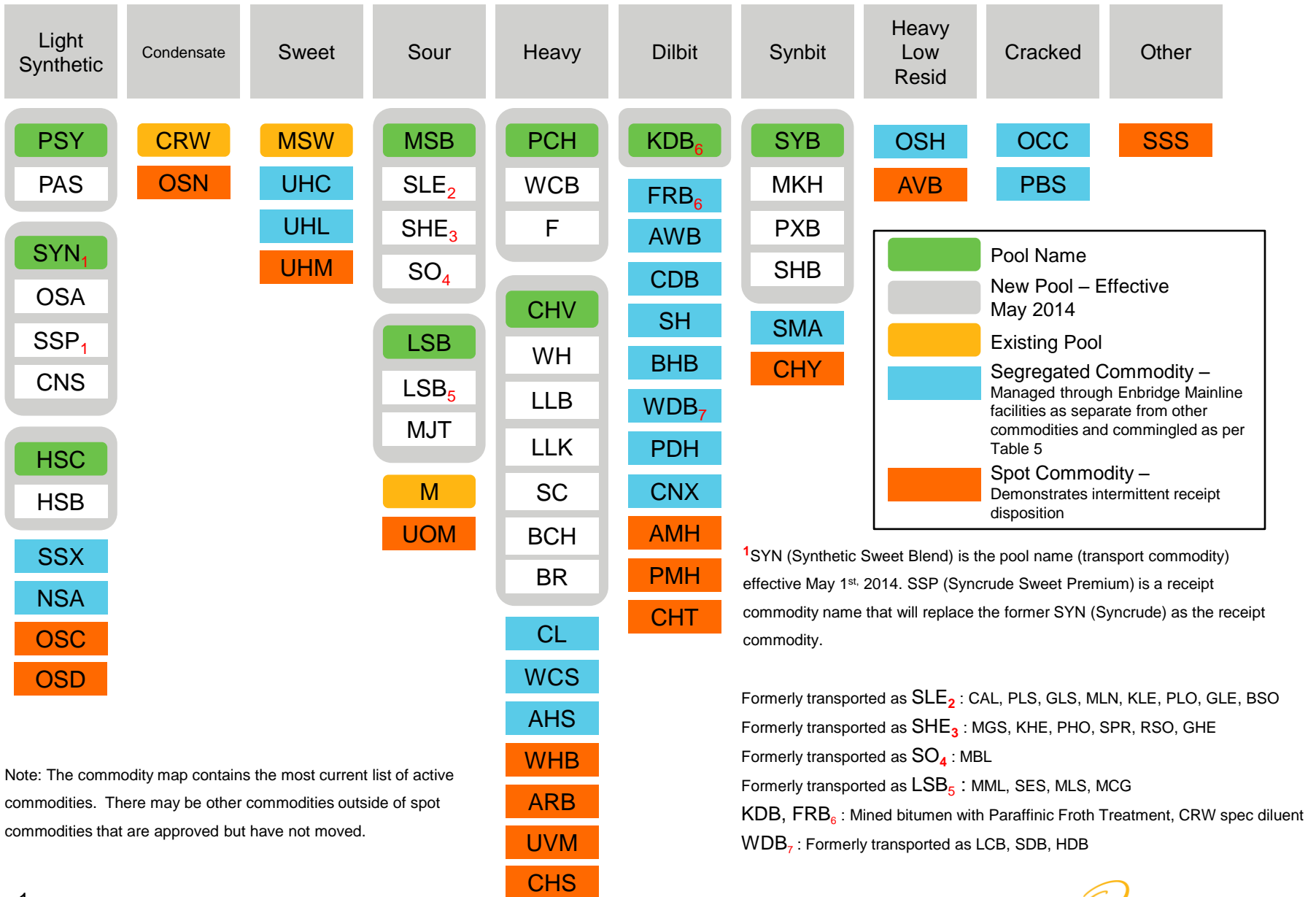


Crude Oil Commodity Map (Effective August 1, 2018)



Note: The commodity map contains the most current list of active commodities. There may be other commodities outside of spot commodities that are approved but have not moved.

Crude Oil Commodity Management Reference

Definitions

Pool: An aggregate of specific receipt commodities.

Segregated Commodity: Commodity that is managed through Enbridge mainline facilities as separate from other commodities and commingled as per Table 5 (Now identified as Appendix 1, "Throughput and Quality Management" found in Enbridge Liquids Pipeline Mainline Service Levels).

Spot Commodity: Demonstrates intermittent receipt disposition.

First Commingling Point: The first point at which a minimum of two components to a specific pool combine using common receipt and/or breakout tanks. Upon custody transfer to Enbridge, each component to an individual pool moves from its receipt ID to its transport ID. Individual components to a specific pool may be combined, in any ratio, prior to the defined first point of commingling under specific operational circumstances where Enbridge at its sole discretion deems it necessary for the safe or efficient operation of the system.

Pool Name	First Commingling Point
Premium Synthetic (PSY)	Edmonton (EP)
Synthetic Sweet Blend (SYN)**	Edmonton (EP)
Hardisty Synthetic Crude (HSC)	Hardisty (YP)
Condensate Blend (CRW)*	Edmonton (EP)
Mixed Sweet Blend (MSW)*	Edmonton (EP)
Medium Sour Blend (MSB)*	Edmonton (EP)
Light Sour Blend (LSB)*	Cromer (CM)
Midale (M)*	Cromer (CM)
Premium Conventional Heavy (PCH)	Superior (PR)
Conventional Heavy (CHV)	Superior (PR)
Synbit Blend (SYB)	Edmonton (EP)

* Equalized Pools

** SYN (Synthetic Sweet Blend) is the pool name (transport commodity) effective May 1st, 2014. SSP (Syn crude Sweet Premium) is a receipt commodity name that will replace the former SYN (Syn crude) as the receipt commodity.

Crude Oil Commodity Management

Crude Quality Group	Commodity Transport Method	Transport Commodity(ies)	Receipt Commodities
Light Synthetic	Pool	Premium Synthetic (PSY)	Premium Albian Synthetic (PAS)
		Synthetic Sweet Blend (SYN)	Suncor A (OSA) CNRL Light Sweet Synthetic Blend (CNS)
			Syncrude Sweet Premium (SSP)
		Hardisty Synthetic Crude (HSC)	Long Lake Light Synthetic Blend (PSC) Husky Synthetic Blend (HSB)
	Segregated	Shell Synthetic Light (SSX) Newgrade Synthetic Blend A (NSA)	Shell Synthetic Light (SSX) Newgrade Synthetic Blend A (NSA)
	Spot	Suncor C (OSC)	Suncor C (OSC)
		Suncor C (OSD)	Suncor C (OSD)

SYN (Synthetic Sweet Blend) is the pool name (transport commodity) effective May 1st, 2014. SSP (Syncrude Sweet Premium) is a receipt commodity name that will replace the former SYN (Syncrude) as the receipt commodity.

Currently Inactive

New Product

Crude Quality Group	Commodity Transport Method	Transport Commodity(ies)	Receipt Commodities
Condensate	Pool	Condensate Blend (CRW)	Pembina Condensate (CPM) Southern Lights Diluent (SLD) Fort Saskatchewan Condensate (CFT) Gibson Condensate (CGB) Condensate Gibsons Light Density (CGL) Plains Marketing Condensate (CLN) Kinder Morgan Condensate Blend (KRW) Pembina Nexus Condensate (CPN) Peace Pipe Condensate (CPR) Rangeland Condensate (CRL) Amoco Condensate (CAM) Rainbow Condensate (CRB) Rimbey Condensate (CRM) Petrocanada Condensate (CPC) Suncor N (OSN) Federated Condensate (CFD) Gibson Condensate Hardisty (CGY) Gibsons Condensate Blend (GRW)
	Spot	Suncor N (OSN)	Suncor N (OSN)
Currently Inactive			

Crude Quality Group	Commodity Transport Method	Transport Commodity(ies)	Receipt Commodities
Sweet	Pool	Mixed Sweet Blend (MSW)	Pembina (P) Gibson Light (MGL) Joarcam (MLN) Kinder Morgan Sweet (KSW) Pembina Sweet Blend (PSB) Peace Pipe Light (MPR) Rangeland Sweet (RSW) Redwater (RW) Rainbow Light (RA) Federated (FD) HCT Sweet Blend (HSW) Gibsons Mixed Blend Sweet (GSW) Light Smiley (MSY) Manitoba Sweet Tundra (MST) Plains Sweet Regina (PSR) BP SW (SWB) Central Alberta Sweet (CSW)
	Segregated	U.S. Sweet- Clearbrook (UHC) U.S. Sweet- Lewiston (UHL)	U.S. Sweet- Clearbrook (UHC) U.S. Sweet- Lewiston (UHL)
	Spot	U.S Sweet Mokena (UHM)	U.S Sweet Mokena (UHM)
	Currently Inactive		
	New Product		

Crude Quality Group	Commodity Transport Method	Transport Commodity(ies)	Receipt Commodities
Sour	Pool	Mixed Sour Blend (MSB)	Central Alberta Pipeline (CAL 1) Pembina Light Sour (PLS 1) Gibsons Light Sour (GLS 1) Joarcam (MLN 1) Kinder Morgan Low Sour (KLE 1) Pembina Low Sour (PLO 1) Gibsons Low Sour (GLE 1) BP Sour Blend (BSO 1)
			Gibson Sour (MGS 2) Kinder Morgan High Sour (KHE 2) Pembina High Sour (PHO 2) Peace Pipe Sour (SPR 2) Rangeland Sour (RSO 2) Gibsons High Sour (GHE 2)
			Hardisty Light (MBL 3)
		Light Sour Blend (LSB)	Manitoba Light (MML) South East Sask (SES) Tundra Light Sour (MLS) ICG Light Sour (MCG) Moose Jaw Tops (MJT)
	Midale (M)	Manitoba Medium (MM 4) Wespur Midale (MSM 4)	
Spot	U.S Mokena Sour (UOM)	U.S Mokena Sour (UOM)	

- Formerly transported as Edmonton Light Sour (SLE) 1
- Formerly transported as High Sulphur Sour (SHE) 2
- Formerly transported as Hardisty Sour (SO) 3
- Effective July 1, 2015 Midale transported as segregated commodity

Crude Quality Group	Commodity Transport Method	Transport Commodity(ies)	Receipt Commodities
Heavy	Pool	Premium Conventional Heavy (PCH)	Western Canadian Blend (WCB) Fosterton (F)
		Conventional Heavy (CHV)	Wabasca Heavy (WH) Lloydminster Hardisty (LLB) Lloydminster Kerrobert (LLK) Smiley Coleville (SC) BP Conventional Heavy Blend (BCH) Bow River (BR)
	Segregated	Cold Lake (CL) Albian Heavy Synthetic (AHS) Western Canadian Select (WCS)	Cold Lake (CL) Albian Heavy Synthetic (AHS) Western Canadian Select (WCS)
	Spot	Albian Residual Blend (ARB) U.S Mokena Heavy (UVM) Western Heavy Blend (WHB) Canadian Heavy Sweet (CHS)	Albian Residual Blend (ARB) U.S Mokena Heavy (UVM) Western Heavy Blend (WHB) Canadian Heavy Sweet (CHS)

Effective Jan 1, 2018 BR migrated from PCH to CHV

Crude Quality Group	Commodity Transport Method	Transport Commodity(ies)	Receipt Commodities
Dilbit	Pool	Kearl Lake Dilbit (KDB)*	Kearl Lake Dilbit (KDB)
	Segregated	Fort Hills Dilbit (FRB)* Access Western Blend (AWB) Christina Lake Dilbit (CDB) Seal Heavy (SH) Borealis Heavy Blend (BHB) Long Lake Heavy Dilbit Blend (PDH) Western Canada Dilbit (WDB)	Fort Hills Dilbit (FRB) Access Western Blend (AWB) Christina Lake Dilbit (CDB) Seal Heavy (SH) Borealis Heavy Blend (BHB) Long Lake Heavy Dilbit Blend (PDH) Western Canada Dilbit (WDB)
	Spot	Albian Muskeg River Heavy (AMH) Long Lake Heavy Mixed DilSynbit Blend (PMH) Canadian Heavy Dilbit (CHT)	Albian Muskeg River Heavy (AMH) Long Lake Heavy Mixed DilSynbit Blend (PMH) Canadian Heavy Dilbit (CHT)

* Mined bitumen with Paraffinic Froth Treatment, CRW spec diluent
Formerly transported as LCB, SDB, HDB

Crude Quality Group	Commodity Transport Method	Transport Commodity(ies)	Receipt Commodities
Synbit	Pool	Synbit Blend (SYB)	MacKay River Heavy (MKH) Surmont Heavy Blend (SHB) PetroChina Blend (PXB) Long Lake Heavy Synbit Blend (PSH)
	Segregated	Surmont Mix A (SMA)	Surmont Mix A (SMA)
	Spot	Canadian Heavy Synbit (CHY)	Canadian Heavy Synbit (CHY)

Currently Inactive

Effective August 1, 2018 trial segregation complete, migrated from segregated to SYB pool

Effective April 1, 2018 migrated from segregated to SYB Pool

Crude Quality Group	Commodity Transport Method	Transport Commodity(ies)	Receipt Commodities
Heavy Low Resid	Segregated	Suncor Synthetic H (OSH)	Suncor Synthetic H (OSH)
	Spot	Albian Vacuum Gas Oil Blend (AVB)	Albian Vacuum Gas Oil Blend (AVB)

Crude Quality Group	Commodity Transport Method	Transport Commodity(ies)	Receipt Commodities
Cracked	Segregated	Suncor Cracked C (OCC) Pine Bend Special (PBS)	Suncor Cracked C (OCC) Pine Bend Special (PBS)

Crude Quality Group	Commodity Transport Method	Transport Commodity(ies)	Receipt Commodities
Other	Spot	Sarnia Special Blend (SSS)	Sarnia Special Blend (SSS)