

**ChiCap Pipeline
Approved Crudes List**

	Symbol	Type	Origin	Gravity	Sulfur	Viscosity, SUS			
						20C (68F)	30C (86F)	40C (104F)	50C (122F)
<u>Domestic</u>									
Bakken	BAK	sw	ND	44.7	0.12	34.0		32.6	32.0
Bonito Sour	BSR	so	LA	33.6	1.05	65.2			43
Eugene Island	EI	so	LA	33.2	1.21	63.1			42.7
HLS	HLS	sw	LA	32.8	0.38	63.1	52.6	45.6	41.1
LLS	LLS	sw	LA	37.1	0.35	46.8	42.9	39.5	36.6
Mars	MAR	so	GOM	28.9	2.05	119	86.5	67.8	56.4
Mississippi Sweet	LMS	sw	MS	40.3	0.42	41.7	38.5	36.3	34.3
North Dakota Sweet	UHC	sw	ND	38.0	0.41	42.6	39.1	36.9	35.3
North Dakota Light	NDL	sw	ND	40.6	0.23	38.6			
Platte Light Sweet	PSW	sw	ND/MT	42.6	0.39	80.5			42.4
Port Hudson	LPS	sw	LA	43.0	0.05	36.2		35.0	34.6
Poseidon	POS	so	GOM	29.1	1.94	120	85.7	66.7	55.4
South Louisiana Sweet	SLS	sw	LA	32.5	0.40	71.9	57.0	48.8	43.3
Thunder Horse	THD	so	GOM	33.8	0.68	70.7	57.0	49.1	44.0
West Hackberry Sweet	WHS	sw	SPR	36.7	0.33	47.90	42.20	38.40	35.80
WTI (West Texas Sweet)	B	sw	Texas/NM	39.8	0.42	41.0	38.2	36.0	
WTS (West Texas Sour)	C	so	Texas/NM	32.0	1.88	54.3	46.8	41.8	
Wyoming Sweet (Montana Mix)	WSC	sw	WY	31.3	0.49	103	77.3	62.4	53.4
<u>Canada</u>									
Alberta Common Synthetic	ACS	sw	Canada	32.7	0.19	50.6	44.8	40.8	38
Albian Muskeg River Heavy (July to September only*)	AMH	H	Canada	21.6	3.72	908			
Albian Muskeg River Heavy / Peace Sour Blend (90/10) (July to October only*)		H	Canada	22.4	3.71	757	372	205	
Access Western Blend (June to November only*)	AWB	H	Canada	21.5	3.83	713	408	252	203
Bow River	BR	H	Canada	23.6	2.51	442	263	167	
Canadian Condensate	CRW	sw	Canada	63.6	0.14	< 32	< 32	< 32	< 32
Canadian Mixed Sweet (MSW)	CMB	sw	Canada	39.6	0.48	41.7	38.2	35.6	34.3
Cold Lake (June to October only*)	CL	H	Canada	21.9	3.66	764	434	267	
Edmonton High Sour	SHE	so	Canada	33.7	1.67	56.3	47.7	43.0	41.4
Fosterton (May to November only*)	FOS	H	Canada	20.6	3.13	653	360	218	
Horizon Syncrude	CNS	sw	Canada	37.3	0.14	37.5			32.6
Husky Synthetic Sweet	HSB	sw	Canada	32.7	0.10	54.0	46.8	42.1	
Keystone Heavy Blend (May to November only)	KHB	H	Canada	22.4	3.06	612	361		
Light Sour Blend (LSB)	CLS	so	Canada	34.6	1.34	48.1	43.3	40.2	37.6
LLB (June to November only*)	LLB	H	Canada	21.4	3.50	732	420	261	

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LLK (<i>June to November only*</i>)	LLK	H	Canada	21.0	3.31	700	408	251	
Midale	MID	so	Canada	29.5	2.28	86.5	63.0	51.1	44.3
Mixed Sour Blend	MSO	so	Canada	28.7	1.95	110	80.9	64.5	54.4
Newgrade Synthetic Sweet	NSA	sw	Canada	36.6	0.08	44.2	40.4	38.2	36.3
OSA (Suncor sweet)	OSA	sw	Canada	33.3	0.18	43.6	39.4		35.0
Premium Albion Synthetic Sweet	PAS	sw	Canada	33.9	0.02	41.4	37.5	34.6	32.6
Seal Heavy (<i>July to September only*</i>)	SH	H	Canada	20.3	4.82	878	438	287	197
Shell Premium Synthetic Sweet	SPX	sw	Canada	30.5	0.05	67.3	56.1	47.5	42.8
SLE	SLE	so	Canada	34.1	0.94	56.0	48.4	43.7	40.2
Smiley Coleville (<i>June to November only*</i>)	SC	H	Canada	20.3	2.98	695	401	246	
Surmont Heavy Blend (<i>July to October only*</i>)	SHB	H	Canada	20.0	3.01	801	441	264	
Syncrude (Imperial)	SYN	sw	Canada	31.9	0.15	49.0	43.6	39.8	37.3
Wabasca (<i>May to November only*</i>)	WAB	H	Canada	20.6	4.15	621	361	226	
Western Canadian Select (<i>June to Nov only*</i>)	CSL	H	Canada	21.2	3.46	681	392	243	146

** This restriction does not apply to the Mokena to Lemont segment*

<u>Foreign</u>									
Abo	ABO	sw	Nigeria	38.5	0.13	38.2	35.9	34.3	
Agbami	AGB	sw	Nigeria	47.4	0.05	35.6			< 32
Akpo	AKP	sw	Nigeria	46.3	0.07	33.6	< 32	< 32	
Alba condensate	-	sw	Equatorial Guinea	53.7	0.01	< 32	< 32	< 32	< 32
Amenam	AME	sw	Nigeria	40.7	0.08	36.2	34.6	33.3	32.3
Arab Light	ARL	so	Saudi Arabia	33.5	1.86	59.5	50.7	45.1	41.4
Arab Medium	ARM	so	Saudi Arabia	30.8	2.61	93.2	71.6	59.2	51.5
Asgard	-	sw	Norway	48.9	0.07	31			29
Basra Light	BAL	so	Iraq	30.2	2.93	85.3	67.0	56.1	48.8
Bonny Light	BL	sw	Nigeria	32.7	0.18	49.4	43.9	40.2	37.6
Bonga	BON	sw	Nigeria	29.8	0.26	57.4	49.4	44.3	40.8
Brass River	BRR	sw	Nigeria	36.0	0.13	41.0	37.8	35.6	33.6
Brent	BRE	sw	UK	37.9	0.45	44.2	40.7	37.9	36.0
Cabinda	CAB	sw	Angola	32.7	0.14	122	89.8	70.1	58.5
Ceiba	CEI	so	Equatorial Guinea	29.7	0.57	131	93.6	72.4	59.3
Cusiana	CUS	sw	Colombia	44.1	0.11	33.9	32.5	< 32	< 32
CPC Blend	CPC	so	Kazakhstan	43.3	0.51	35.9	34.2	32.9	32.0
Dalia (<i>May to November only</i>)	DAL	H	Angola	23.7	0.49	652	361	218	142
Draugen	DRA	sw	Norway	40.0	0.15	38.1	35.9	34.3	33.3

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E.A	E.A	sw	Nigeria	35.4	0.08	40.4	37.5	35.6	34.0
Ekofisk	EKO	sw	Norway	37.7	0.21	50.0	43.9	39.8	36.9
Erha	ERH	sw	Nigeria	33.7	0.19	49.0	43.6	39.8	37.3
Escravos	ESC	sw	Nigeria	33.4	0.17	52.0	44.8	40.8	37.9
Forcados	FOR	sw	Nigeria	28.9	0.18	60.1	50.0	44.3	40.2
Forties	FOT	sw	UK	40.4	0.61	39.4	36.8	35.0	33.6
Galeota	TRI	sw	Trinidad	42.4	0.13	32.5	< 32	< 32	< 32
Girassol	GIR	sw	Angola	30.1	0.33	108	78.5	62.0	52.4
Hungo	HUN	so	Angola	28.7	0.62	124	90.6	70.5	58.5
Kissanje	KIS	sw	Angola	30.5	0.37	90.6	68.9	56.8	49.1
Kuwait	KUW	so	Kuwait	30.3	2.71	97.8	73.9	60.2	52.1
Maya/Mars Blend (60/40) <i>(May to Nov only)</i>		H	Mexico/GOM	23.8	3.00	588	335	207	138
Nemba	NEM	sw	Angola	39.1	0.23	42.3	39.1	36.6	35.0
N'Kossa	NKO	sw	Congo	41.4	0.06	43.6	39.4	36.9	34.6
Okono	OKO	sw	Nigeria	40.5	0.13	35.8	34.2	32.6	< 32
Oseberg	OSE	sw	Norway	37.4	0.27	43.9	40.4	37.6	35.6
Oso Condensate	OSO	sw	Nigeria	46.0	0.05	33.2	32.1	< 32	< 32
Palanca	PAL	sw	Angola	36.5	0.18	52.6	45.8	41.4	38.2
Purovsky	PUR	sw	Russia	61.2	0.01	< 32	< 32	< 32	< 32
Qua Iboe	QIB	sw	Nigeria	34.3	0.14	45.4	40.1		36.3
Saharan Blend	SAH	sw	Algeria	45.2	0.09	35.2	33.9	32.6	< 32
Santa Barbara	SAN	so	Venezuela	39.5	0.48	37.8	35.5	34.0	32.6
Schiehallion	SCH	sw	UK	25.5	0.47	246	152	103	75.8
Sleipner Condensate	SLP	sw	Norway	62.1	0.01	< 32	< 32	< 32	< 32
Topacio	TOP	sw	Equatorial Guinea	27.0	0.34	106	78.9	62.4	52.7
Trinidad Gulf Stream Condensate	TRN	sw	Trinidad	73.1	0.02	< 32	< 32 @ 100F		
Troll	TRO	sw	Norway	30.1	0.21	73.4	58.4	49.8	44.3
Urals	URA	so	Russia	31.3	1.48	87.3	67.7	56.1	48.8
Vasconia	VAS	so	Colombia	25.3	0.95	275	172	116	84.3
Yoho	YOH	sw	Nigeria	39.3	0.07	36.5	34.9	33.6	32.3
Zafiro	ZAF	sw	Equatorial Guinea	30.9	0.25	62.3			41.8
Zuata Sweet	ZUA	sw	Venezuela	30.9	0.06	57.7	48.7	43.3	39.5
Zueitina	ZUE	sw	Libya	37.9	0.48	54.3	46.4	41.4	38.2

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