

**REFERENCE CRUDE OIL SPECIFICATIONS**

Parameter	Units		Method ASTM	Whole Crude	Atmospheric cuts						Vacuum cuts		
					LSR	MSR	DL	DM	DP	RAT	GO	LT	RV
Cut range	°C	-	Atmosferic D 2892 , D 86		C5+ -100	100 - 160	160 - 190	190 - 260	260 -360	360 +	360 - 405	405 - 552	552 +
	°F	-	Vacuum D5236, D1160		C5+ -212	212 - 320	320 - 375	375 - 500	500 - 680	680 +	680 - 761	761 - 1026	1026 +
Cut yields	% vol	min			40%		30%		4%	2,3%	1,4%	0,3%	
	% vol	max			67%		56%		8%	4,7%	2,7%	0,6%	
° API			D 4052, D1298	50 to 65	report	report	report	report	report	report	report	report	report
UOPK		min	UOP 375	12	report	report	report	report	report	report	report	report	report
TVR	psia	max	D 323, D5191, D6378	12									
Salts	lb/1000 bbl	max	D 3230	5									
W & S	% vol	max	D 4377, D 473, D 1796	0,5									
Pour point	°C	max	D97, D5949, D5853, D5950	-4									
Ethane	% wt	max	D 6730, D 2163	0,02%									
Mercury (Hg)	ppb wt	max	D5708, D5863, IP-501, 6722, UOP 938	5									
Total Sulphur (S)	% wt	max	D4294, D2622, D5453, D4045	0,05	0,01	0,01	0,05	0,05	0,05	0,05	0,05	0,06	0,12
Mercaptan Sulphur	ppm wt	max	UOP 163, D 3227	report			30	30	report	report	report	report	report
Acidity	mg KOH/g	max	D 664, D3242				0,1	0,1	report	report	report	report	report
Total Nitrogen	ppm wt	max	D 4629, D 5762		1	1	report	report	report	report	report	report	report
Oxigenates	ppm wt	max	D 4815, D6730		100	100							
Metals	ppb wt	max	UOP 391, UOP 389		405	1400							
Lead (Pb)	ppb wt	max	UOP 952, UOP 350, D5059, D-3237		10	25							
Arsenic (As)	ppb wt	max	UOP 946, UOP 296		1	5							
Copper (Cu)	ppb wt	max	UOP 962, UOP144,UOP 391		5	5							
Phosphorus compounds	ppb wt	max	D3231, UOP389		30	30							
Bromine Index	g Br/100g	max	UOP 304. UOP 999		0,02	0,02							

Referential values. Non-exclusive