

## Properties of Crude

## Crude Type: Murban Crude Oil

		Crude <b>MURBAN</b>								
		Country United Arab Emirates								
Density at 15°C, kg/m <sup>3</sup>	822.4				°C		wt%	vol%	°C	
°API	40.5				080		8.09	10.36	460	
Bbl/mt	7.660				090		9.54	12.05	480	
Acidity, mg KOH/g	0.05				100		11.19	13.94	500	
Sulphur, wt%	0.743				120		15.06	18.27	520	
Hydrogen Sulphide, mg/kg	0				140		19.48	23.11	540	
Mercaptan Sulphur, mg/kg	56				160		24.15	28.11	560	
Viscosity, cSt at 10 °C	6.5				180		28.80	33.01	580	
50 °C	2.5				200		33.37	37.77		
Pour Point, °C	-9				220		37.90	42.43		
Total Nitrogen, wt%	0.042				240		42.34	46.93		
Wax, wt%	-		wt%	vol%	260		46.50	51.09		
Wax Appearance Temperature, °C	-				280		50.32	54.85		
RVP at 37.8 °C, kPa	39	Ethane	0.00	0.01	300		54.08	58.49		
Water, vol%	-	Propane	0.17	0.28	320		58.22	62.45		
NaCl, mg/kg	-	Iso-Butane	0.19	0.28	340		62.69	66.68		
Nickel, mg/kg	1.6	n-Butane	0.69	0.97	360		65.76	69.57		
Vanadium, mg/kg	2.4				380		68.46	72.10		
Iron, mg/kg	-				400		71.62	75.04		
Mercury, µg/kg	-				420		74.89	78.06		
					440		78.03	80.93		





## Crude Type: El Sharara Crude Oil

	Crude	El Sharara		TBP DISTILLATION							
		Country	Libya								
Density at 15°C, kg/m3	812			°C		wt%	vol%				
°API	42.75			065		8.0	10.6				
				100		15.8	19.5				
Acidity, mg KOH/g	0.03			150		29.0	33.7				
Sulphur, wt%	0.08			200		40.2	45.20				
Hydrogen Sulphide, mg/kg	1			250		51.0	55.80				
Mercaptan Sulphur, mg/kg	2.7			300		60.8	65.10				
Viscosity, cSt at 20 °C	3.04			350		69.8	73.50				
40 °C	2.12			370		73.2	76.60				
Pour Point, °C	-60			FBP		100.0	100.0				
Total Nitrogen, ppm	648										
Wax, wt%	-		wt%								
RVP at 37.8 °C, psi	6.4										
Water, vol%	-		Methane + ethane	0.03							
Salt, lb/1000b	-		Propane	0.42							
			Butane	1.94							
			Pentane	3.66							



Crude Type: ULL Blend Crude Oil

		Crude	ULL Blend (70% SARB+30 % ULL)		TBP DISTILLATION				
		Country	Zurku Island						
Density at 15°C, kg/m3	817.2			°C		wt%	vol%		
°API	41.6			065		8.38	11.00		
				100		14.59	18.16		
Acidity, mg KOH/g	0.25			150		25.55	51.53		
Sulphur, wt%	0.568			200		36.46	41.40		
Hydrogen Sulphide, mg/kg	<1			250		46.54	51.53		
Mercaptan Sulphur, mg/kg	209			300		56.81	61.51		
Viscosity, cSt at 20 °C	3.11			350		66.29	70.46		
50 °C	1.88			370		69.74	73.64		
Pour Point, °C	-			FBP		100.00	100.00		
Total Nitrogen, ppm	392								
Wax, wt%	<5		wt%						
Salt, lb/1000b	2.0								
RVP at 37.8 °C, psi	7.73		Methane + ethane						
			0.05						
Water, vol%	0.05		Propane						
			0.34						
			Butane						
			1.46						
			Pentane						
			4.09						



## Properties of Crude

### Crude Type: WTI – Midland Crude Oil (Sweet)

Test	Unit	Result
API @ 60°F	°API	41.67
Density @ 15°C	g/cc	0.8167
Vapor Pressure	Psi	6.3
Pour point	°C	-29.0
Total Sulphur	% wt	0.140
H <sub>2</sub> S	ppm	-
Total Acid Number	mg KOH/g	0.03
K Factor		11.78
Total Nitrogen	ppm	684.2
Basic Nitrogen	ppm	222.6
Flash	°C	-23.6
n-Paraffin	%vol	40.34
Vanadium	ppm	0.47
Nickel	ppm	0.61
Sodium	ppm	<5
Iron	ppm	7.25
Salt Content	lb/1000 bbl	<5.0
Water Content	% vol	<0.05
Viscosity @ 40°C	cSt	2.8
Viscosity @ 50°C	cSt	2.3
Wax (shell)	% wt	5.98
Asphaltenes	% wt	0.06