

BASRA16Y

	Whole crude	Butane and Lighter IBP - 60F	Lt. Naphtha C5 - 165F	Hvy Naphtha 165 - 330F	Kerosene 330 - 480F	Diesel 480 - 650F	Vacuum Gas Oil 650 - 1000F	Vacuum Residue 1000F+
Cut volume, %	100.0	1.4	5.5	14.1	13.9	15.2	27.9	22.0
API Gravity,	29.9	119.2	87.0	60.5	47.0	34.2	21.0	4.0
Specific Gravity (60/60F),	0.877	0.564	0.648	0.737	0.793	0.854	0.928	1.044
Carbon, wt %	84.4	82.5	83.6	85.4	85.4	85.0	84.3	83.5
Hydrogen, wt %	12.9	17.5	16.4	14.6	14.3	13.2	12.1	11.3
Pour point, F	(67.7)			(117.1)	(58.0)	12.3	92.6	120.5
Neutralization number (TAN), MG/GM	0.260	0.004	0.004	0.042	0.092	0.237	0.382	0.362
Sulfur, wt%	2.927	0.001	0.003	0.031	0.279	1.786	3.431	6.142
Viscosity at 20C/68F, cSt	19.2	0.4	0.5	0.8	1.7	6.4	192.8	846,925,979.1
Viscosity at 40C/104F, cSt	10.1	0.3	0.4	0.6	1.3	3.8	57.9	12,633,472.4
Viscosity at 50C/122F, cSt	7.7	0.3	0.4	0.6	1.1	3.1	36.0	2,334,028.0
Mercaptan sulfur, ppm	62.6	8.5	27.1	31.3	42.1	19.1	2.9	0.1
Nitrogen, ppm	1,469.6	-	-	0.1	1.9	69.0	830.4	4,632.5
CCR, wt%	6.9						0.4	25.7
N-Heptane Insolubles (C7 Asphaltenes), wt%	2.6						-	10.0
Nickel, ppm	12.9							49.2
Vanadium, ppm	48.2							183.8
Calcium, ppm	1.0							
Reid Vapor Pressure (RVP) Whole Crude, psi	5.0							
Hydrogen Sulfide (dissolved), ppm	-							
Salt content, ptb	2.2							
Paraffins, vol %	38.0	100.0	93.0	64.7	59.6	38.8	24.5	4.2
Naphthenes, vol %	20.8	-	7.0	23.8	25.3	35.5	24.5	7.7
Aromatics (FIA), vol %	41.2	-	-	11.5	15.1	25.7	51.0	88.1
Distillation type, TBP								
IBP, F	32.1		60.9	166.0	330.7	480.8	651.6	1,001.7
5 vol%, F	135.9		68.5	174.9	337.4	488.5	665.7	1,016.8
10 vol%, F	206.1		73.5	184.4	344.8	496.9	681.5	1,034.0
20 vol%, F	319.4		83.5	202.7	359.6	513.9	713.4	1,069.9
30 vol%, F	426.5		99.7	220.1	374.4	530.9	745.7	1,107.8
40 vol%, F	536.8		106.0	236.9	389.4	547.9	778.6	1,148.2
50 vol%, F	648.5		112.3	253.2	404.4	564.8	812.3	1,191.6
60 vol%, F	763.3		130.7	269.1	419.4	581.8	847.0	1,238.6
70 vol%, F	887.4		139.9	284.6	434.4	598.8	882.8	1,290.2
80 vol%, F	1,030.6		148.6	299.9	449.5	615.8	920.1	1,347.6
90 vol%, F	1,212.3		157.0	315.0	464.7	632.9	959.0	1,413.0
95 vol%, F	1,331.2		161.0	322.5	472.3	641.4	979.2	1,451.2
EP, F	1,478.2		164.6	329.3	479.2	649.1	997.9	1,512.6
Freeze point, F				(105.3)	(46.0)	24.5		
Smoke point, mm				35.3	28.3	16.0		
Naphthalenes (D1840), vol%					0.9	9.3		
Viscosity at 100C/212F, cSt	2.9	0.2	0.3	0.4	0.7	1.4	7.1	7,357.1
Viscosity at 150C/302F, cSt	1.6	0.2	0.2	0.3	0.4	0.8	2.8	315.6
Cetane Index 1990 (D4737),				40.7	51.1	53.6		
Cloud point, F				(112.8)	(53.7)	17.6		
Aniline pt, F					139.9	158.3	173.4	