

KRLB918Y

	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	0.8	13.8	4.2	2.5	9.2	34.7	34.7
API Gravity,	19.8	116.7	92.1	59.6	34.2	25.1	13.4	4.5
Specific Gravity (60/60F),	0.935	0.570	0.633	0.740	0.854	0.903	0.976	1.040
Carbon, wt %	84.2	82.7	83.5	85.8	86.4	85.9	84.7	83.4
Hydrogen, wt %	12.0	17.3	16.5	14.2	12.9	12.3	11.3	11.0
Pour point, F	(30.1)			(214.3)	(179.8)	(139.3)	38.7	168.9
Neutralization number (TAN), MG/GM	2.121	0.000	0.006	0.036	0.058	1.444	3.339	1.979
Sulfur, wt%	4.000	0.002	0.007	0.027	0.574	1.765	3.695	6.372
Viscosity at 20C/68F, cSt	422.9	0.6	0.7	1.0	3.0	15.1	2,848.9	116,916,491,630.4
Viscosity at 40C/104F, cSt	105.9	0.5	0.5	0.8	2.0	7.3	430.7	674,305,456.8
Viscosity at 50C/122F, cSt	61.4	0.4	0.5	0.7	1.7	5.5	206.3	84,680,149.5
Mercaptan sulfur, ppm	57.5	15.7	55.3	117.8	93.6	18.2	1.3	0.0
Nitrogen, ppm	3,369.5	-	-	0.0	1.9	93.1	1,240.4	7,479.2
CCR, wt%	9.4						0.7	23.6
N-Heptane Insolubles (C7 Asphaltenes), wt%	3.0						-	7.8
Nickel, ppm	52.1							134.0
Vanadium, ppm	134.8							346.6
Calcium, ppm	116.0							
Reid Vapor Pressure (RVP) Whole Crude, psi	6.8							
Hydrogen Sulfide (dissolved), ppm	-							
Salt content, ptb	1.2							
Paraffins, vol %	21.3	99.6	95.5	48.4	16.2	10.0	2.6	0.4
Naphthenes, vol %	19.1	-	4.4	38.5	50.2	52.8	28.2	4.7
Aromatics (FIA), vol %	59.6	-	-	13.2	33.6	37.2	69.2	95.0
Distillation type, TBP								
IBP, F	47.4		62.9	165.4	331.8	481.5	652.3	1,001.8
5 vol%, F	83.5		70.0	169.6	347.3	493.7	671.6	1,018.5
10 vol%, F	110.6		72.6	174.7	361.9	506.2	691.7	1,037.3
20 vol%, F	425.2		78.0	186.6	385.1	528.2	728.7	1,076.1
30 vol%, F	641.7		83.3	199.6	403.3	547.5	762.7	1,116.9
40 vol%, F	752.8		97.4	212.5	418.5	564.9	795.0	1,160.0
50 vol%, F	846.2		102.5	224.9	431.6	581.2	827.1	1,205.4
60 vol%, F	945.0		107.4	237.3	443.1	596.5	859.9	1,253.3
70 vol%, F	1,050.8		112.3	250.6	453.6	611.1	893.7	1,304.5
80 vol%, F	1,170.4		131.2	266.1	463.1	624.8	928.5	1,359.9
90 vol%, F	1,310.7		144.6	287.9	471.9	637.7	963.9	1,421.2
95 vol%, F	1,393.2		153.3	304.1	476.0	644.0	981.8	1,456.6
EP, F	1,493.3		163.7	327.0	479.6	649.4	998.2	1,515.4
Freeze point, F				(203.2)	(168.8)	(130.7)		
Smoke point, mm				27.6	19.2	13.0		
Naphthalenes (D1840), vol%					0.1	1.5		
Viscosity at 100C/212F, cSt	9.8	0.3	0.3	0.4	0.9	2.0	18.5	69,780.0
Viscosity at 150C/302F, cSt	3.5	0.2	0.3	0.3	0.5	1.1	5.1	1,408.2
Cetane Index 1990 (D4737),				30.3	29.8	36.0		
Cloud point, F				(210.0)	(176.0)	(132.5)		
Aniline pt, F					137.2	132.9	130.9	