

22777 Springwoods Village Parkway,
Spring, TX 77389

HEBRON18

	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	0.1	0.3	2.2	8.2	18.3	42.0	28.9
API Gravity,	20.4	114.8	81.8	49.9	34.9	29.2	21.0	9.1
Specific Gravity (60/60F),	0.932	0.575	0.663	0.780	0.851	0.880	0.928	1.006
Carbon, wt %	86.6	82.7	83.8	85.7	87.1	87.0	86.8	86.1
Hydrogen, wt %	12.5	17.3	16.2	14.3	12.9	12.8	12.3	12.2
Pour point, F	26.6			(207.1)	(113.2)	(3.4)	95.9	135.2
Neutralization number (TAN), MG/GM	1.200	0.000	0.010	0.224	0.384	0.682	1.707	1.069
Sulfur, wt%	0.787	0.000	0.001	0.005	0.032	0.222	0.657	1.506
Viscosity at 20C/68F, cSt	368.3	0.5	0.6	1.0	2.3	8.1	331.8	181,123,210.9
Viscosity at 40C/104F, cSt	94.8	0.4	0.5	0.8	1.6	4.6	86.5	3,496,875.3
Viscosity at 50C/122F, cSt	55.5	0.4	0.5	0.7	1.4	3.6	50.9	719,823.5
Mercaptan sulfur, ppm	13.0	0.5	1.8	3.4	1.0	0.2	0.0	0.0
Nitrogen, ppm	2,444.2	-	-	0.0	0.7	34.6	938.2	6,543.8
CCR, wt%	5.0						0.2	15.8
N-Heptane Insolubles (C7 Asphaltenes), wt%	1.5						-	4.8
Nickel, ppm	5.5							17.7
Vanadium, ppm	3.8							12.1
Calcium, ppm	0.5							
Reid Vapor Pressure (RVP) Whole Crude, psi	0.4							
Hydrogen Sulfide (dissolved), ppm	-							
Salt content, ptb	32.0							
Paraffins, vol %	11.8	100.0	83.3	23.7	14.2	17.2	13.7	2.5
Naphthenes, vol %	38.3	-	16.7	70.8	55.4	53.0	40.9	19.3
Aromatics (FIA), vol %	49.9	-	-	5.4	30.5	29.8	45.4	78.2
Distillation type, TBP								
IBP, F	178.4		61.0	167.1	331.6	481.0	651.8	1,001.4
5 vol%, F	404.4		68.7	183.3	345.8	489.8	667.5	1,014.5
10 vol%, F	471.8		72.1	198.5	360.0	499.4	684.8	1,029.4
20 vol%, F	571.7		78.8	223.5	384.9	518.2	718.7	1,060.6
30 vol%, F	658.1		85.6	243.6	405.3	536.4	752.0	1,094.0
40 vol%, F	739.0		105.3	260.5	421.0	553.9	785.1	1,130.2
50 vol%, F	817.9		124.9	275.3	433.0	570.7	818.3	1,169.9
60 vol%, F	899.5		134.5	288.3	443.4	587.1	851.9	1,213.9
70 vol%, F	989.5		143.2	300.1	453.0	603.2	886.5	1,264.0
80 vol%, F	1,097.0		151.1	310.9	462.2	619.0	922.3	1,322.5
90 vol%, F	1,240.3		158.4	320.8	471.2	634.6	959.9	1,394.1
95 vol%, F	1,340.4		161.7	325.4	475.6	642.3	979.6	1,438.3
EP, F	1,477.1		164.7	329.6	479.6	649.2	997.9	1,505.6
Freeze point, F				(195.6)	(96.2)	11.0		
Smoke point, mm				24.6	17.1	10.6		
Naphthalenes (D1840), vol%					7.0	12.3		
Viscosity at 100C/212F, cSt	9.2	0.3	0.3	0.5	0.8	1.6	8.6	3,365.2
Viscosity at 150C/302F, cSt	3.3	0.2	0.2	0.3	0.5	0.9	3.2	183.0
Cetane Index 1990 (D4737),				25.4	31.0	43.3		
Cloud point, F				(202.8)	(110.0)	1.5		
Aniline pt, F					113.2	140.2	175.7	