

BALDR16Y

	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	1.0	2.9	9.8	12.6	20.9	34.2	18.6
API Gravity,	26.4	126.7	80.4	53.6	39.8	31.0	21.3	8.2
Specific Gravity (60/60F),	0.896	0.548	0.668	0.764	0.826	0.871	0.926	1.013
Carbon, wt %	86.4	82.4	83.9	85.8	86.5	86.7	86.7	86.2
Hydrogen, wt %	12.9	17.6	16.1	14.2	13.4	13.0	12.4	12.1
Pour point, F	18.4			(167.1)	(83.1)	(4.7)	91.2	121.2
Neutralization number (TAN), MG/GM	1.119	-	0.000	0.002	0.074	0.373	1.768	1.914
Sulfur, wt%	0.640	0.000	0.000	0.002	0.027	0.233	0.723	1.566
Viscosity at 20C/68F, cSt	32.4	0.4	0.6	0.9	2.0	7.2	254.3	145,980,740.4
Viscosity at 40C/104F, cSt	13.2	0.4	0.5	0.7	1.4	4.2	70.7	2,897,889.0
Viscosity at 50C/122F, cSt	9.3	0.3	0.4	0.7	1.2	3.3	42.6	604,017.4
Mercaptan sulfur, ppm	6.6	0.0	0.1	0.4	0.3	0.1	0.0	0.0
Nitrogen, ppm	1,632.5	-	-	0.0	0.7	27.7	1,092.7	5,845.9
CCR, wt%	3.7						0.2	17.2
N-Heptane Insolubles (C7 Asphaltenes), wt%	0.7						-	3.4
Nickel, ppm	3.4							16.0
Vanadium, ppm	11.7							55.3
Calcium, ppm	0.7							
Reid Vapor Pressure (RVP) Whole Crude, psi	4.7							
Hydrogen Sulfide (dissolved), ppm	-							
Salt content, ptb	36.6							
Paraffins, vol %	21.4	100.0	81.7	35.4	30.5	22.5	12.9	2.0
Naphthenes, vol %	39.4	-	18.3	52.6	42.8	51.0	43.6	16.8
Aromatics (FIA), vol %	39.2	-	-	12.1	26.7	26.5	43.5	81.1
Distillation type, TBP								
IBP, F	16.4		61.0	166.0	331.0	481.0	651.4	1,001.4
5 vol%, F	186.8		69.3	174.9	339.8	489.4	664.0	1,014.2
10 vol%, F	270.9		75.3	184.1	349.3	498.6	678.3	1,029.1
20 vol%, F	416.6		95.7	201.7	367.7	516.4	707.5	1,060.7
30 vol%, F	512.9		103.6	218.4	384.9	533.7	737.8	1,095.2
40 vol%, F	593.2		111.3	234.7	401.1	550.5	769.0	1,133.3
50 vol%, F	673.8		129.2	250.8	416.1	567.0	801.1	1,175.5
60 vol%, F	761.5		137.7	266.9	430.2	583.5	834.6	1,222.4
70 vol%, F	858.6		145.3	282.8	443.5	599.9	870.3	1,274.7
80 vol%, F	980.0		152.3	298.7	456.2	616.4	909.1	1,333.8
90 vol%, F	1,159.5		158.9	314.5	468.3	633.1	951.8	1,402.7
95 vol%, F	1,292.6		161.9	322.3	474.2	641.5	975.1	1,443.8
EP, F	1,467.6		164.7	329.2	479.4	649.2	997.4	1,507.6
Freeze point, F				(156.4)	(68.9)	8.7		
Smoke point, mm				20.8	16.9	12.6		
Naphthalenes (D1840), vol%					2.4	8.7		
Viscosity at 100C/212F, cSt	2.8	0.3	0.3	0.4	0.7	1.5	7.7	2,968.2
Viscosity at 150C/302F, cSt	1.4	0.2	0.2	0.3	0.5	0.9	3.0	166.9
Cetane Index 1990 (D4737),				26.4	38.0	46.8		
Cloud point, F				(162.6)	(78.5)	(1.3)		
Aniline pt, F					129.4	147.8	176.7	