

ANASR06X

	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	3.0	8.7	19.4	16.2	17.9	25.2	9.6
API Gravity,	39.7	123.3	82.6	55.1	43.6	34.7	25.5	11.5
Specific Gravity (60/60F),	0.827	0.555	0.661	0.758	0.808	0.851	0.901	0.989
Carbon, wt %	86.0	82.4	83.8	85.9	86.1	86.5	86.5	86.2
Hydrogen, wt %	13.6	17.6	16.2	14.1	13.8	13.4	12.9	12.5
Pour point, F	15.8			(120.0)	(50.5)	20.8	101.3	103.0
Neutralization number (TAN), MG/GM	0.030	0.003	0.004	0.034	0.035	0.017	0.029	0.061
Sulfur, wt%	0.311	0.000	0.000	0.001	0.013	0.185	0.521	1.144
Viscosity at 20C/68F, cSt	4.2	0.4	0.5	0.8	1.8	6.1	100.8	161,019.9
Viscosity at 40C/104F, cSt	3.0	0.3	0.4	0.6	1.3	3.7	36.0	14,296.2
Viscosity at 50C/122F, cSt	2.5	0.3	0.4	0.6	1.2	3.0	23.9	5,393.0
Mercaptan sulfur, ppm	-	0.1	0.3	0.9	0.8	0.4	0.1	0.0
Nitrogen, ppm	617.8	-	-	0.0	0.2	55.5	766.9	3,447.2
CCR, wt%	1.4						0.3	11.4
N-Heptane Insolubles (C7 Asphaltenes), wt%	0.3						-	2.3
Nickel, ppm	1.2							10.8
Vanadium, ppm	3.0							25.7
Calcium, ppm	0.5							
Reid Vapor Pressure (RVP) Whole Crude, psi	6.5							
Hydrogen Sulfide (dissolved), ppm	-							
Salt content, ptb	5.8							
Paraffins, vol %	39.5	100.0	85.1	46.3	44.7	35.8	24.0	3.5
Naphthenes, vol %	34.7	-	14.9	39.1	34.7	42.1	42.4	22.1
Aromatics (FIA), vol %	25.8	-	-	14.6	20.7	22.1	33.6	74.5
Distillation type, TBP								
IBP, F	(37.2)		60.8	165.9	330.7	480.8	651.3	1,001.0
5 vol%, F	93.5		68.4	173.6	337.3	488.2	663.6	1,010.5
10 vol%, F	149.7		76.0	182.0	344.6	496.4	677.5	1,021.4
20 vol%, F	235.5		89.5	198.5	359.3	512.6	706.5	1,044.5
30 vol%, F	320.8		101.4	214.6	374.2	528.7	736.3	1,069.8
40 vol%, F	412.4		112.3	230.6	389.3	544.9	767.1	1,097.8
50 vol%, F	505.1		122.3	246.6	404.4	561.5	798.9	1,129.4
60 vol%, F	597.9		131.6	262.8	419.6	578.6	832.4	1,165.8
70 vol%, F	704.0		140.5	279.2	434.8	595.9	868.1	1,209.5
80 vol%, F	828.4		148.9	295.9	449.9	613.5	906.9	1,264.7
90 vol%, F	992.1		157.1	312.8	465.0	631.4	950.2	1,342.3
95 vol%, F	1,122.9		161.1	321.4	472.5	640.6	974.1	1,399.1
EP, F	1,396.5		164.6	329.1	479.3	649.1	997.3	1,487.9
Freeze point, F				(108.1)	(39.5)	31.8		
Smoke point, mm				28.0	22.2	15.4		
Naphthalenes (D1840), vol%					2.9	9.0		
Viscosity at 100C/212F, cSt	1.4	0.2	0.3	0.4	0.7	1.4	5.7	190.8
Viscosity at 150C/302F, cSt	0.9	0.2	0.2	0.3	0.5	0.8	2.5	29.8
Cetane Index 1990 (D4737),				28.1	43.7	54.4		
Cloud point, F				(115.7)	(45.6)	25.8		
Aniline pt, F					136.6	163.4	197.3	