Bonny Light Crude Oil Assay

WHOLE CRUDE	
Gravity, °API	32.9
Specific Gravity	0.86
Sulfur, wt %	0.16
Nitrogen, ppm	1170
Pour Point °F	6.1
Pour Point °C	-14.4
Acid Number, mg KOH/g	0.19
Back-Blended Acid, mg KOH/g	0.17
Viscosity @ 40 °C (104 °F), cSt	4.99
Viscosity @ 50 °C (122 °F), cSt	4.05
Asphaltenes, C7, %	0.0032
Nickel, ppm	4.16
Vanadium, ppm	0.42
Characterization Factor, K	11.68

TBP YIELDS, VOL %	
Butanes and Lighter	0.92
Light Gasoline (55-175 °F)	4.25
Light Naphtha (175-300 °F)	13.73
Heavy Naphtha (300-400 °F)	10.12
Kerosene (400-500 °F)	13.28
Atm. Gas Oil (500-650 °F)	22.69
Lt Vacuum Gas Oil (650-800 °F)	16.81
Hvy Vacuum Gas Oil (800-1050 °F)	13.26
Vacuum Residuum (1050 °F+)	4.96

LIGHT GASOLINE (55-175 °F)	
Gravity, °API	80.5
Specific Gravity	0.67
Mercaptan Sulfur, ppm	0.15
Octane Number, Research, Clear	75.7

LIGHT NAPHTHA (175-300 °F)	
Gravity, °API	54.9
Specific Gravity	0.76
Mercaptan Sulfur, ppm	0.41
Naphthenes, vol %	53.25
Aromatics, vol %	12.45
Octane Number, Research, Clear	68

HEAVY NAPHTHA (300-400 °F)	
Gravity, °API	45.2
Specific Gravity	0.80
Sulfur, wt %	0.014
Mercaptan Sulfur, ppm	0.381
Naphthenes, vol %	66.43
Aromatics, vol %	14.59
Smoke Point, mm (ASTM)	24

KEROSENE (400-500 °F)	
Gravity, °API	35.1
Specific Gravity	0.85
Sulfur, wt %	0.05
Mercaptan Sulfur, ppm	0.55
Naphthenes, vol %	62.1
Aromatics, vol %	20.18
Freezing Point, °F	-52.1
Freezing Point, °C	-46.7
Smoke Point, mm (ASTM)	18.6
Acid Number, mg KOH/g	0.04
Viscosity @ 50 °C (122 °F), cSt	1.66

ATM. GAS OIL (500-650 °F)	
Gravity, °API	30.9
Specific Gravity	0.87
Sulfur, wt %	0.13
Nitrogen, ppm	83.3
Acid Number, mg KOH/g	0.06
Pour Point °F	8.3
Pour Point °C	-13.2
Viscosity @ 50 °C (122 °F), cSt	3.7
Cetane Index	48.5
Characterization Factor, K	11.61

Bonny Light Crude Oil Assay

ATM. RESIDUUM (650 °F+)	
Yield, vol%	35.02
Gravity, °API	19
Specific Gravity	0.94
Sulfur, wt %	0.32
Nitrogen, ppm	3010
MCR, wt%	3.48
Asphaltenes, C7, %	0.00828
Nickel, ppm	10.8
Vanadium, ppm	1.09
Pour Point °F	93.8
Pour Point °C	34.3
Viscosity @ 50 °C (122 °F), cSt	111
Viscosity @ 100 °C (212 °F), cSt	14.9
Characterization Factor, K	11.64

LT VAC. GAS OIL (650-800 °F)	
Gravity, °API	23.5
Specific Gravity	0.91
Sulfur, wt %	0.24
Nitrogen, ppm	740
Naphthenes, vol %	46.1
Paraffins, vol%	13.68
Pour Point °F	63.9
Pour Point °C	17.7
Acid Number, mg KOH/g	0.23
Aniline Point, °F	162.1
Aniline Point, °C	72.3
Hydrogen, wt%	12.58
Viscosity @ 50 °C (122 °F), cSt	18.3
Viscosity @ 100 °C (212 °F), cSt	4.45
Characterization Factor, K	11.58

HVY VAC. GAS OIL (800-1050 °F)	
Gravity, °API	18.5
Specific Gravity	0.94
Sulfur, wt %	0.32
Nitrogen, ppm	3430
Pour Point °F	111.9
Pour Point °C	44.4
Acid Number, mg KOH/g	0.61
Aniline Point, °F	176.3
Aniline Point, °C	80.1
Hydrogen, wt%	12.05
Viscosity @ 50 °C (122 °F), cSt	240
Viscosity @ 100 °C (212 °F), cSt	21.9
Characterization Factor, K	11.75

VACUUM RESIDUUM (1050 °F+)	
Yield, vol%	4.957
Gravity, °API	6.7
Specific Gravity	1.02
Sulfur, wt %	0.53
Nitrogen, ppm	8820
Hydrogen, wt%	11.19
MCR, wt%	19.9
Asphaltenes, C7, %	0.052
Nickel, ppm	69.3
Vanadium, ppm	6.78
Pour Point °F	130.7
Pour Point °C	54.9
Viscosity @ 50 °C (122 °F), cSt	1990000
Viscosity @ 100 °C (212 °F), cSt	5950
Viscosity @ 135 °C (275 °F), cSt	553
Cutter, vol% in Fuel Oil	37.4
Fuel Oil Yield, vol%	7.92
Characterization Factor, K	11.7