

# Agbami Crude Oil Assay

## USGC Cutpoints

Whole Crude	
Gravity, °API	47.2
Sulfur, wt %	0.05
Pour Point, °F	35
Pour Point, °C	1.6
Measured Acid, mg KOH/g	<0.05
Blended Back Acid, mg KOH/g	0.07
Viscosity @ 40°C (104°F), cSt	1.98
Viscosity @ 50°C (122°F), cSt	1.69
Characterization Factor, K	12.1

Yields, VOL %	
Lt Gasoline (55-175°F)	9.6
Lt Naphtha (175-300°F)	19.0
Hvy Naphtha (300-400°F)	14.3
Kerosene (400-500°F)	15.1
Atm Gas Oil (500-650°F)	19.2
Lt Vac Gas Oil (650-800°F)	10.9
Hvy Vacuum Gas Oil (800-1050°F)	5.2
Vac Resid (1050-FBP°F)	1.6

Light Gasoline (55-175°F)	
Gravity, °API	83.2
Mercaptan Sulfur, ppm	1
Octane Number, Research, Clear	73.8

Light Naphtha (175-300°F)	
Gravity, °API	57.6
Mercaptan Sulfur, ppm	5
Naphthenes, vol %	36.0
Aromatics, vol %	11.7
Octane Number, Research, Clear	59.4

Heavy Naphtha (300-400°F)	
Gravity, °API	51.1
Sulphur, wt %	0.01
Mercaptan Sulfur, ppm	6
Naphthenes, vol %	26.1
Aromatics, vol %	11.4
Smoke Point, mm (ASTM)	22

Kerosene (400-500°F)	
Gravity, °API	45.3
Sulphur, wt %	0.02
Mercaptan Sulfur, ppm	4
Naphthenes, vol %	30.5
Aromatics, vol %	11.6
Freezing Point, °F	-15
Smoke Point, mm (ASTM)	17
Acid, mg KOH/g	0.05
Viscosity @ 50°C (122°F), cSt	1.49

ATM Gas Oil (500-650°F)	
Gravity, °API	38.9
Sulfur, wt %	0.05
Nitrogen, ppm	97.0
Naphthenes, vol %	35.3
Paraffins, vol%	49.8
Acid, mg KOH/g	0.12
Pour Point, °F	41
Viscosity @ 50°C (122°F), cSt	3.26
Cetane Index	67
Characterization Factor, K	12.2

LT VAC Gas Oil (650-800°F)	
Gravity, °API	32.4
Sulfur, wt %	0.13
Nitrogen, ppm	715
Naphthenes, vol %	39.2
Paraffins, vol%	40.3
Pour Point, °F	85
Acid, mg KOH/g	0.20
Aniline Point, °F	187
Viscosity @ 50°C (122°F), cSt	10.0
Viscosity @ 100°C (212°F), cSt	3.04
Characterization Factor, K	12.2

HVY VAC Gas Oil (800-1050°F)	
Gravity, °API	20.5
Sulfur, wt %	0.25
Nitrogen, ppm	3700
Pour Point, °F	105
Acid, mg KOH/g	0.17
Aniline Point, °F	207
Viscosity @ 50°C (122°F), cSt	101
Viscosity @ 100°C (212°F), cSt	14.2
Characterization Factor, K	11.9

ATM Residuum (650-FBP °F)	
Yield, vol %	17.7
Gravity, °API	24.9
Sulfur, wt %	0.18
Nitrogen, ppm	2200
MCRT, wt %	4.2
Asphaltenes, wt % (C7 Insolubles)	1.7
Nickel, ppm	3.8
Vanadium, ppm	0.4
Pour Point, °F	95
Viscosity @ 50°C (122°F), cSt	29.6
Viscosity @ 100°C (212°F), cSt	6.63
Characterization Factor, K	11.9

Vacuum Residuum (1050-FBP °F)	
Yield, vol %	1.6
Gravity, °API	-3.3
Sulfur, wt %	0.28
Nitrogen, ppm	5900
MCRT, wt %	33.0
Asphaltenes, wt % (C7 Insolubles)	15.3
Nickel, ppm	35
Vanadium, ppm	3.9
Iron, ppm	12
Pour Point, °F	170
Viscosity @ 50°C (122°F), cSt	253500
Viscosity @ 100°C (212°F), cSt	3100
Viscosity @ 135°C (275°F), cSt	460