

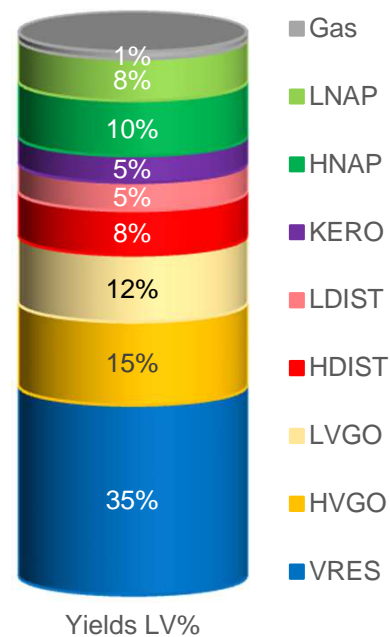
LIFTINGS

Country	PERU
Terminals	Bayovar (PetroPeru) / El Manati (Perenco)
Location	Bayovar / Boca del Napo river
Loading Restriction	Max 250k DWT / Max 15k DWT
Loading Rate	85,000 bbl/hour
Cargo Size	440,000 bbl for Bayovar / 40,000 to 100,000 bbl for El Manati
Note	Max 27 m / variable



CRUDE OIL CHARACTERISTICS

General	Pirana Blend is a heavy, medium sulfur, aromatic asphaltenic Crude Oil, with very good pour point and Gas Oil yield of excellent cold properties.
Naphtha	Good yield of Naphtha suited for reforming and isomerization units.
Gas Oil	Excellent cold properties with good cetane index suitable for Diesel after hydrotreating.
VGO	Can be used internally to substitute 3 WT% Fuel Oil # 6 as it features 2.5 WT% of sulfur and high heating value.
Residue	Good source (+30 LV%) of excellent Asphalt with high ductility and good range of viscosity grades.



PIRANA

API Gravity	20.29
Density 15°C kg/l	0.9316
Sulfur WT%	2.33
Nitrogen ppm	4000
RVP kPa	12.4
Pour Point °C	-21
TAN mgKOH/g	0.3
Viscosity 40°C cSt	257.8
Viscosity 50°C cSt	142.9
Vanadium ppm	324
Nickel ppm	91

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