

Certificate of Analysis

Nomination ID: COCNG-23-02102

Bureau Veritas Corporation Cienaga Laboratory Vía 40 No 85-999, Parque Logístico Logika bodegas B11, B12 y B13 Barranquilla, Colombia E: marilyn.munoz@bureauveritas.com

Product : Gasoline Date Client : Odin Petroil Date Client Address : Km 1 Vía San Francisco Mamatoco Troncal,Santa Marta Date	Inter Sampled : 04-Jul-2023 Inter Analyzed : 05-07-Jul-2023 Inter Reported : 10-Jul-2023 Ib Number : 02-8008-1
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	Petróil 90 Gasolina Premium sin oxigenante Submitted Sample		
Method	COCNG-23-02102-001 Test Result		
IAC - 053 **	RON	90.2	
	MON	82.4	
	R+M / 2	86.3	
ASTM D3237 -17	Lead Content, mg/L	5.8	
	Lead Content, g/L	0.0058	
ASTM D1319 -20a	Aromatics, % (V/V)	33.5	
ASTM D3606B -17 **	Benzene, % (V/V)	0.40	
ASTM D2622 -21	Total Sulfur Content, mg/kg	34.3	
ASTM D130 -19	Corrosion Copper Strip - 3h at 50°C (122°F)	1a	
ASTM D381 -22	Sample Filtered	No	
	Unwashed Gum Content, mg/100mL	17.5	
	Washed Gum Content, mg/100mL	0.5	
ASTM D525 -12a(2019)	Induction Period at 100°C, Minutes	>240	
	Obs Baro Pressure. kPa	101.3	
	Manual/Automated	Manual	
	IBP, °C	40.0	
	5% Recovered, °C	61.0	
	10% Recovered. °C	70.5	
	20% Recovered, °C	85.5	
	30% Recovered, °C	98.5	
	40% Recovered, °C	109.5	
	50% Recovered, °C	119.5	
ASTM D86 -20b	60% Recovered, °C	130.0	
	70% Recovered, °C	142.5	
	80% Recovered, °C	155.0	
	90% Recovered, °C	161.0	
	95% Recovered, °C	166.0	
	Endpoint, °C	192.0	
	Recovery, % (V/V)	98.5	
	Residue, % (V/V)	1.0	
	Loss, % (V/V)	0.5	
	Drying Agent Used	No	
	DVPE, psi	5.72	
	DVPE, kPa	39.4	
ASTM D5191, ASTM Calc20	Hazy	No	
	Container Size	1L	
	Bath Verification	Yes	
ASTM D1296 -23 **	Odor	Characteristic	
ASTM D4052 -22	API Gravity @60°F, °API	54.2	
	Density at 60°F, g/mL	0.7614	

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Marilyn Muñoz ,Laboratory Supervisor

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End of Certificate

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