



ISO/IEC 17025:2017  
18-LAB-006

# Certificate of Analysis

Nomination ID: COCNG-22-01708

Bureau Veritas Corporation  
Cienaga Laboratory  
Calle 20 #30-38  
Cienaga, Colombia  
E: marilyn.munoz@bureauveritas.com  
T: +57 53160713

**Vessel / Tank :** Not Applicable  
**Product :** Diesel Oil  
**Client :** ODIN PETROIL S.A  
**Client Address :** km 1 VIA SAN FRANCISCO, MAMATOCO , Santa Marta  
**Submitted by :** ODIN PETROIL S.A

**Date Sampled :**  
**Dated Received :** 29-Aug-2022  
**Date Analyzed :** 31-Aug-2022  
**Date Reported :** 19-Sep-2022  
**Job Number :** 22-414

PETROIL 50-10 Submitted Sample		
COCNG-22-01708-001		
Method	Test	Result
ASTM D2622 -16	Total Sulfur Content, mg/kg	8.0
† ASTM D613 -18ae1 **	Cetane Number	49.8
ASTM D7371 -14	Biodiesel, % (V/V)	11.20
ASTM D130 -19	Corrosion Copper Strip - 3h at 50°C (122°F)	1a
ASTM D1500 -12(2017)	ASTM Color	L0.5
ASTM D4530 -15(2020)	MCRT on 10% Distillation Residue, % (m/m)	<0.10
ASTM D445 -19a	Kinematic Viscosity at 40°C, mm <sup>2</sup> /s	2.989
ASTM D86 -20b	Obs Baro Pressure, kPa	101.3
	Manual/Automated	Manual
	IBP, °C	192.0
	5% Recovered, °C	209.0
	10% Recovered, °C	218.5
	20% Recovered, °C	233.5
	30% Recovered, °C	247.0
	40% Recovered, °C	261.0
	50% Recovered, °C	276.0
	60% Recovered, °C	287.0
	70% Recovered, °C	300.0
	80% Recovered, °C	312.0
	90% Recovered, °C	326.0
	95% Recovered, °C	334.0
	Endpoint, °C	343.0
	Recovery, % (V/V)	98.5
	Residue, % (V/V)	1.5
Loss, % (V/V)	0.0	
Drying Agent Used	No	
ASTM D2709 -16	Water and Sediment, % (V/V)	< 0.01
ASTM D97 -17b	Pour Point, °C	<-24
ASTM D6371 -17a	Cold Filter Plugging Point (CFPP), °C	-18
ASTM D2500 -17a	Cloud Point, °C	-14
ASTM D93A -20	Corrected Flash Point, °C	77.5
ASTM D482 -19	Ash, % (m/m)	0.0012
ASTM D6079 -18	Upper Specimen Batch	23032
	Lower Specimen Batch	v1069/24
	Test Temperature, °C	60
	Major Axis, µm	240
	Minor Axis, µm	200
	Wear Scar Diameter, µm	220
ASTM D6468 -08(2019)	Aging Time	180 Minutes
	Reflectance Rating, %	98
ASTM D1298 -12b(17)	API Gravity, °API	33.9
	Relative Density@60°F	0.8555

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ASTM D2274 -14(2019)	Test Time, Hours	16
	Filterable Insolubles, mg/100mL	0.1
	Adherent Insolubles, mg/100mL	0.3
	Total Insolubles, g/m <sup>3</sup> / mg/100mL	4 / 0.4
ASTM D1319 -20a	Aromatics, % (V/V)	26.2

## Job Comments

## Comments

<sup>1</sup> Analysis performed by contracted laboratory

Marilyn Muñoz ,Laboratory Supervisor

Test(s) marked as (\*\*) is/are not in the scope of 18-LAB-006 certificate issued by ONAC

End of Certificate