



KURT LENTSCH CUMMINS 46056139 - STARBOARD DIESEL ENGINE

Sample No: VPA058121

Oil Type: SHELL ROTELLA T4 15W40

SAMPLE INFORMAT	TION			
	HOIN -	VD4050404	V/DA050067	
Sample Number		VPA058121	VPA050867	
Sample Date		09 Jan 2024	24 Oct 2023	
Machine Hours		0	0	
Oil Hours		0	0	
Oil Changed		N/A	Changed	
Sample Status		NORMAL	NORMAL	
OIL CONDITION				
Visc @ 100°C	cSt	■14.6	14.5	
Base Number (BN)	mg KOH/g	7.0	■8.3	
Oxidation (PA)	%	68	69	
CONTAMINATION				
Water	%	NEG	NEG	
Soot %	%	■ 0.3	■0.3	
Nitration (PA)	%	58	58	
Sulfation (PA)	%	57	58	
Glycol	%	NEG	NEG	
Fuel	%	<1.0	<1.0	
Silicon	ppm	■3	3	
Sodium	ppm	2	4	
Potassium	ppm	6	4	
WEAR METALS				
Iron	ppm	17	1 6	
Copper	ppm	4	1 4	
Lead	ppm	<1	0	
Tin	ppm	_ <1	0	
Aluminum	ppm	1	1	
Chromium	ppm	■ <1	<1	
Molybdenum	ppm	2	<1	
Nickel	ppm	□ <1	<1	
Titanium	ppm	■0	0	
Silver		■0	0	
Manganese	ppm	■ <1	<u></u> <1	
	ppm	_	0	
Vanadium	ppm	<1	0	
ADDITIVES				
Calcium	ppm	2049	2111	
Magnesium	ppm	13	16	
Zinc	ppm	1194	■1177	
Phosphorus	ppm	■1005	■845	
Barium	ppm	■0	0	
Boron	ppm	□ 176	168	
20.011	PP'''			

BAY MARINE

3 E MADISON ST WAUKEGAN, IL US 60085 Contact: BRENDAN COWHEY brendan@baymarine.net T: (847)336-2628 F:

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot:VP1174336Unique No:10822421Signed:Don BaldridgeReport Date:11 Jan 2024

OIL ANALYSIS REPORT



