OIL ANALYSIS REPORT

VOLVO PENTA A284257 - STARBOARD DIESEL ENGINE

Sample No: VPA053250

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

Sample Number		VPA053250	 	
Sample Date		17 Apr 2024	 	 FDDA FT PIERCE - POWER CENTE
Machine Hours		541	 	
Dil Hours		3	 	 FORT PIERCE, FL
Oil Changed		Not Changd	 	 US
Sample Status		NORMAL		Contact: KYLE GRASER
Sample Status		NORMAL	 	 k.graser@kirbycorp.com
OIL CONDITION				T:
/isc @ 100°C	cSt	13.41	 	 F:
Oxidation (PA)	%	54	 	 Diagnosis
CONTAMINATION				No corrective action is recommend
Water	%	NEG	 	 at this time. Resample at the next
Soot %	%	0.1	 	 service interval to monitor.All
Nitration (PA)	%	38	 	 component wear rates are normal.
Sulfation (PA)	%	50	 	 There is no indication of any contamination in the oil. The
Glycol	%	NEG	 	 condition of the oil is acceptable for
Fuel	%	<1.0		the time in service.
Silicon	ppm	7	 	
Sodium Potassium	ppm	0	 	
Fotassium	ppm	0	 	 _
WEAR METALS				
ron	ppm	13	 	
Copper	ppm	 <1	 	
_ead	ppm	0	 	
Tin	ppm	0	 	
Aluminum	ppm	6	 	
Chromium	ppm	 <1	 	
Molybdenum	ppm	60	 	
Nickel	ppm	0	 	
Titanium	ppm	0	 	
Silver	ppm	0	 	
Manganese	ppm	■<1	 	
Vanadium	ppm	<1	 	
ADDITIVES				
Calcium	ppm	1085	 	
Vagnesium	ppm	1033	 	
Zinc	ppm	1355	 	
Phosphorus		1132		
	ppm	0	 	
	ppm		 	
Barium Boron	ppm	7	 	

Contact/Location: KYLE GRASER - VP208659

Doug Bogart

18 Apr 2024

Signed:

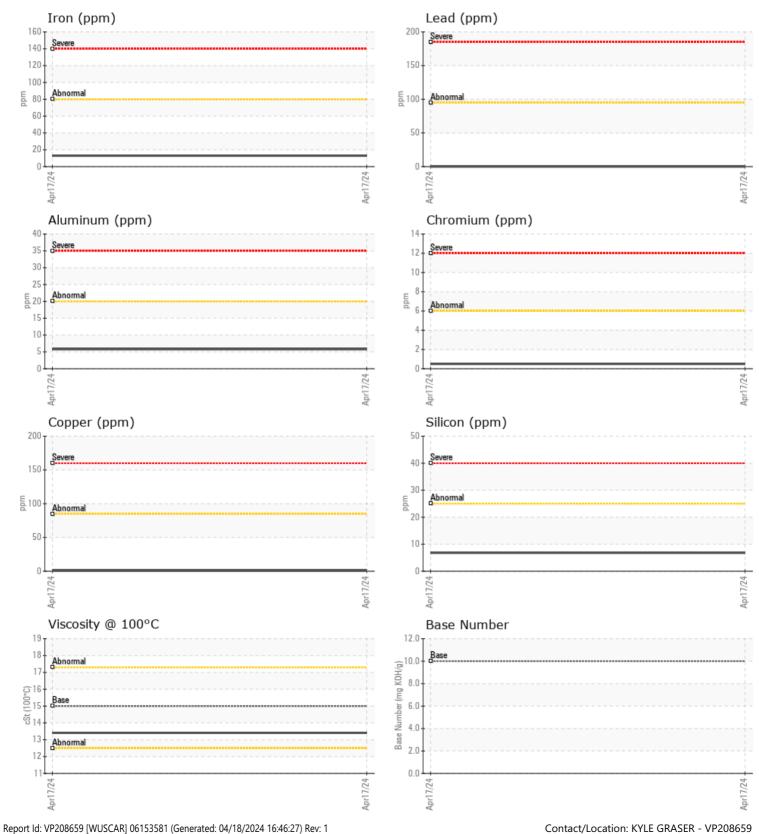
Report Date:



OIL ANALYSIS REPORT



GRAPHS



Contact/Location. RTLE GRA