



## TREVOR SKELLY 7718151 VOLVO PENTA 1101053468 - STARBOARD DIESEL ENGINE

Sample No: VPA060868

Oil Type: VOLVO VDS-4.5 Premium Motor Oil 15W40

SAMPLE INFORMAT	TION			
Sample Number		VPA060868	VPA033465	 
Sample Date		09 Jan 2024	28 Feb 2022	 
Machine Hours		1710	1388	 
Oil Hours		310	200	 
Oil Changed		Changed	Changed	 
Sample Status		NORMAL	NORMAL	 
OIL CONDITION				
Visc @ 100°C	cSt	<b>12.9</b>	□13.4	 
Base Number (BN)	mg KOH/g	■8.9	9.3	 
Oxidation (PA)	%	67	61	 
CONTAMINATION				
Water	%	NEG	NEG	 
Soot %	%	■0.5	■0.4	 
Nitration (PA)	%	79	83	 
Sulfation (PA)	%	54	55	 
Glycol	%	NEG	NEG	 
Fuel	%	<1.0	<1.0	 
Silicon	ppm	<b>6</b>	<b>3</b>	 
Sodium	ppm	<b>2</b>	<b>3</b>	 
Potassium	ppm	<b>□</b> <1	<b>2</b>	 
WEAR METALS				
Iron	ppm	<b>12</b>	<b>8</b>	 
Copper	ppm	<b>2</b>	<b>-</b> <1	 
Lead	ppm	<b>■</b> 3	■3	 
Tin	ppm	<b>-&lt;1</b>	<b>-</b> <1	 
Aluminum	ppm	<b>2</b>	<b>2</b>	 
Chromium	ppm	<b>■&lt;1</b>	<b>-</b> <1	 
Molybdenum	ppm	<b>■</b> 53	<b>1</b> 4	 
Nickel	ppm	<b>1</b>	<b>-</b> <1	 
Titanium	ppm	<b>0</b>	<b>0</b>	 
Silver	ppm	<b>■</b> 0	<b>0</b>	 
Manganese	ppm	<b>■</b> <1	< 1	 
Vanadium	ppm	<1	0	 
ADDITIVES				
Calcium	ppm	<b>1364</b>	<b>1</b> 598	 
Magnesium	ppm	907	776	 
Zinc	ppm	<b>1220</b>	■909	 
Phosphorus	ppm	<b>1032</b>	■873	 
Barium	ppm	<b>0</b>	<u> </u>	 
Boron	ppm	■38	77	 

## Pacific Power Group - VP981534

7215 S 228th St Kent, WA US 98032 Contact: PAT RYAN pryan@pacificpowergroup.com T: (253)520-5163 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:
 VP99031103

 Unique No:
 10833686

 Signed:
 Sean Felton

 Report Date:
 18 Jan 2024

## **OIL ANALYSIS REPORT**



