

# OIL ANALYSIS REPORT



**NOT GIVEN 502125 VOLVO D8AZ-2 MP 7008447889 - PORT DIESEL ENGINE**

**Sample No:** VPA058178

**Oil Type:** CHEVRON DELO 400 MULTIGRADE 15W40

## SAMPLE INFORMATION

Sample Number	<b>VPA058178</b>	VPA048032	---	---
Sample Date	<b>05 Jan 2024</b>	09 Dec 2022	---	---
Machine Hours	<b>491</b>	333	---	---
Oil Hours	<b>0</b>	0	---	---
Oil Changed	<b>Changed</b>	Changed	---	---
Sample Status	<b>NORMAL</b>	NORMAL	---	---

**North Harbor Diesel Inc**  
 720 30Th Street  
 ANACORTES, WA  
 US 98221  
 Contact: ROBBIN MURDOCK  
 robbin@northharbordiesel.com  
 T: (360)299-1904  
 F:

## OIL CONDITION

Visc @ 100°C	cSt	<b>13.7</b>	13.8	---	---
Base Number (BN)	mg KOH/g	<b>8.3</b>	11.1	---	---
Oxidation (PA)	%	<b>49</b>	58	---	---

## 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 suitable for further service.

## CONTAMINATION

Water	%	<b>NEG</b>	NEG	---	---
Soot %	%	<b>0.3</b>	0.3	---	---
Nitration (PA)	%	<b>60</b>	51	---	---
Sulfation (PA)	%	<b>49</b>	54	---	---
Glycol	%	<b>NEG</b>	NEG	---	---
Fuel	%	<b>&lt;1.0</b>	<1.0	---	---
Silicon	ppm	<b>11</b>	10	---	---
Sodium	ppm	<b>&lt;1</b>	<1	---	---
Potassium	ppm	<b>2</b>	1	---	---

## WEAR METALS

Iron	ppm	<b>8</b>	9	---	---
Copper	ppm	<b>30</b>	34	---	---
Lead	ppm	<b>&lt;1</b>	0	---	---
Tin	ppm	<b>&lt;1</b>	0	---	---
Aluminum	ppm	<b>1</b>	0	---	---
Chromium	ppm	<b>&lt;1</b>	<1	---	---
Molybdenum	ppm	<b>9</b>	59	---	---
Nickel	ppm	<b>&lt;1</b>	0	---	---
Titanium	ppm	<b>0</b>	0	---	---
Silver	ppm	<b>1</b>	<1	---	---
Manganese	ppm	<b>&lt;1</b>	<1	---	---
Vanadium	ppm	<b>0</b>	0	---	---

## ADDITIVES

Calcium	ppm	<b>1221</b>	1090	---	---
Magnesium	ppm	<b>800</b>	959	---	---
Zinc	ppm	<b>877</b>	1261	---	---
Phosphorus	ppm	<b>767</b>	1064	---	---
Barium	ppm	<b>0</b>	0	---	---
Boron	ppm	<b>70</b>	5	---	---

**Depot:** VP179089  
**Unique No:** 10832221  
**Signed:** Jonathan Hester  
**Report Date:** 17 Jan 2024

# OIL ANALYSIS REPORT



## GRAPHS

