

OIL ANALYSIS REPORT

VOLVO PENTA

HAL KAUFMAN MATTHEW DOW VOLVO PENTA 2006016825 - STARBOARD DIESEL ENGINE

Sample No: VPA048743

Oil Type: VALVOLINE PREMIUM BLUE

SAMPLE INFORMATION

Sample Number	VPA048743	VPA042763	VPA033902	VPA027050
Sample Date	06 Sep 2023	21 Sep 2022	09 Sep 2021	23 Sep 2019
Machine Hours	421	391	374	357
Oil Hours	30	17	17	22
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

Mobile Marine Services Inc
01032 Advance Rd South
EAST JORDAN, MI
US 49727
Contact: Duane Kujat
mobilemarine@twin-valley.net
T: Phone
F:

OIL CONDITION

Visc @ 100°C	cSt	13.0	14.7	15.1	14.9
Base Number (BN)	mg KOH/g	7.9	10.6	10.6	---
Oxidation (PA)	%	71	73	65	61

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	63	63	55	54
Sulfation (PA)	%	55	59	54	52
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	3	4	3	3
Sodium	ppm	2	3	7	6
Potassium	ppm	0	0	<1	4

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.

WEAR METALS

Iron	ppm	2	4	6	6
Copper	ppm	<1	<1	<1	<1
Lead	ppm	0	<1	0	0
Tin	ppm	<1	<1	<1	0
Aluminum	ppm	1	<1	0	<1
Chromium	ppm	0	<1	0	0
Molybdenum	ppm	43	45	47	42
Nickel	ppm	0	0	0	0
Titanium	ppm	0	<1	<1	4
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	0	1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	1086	1215	1612	1425
Magnesium	ppm	813	750	625	653
Zinc	ppm	878	899	1117	1095
Phosphorus	ppm	663	757	1026	897
Barium	ppm	0	0	0	0
Boron	ppm	43	58	72	54

Depot: VP443016
Unique No: 10742671
Signed: Don Baldrige
Report Date: 18 Nov 2023

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GRAPHS

