

OIL ANALYSIS REPORT



GRANT BOEN 505830 ZF 20333213 - INBOARD - STARBOARD GEARBOX

Sample No: VPA052137

Oil Type: CHEVRON DELO 400 SAE 30

SAMPLE INFORMATION

Sample Number	VPA052137	VPA041034	VPA029989	---
Sample Date	18 Jan 2024	12 Dec 2022	06 Jan 2022	---
Machine Hours	651	577	464	---
Oil Hours	74	100	300	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	ATTENTION	---

Jefferson Beach Yacht Sales Inc
 24400 Jefferson Ave.
 SAINT CLAIR SHORES, MI
 US 48080
 Contact: CORT CORINO
 ccorino@jbys.com
 T: (773)641-6947
 F:

OIL CONDITION

Visc @ 40°C	cSt	86.8	83.5	81.2	---
-------------	-----	------	------	------	-----

CONTAMINATION

Water	%	NEG	NEG	NEG	---
Silicon	ppm	7	11	12	---
Sodium	ppm	4	4	7	---
Potassium	ppm	<1	0	3	---

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal for OEM. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

WEAR METALS

PQ		20	23	36	---
Iron	ppm	55	96	206	---
Copper	ppm	86	150	335	---
Lead	ppm	3	6	13	---
Tin	ppm	5	8	16	---
Aluminum	ppm	4	7	14	---
Chromium	ppm	0	<1	2	---
Molybdenum	ppm	40	42	43	---
Nickel	ppm	<1	0	<1	---
Titanium	ppm	0	0	<1	---
Silver	ppm	0	<1	<1	---
Manganese	ppm	<1	1	2	---
Vanadium	ppm	0	0	0	---

ADDITIVES

Calcium	ppm	3187	3512	3711	---
Magnesium	ppm	14	13	12	---
Zinc	ppm	1024	1087	1091	---
Phosphorus	ppm	875	938	1087	---
Barium	ppm	1	0	<1	---
Boron	ppm	451	436	466	---

Depot: VP297371
 Unique No: 10848633
 Signed: Jonathan Hester
 Report Date: 30 Jan 2024

OIL ANALYSIS REPORT

**VOLVO
PENTA**

GRAPHS

