



## JOHN LUGGER SAM VOLVO PENTA 3950002691 - STARBOARD IPS

Sample No: VPA060417

**Oil Type:** GEAR OIL SAE 75W90

SAMPLE INFORMA	ATION				
Sample Number Sample Date Machine Hours Oil Hours Oil Changed Sample Status		VPA060417 13 Mar 2024 1442 0 Changed NORMAL	VPA048933 11 Nov 2022 0 176 Not Changd NORMAL	VPA037061 02 Jan 2022 0 0 Changed ATTENTION	VPA030682 02 Mar 2020 450 0 Changed ABNORMAL
OIL CONDITION					
Visc @ 40°C	cSt	■104	□104	□104	□99.7
CONTAMINATION					
Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	4	4	2	5
Sodium	ppm	<b>6</b>	<b>5</b>	<b>2</b> 0	<b>6</b>
Potassium	ppm	<b>■</b> 3	<b>6</b>	<b>2</b>	<b>4</b>
WEAR METALS					
PQ		<b>1</b> 6	<b>1</b> 4	<b>□</b> 28	<b>□</b> 37
Iron	ppm	<b>62</b>	<b>1</b> 72	220	<b>7</b> 6
Copper	ppm	6	6	10	5
Lead	ppm	<1	<1	1	0
Tin	ppm	<1	<1	<1	0
Aluminum	ppm	2	2	■13	4
Chromium	ppm	<b>■&lt;1</b>	<b>-</b> <1	<b>2</b>	<b>1</b>
Molybdenum	ppm	<b>■&lt;1</b>	<b>-</b> <1	<u> </u>	0
Nickel	ppm	<b>1</b>	< 1	<b>2</b>	< 1
Titanium	ppm	<1	0	0	0
Silver	ppm	0	1	1	0
Manganese	ppm	<b>■</b> 3	<b>5</b>	<b>4</b>	2
Vanadium	ppm	<1	0	0	0
ADDITIVES					
Calcium	ppm	<b>12</b>	<b>2</b> 4	<b>6</b>	14
Magnesium	ppm	<b>6</b>	42	<b>1</b> 2	52
Zinc	ppm	<b>7</b>	<b>0</b>	<b>159</b>	8
Phosphorus	ppm	<b>1193</b>	<b>1379</b>	<b>1445</b>	1470
Barium	ppm	<b>0</b>	<b>0</b>	□0	<1
Boron	ppm	<b>282</b>	□284	<b>263</b>	298

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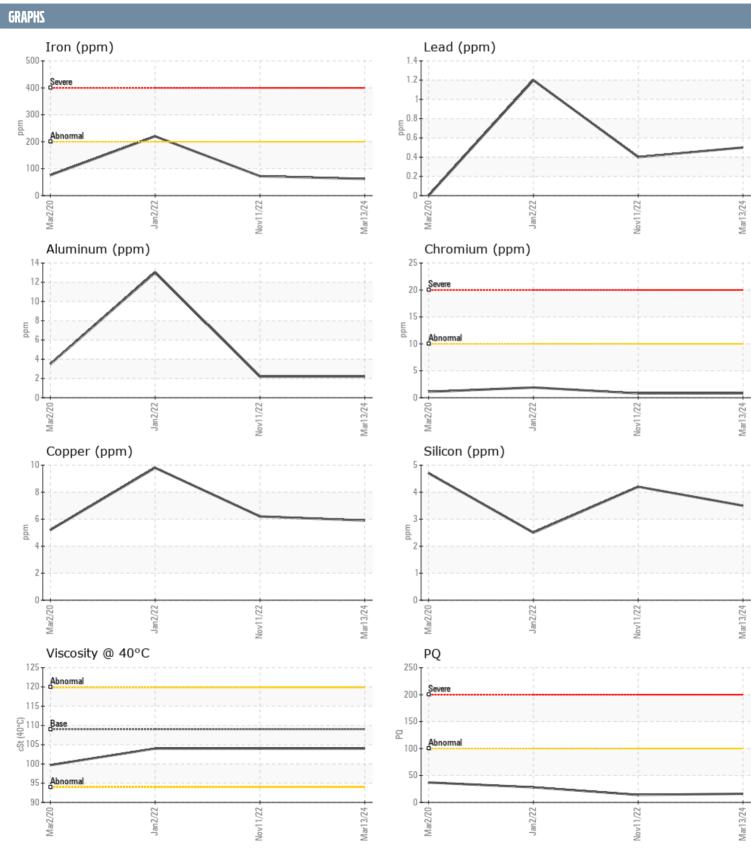
## Diagnosis

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 condition of the oil is acceptable for the time in service.

Depot:VP794951Unique No:10938135Signed:Don BaldridgeReport Date:22 Mar 2024

## **OIL ANALYSIS REPORT**





Report Id: VP794951 [WUSCAR] 06123984 (Generated: 03/28/2024 08:20:23) Rev: 1