



CRAIG BYAR MATTHEW DOW MERCURY MARINE 0M963942 - STARBOARD IPS

Sample No: VPA060588

Oil Type: MERCURY MARINE SAE 90 HIGH PRO

CAMPLE INCORMA	TION				
SAMPLE INFORMA	ATIUN				
Sample Number		VPA060588	VPA042492	VPA035295	VPA030295
Sample Date		08 Nov 2023	25 Jan 2023	22 Mar 2022	21 Feb 2020
Machine Hours		827	776	30	579
Oil Hours		51	62	30	134
Oil Changed		Changed	Changed	Changed	Changed
Sample Status		NORMAL	SEVERE	SEVERE	ATTENTION
OIL CONDITION					
Visc @ 40°C	cSt	161	■107	1 02	■100.9
CONTAMINATION					
Water	%	NEG	1.53	1.03	△ 0.291
Silicon	ppm	<1	2	3	2
Sodium	ppm	0	0	0	2
Potassium	ppm	■1	- <1	□ 0	5
WEAR METALS					
PQ		40	■37	4 0	6 7
Iron	ppm	■39	1 96	<u>▲</u> 256	▲ 326
Copper	ppm	6	4	5	9
Lead	ppm	1	<1	0	0
Tin	ppm	0	2	<1	0
Aluminum	ppm	<1	3	4	4
Chromium	ppm	0	2	2	3
Molybdenum	ppm	38	- <1	1	■8
Nickel	ppm	■<1	2	1	2
Titanium	ppm	0	<1	2	0
Silver	ppm	0	0	<1	<1
Manganese	ppm	0	2	3	3
Vanadium	ppm	0	0	0	0
ADDITIVES					
Calcium	ppm	16	1 5	1 2	■15
Magnesium	ppm	<1	- <1	 <1	1
Zinc	ppm	5	1 6	1 5	1 9
Phosphorus	ppm	265	1240	1330	1231
		_			
Barium	ppm	7	0	0	□ 0

Mobile Marine Services Inc

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

Diagnosis

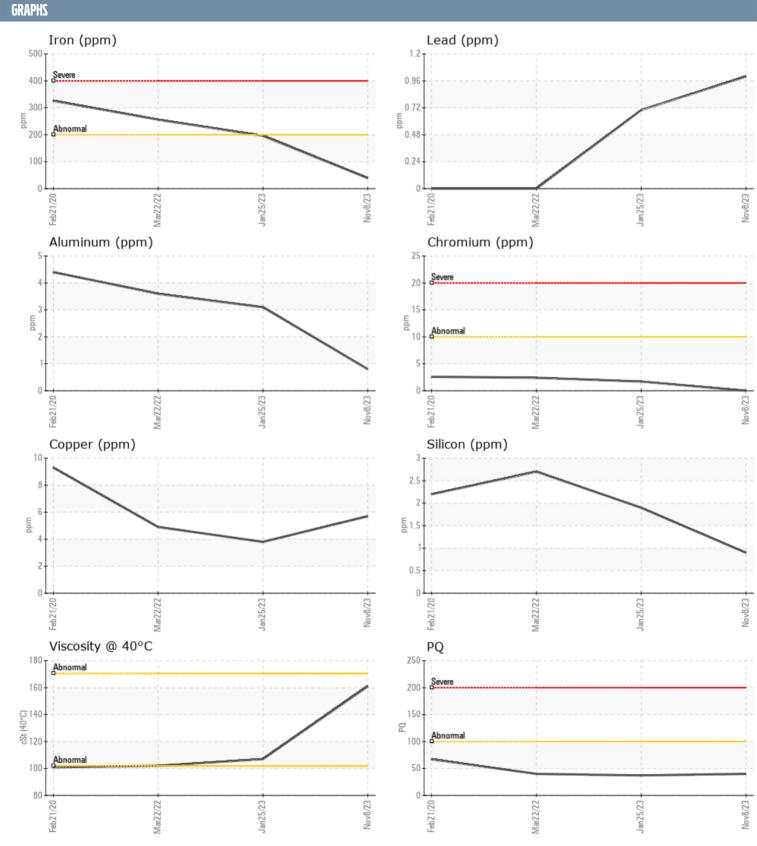
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The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time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

Depot:VP443016Unique No:10742959Signed:Angela BorellaReport Date:17 Nov 2023







Report Id: VP443016 [WUSCAR] 06009197 (Generated: 11/30/2023 10:02:35) Rev: 1