



## MICHAEL MAGNAN ZF IRM220A1 91-7644 - INBOARD - STARBOARD GEARBOX

Sample No: VPA051552
Oil Type: {unknown}

CAMPLE INFORM	n TION			
SAMPLE INFORM	ATIUN			
Sample Number		VPA051552	VPA060556	 
Sample Date		23 Mar 2024	17 Feb 2024	 
Machine Hours		0	1629	 
Oil Hours		0	0	 
Oil Changed		Not Changd	Not Changd	 
Sample Status		ATTENTION	SEVERE	 
OIL CONDITION				
Visc @ 40°C	cSt	■90.0	□91.6	 
CONTAMINATION				
Water	%	NEG	NEG	 
Silicon	ppm	<b>11</b>	<b>7</b>	 
Sodium	ppm	<b>25</b>	<b>7</b> 7	 
Potassium	ppm	<b>1</b>	■8	 
WEAR METALS				
PQ		<b>16</b>	■21	 
Iron	ppm	<b>■15</b>	□26	 
Copper	ppm	<b>127</b>	<b>▲</b> 510	 
Lead	ppm	<b>7</b> 1	<b>1</b> 274	 
Tin	ppm	<b>1</b>	■3	 
Aluminum	ppm	<b>■1</b>	<b>2</b>	 
Chromium	ppm	■0	< 1	 
Molybdenum	ppm	44	45	 
Nickel	ppm	<b>■</b> 0	□0	 
Titanium	ppm	<1	1	 
Silver	ppm	0	0	 
Manganese	ppm	0	0	 
Vanadium	ppm	0	0	 
Z3VITIDDA				
Calcium	ppm	3447	3068	 
Magnesium	ppm	20	34	 
Zinc	ppm	1139	1086	 
Phosphorus	ppm	1031	911	 
Barium	ppm	0	1	 
Boron	ppm	338	67	 

## **Northwest Diesel Power**

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Contact: BRANDON ROBERTSON parts@nwdieselpower.com

T: F:

## Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. The lead level has decreased, but is still abnormal. All other 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:VP759009Unique No:10940868Signed:Don BaldridgeReport Date:26 Mar 2024

## OIL ANALYSIS REPORT



