

Overall report severity based on comments.

Account Information		Component Information		Sample Information	
Account Number: 279824-0005-0000 Company Name: ZIMMERMAN MARINE Contact: MAX PARKER / J JESS Address: 606 W WESTST SOUTHPORT, NC 28461 US Phone Number: 910-477-9044		Component ID: IRISH EYES E Secondary ID: 19273P13220 Component Type: DIESEL ENGINE Manufacturer: YANMAR Model: 3YM30 Application: MARINE Sump Capacity:		Tracking Number: 19273P13220 Lab Number: I-103241 Lab Location: Indianapolis Data Analyst: CXW Sampled: 12-Feb-2020 Received: 17-Feb-2020 Completed: 18-Feb-2020	
Filter Information		Miscellaneous Information		Product Information	
Filter Type: Information Requested Micron Rating: 0				Product Manufacturer: SHELL Product Name: ROTELLA SERIES Viscosity Grade: SAE 15W40	
Comments	Data indicates no abnormal findings. Resample at normal interval. The fluid identified is the name of a series that includes several products. Please provide the specific type of fluid (Product Name) to ensure proper standards are used for an accurate evaluation.				

	Wear Metals (ppm)										Contaminant Metals (ppm)			Multi-Source Metals (ppm)						Additive Metals (ppm)				
Sample #	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
1	9	0	0	1	0	0	0	0	0	0	3	4	7	0	6	1	0	0	172	97	2226	0	1074	1222

Sample #	Sample Information							Contaminants			Fluid Properties					
	Date Sampled	Date Received	Lube Time	Unit Time	Lube Change	Lube Added	Filter Change	Fuel Dilution	Soot	Water	Viscosity 40°C	Viscosity 100 °C	Acid Number	Base No. D4739	Oxidation	Nitration
			h	h		gal		% Vol	% Vol	% Vol	cSt	cSt	mg KOH/g	mg KOH/g	abs/cm	abs/0.1 mm
1	12-Feb-2020	17-Feb-2020	60	632	No	0	No	<1 - Estimate	<.1	<.1 - FTIR		14.8				

Sample #	Particle Count (particles/mL)										Additional Testing					
	ISO Code Based On 4/6/14	> 4 µm	> 6 µm	> 10 µm	> 14 µm	> 21 µm	> 38 µm	> 70 µm	> 100 µm	Test Method						
1	//															

Comments are advisory only and are based on the assumption that the sample and data submitted are valid. Missing fluid or component information limits the evaluation. No warranty is expressed or implied. Measurement uncertainty available upon request.