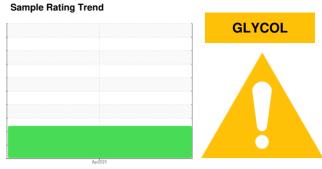


OIL ANALYSIS REPORT

THE QUEEN CITY YACHT CLUB CKS01046

Diesel Engine

SHELL ROTELLA T 15W40 (--- GAL)



DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Test for glycol is positive. There is a moderate concentration of glycol present in the oil.

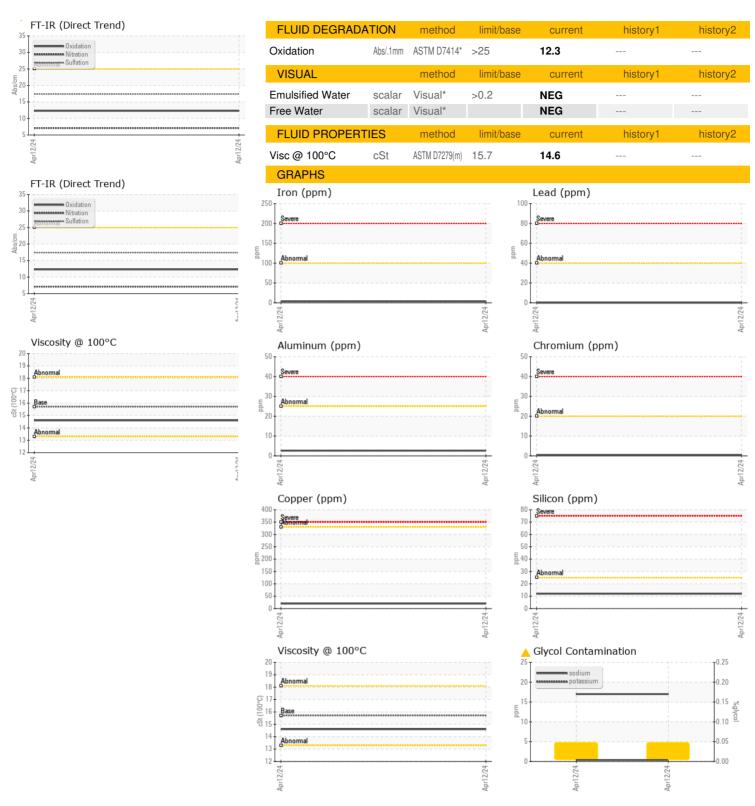
Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PP		
Sample Date		Client Info		12 Apr 2024		
Machine Age	hrs	Client Info		5454		
Oil Age	hrs	Client Info		10		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	4		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>2	<1		
Titanium	ppm	ASTM D5185(m)	>2	0		
Silver	ppm	ASTM D5185(m)	>2	0		
Aluminum	ppm	ASTM D5185(m)	>25	3		
Lead	ppm	ASTM D5185(m)	>40	0		
Copper	ppm	ASTM D5185(m)	>330	20		
Tin	ppm	ASTM D5185(m)	>15	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	35	64		
Barium	ppm	ASTM D5185(m)	0	0		
Molybdenum	ppm	ASTM D5185(m)	0	87		
Manganese	ppm	ASTM D5185(m)	0	0		
Magnesium	ppm	ASTM D5185(m)	10	12		
Calcium	ppm	ASTM D5185(m)	2340	2099		
Phosphorus	ppm	ASTM D5185(m)	1110	992		
Zinc	ppm	ASTM D5185(m)	1210	1126		
Sulfur	ppm	ASTM D5185(m)	3890	3079		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	12		
Sodium	ppm	ASTM D5185(m)		17		
Potassium	ppm	ASTM D5185(m)	>20	<1		
Glycol	%	ASTM D7922*		<u> </u>		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0		
Nitration	Abs/cm	ASTM D7624*	>20	7.1		
Milialion						



OIL ANALYSIS REPORT







Laboratory

Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

: PP Lab Number : 02628632 Unique Number : 5761764

Diagnosed Test Package : MOB 1 (Additional Tests: Glycol)

Received

Tested

: 15 Apr 2024

: 15 Apr 2024

: 15 Apr 2024 - Kevin Marson

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Toromont CAT - Power Systems

288 Orenda Rd. Brampton, ON CA L6T 1E9

Contact: Scott McMahon smcmahon@toromont.com

T: F: