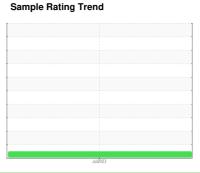


OIL ANALYSIS REPORT



NORMAL



NO UNIT GFL0074304

Component

Diesel Engine

SHELL ROTELLA T 15W40 (--- LTR)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

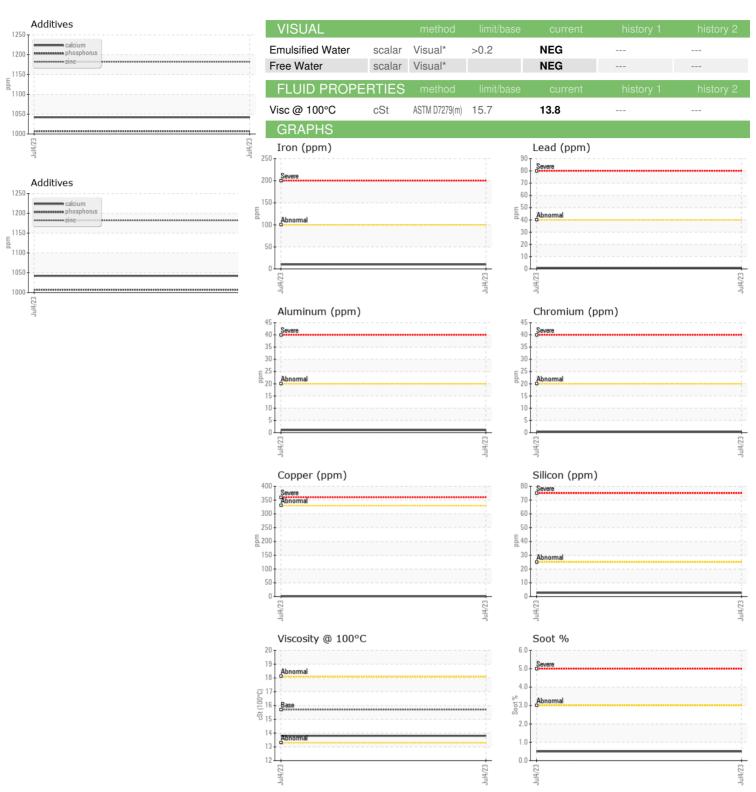
				Jul2023		
SAMPLE INFOR	MATION	method	limit/base	current	history 1	history 2
Sample Number		Client Info		GFL0074304		
Sample Date		Client Info		04 Jul 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINAT	ION	method	limit/base	current	history 1	history 2
Fuel		WC Method	>5	<1.0		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history 1	history 2
Iron		ASTM D5185(m)	>100	10		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>4	0		
Titanium	ppm	ASTM D5185(m)	77	0		
Silver	ppm	ASTM D5185(m)	>3	0		
Aluminum	ppm	ASTM D5185(m)		1		
Lead	ppm	ASTM D5185(m)	>40	- <1		
Copper	ppm	ASTM D5185(m)		<1		
Tin	ppm	ASTM D5185(m)	>15	<1		
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	history 1	history 2
Boron	ppm	ASTM D5185(m)	35	4		
Barium	ppm	ASTM D5185(m)	0	0		
Molybdenum	ppm	ASTM D5185(m)	0	59		
Manganese	ppm	ASTM D5185(m)	0	<1		
Magnesium	ppm	ASTM D5185(m)	10	977		
Calcium	ppm	ASTM D5185(m)	2340	1042		
Phosphorus	ppm	ASTM D5185(m)	1110	1007		
Zinc	ppm	ASTM D5185(m)	1210	1182		
Sulfur	ppm	ASTM D5185(m)	3890	2314		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINAN	TS	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m)	>25	3		
Sodium	ppm	ASTM D5185(m)		4		
Potassium	ppm	ASTM D5185(m)	>20	<1		
INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	ASTM D7844*	>3	0.5		
Nitration	Abs/cm	ASTM D7624*	>20	7.8		
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.2		
FLUID DEGRA	DATION	method	limit/base	current	history 1	history 2
Outdettere	Al / d	ACTM D7414*	. 05	157		

Oxidation

15.7



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number

Test Package : MOB 1

: GFL0074304 : 02567887 : 5604933

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

: 05 Jul 2023 : 05 Jul 2023

Diagnostician : 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.

GFL Environmental - 216 15 Bermondsey Road Toronto, ON CA M4B 0A6 Contact: Joe Young jyoung@gflenv.com T: (416)678-4692

Report Id: GFL216 [WCAMIS] 02567887 (Generated: 07/12/2023 10:14:40) Rev: 1

Contact/Location: Joe Young - GFL216