WEAR CONTAMINATION FLUID CONDITION

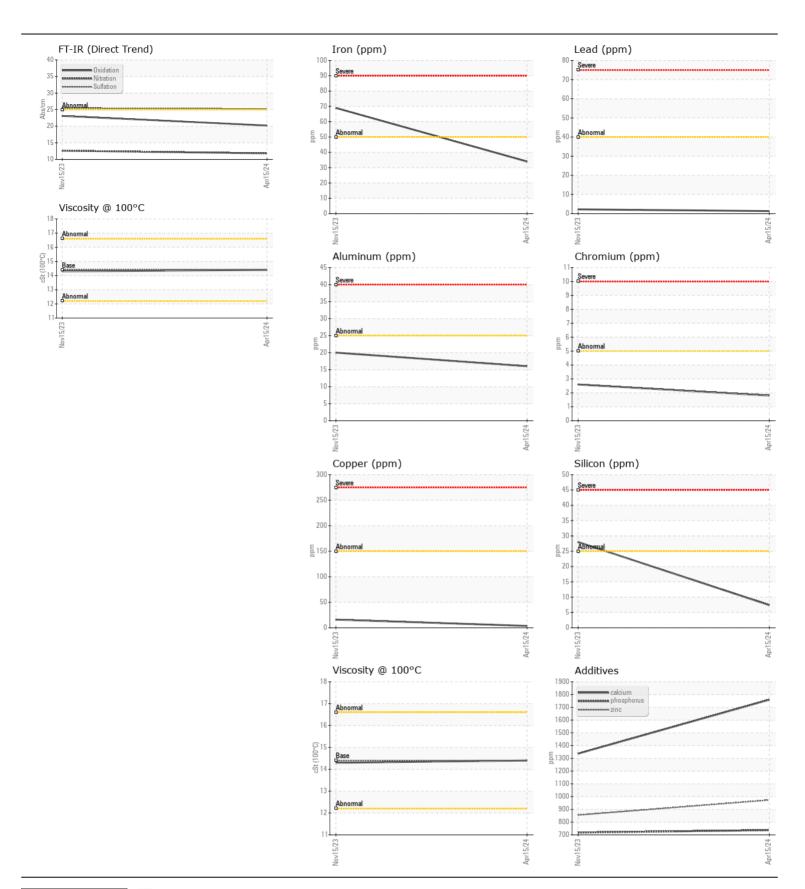
NORMAL NORMAL



Machine Id 933027 Component Natural Gas Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIESEL ENGINE OIL SAE 15W4	0 ( GAL)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
TESSIMILITERATION	Sample Number	OOW	Client Info	LITTIO/ NOT	GFL0112701	GFL0102931	
Resample at the next service interval to monitor.	Sample Date		Client Info		15 Apr 2024	15 Nov 2023	
	Machine Age	hrs	Client Info		2124	0	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	ABNORMAL	
WEAR	Iron	nnm	ASTM D5185(m)	<u>~50</u>	34	69	
WLAN	Chromium	ppm	ASTM D5185(m)		2	3	
All component wear rates are normal.	Nickel	ppm	ASTM D5185(m)		2	2	
	Titanium	ppm	ASTM D5185(m)		0	0	
	Silver	ppm	ASTM D5185(m)	>3	0	<1	
	Aluminum	ppm	ASTM D5185(m)		16	20	
	Lead	ppm	ASTM D5185(m)	>40	1	2	
	Copper	ppm	ASTM D5185(m)		4	16	
	Tin	ppm	ASTM D5185(m)		<1	1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
	White Metal	scalar	Visual*	NONE	NONE	NONE	
	Yellow Metal	scalar	Visual*	NONE	NONE	VLITE	
CONTAMINATION	0.11		AOTM DE40E()	05	_	A 00	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)		7	<u>^</u> 28	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)		3	13	
	Water		WC Method	>0.1	NEG	NEG	
	Glycol Soot %	0/	WC Method ASTM D7844*			0.0	
	Nitration	% Abs/cm		- 20	0 11.8	0 12.6	
	Sulfation	Abs/.1mm	ASTM D7024 ASTM D7415*	>30	25.2	25.5	
	Silt	scalar	Visual*	NONE	NONE	NONE	
	Debris	scalar	Visual*	NONE	VLITE	NONE	
	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
	Appearance	scalar	Visual*	NORML	NORML	NORML	
	Odor	scalar	Visual*	NORML	NORML	NORML	
	Emulsified Water		Visual*	>0.1	NEG	NEG	
TI IUD AANDITIAN							
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		10	6	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		9	8	
	Barium	ppm	. ,	10	<1	3	
	Molybdenum	ppm	ASTM D5185(m)	100	59	55	
	Manganese	ppm	ASTM D5185(m)	450	2	11	
	Magnesium	ppm	ASTM D5185(m)		610	731	
	Calcium	ppm	ASTM D5185(m)	3000	1759	1337	
	Phosphorus	ppm	ASTM D5185(m)		737	718	
	Zinc	ppm	ASTM D5185(m)		973	855	
	Sulfur Oxidation	ppm Abs/.1mm	ASTM D5185(m) ASTM D7414*		1941 20.2	1927 23.1	
	Visc @ 100°C	cSt	ASTM D7414 ASTM D7279(m)		14.4	14.3	
	1150 W 100 C	COL	NOTIVI DIZIB(III)	14.4	14.4	14.3	





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02630065

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : GFL0112701 Unique Number : 5763197

Received **Tested** Diagnosed Test Package : MOB 1 (Additional Tests: Visual)

: 19 Apr 2024 : 19 Apr 2024

: 19 Apr 2024 - Kevin Marson

GFL Environmental - 253 - TOR APT 15 Bermondsey Road - Building B Toronto, ON CA M4B 1Y9

Contact: Natalia Stalynska nstalynska@gflenv.com T:

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.

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