WEAR CONTAMINATION FLUID CONDITION

NORMAL

MARGINAL

ABNORMAL

Area

[397276]

16-8019

Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number		Client Info		VCP448050	VCP394197	,
	Sample Date		Client Info		05 Apr 2024	29 Oct 2023	30 Jul 202
	Machine Age	hrs	Client Info		11500	11000	10509
	Oil Age	hrs	Client Info		500	500	500
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Change
	Sample Status				ABNORMAL	NORMAL	ABNORM
WEAR	Iron	ppm	ASTM D5185(m)	>100	5	4	4
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		0	0	0
	Nickel	ppm	ASTM D5185(m)		0	0	0
	Titanium	ppm	ASTM D5185(m)		0	0	0
	Silver	ppm	ASTM D5185(m)	>2	0	<1	0
	Aluminum	ppm	ASTM D5185(m)	>10	1	1	1
	Lead	ppm	ASTM D5185(m)	>20	0	<1	<1
	Copper	ppm	ASTM D5185(m)	>15	<1	<1	1
	Tin	ppm	ASTM D5185(m)	>10	0	0	0
	Vanadium	ppm	ASTM D5185(m)		0	0	0
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>20	3	5	5
Light fuel dilution occurring.	Potassium	ppm	ASTM D5185(m)		<1	0	<1
	Fuel	%	ASTM D7593*	>6.0	5.9	4.6	4.3
	Water		WC Method	>0.1	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	ASTM D7844*	>3	0	0.1	0
	Nitration	Abs/cm	ASTM D7624*	>20	7.4	7.1	7.5
	Sulfation	Abs/.1mm	ASTM D7415*	>30	22.0	22.1	22.7
	Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2	2	2
Fuel is present in the oil and is lowering the viscosity. The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	2.5	42	32	32
	Barium	ppm	ASTM D5185(m)	0.0	0	<1	0
	Molybdenum	ppm	ASTM D5185(m)	0.7	38	38	38
	Manganese	ppm	ASTM D5185(m)	0.0	<1	0	<1
	Magnesium	ppm	ASTM D5185(m)	256	478	463	480
	Calcium	ppm	ASTM D5185(m)	2057	1590	1610	1535
	Phosphorus	ppm	ASTM D5185(m)	935	874	860	930
	Zinc	ppm	ASTM D5185(m)	1223	1028	1009	1014
	Sulfur	ppm	ASTM D5185(m)	4079	2281	2232	2286
						1	

Oxidation

Visc @ 100°C cSt

Abs/.1mm ASTM D7414* >25

ASTM D7279(m) 15.0

19.8

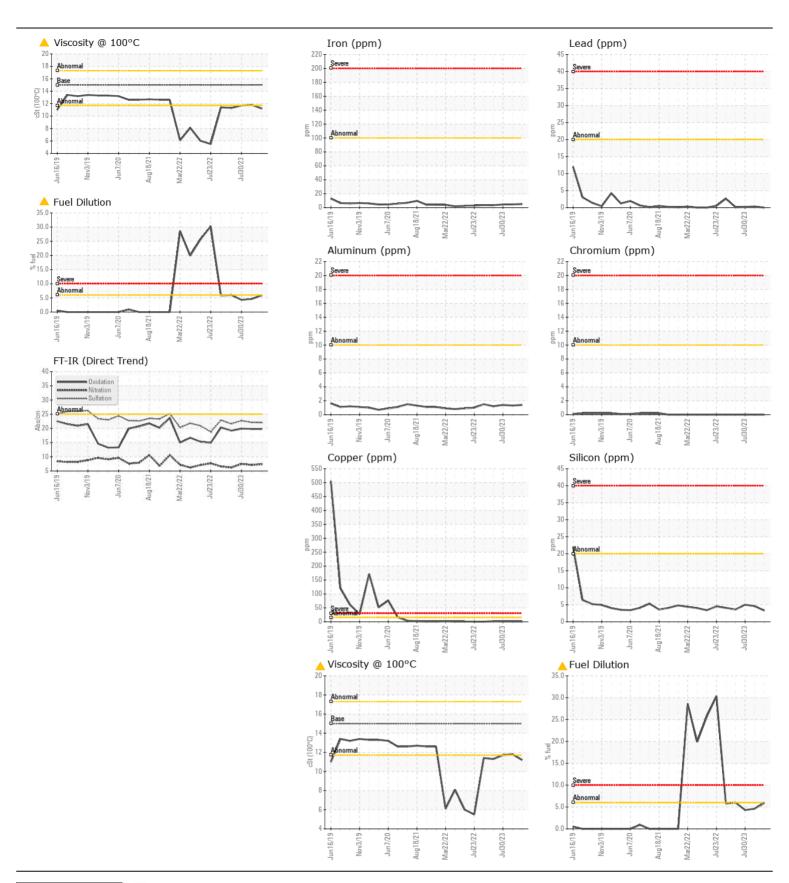
11.8

19.8

<u>11.2</u>

<u>▲</u> 11.7

19.9





CALA ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Sample No. : VCP448050

Received Lab Number : 02627841 **Tested** Unique Number : 5760973 Diagnosed

Test Package: MOB 1 (Additional Tests: FuelDilution, PercentFuel) To discuss this sample report, contact Customer Service at 1-800-268-2131.

: 10 Apr 2024

: 11 Apr 2024

: 11 Apr 2024 - Kevin Marson

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.

CRH CANADA GROUP INC.

P.O. BOX 5400 CONCORD, ON CA L4K 1B6 Contact: Dan Brown

dan.brown@ca.crh.com

T: F: