WEAR CONTAMINATION FLUID CONDITION

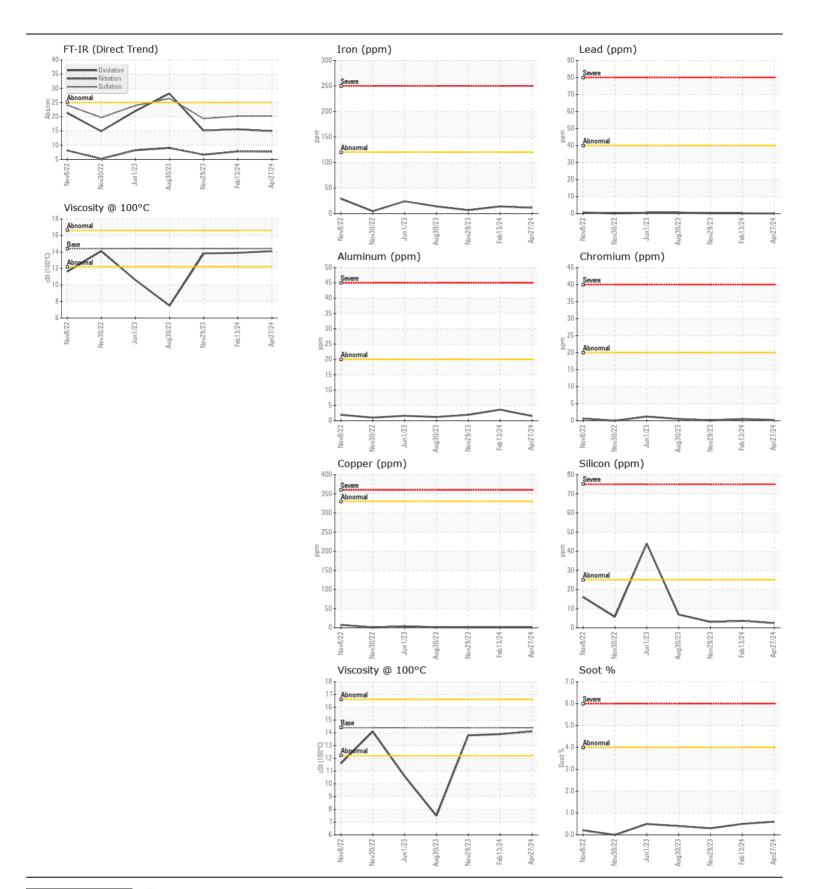
NORMAL NORMAL



Machine Id 911046 Component Diesel Engine

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

DIESEL ENGINE OIL SAE 15W40 ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0097291	GFL0097282	GFL0097250
	Sample Date		Client Info		27 Apr 2024	13 Feb 2024	29 Nov 2023
	Machine Age	hrs	Client Info		2609	2275	1891
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	N/A
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185(m)	>120	11	14	7
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
	Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
	Titanium	ppm	ASTM D5185(m)	>2	0	0	0
	Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
	Aluminum	ppm	ASTM D5185(m)	>20	2	4	2
	Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
	Copper	ppm	ASTM D5185(m)	>330	<1	<1	1
	Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
	Vanadium	ppm	ASTM D5185(m)		0	0	0
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	2	4	3
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	1	4	1
, , , , , , , , , , , , , , , , , , ,	Fuel		WC Method	>3.0	<1.0	<1.0	0.7
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	ASTM D7844*	>4	0.6	0.5	0.3
	Nitration	Abs/cm	ASTM D7624*	>20	7.7	7.8	6.6
	Sulfation	Abs/.1mm	ASTM D7415*	>30	20.2	20.2	19.3
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	>158	3	2	2
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	250	3	3	8
	Barium	ppm	ASTM D5185(m)	10	0	0	0
	Molybdenum	ppm	ASTM D5185(m)	100	59	58	57
	Manganese	ppm	ASTM D5185(m)		<1	0	0
	Magnesium	ppm	ASTM D5185(m)	450	971	949	917
	Calcium	ppm	ASTM D5185(m)	3000	1046	1071	1076
	Phosphorus	ppm	ASTM D5185(m)	1150	982	999	956
	Zinc	ppm	ASTM D5185(m)		1166	1161	1137
	Sulfur	ppm	ASTM D5185(m)	4250	2423	2617	2479
	Oxidation	Abs/.1mm	ASTM D7414*		14.9	15.6	15.1
	Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.1	13.9	13.8





CALA ISO 17025:2017 Accredited Laboratory

Report Id: GFL558 [WCAMIS] 02632514 (Generated: 05/01/2024 13:36:24) Rev: 1

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 558 - Grand Prairie Lab Number : 02632514 Unique Number : 5773667

: GFL0097291 Test Package : MOB 1

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.

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Received :01 May 2024 : 01 May 2024 **Tested** Diagnosed

: 01 May 2024 - Wes Davis

Grande Prairie, AB CA T8W 6T2 Contact: Tristen Ebach tebach@gflenv.com T: (780)532-3086 F: (780)513-5217

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