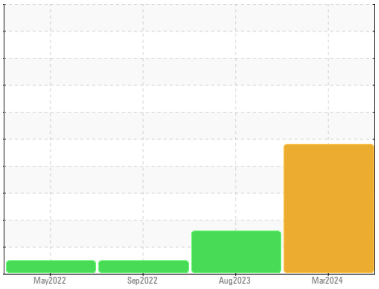
OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Machine Id
4555
Component
Transmission (Auto)
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check all areas where dirt can enter the system. The fluid change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The AN level is acceptable for this fluid. The fluid is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0112478**	GFL0084352	GFL0057800
Sample Date		Client Info		**17 Mar 2024**	17 Aug 2023	02 Sep 2022
Machine Age	kms	Client Info		**677140**	0	19165
Oil Age	kms	Client Info		**0**	61201	733
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**SEVERE**	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	NEG

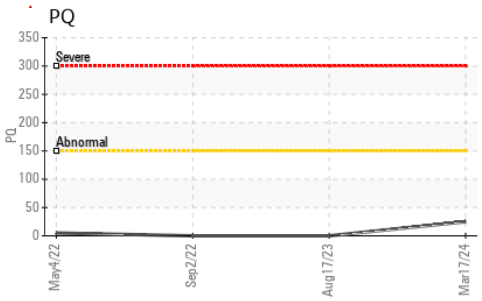
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*	>150	**25**	0	0
Iron	ppm	ASTM D5185(m)	>325	**166**	28	72
Chromium	ppm	ASTM D5185(m)	>2	**<1**	0	0
Nickel	ppm	ASTM D5185(m)	>2	**0**	<1	0
Titanium	ppm	ASTM D5185(m)	>3	**0**	0	0
Silver	ppm	ASTM D5185(m)	>5	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>75	**24**	11	31
Lead	ppm	ASTM D5185(m)	>40	**2**	<1	5
Copper	ppm	ASTM D5185(m)	>50	**27**	10	37
Tin	ppm	ASTM D5185(m)	>10	**3**	<1	2
Antimony	ppm	ASTM D5185(m)	>3	**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

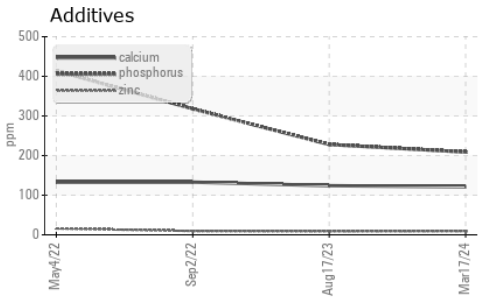
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	**71**	77	113
Barium	ppm	ASTM D5185(m)	10	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	100	**0**	0	<1
Manganese	ppm	ASTM D5185(m)		**<1**	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	**2**	1	1
Calcium	ppm	ASTM D5185(m)	3000	**121**	124	133
Phosphorus	ppm	ASTM D5185(m)	1150	**209**	228	318
Zinc	ppm	ASTM D5185(m)	1350	**9**	9	10
Sulfur	ppm	ASTM D5185(m)	4250	**1463**	1486	1714
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

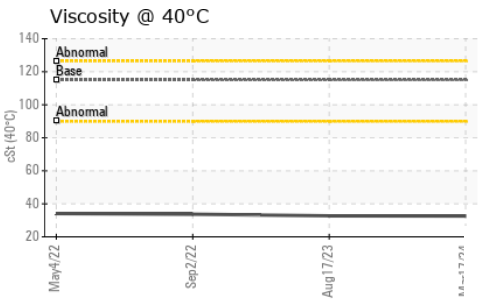
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	▲ **47**	▲ 34	8
Sodium	ppm	ASTM D5185(m)	>158	**4**	3	6
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	1

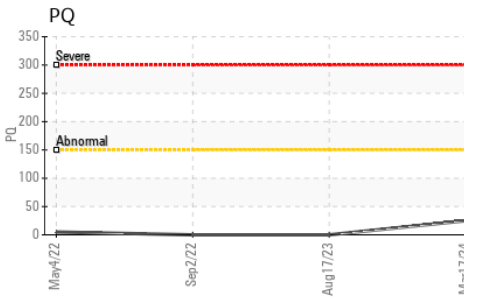
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.79**	1.02	1.30

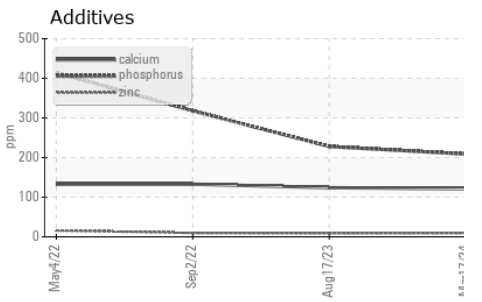
OIL ANALYSIS REPORT





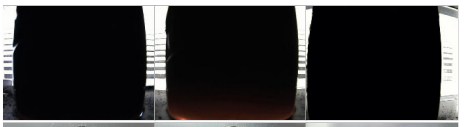






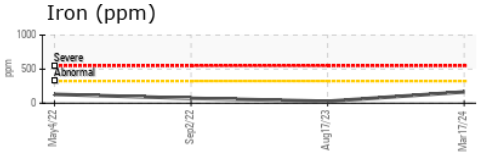
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	115	**32.6**	32.7	33.7

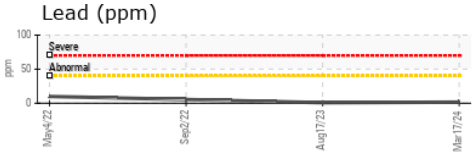
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

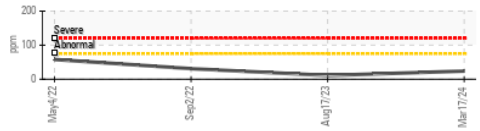
Iron (ppm)



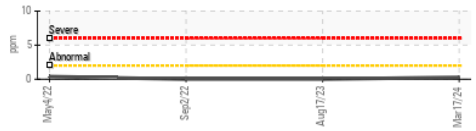
Lead (ppm)



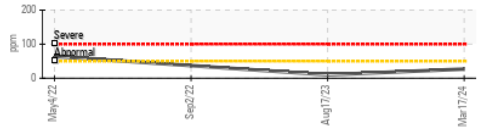
Aluminum (ppm)



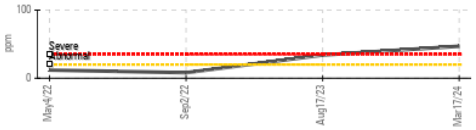
Chromium (ppm)



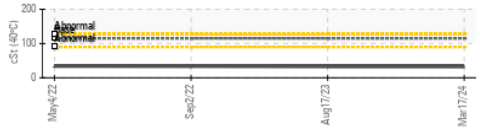
Copper (ppm)



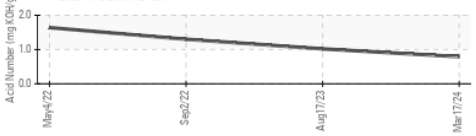
Silicon (ppm)



Viscosity @ 40°C



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112478
Lab Number : 02624737
Unique Number : 5749856
Test Package : MOB 2 (Additional Tests: PQ)

Received : 26 Mar 2024
Tested : 26 Mar 2024
Diagnosed : 27 Mar 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.

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