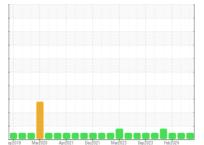


OIL ANALYSIS REPORT

Sample Rating Trend









Machine Id
910038
Component
Diesel Engine
Fluid

DIESEL ENGINE OIL SAE 15W40 (25 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil

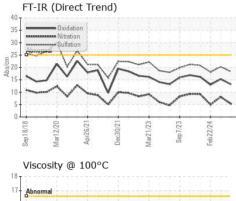
Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		GFL0117893	GFL0111732	GFL0111752	
Sample Date		Client Info		02 May 2024	18 Apr 2024	22 Feb 2024	
Machine Age	hrs	Client Info		9089	8998	838860	
Oil Age	hrs	Client Info		0	600	0	
Oil Changed		Client Info		Changed	Changed	Not Changd	
Sample Status				NORMAL	NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2	
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	NEG	
Glycol		WC Method		NEG	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>90	2	8	2	
Chromium	ppm	ASTM D5185(m)	>20	0	<1	0	
Nickel	ppm	ASTM D5185(m)	>2	<1	3	<1	
Titanium	ppm	ASTM D5185(m)	>2	0	0	0	
Silver	ppm	ASTM D5185(m)	>2	0	0	0	
Aluminum	ppm	ASTM D5185(m)	>20	<1	3	1	
Lead	ppm	ASTM D5185(m)	>40	0	0	0	
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1	
Tin	ppm	ASTM D5185(m)	>15	0	0	0	
Antimony	ppm	ASTM D5185(m)		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	20	47	9	
Barium	ppm	ASTM D5185(m)	10	0	0	0	
Molybdenum	ppm	ASTM D5185(m)	100	61	62	57	
Manganese	ppm	ASTM D5185(m)		0	<1	0	
Magnesium	ppm	ASTM D5185(m)	450	934	882	920	
Calcium	ppm	ASTM D5185(m)	3000	1050	1095	1014	
Phosphorus	ppm	ASTM D5185(m)	1150	986	969	995	
Zinc	ppm	ASTM D5185(m)	1350	1154	1177	1127	
Sulfur	ppm	ASTM D5185(m) ASTM D5185(m)		1154 2541	1177 2417	1127 2721	
Sulfur Lithium	ppm	ASTM D5185(m)	1350	1154	1177	1127	
Sulfur	ppm	ASTM D5185(m) ASTM D5185(m)	1350	1154 2541	1177 2417	1127 2721	
Sulfur Lithium	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1350 4250	1154 2541 <1	1177 2417 <1	1127 2721 <1	
Sulfur Lithium CONTAMINAN	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	1350 4250 limit/base >25	1154 2541 <1 current	1177 2417 <1 history1 1	1127 2721 <1 history2	
Sulfur Lithium CONTAMINAN Silicon	ppm ppm TS	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m)	1350 4250 limit/base >25	1154 2541 <1 current	1177 2417 <1 history1	1127 2721 <1 history2	
Sulfur Lithium CONTAMINAN Silicon Sodium	ppm ppm TS ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	1350 4250 limit/base >25 >158	1154 2541 <1 current 1 <1	1177 2417 <1 history1 1	1127 2721 <1 history2 3 <1	
Sulfur Lithium CONTAMINAN Silicon Sodium Potassium	ppm ppm TS ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1350 4250 limit/base >25 >158 >20	1154 2541 <1 current 1 <1 <1	1177 2417 <1 history1 1 1 2	1127 2721 <1 history2 3 <1	
Sulfur Lithium CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm TS ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	1350 4250 limit/base >25 >158 >20 limit/base	1154 2541 <1 current 1 <1 <1 <1	1177 2417 <1 history1 1 1 2 history1	1127 2721 <1 history2 3 <1 1	

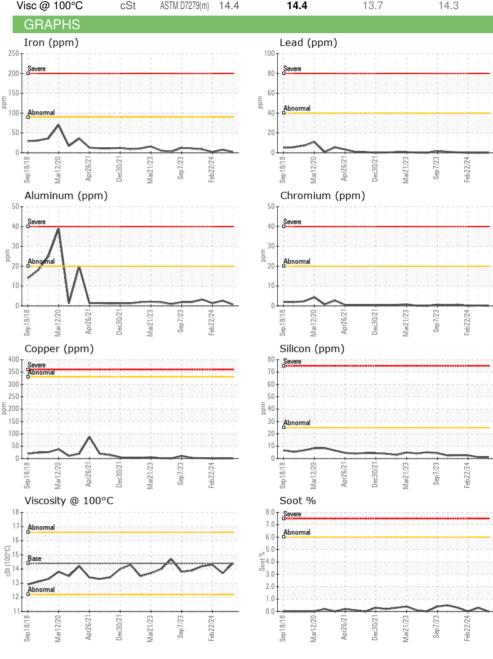


OIL ANALYSIS REPORT





Visc	osity (0 100°	С				
17- Abnor	rmal						_
16 (3001) 15 Base 13 Abnor	mal	<u> </u>			^_	~	7
12 81/81 des	Mar12/20	Apr26/21	Dec30/21 -	Mar21/23 -	Sep7/23	Feb22/24 -	_





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number : 02633413 Unique Number : 5774566 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : GFL0117893

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

Received **Tested**

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

: 06 May 2024 Diagnosed

: 06 May 2024 - Wes Davis

: 06 May 2024

GFL Environmental - 217 - Aurora 14131 BAYVIEW AVE, AURORA YARD AURORA, ON CA L4G 0K6

Contact: Mike Havens MHavens@gflenv.com

T: F: (905)713-2445

Validity of results and interpretation are based on the sample and information as supplied. Report Id: GFL217 [WCAMIS] 02633413 (Generated: 05/06/2024 13:53:01) Rev: 1

Submitted By: Scott Ewan