

CONTAMINATION NORMAL FLUID CONDITION ABNORMAL

WEAR

NORMAL

Machine Id **519004** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0107929		
	Sample Date		Client Info		22 May 2024		
	Machine Age	kms	Client Info		5311		
	Oil Age	kms	Client Info		400		
	Filter Age	kms	Client Info		400		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR Metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185(m)	>127	19		
	Chromium	ppm	ASTM D5185(m)	>3	<1		
	Nickel	ppm	ASTM D5185(m)		0		
	Titanium	ppm	ASTM D5185(m)	>2	0		
	Silver	ppm	ASTM D5185(m)	>2	0		
	Aluminum	ppm	ASTM D5185(m)	>59	<1		
	Lead	ppm	ASTM D5185(m)	>29	3		
	Copper	ppm	ASTM D5185(m)	>135	<1		
	Tin	ppm	ASTM D5185(m)	>2	0		
	Vanadium	ppm	ASTM D5185(m)		0		
CONTAMINATION Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185(m)		3		
	Potassium	ppm	ASTM D5185(m)		1		
	Fuel	%	ASTM D7593*		0.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method	0	NEG		
	Soot %	%	ASTM D7844*		0.3		
	Nitration	Abs/cm	ASTM D7624*	>20	13.2		
	Sulfation Emulsified Water	Abs/.1mm	ASTM D7415*	>30	25.7		
		scalar	Visual*	>0.2	NEG		
FLUID CONDITION Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.	Sodium	ppm	ASTM D5185(m)	>158	5		
	Boron	ppm	ASTM D5185(m)	250	2		
	Barium	ppm	ASTM D5185(m)	10	0		
	Molybdenum	ppm	ASTM D5185(m)	100	70		
	Manganese	ppm	ASTM D5185(m)		<1		
	Magnesium	ppm	ASTM D5185(m)	450	1136		
	Calcium	ppm	ASTM D5185(m)	3000	1236		

Phosphorus

Zinc

Sulfur

Oxidation

Visc @ 100°C cSt

ppm

ppm

ppm

Abs/.1mm

ASTM D5185(m) 1150

ASTM D5185(m) 4250

ASTM D7414* >25

ASTM D7279(m) 14.4

ASTM D5185(m)

1350

Contact/Location: Kim Cunningham - GFL350 Page 1 of 2

1162

1365

2594

24.6

12.5



