

GFL515 Machine Id

125072

Diesel Engine

DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RF	COM	IMEN	IDAT	ION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0116393		
Sample Date		Client Info		03 Jun 2024		
Machine Age	kms	Client Info		116084		
Oil Age	kms	Client Info		0		
Filter Age	kms	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				NORMAL		
Iron	ppm	ASTM D5185(m)	>90	31		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>2	0		
Titanium	ppm	ASTM D5185(m)	>2	0		
Silver	ppm	ASTM D5185(m)	>2	0		
Aluminum	ppm	ASTM D5185(m)	>20	17		
Lead	ppm	ASTM D5185(m)	>40	8		
Copper	ppm	ASTM D5185(m)	>330	2		
Tin	ppm	ASTM D5185(m)	>15	0		
Vanadium	ppm	ASTM D5185(m)		0		
Silicon	ppm	ASTM D5185(m)	>25	2		
Potassium	ppm	ASTM D5185(m)	>20	41		
Fuel		WC Method	>3.0	<1.0		
i uei		WO WELLIOU	20.0	<1.0		
Water		WC Method	>0.2	NEG		
Water	%	WC Method		NEG		
Water Glycol	% Abs/cm	WC Method WC Method	>0.2	NEG NEG		
Water Glycol Soot %		WC Method WC Method ASTM D7844*	>0.2 >6	NEG NEG 0.4		
Water Glycol Soot % Nitration	Abs/cm	WC Method WC Method ASTM D7844* ASTM D7624*	>0.2 >6 >20	NEG NEG 0.4 10.9		
Water Glycol Soot % Nitration Sulfation Emulsified Water	Abs/cm Abs/.1mm scalar	WC Method WC Method ASTM D7844* ASTM D7624* ASTM D7415* Visual*	>0.2 >6 >20 >30	NEG NEG 0.4 10.9 22.7 NEG	 	
Water Glycol Soot % Nitration Sulfation Emulsified Water Sodium	Abs/cm Abs/.1mm scalar ppm	WC Method WC Method ASTM D7844* ASTM D7624* ASTM D7415* Visual* ASTM D5185(m)	>0.2 >6 >20 >30 >0.2	NEG NEG 0.4 10.9 22.7 NEG 4	 	
Water Glycol Soot % Nitration Sulfation Emulsified Water Sodium Boron	Abs/cm Abs/.1mm scalar ppm ppm	WC Method WC Method ASTM D7844* ASTM D7624* ASTM D7415* Visual* ASTM D5185(m) ASTM D5185(m)	>0.2 >6 >20 >30 >0.2 250	NEG NEG 0.4 10.9 22.7 NEG 4 2	 	
Water Glycol Soot % Nitration Sulfation Emulsified Water Sodium Boron Barium	Abs/cm Abs/.1mm scalar ppm ppm ppm	WC Method WC Method ASTM D7844* ASTM D7624* ASTM D7415* Visual* ASTM D5185(m) ASTM D5185(m)	>0.2 >6 >20 >30 >0.2 250 10	NEG NEG 0.4 10.9 22.7 NEG 4 2 0		
Water Glycol Soot % Nitration Sulfation Emulsified Water Sodium Boron Barium Molybdenum	Abs/cm Abs/.1mm scalar ppm ppm ppm ppm	WC Method WC Method ASTM D7844* ASTM D7624* ASTM D7415* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 >6 >20 >30 >0.2 250	NEG NEG 0.4 10.9 22.7 NEG 4 2 0 65		
Water Glycol Soot % Nitration Sulfation Emulsified Water Sodium Boron Barium Molybdenum Manganese	Abs/cm Abs/.1mm scalar ppm ppm ppm ppm	WC Method WC Method ASTM D7844* ASTM D7624* ASTM D7415* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 >6 >20 >30 >0.2 250 10 100	NEG NEG 0.4 10.9 22.7 NEG 4 2 0 65 <1		
Water Glycol Soot % Nitration Sulfation Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	Abs/cm Abs/.1mm scalar ppm ppm ppm ppm ppm	WC Method WC Method ASTM D7844* ASTM D7624* ASTM D7415* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 >6 >20 >30 >0.2 250 10 100 450	NEG NEG 0.4 10.9 22.7 NEG 4 2 0 65 <1 1060		
Water Glycol Soot % Nitration Sulfation Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium	Abs/cm Abs/.1mm scalar ppm ppm ppm ppm ppm ppm	WC Method WC Method ASTM D7844* ASTM D7624* ASTM D7415* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 >6 >20 >30 >0.2 250 10 100 100 450 3000	NEG NEG 0.4 10.9 22.7 NEG 4 2 0 65 <1 1060 1167		
Water Glycol Soot % Nitration Sulfation Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium Calcium	Abs/cm Abs/.1mm scalar ppm ppm ppm ppm ppm ppm	WC Method WC Method ASTM D7844* ASTM D7624* ASTM D7415* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 >6 >20 >30 >0.2 250 10 100 450 3000 1150	NEG NEG 0.4 10.9 22.7 NEG 4 2 0 65 <1 1060 1167 1082		
Water Glycol Soot % Nitration Sulfation Emulsified Water Sodium Boron Barium Barium Malybdenum Manganese Magnesium Calcium Phosphorus Zinc	Abs/cm Abs/.1mm scalar ppm ppm ppm ppm ppm ppm ppm ppm	WC Method WC Method ASTM D7844* ASTM D7624* ASTM D7415* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	 >0.2 >20 >30 >0.2 250 10 100 450 3000 1150 1350 	NEG NEG 0.4 10.9 22.7 NEG 4 2 0 65 <1 1060 1167 1082 1295		
Water Glycol Soot % Nitration Sulfation Emulsified Water Sodium Boron Barium Barium Malybdenum Manganese Magnesium Calcium	Abs/cm Abs/.1mm scalar ppm ppm ppm ppm ppm ppm	WC Method WC Method ASTM D7844* ASTM D7624* ASTM D7415* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 >6 >20 >30 >0.2 250 10 100 450 3000 1150	NEG NEG 0.4 10.9 22.7 NEG 4 2 0 65 <1 1060 1167 1082		

Visc @ 100°C cSt

ASTM D7279(m) 10.9

FLUID CONDITION NORMAL

CONTAMINATION

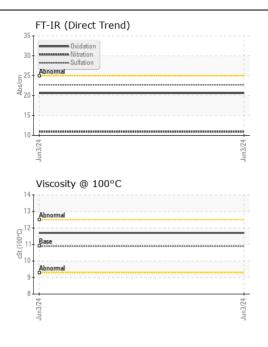
WEAR

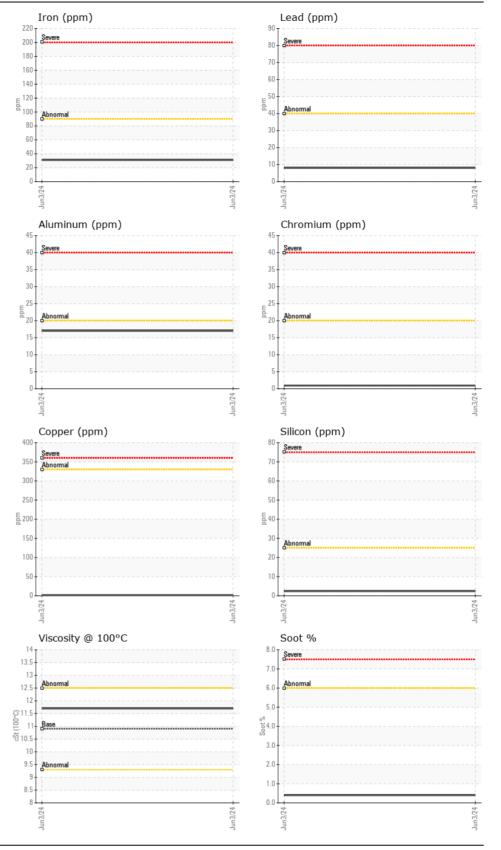
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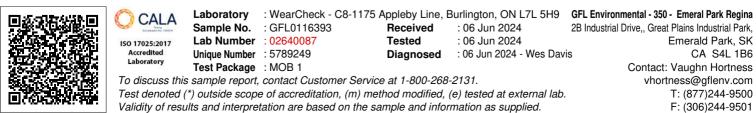
NORMAL

Contact/Location: Vaughn Hortness - GFL350

11.7







Contact/Location: Vaughn Hortness - GFL350 Page 2 of 2