

## **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

#### Machine Id 423101 Component Diesel Engine Fluid {not provided} (10 GAL)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

#### Wear

Metal levels are typical for a components first oil change.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION method limit/base current	history1 his	story2
Sample Number Client Info GFL0123767		
Sample Date Client Info 24 Jun 2024		
Machine Age hrs Client Info 312		
Oil Age hrs Client Info 312		
Oil Changed Client Info Changed		
Sample Status NORMAL		
CONTAMINATION method limit/base current	history1 his	story2
Fuel WC Method >5 <1.0		
Water WC Method >0.2 NEG		
Glycol WC Method NEG		
WEAR METALS method limit/base current	history1 his	story2
Iron ppm ASTM D5185m >100 42		
Chromium ppm ASTM D5185m >20 <1		
Nickel ppm ASTM D5185m >4 0		
Titanium ppm ASTM D5185m <1		
Silver ppm ASTM D5185m >3 0		
Aluminum ppm ASTM D5185m >20 9		
Lead ppm ASTM D5185m >40 0		
Copper ppm ASTM D5185m >330 2		
Tin ppm ASTM D5185m >15 0		
Vanadium ppm ASTM D5185m <1		
Cadmium ppm ASTM D5185m 0		
ADDITIVES method limit/base current	history1 his	story2
Boron ppm ASTM D5185m 33		
Barium ppm ASTM D5185m O		
Barium      ppm      ASTM D5185m      0        Molybdenum      ppm      ASTM D5185m      70		
Molybdenum ppm ASTM D5185m 70		
MolybdenumppmASTM D5185m70ManganeseppmASTM D5185m<1		
Molybdenum      ppm      ASTM D5185m      70        Manganese      ppm      ASTM D5185m      <1        Magnesium      ppm      ASTM D5185m      1267	 	
Molybdenum      ppm      ASTM D5185m      70        Manganese      ppm      ASTM D5185m      <1		
MolybdenumppmASTM D5185m70ManganeseppmASTM D5185m<1		
MolybdenumppmASTM D5185m70ManganeseppmASTM D5185m<1	Constant of the second sec	story2
Molybdenum      ppm      ASTM D5185m      70        Manganese      ppm      ASTM D5185m      <1	Constant of the second sec	story2
MolybdenumppmASTM D5185m70ManganeseppmASTM D5185m<1		story2
MolybdenumppmASTM D5185m70ManganeseppmASTM D5185m<1		story2
Molybdenum      ppm      ASTM D5185m      70        Manganese      ppm      ASTM D5185m      <1	history1  history1	story2
MolybdenumppmASTM D5185m70ManganeseppmASTM D5185m<1	history1  history1	
MolybdenumppmASTM D5185m70ManganeseppmASTM D5185m<1	history1  history1    history1  history1    history1  history1	
MolybdenumppmASTM D5185m70ManganeseppmASTM D5185m<1	history1  history1    history1  history1    history1  history1    history1  history1	
Molybdenum      ppm      ASTM D5185m      70        Manganese      ppm      ASTM D5185m      <1	history1  history1    history2                                                                                                     <	
Molybdenum      ppm      ASTM D5185m      70        Manganese      ppm      ASTM D5185m      <1	history1  history1    history2                                                                                                     <	story2



# **OIL ANALYSIS REPORT**

FT-IR (Direct Trend)		VISUAL		method		current	history1	history2
0xidation		White Metal	scalar	*Visual	NONE	NONE		
80 - Mitration Sulfation		Yellow Metal	scalar	*Visual	NONE	NONE		
25 - Abnormal		Precipitate	scalar	*Visual	NONE	NONE		
20 -		Silt	scalar	*Visual	NONE	NONE		
5		Debris	scalar	*Visual	NONE	NONE		
0		Sand/Dirt	scalar	*Visual	NONE	NONE		
o Jun24/24	Jun24/24 -	Appearance	scalar	*Visual	NORML	NORML		
	Junî	Odor	scalar	*Visual	NORML	NORML		
Base Number		Emulsified Water	scalar	*Visual	>0.2	NEG		
0 		Free Water	scalar	*Visual		NEG		
.0		FLUID PROPE	ERTIES	method	limit/base	current	history1	history2
1		Visc @ 100°C	cSt	ASTM D445		14.7		
.0		GRAPHS						
.0 -		Ferrous Alloys						
04	ζ.	40 iron						
Jun 24/24	180	35 - nickel						
		30						
Viscosity @ 100°C		25 20						
17- Abnormal		15						
16 -		10						
4		5						
Abnormal		Jun24/24			Jun24/24			
11		Non-ferrous Meta	als					
Jun 24/24	N CI N C	10 copper						
сил Г	<u> </u>	8 accesses lead						
		tin tin						
		6						
		4						
		2						
			******					
		n24/24			n24/24			
			c		Jur			
		Viscosity @ 100°			10.0	Base Number		
		17- Abnormal			10.0			
		16-			( <sup>B</sup> } 8.0	-		
	ç				HOX D 6.0			
		5 15			0.0 6.0 8985 Winnber (mg 4.0 898			
	ć				4.0			
		13 - Abnormal			2.0			
		12-						
		114			0.0	24		24 -
		Jun24/24			Jun24/24	Jun24/24		Jun24/24
	ample No. ab Number nique Number est Package	11101410	Recei Teste Diagr	ived : 28 d : 28	7, NC 27513 3 Jun 2024 3 Jun 2024 3 Jun 2024 - W		Contact	<b>8 - Hartland HC</b> Industrial Drive Hartland, W US 53029 :: David McCal all@gflenv.com

Submitted By: David McCall

Page 2 of 2