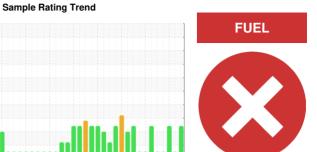


PROBLEM SUMMARY

Sample





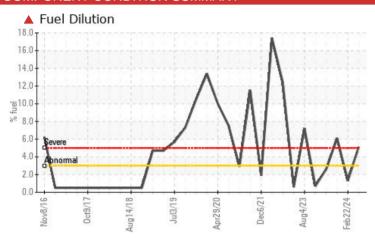
Machine Id

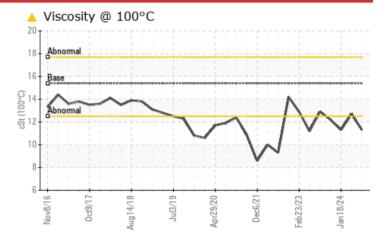
MACK 2658

Component
Diesel Engine
Fluid

PETRO CANADA DURON SHP 15W40 (7 GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS									
Sample Status				SEVERE	NORMAL	SEVERE			
Fuel	%	ASTM D3524	>3.0	▲ 5.1	1.3	▲ 6.1			
Visc @ 100°C	cSt	ASTM D445	15.4	11.3	12.7	<u></u> 11.3			

Customer Id: GFL009 Sample No.: GFL0116764 Lab Number: 06193722 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS						
Action	Status	Date	Done By	Description		
Change Fluid			?	We recommend that you drain the oil from the component if this has not already been done.		
Resample			?	We recommend an early resample to monitor this condition.		
Check Fuel/injector System			?	We advise that you check the fuel injection system.		

HISTORICAL DIAGNOSIS

22 Feb 2024 Diag: Wes Davis

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



FUEL





18 Jan 2024 Diag: Wes Davis We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.







06 Sep 2023 Diag: Wes Davis

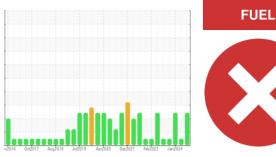
No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id

MACK 2658
Component
Diesel Engine

PETRO CANADA DURON SHP 15W40 (7 GAL)

DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

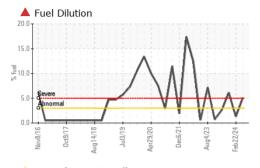
Fluid Condition

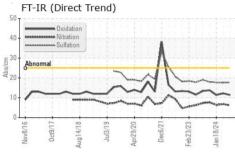
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

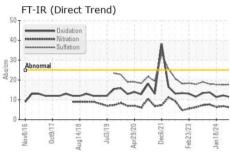
Sample Number Client Info GFL0116764 GFL0109042 GFL01090942 Sample Date Client Info 24 May 2024 22 Feb 2024 18 Jan 2024 34029 33773 33661							
Sample Date Client Info 24 May 2024 22 Feb 2024 18 Jan 2024 Machine Age hrs Client Info 34029 33773 33661 Dil Age hrs Client Info 1517 1261 33661 Dil Changed Client Info Not Changd N/A N/A N/A Sample Status SEVERE NORMAL SEVERE CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG NEG NEG NEG Silycol WC Method NEG NEG NEG NEG WEAR METALS method limit/base current history1 history2 WEAR METALS method limit/base current history1 history2 WEAR METALS method limit/base current history1 history2 Window ppm ASTM 05185m >20 <1 1 1 1 Nickel ppm ASTM 05185m >20 <1 1 1 1 Nickel ppm ASTM 05185m >20 <1 1 1 1 Nickel ppm ASTM 05185m >20 3 2 2 2 Lead ppm ASTM 05185m >20 3 2 2 2 Lead ppm ASTM 05185m >20 3 2 2 2 Lead ppm ASTM 05185m >20 3 2 2 2 Lead ppm ASTM 05185m >20 3 2 2 9 Tin ppm ASTM 05185m >330 4 2 9 Vanadium ppm ASTM 05185m >15 <1 <1 <1 <1 Cadmium ppm ASTM 05185m >10 <1 <1 <1 Cadmium ppm ASTM 05185m 0 <1 <1 <1 <1 Cadmium ppm ASTM 05185m 0 <1 <1 <1 Calcilum ppm ASTM 05185m 0 0 1 0 Molybdenum ppm ASTM 05185m 0 0 0 1 0 Molybdenum ppm ASTM 05185m 0 0 0 1 0 Molybdenum ppm ASTM 05185m 0 0 0 1 0 Molybdenum ppm ASTM 05185m 0 0 0 1 0 Molybdenum ppm ASTM 05185m 0 0 0 1 0 Molybdenum ppm ASTM 05185m 0 0 0 1 0 Molybdenum ppm ASTM 05185m 0 0 0 1 0 Molybdenum ppm ASTM 05185m 0 0 0 1	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Date	Sample Number		Client Info		GFL0116764	GFL0109042	GFL0109096
Dil Changed	Sample Date		Client Info		24 May 2024	22 Feb 2024	18 Jan 2024
Dil Changed Client Info SEVERE NORMAL SEVERE	Machine Age	hrs	Client Info		34029	33773	33661
Several Sev	Oil Age	hrs	Client Info		1517	1261	33661
Sever Normal Sever Normal Sever Sever Normal Sever Sever Normal Sever Normal Sever Normal Sever Normal Sever Normal Sever Normal No	Oil Changed		Client Info		Not Changd	N/A	N/A
Water WC Method >0.2 NEG NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >120 34 14 38 Chromium ppm ASTM D5185m >20 <1 1 1 Nickel ppm ASTM D5185m >5 0 <1 0 Silver ppm ASTM D5185m >2 0 <1 0 Silver ppm ASTM D5185m >2 0 <1 0 Silver ppm ASTM D5185m >20 3 2 2 Copper ppm ASTM D5185m >30 4 2 9 Tin ppm ASTM D5185m >315 <1 <1 <1 <1 Vanadium ppm ASTM D5185m 0 18 12 17 ADDITIVES method limit/base current <t< td=""><td>Sample Status</td><td></td><td></td><td></td><th></th><td>NORMAL</td><td>SEVERE</td></t<>	Sample Status					NORMAL	SEVERE
WEAR METALS	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >120 34 14 38 Chromium ppm ASTM D5185m >20 <1	Water		WC Method	>0.2	NEG	NEG	NEG
Description	Glycol		WC Method		NEG	NEG	NEG
Description	WEAR METAL	S	method	limit/base	current	history1	history2
Silver	ron	ppm	ASTM D5185m	>120	34	14	38
Silver	Chromium	ppm	ASTM D5185m	>20	<1	1	1
Saliver	Nickel	ppm	ASTM D5185m	>5	0	<1	0
Aluminum ppm ASTM D5185m >20 3 2 2 Lead ppm ASTM D5185m >40 <1 <1 <1 <1 Copper ppm ASTM D5185m >330 4 2 9 Tin ppm ASTM D5185m >15 <1 <1 <1 <1 Cadmium ppm ASTM D5185m >0 <1 <1 <1 Cadmium ppm ASTM D5185m 0 0 <1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 1 1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 1 1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 1 1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 1 1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 10 0 0 1 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 10 0 0 1 0 0 ASTM D5185m 10 0 0 0 1 0 0 ASTM D5185m 10 0 0 0 1 0 0 ASTM D5185m 10 0 0 0 0 1 0 0 ASTM D5185m 10 0 0 0 0 1 0 0 ASTM D5185m 10 0 0 0 0 0 0 0 ASTM D5185m 10 0 0 0 0 0 0 0 0 ASTM D5185m 10 0 0 0 0 0 0 0 0 0 0 ASTM D5185m 10 0 0 0 0 0 0 0 0 0 0 0 0 0 ASTM D5185m 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Titanium		ASTM D5185m	>2	0	<1	0
Aluminum ppm ASTM D5185m >20 3 2 2 Lead ppm ASTM D5185m >40 <1 <1 <1 <1 Copper ppm ASTM D5185m >330 4 2 9 Fin ppm ASTM D5185m >15 <1 <1 <1 <1 Cadmium ppm ASTM D5185m >15 <1 <1 <1 <1 Cadmium ppm ASTM D5185m 0 0 <1 0 Cadmium ppm ASTM D5185m 0 0 <1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 18 12 17 Barium ppm ASTM D5185m 0 0 1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Silver		ASTM D5185m	>2	0	0	0
Lead ppm ASTM D5185m >40 <1 <1 <1 <1 Clopper ppm ASTM D5185m >330 4 2 9 Fin ppm ASTM D5185m >15 <1	Aluminum		ASTM D5185m	>20	3	2	2
Description	_ead		ASTM D5185m	>40		<1	<1
Tin	Copper		ASTM D5185m	>330	4	2	9
Vanadium ppm ASTM D5185m 0 <1 <1 Cadmium ppm ASTM D5185m 0 <1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 18 12 17 Barium ppm ASTM D5185m 0 0 1 0 Molybdenum ppm ASTM D5185m 0 0 1 0 Manganese ppm ASTM D5185m 0 <1 <1 0 Magnesium ppm ASTM D5185m 1010 728 673 730 Calcium ppm ASTM D5185m 1070 1053 1005 971 Phosphorus ppm ASTM D5185m 1270 1052 1049 1063 Sulfur ppm ASTM D5185m 1270 1052 1049 1063 Sulfur ppm ASTM D5185m 22 4 4	• • • • • • • • • • • • • • • • • • • •						<1
Cadmium ppm ASTM D5185m 0 <1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 18 12 17 Barium ppm ASTM D5185m 0 0 1 0 Molybdenum ppm ASTM D5185m 60 55 56 53 Manganese ppm ASTM D5185m 1010 728 673 730 Magnesium ppm ASTM D5185m 1070 1053 1005 971 Phosphorus ppm ASTM D5185m 1150 906 866 889 Zinc ppm ASTM D5185m 1270 1052 1049 1063 Sulfur ppm ASTM D5185m 2060 3073 2986 2763 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 20 <td< td=""><td></td><td></td><td></td><td>7.0</td><th></th><td></td><td></td></td<>				7.0			
Boron							
Barium	ADDITIVES		method	limit/base	current	history1	history2
Barium	Boron	ppm	ASTM D5185m	0	18	12	17
Manganese ppm ASTM D5185m 0 <1 <1 0 Magnesium ppm ASTM D5185m 1010 728 673 730 Calcium ppm ASTM D5185m 1070 1053 1005 971 Phosphorus ppm ASTM D5185m 1150 906 866 889 Zinc ppm ASTM D5185m 1270 1052 1049 1063 Sulfur ppm ASTM D5185m 2060 3073 2986 2763 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m 22 5 <1 Potassium ppm ASTM D5185m 20 2 3 3 Fuel % ASTM D5185m >20 2 3 3 Fuel % ASTM D5185m >20 2 3 3 Fuel % ASTM D5185m >20 2	Barium	ppm	ASTM D5185m	0	0	1	0
Manganese ppm ASTM D5185m 0 <1 <1 0 Magnesium ppm ASTM D5185m 1010 728 673 730 Calcium ppm ASTM D5185m 1070 1053 1005 971 Phosphorus ppm ASTM D5185m 1150 906 866 889 Zinc ppm ASTM D5185m 1270 1052 1049 1063 Sulfur ppm ASTM D5185m 2060 3073 2986 2763 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 22 5 <1 Potassium ppm ASTM D5185m 20 2 3 3 Fuel % ASTM D5185m >20 2 3 3 Fuel % ASTM D5185m >20 2 3 3 Fuel % ASTM D5185m >20 2	Molybdenum		ASTM D5185m	60	55	56	53
Magnesium ppm ASTM D5185m 1010 728 673 730 Calcium ppm ASTM D5185m 1070 1053 1005 971 Phosphorus ppm ASTM D5185m 1150 906 866 889 Zinc ppm ASTM D5185m 1270 1052 1049 1063 Sulfur ppm ASTM D5185m 2060 3073 2986 2763 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 4 2 Sodium ppm ASTM D5185m >20 2 3 3 Potassium ppm ASTM D5185m >20 2 3 3 Fuel % ASTM D3524 >3.0 5.1 1.3 6.1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624	-			0	.4	4	•
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Zinc ppm ASTM D5185m 1270 1052 1049 1063 Sulfur ppm ASTM D5185m 2060 3073 2986 2763 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 4 2 Sodium ppm ASTM D5185m 2 5 <1 Potassium ppm ASTM D5185m >20 2 3 3 Fuel % ASTM D3524 >3.0 ▲ 5.1 1.3 ▲ 6.1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >4 0.9 0.5 1.1 Nitration Abs/cm *ASTM D7624 >20 6.1 6.8 6.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.7 17.6 17.7 FLUID DEGRADATION method limit/base	Magnesium	ppm	ASTM D5185m	1010	728	673	730
Sulfur ppm ASTM D5185m 2060 3073 2986 2763 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 4 2 Sodium ppm ASTM D5185m 2 5 <1	Magnesium Calcium	ppm	ASTM D5185m ASTM D5185m	1010 1070	728 1053	673 1005	730 971
Silicon ppm ASTM D5185m >25 4 4 2 Sodium ppm ASTM D5185m 2 5 <1 Potassium ppm ASTM D5185m >20 2 3 3 Fuel % ASTM D3524 >3.0 ▲ 5.1 1.3 ▲ 6.1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >4 0.9 0.5 1.1 Nitration Abs/cm *ASTM D7624 >20 6.1 6.8 6.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.7 17.6 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 11.4 12.2 11.4	Magnesium Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1010 1070 1150	728 1053 906	673 1005 866	730 971 889
Sodium ppm ASTM D5185m 2 5 <1	Magnesium Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1010 1070 1150 1270	728 1053 906 1052	673 1005 866 1049	730 971 889 1063
Sodium ppm ASTM D5185m 2 5 <1 Potassium ppm ASTM D5185m >20 2 3 3 Fuel % ASTM D3524 >3.0 ▲ 5.1 1.3 ▲ 6.1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >4 0.9 0.5 1.1 Nitration Abs/cm *ASTM D7624 >20 6.1 6.8 6.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.7 17.6 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 11.4 12.2 11.4	Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1010 1070 1150 1270 2060	728 1053 906 1052 3073	673 1005 866 1049 2986	730 971 889 1063 2763
Potassium ppm ASTM D5185m >20 2 3 3 Fuel % ASTM D3524 >3.0 ▲ 5.1 1.3 ▲ 6.1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >4 0.9 0.5 1.1 Nitration Abs/cm *ASTM D7624 >20 6.1 6.8 6.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.7 17.6 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 11.4 12.2 11.4	Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1010 1070 1150 1270 2060 limit/base	728 1053 906 1052 3073 current	673 1005 866 1049 2986 history1	730 971 889 1063 2763 history2
Fuel	Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1010 1070 1150 1270 2060 limit/base	728 1053 906 1052 3073 current	673 1005 866 1049 2986 history1	730 971 889 1063 2763 history2
Soot % % *ASTM D7844 >4 0.9 0.5 1.1 Nitration Abs/cm *ASTM D7624 >20 6.1 6.8 6.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.7 17.6 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 11.4 12.2 11.4	Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	1010 1070 1150 1270 2060 limit/base >25	728 1053 906 1052 3073 current 4	673 1005 866 1049 2986 history1 4	730 971 889 1063 2763 history2 2 <1
Nitration Abs/cm *ASTM D7624 >20 6.1 6.8 6.4 Sulfation Abs/.1mm *ASTM D7615 >30 17.7 17.6 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 11.4 12.2 11.4	Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1010 1070 1150 1270 2060 limit/base >25	728 1053 906 1052 3073 current 4 2	673 1005 866 1049 2986 history1 4 5	730 971 889 1063 2763 history2 2 <1 3
Sulfation Abs/.1mm *ASTM D7415 >30 17.7 17.6 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 11.4 12.2 11.4	Magnesium Calcium Phosphorus Zinc Gulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m	1010 1070 1150 1270 2060 limit/base >25 >20 >3.0	728 1053 906 1052 3073 current 4 2 2 \$ \$\int 5.1\$	673 1005 866 1049 2986 history1 4 5 3 1.3	730 971 889 1063 2763 history2 2 <1 3
Sulfation Abs/.1mm *ASTM D7415 >30 17.7 17.6 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 11.4 12.2 11.4	Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm	ASTM D5185m	1010 1070 1150 1270 2060 limit/base >25 >20 >3.0	728 1053 906 1052 3073	673 1005 866 1049 2986 history1 4 5 3 1.3	730 971 889 1063 2763 history2 2 <1 3 ▲ 6.1 history2
Oxidation	Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524	1010 1070 1150 1270 2060 limit/base >25 >20 >3.0 limit/base	728 1053 906 1052 3073	673 1005 866 1049 2986 history1 4 5 3 1.3 history1 0.5	730 971 889 1063 2763 history2 2 <1 3 ▲ 6.1 history2 1.1
	Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844	1010 1070 1150 1270 2060 limit/base >25 >20 >3.0 limit/base >4 >20	728 1053 906 1052 3073	673 1005 866 1049 2986 history1 4 5 3 1.3 history1 0.5 6.8	730 971 889 1063 2763 history2 2 <1 3 ▲ 6.1 history2 1.1 6.4
	Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm %	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	1010 1070 1150 1270 2060 limit/base >25 >20 >3.0 limit/base >4 >20 >30	728 1053 906 1052 3073	673 1005 866 1049 2986 history1 4 5 3 1.3 history1 0.5 6.8 17.6	730 971 889 1063 2763 history2 2 <1 3 ▲ 6.1 history2 1.1 6.4 17.7
	Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D7824 *ASTM D7844 *ASTM D7624 *ASTM D7415 method	1010 1070 1150 1270 2060 limit/base >25 >20 >3.0 limit/base >4 >20 >30 limit/base	728 1053 906 1052 3073 current 4 2 2 ▲ 5.1 current 0.9 6.1 17.7 current	673 1005 866 1049 2986 history1 4 5 3 1.3 history1 0.5 6.8 17.6 history1	730 971 889 1063 2763 history2 2 <1 3 ▲ 6.1 history2 1.1 6.4 17.7 history2

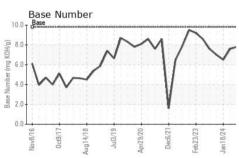


OIL ANALYSIS REPORT





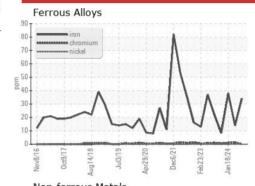


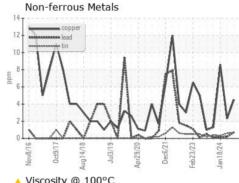


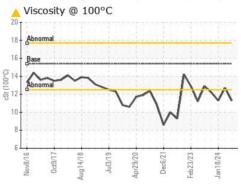
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

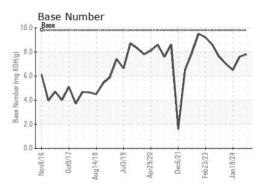
FLUID PROPE	RHES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	<u> </u>	12.7	▲ 11.3

GRAPHS













Certificate 12367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: GFL0116764 Lab Number : 06193722 Unique Number : 11050474

Received **Tested**

: 29 May 2024 : 03 Jun 2024

: 03 Jun 2024 - Wes Davis

Diagnosed

Test Package: FLEET (Additional Tests: FuelDilution, PercentFuel) To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

GFL Environmental - 009 - Fairburn

6905 Roosevelt Hwy Fairburn, GA

US 30213 Contact: Eric Jones erjones@gflenv.com

T: (678)630-9927

Submitted By: Eric Jones