

PROBLEM SUMMARY

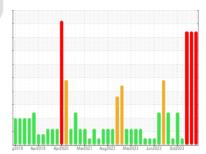
Sample Rating Trend

GLYCOL

Machine Id 10682 Component

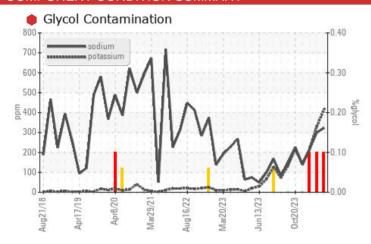
Diesel Engine

PETRO CANADA DURON SHP 15W40 (40 GAL)





COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS							
Sample Status				SEVERE	SEVERE	SEVERE	
Sodium	ppm	ASTM D5185m		△ 323	▲ 300	1 217	
Potassium	ppm	ASTM D5185m	>20	<u> </u>	△ 330	<u> </u>	
Glycol	%	*ASTM D2982		0.10	0.10	0.10	

Customer Id: GFL084 Sample No.: GFL0098964 Lab Number: 06070308 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 ihester@wearcheckusa.com

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			?	Oil and filter change at the time of sampling has been noted.			
Change Filter			?	Oil and filter change at the time of sampling has been noted.			
Resample			?	We recommend an early resample to monitor this condition.			
Check Glycol Access			?	We advise that you check for the source of the coolant leak.			

HISTORICAL DIAGNOSIS

26 Dec 2023 Diag: Jonathan Hester





We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. Test for glycol is positive. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.



30 Nov 2023 Diag: Wes Davis

GLYCOL



We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition. All component wear rates are normal. Test for glycol is positive. There is a high concentration of glycol present in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.



09 Nov 2023 Diag: Wes Davis

NORMAL



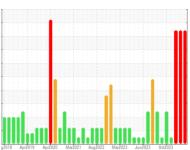
Resample at the next service interval to monitor. All component wear rates are normal. Test for glycol is negative. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id 10682 Component

Diesel Engine

PETRO CANADA DURON SHP 15W40 (40 GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Test for glycol is positive.

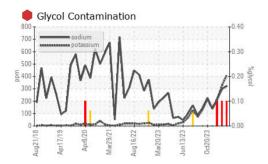
▲ Fluid Condition

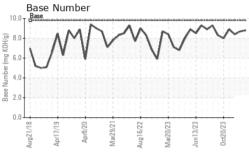
The BN result indicates that there is suitable alkalinity remaining in the oil.

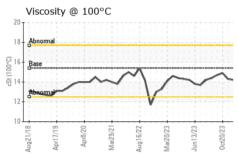
SAMPLE INFORMATION method limit/base current history1 history2	GAL) gail 8 Apr2019 Apr2020 Mar2021 Apr2022 Mar2023 Jun2023 0cr2023 3						
Sample Date	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Date Client Info 11 Jan 2024 26 Dec 2023 30 Nov 2023 Machine Age hrs Client Info 17922 179	Sample Number		Client Info		GFL0098964	GFL0099010	GFL0098981
Machine Age hrs Client Info 18544 18386 18241 Oil Age hrs Client Info 17922 17922 17922 Oil Changed Client Info Changed N/A N/A Sample Status Image: Client Info Changed N/A N/A CONTAMINATION method limit/base current historyt history2 Fuel WC Method >3.0 <1.0 <1.0 <1.0 WEAR METALS wellod limit/base current historyt history2 Iron ppm ASTM D5185m >75 30 24 21 Chromium ppm ASTM D5185m >5 1 <1 <1 Nickel ppm ASTM D5185m >2 0 0 <1 Aluminum ppm ASTM D5185m >2 0 0 <1 Lead ppm ASTM D5185m >2 0 0 <1 Copper			Client Info		11 Jan 2024	26 Dec 2023	30 Nov 2023
Oil Age hrs Client Info 17922 17922 17922 17922 Oil Changed Sample Status Client Info Changed SEVERE N/A N/A CONTAMINATION method limit/base current history1 history2 Fuel WC Method >3.0 <1.0		hrs	Client Info		18544	18386	18241
Oil Changed Sample Status Client Info Changed SEVERE N/A N/A CONTAMINATION method limit/base current history1 history2 Fuel WC Method >3.0 <1.0 <1.0 <1.0 <1.0 Water WC Method >0.0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >75 30 24 21 Chromium ppm ASTM D5185m >5 1 <1		hrs	Client Info		17922	17922	17922
Sample Status	-		Client Info		Changed	N/A	N/A
Fuel WC Method >3.0 <1.0	-				_	SEVERE	SEVERE
Water WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >75 30 24 21 Chromium ppm ASTM D5185m >5 1 <1	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Iron	Water		WC Method	>0.2	NEG	NEG	NEG
Chromium ppm ASTM D5185m >5 1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	WEAR METAL	.S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>75	30	24	21
Titanium	Chromium	ppm	ASTM D5185m	>5	1	<1	<1
Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >15 3 2 2 Lead ppm ASTM D5185m >25 <1 <1 0 Copper ppm ASTM D5185m >100 <1 <1 0 Vanadium ppm ASTM D5185m 0 <1 0 <1 0 Vanadium ppm ASTM D5185m 0 0 <1 0 Vanadium ppm ASTM D5185m 0 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 3 0 Barium ppm ASTM D5185m 0 0 3 0 Barium ppm ASTM D5185m 0 21 <1 <1 0 Magnesium ppm ASTM D5185m	Nickel	ppm	ASTM D5185m	>4	0	<1	0
Aluminum ppm ASTM D5185m >15 3 2 2 Lead ppm ASTM D5185m >25 <1	Titanium	ppm	ASTM D5185m	>2	0	0	<1
Lead ppm ASTM D5185m >25 <1 <1 0 Copper ppm ASTM D5185m >100 <1 <1 <1 Tin ppm ASTM D5185m >4 <1 <1 0 Vanadium ppm ASTM D5185m 0 0 <1 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 3 0 Barium ppm ASTM D5185m 0 0 0 6 Molybdenum ppm ASTM D5185m 0 0 0 6 Magnesium ppm ASTM D5185m 0 <1 <1 <1 0 Calcium ppm ASTM D5185m 1070 1253 1070 1059 Phosphorus ppm ASTM D5185m 1270 1279	Silver	ppm	ASTM D5185m	>2	0	0	0
Copper ppm ASTM D5185m >100 <1 <1 <1 Tin ppm ASTM D5185m >4 <1	Aluminum	ppm	ASTM D5185m	>15	3	2	2
Tin ppm ASTM D5185m >4 <1 <1 0 Vanadium ppm ASTM D5185m 0 <1 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 3 0 Barium ppm ASTM D5185m 0 0 0 6 Molybdenum ppm ASTM D5185m 0 <1 <1 0 Magnesium ppm ASTM D5185m 1010 1058 958 881 Calcium ppm ASTM D5185m 1070 1253 1070 1059 Phosphorus ppm ASTM D5185m 1150 987 1098 1018 Zinc ppm ASTM D5185m 1270 1279 1336 1153 Sulfur ppm ASTM D5185m >2060 3090 3069	Lead	ppm	ASTM D5185m	>25	<1	<1	0
Vanadium ppm ASTM D5185m 0 <1 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 3 0 Barium ppm ASTM D5185m 0 0 0 6 Molybdenum ppm ASTM D5185m 60 82 76 72 Manganese ppm ASTM D5185m 0 <1 <1 0 Magnesium ppm ASTM D5185m 1010 1058 958 881 Calcium ppm ASTM D5185m 1070 1253 1070 1059 Phosphorus ppm ASTM D5185m 1150 987 1098 1018 Zinc ppm ASTM D5185m 2060 3090 3069 2687 CONTAMINANTS method limit/base current history1<	Copper	ppm	ASTM D5185m	>100	<1	<1	<1
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 3 0 Barium ppm ASTM D5185m 0 0 0 6 Molybdenum ppm ASTM D5185m 0 41 <1 0 Manganese ppm ASTM D5185m 0 <1 <1 0 Magnesium ppm ASTM D5185m 1010 1058 958 881 Calcium ppm ASTM D5185m 1070 1253 1070 1059 Phosphorus ppm ASTM D5185m 1150 987 1098 1018 Zinc ppm ASTM D5185m 1270 1279 1336 1153 Sulfur ppm ASTM D5185m 2060 3090 3069 2687 CONTAMINANTS method limit/base current	Tin	ppm	ASTM D5185m	>4	<1	<1	0
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 3 0 Barium ppm ASTM D5185m 0 0 0 6 Molybdenum ppm ASTM D5185m 0 <1	Vanadium	ppm	ASTM D5185m		0	<1	0
Boron ppm ASTM D5185m 0 0 3 0 Barium ppm ASTM D5185m 0 0 0 6 Molybdenum ppm ASTM D5185m 0 82 76 72 Manganese ppm ASTM D5185m 0 <1 <1 0 Magnesium ppm ASTM D5185m 1010 1058 958 881 Calcium ppm ASTM D5185m 1070 1253 1070 1059 Phosphorus ppm ASTM D5185m 1150 987 1098 1018 Zinc ppm ASTM D5185m 1270 1279 1336 1153 Sulfur ppm ASTM D5185m 2060 3090 3069 2687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >20	Cadmium	ppm	ASTM D5185m		0	0	0
Barium ppm ASTM D5185m 0 0 0 6 Molybdenum ppm ASTM D5185m 60 82 76 72 Manganese ppm ASTM D5185m 0 <1 <1 0 Magnesium ppm ASTM D5185m 1010 1058 958 881 Calcium ppm ASTM D5185m 1070 1253 1070 1059 Phosphorus ppm ASTM D5185m 1150 987 1098 1018 Zinc ppm ASTM D5185m 1270 1279 1336 1153 Sulfur ppm ASTM D5185m 2060 3090 3069 2687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >20 415 330 217 Potassium ppm ASTM D5	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 60 82 76 72 Manganese ppm ASTM D5185m 0 <1 <1 0 Magnesium ppm ASTM D5185m 1010 1058 958 881 Calcium ppm ASTM D5185m 1070 1253 1070 1059 Phosphorus ppm ASTM D5185m 1150 987 1098 1018 Zinc ppm ASTM D5185m 1270 1279 1336 1153 Sulfur ppm ASTM D5185m 2060 3090 3069 2687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >20 415 330 217 Glycol % *ASTM D7844 >6 0.4 0.4 0.4 INFRA-RED method <td< td=""><td>Boron</td><td>ppm</td><td>ASTM D5185m</td><td>0</td><th>0</th><td>3</td><td>0</td></td<>	Boron	ppm	ASTM D5185m	0	0	3	0
Manganese ppm ASTM D5185m 0 <1 <1 0 Magnesium ppm ASTM D5185m 1010 1058 958 881 Calcium ppm ASTM D5185m 1070 1253 1070 1059 Phosphorus ppm ASTM D5185m 1150 987 1098 1018 Zinc ppm ASTM D5185m 1270 1279 1336 1153 Sulfur ppm ASTM D5185m 2060 3090 3069 2687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >20 415 330 217 Potassium ppm ASTM D5185m >20 415 330 217 Glycol % *ASTM D7844 >6 0.4 0.4 0.4 Nitration Abs/cm	Barium	ppm	ASTM D5185m	0	0	0	6
Magnesium ppm ASTM D5185m 1010 1058 958 881 Calcium ppm ASTM D5185m 1070 1253 1070 1059 Phosphorus ppm ASTM D5185m 1150 987 1098 1018 Zinc ppm ASTM D5185m 1270 1279 1336 1153 Sulfur ppm ASTM D5185m 2060 3090 3069 2687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >20 415 330 217 Potassium ppm ASTM D5185m >20 415 330 217 Glycol % *ASTM D585m >20 0.10 0.10 0.10 INFRA-RED method	Molybdenum	ppm	ASTM D5185m	60	82	76	72
Calcium ppm ASTM D5185m 1070 1253 1070 1059 Phosphorus ppm ASTM D5185m 1150 987 1098 1018 Zinc ppm ASTM D5185m 1270 1279 1336 1153 Sulfur ppm ASTM D5185m 2060 3090 3069 2687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >20 415 330 217 Potassium ppm ASTM D5185m >20 415 330 217 Glycol % *ASTM D2982 • 0.10 • 0.10 • 0.10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7415	Manganese	ppm	ASTM D5185m	0	<1	<1	0
Phosphorus ppm ASTM D5185m 1150 987 1098 1018 Zinc ppm ASTM D5185m 1270 1279 1336 1153 Sulfur ppm ASTM D5185m 2060 3090 3069 2687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >20 415 330 217 Potassium ppm ASTM D5185m >20 415 330 217 Glycol % *ASTM D2982 0.10 0.10 0.10 0.10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 12.5 11.8 10.6 Sulfation Abs/.1mm *AS	Magnesium	ppm	ASTM D5185m	1010	1058	958	881
Zinc ppm ASTM D5185m 1270 1279 1336 1153 Sulfur ppm ASTM D5185m 2060 3090 3069 2687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >20 415 330 217 Potassium ppm ASTM D5185m >20 415 330 217 Glycol % *ASTM D2982 0.10 0.10 0.10 0.10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 12.5 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 22.6 22.4 21.6 FLUID DEGRADATION method limit	Calcium	ppm	ASTM D5185m	1070	1253	1070	1059
Sulfur ppm ASTM D5185m 2060 3090 3069 2687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >20 415 330 217 Potassium ppm ASTM D5185m >20 415 330 217 Glycol % *ASTM D2982 0.10 0.10 0.10 0.10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 12.5 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 22.6 22.4 21.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D	Phosphorus	ppm	ASTM D5185m	1150	987	1098	1018
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >20 415 330 217 Potassium ppm ASTM D5185m >20 415 330 217 Glycol % *ASTM D2982 • 0.10 0.10 0.10 0.10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >6 0.4 0.4 0.4 Nitration Abs/.mm *ASTM D7624 >20 12.5 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 22.6 22.4 21.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 19.2 18.6	Zinc	ppm	ASTM D5185m	1270	1279	1336	1153
Silicon ppm ASTM D5185m >25 7 6 6 Sodium ppm ASTM D5185m >20 415 330 217 Potassium ppm ASTM D5185m >20 415 330 217 Glycol % *ASTM D2982 0.10 0.10 0.10 0.10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >6 0.4 0.4 0.4 Nitration Abs/cm *ASTM D7624 >20 12.5 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 22.6 22.4 21.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 19.2 18.6	Sulfur	ppm	ASTM D5185m	2060	3090	3069	2687
Sodium ppm ASTM D5185m ▲ 323 ▲ 300 ▲ 217 Potassium ppm ASTM D5185m >20 ▲ 415 ▲ 330 ▲ 217 Glycol % *ASTM D2982 ● 0.10 ● 0.10 ● 0.10 ● 0.10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >6 0.4 0.4 0.4 Nitration Abs/cm *ASTM D7624 >20 12.5 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 22.6 22.4 21.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 19.2 18.6	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 415 330 217 Glycol % *ASTM D2982 0.10 0.10 0.10 0.10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >6 0.4 0.4 0.4 Nitration Abs/cm *ASTM D7624 >20 12.5 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 22.6 22.4 21.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 19.2 18.6	Silicon	ppm	ASTM D5185m	>25	7	6	6
Glycol % *ASTM D2982 ● 0.10 ● 0.10 ● 0.10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >6 0.4 0.4 0.4 Nitration Abs/cm *ASTM D7624 >20 12.5 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 22.6 22.4 21.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 19.2 18.6	a				A 000	A 000	A 017
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >6 0.4 0.4 0.4 Nitration Abs/cm *ASTM D7624 >20 12.5 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 22.6 22.4 21.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 19.2 18.6	Sodium	ppm	ASTM D5185m		<u> </u>	<u></u>	
Soot % % *ASTM D7844 >6 0.4 0.4 0.4 Nitration Abs/cm *ASTM D7624 >20 12.5 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 22.6 22.4 21.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 19.2 18.6				>20			
Nitration Abs/cm *ASTM D7624 >20 12.5 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 22.6 22.4 21.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 19.2 18.6	Potassium	ppm	ASTM D5185m	>20	<u>415</u>	▲ 330	<u>^</u> 217
Sulfation Abs/.1mm *ASTM D7415 >30 22.6 22.4 21.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 19.2 18.6	Potassium Glycol	ppm	ASTM D5185m *ASTM D2982		▲ 415 ● 0.10	▲ 330 ● 0.10	▲ 217 ● 0.10
FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2OxidationAbs/.1mm*ASTM D7414>2519.719.218.6	Potassium Glycol INFRA-RED	ppm %	ASTM D5185m *ASTM D2982 method	limit/base	△ 415 ● 0.10 current	△ 330	△ 217
Oxidation Abs/.1mm *ASTM D7414 >25 19.7 19.2 18.6	Potassium Glycol INFRA-RED Soot %	ppm %	ASTM D5185m *ASTM D2982 method *ASTM D7844	limit/base >6	▲ 415 ● 0.10 current 0.4	△ 330	217 0.10 history2 0.4
	Potassium Glycol INFRA-RED Soot % Nitration	ppm % % Abs/cm	ASTM D5185m *ASTM D2982 method *ASTM D7844 *ASTM D7624	limit/base >6 >20	▲ 415 ● 0.10 current 0.4 12.5	↑ 330	↑ 217
Base Number (BN) mg KOH/g ASTM D2896 9.8 8.8 8.7 8.4	Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm % % Abs/cm Abs/.1mm	ASTM D5185m *ASTM D2982 method *ASTM D7844 *ASTM D7624 *ASTM D7415	limit/base >6 >20 >30	 ↓ 415 ↓ 0.10 current 0.4 12.5 22.6 	→ 330 → 0.10 history1 0.4 11.8 22.4	△ 217
	Potassium Glycol INFRA-RED Soot % Nitration Sulfation FLUID DEGRA	ppm % % Abs/cm Abs/.1mm	ASTM D5185m *ASTM D2982 method *ASTM D7844 *ASTM D7624 *ASTM D7415 method	limit/base >6 >20 >30 limit/base	 ↓ 415 ↓ 0.10 current 0.4 12.5 22.6 current 	△ 330	△ 217



OIL ANALYSIS REPORT



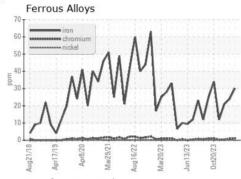


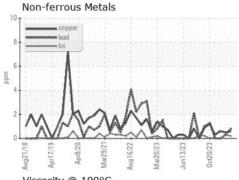


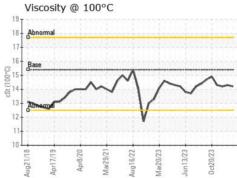
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

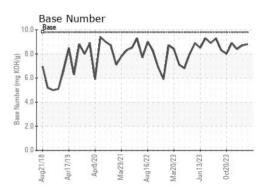
FLUID PROP	ERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.2	14.3	14.2

GRAPHS













Certificate L2367

Laboratory

Sample No. Lab Number **Unique Number**

: GFL0098964 : 06070308 : 10846985 Test Package : FLEET

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 25 Jan 2024 : 29 Jan 2024 Diagnosed

Diagnostician : Jonathan Hester GFL Environmental - 084 - Clarksville

699 Jack Miller Boulevard Clarksville, TN US 37042

Contact: ROBERT THIBAULT

robert.thibault@gflenv.com T: (931)552-7276

* - 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)

F: (931)572-9674