



COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition. (Customer Sample Comment: Top Up Amount: 1 LTR)

PROBLEMATIC TEST RESULTS							
Sample Status				ABNORMAL	SEVERE	SEVERE	
Sodium	ppm	ASTM D5185m		<u> </u>	1043	1290	
Potassium	ppm	ASTM D5185m	>20	i 134	🔺 1113	🔺 1525	

Customer Id: GFL885 Sample No.: GFL0081524 Lab Number: 05888244 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 <u>don.b505@comcast.net</u>

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

RECOMMENDED ACTIONS						
Action	Status	Date	Done By	Description		
Resample			?	We recommend an early resample to monitor this condition.		

HISTORICAL DIAGNOSIS

06 Mar 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. There is a high concentration of glycol present in the oil. The oil is no longer serviceable due to the presence of contaminants.



view report

13 Feb 2023 Diag: Jonathan Hester



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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.All component wear rates are normal. Sodium and/or potassium levels are high. 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.



24 Feb 2022 Diag: Jonathan Hester

We advise that you check for the source of the coolant leak. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Bearing and/or bushing wear is indicated. Sodium and/or potassium levels are high. 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.







OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL



Machine Id 424042-402401 Component

Diesel Engine Fluid

PETRO CANADA DURON SHP 15W40 (--- LTR)

DIAGNOSIS	SAMPLE INFOR	MATION	method	limit/base	current	history 1	history 2
Recommendation	Sample Number		Client Info		GFL0081524	GFL0071954	GFL0071936
lo corrective action is recommended at this time.	Sample Date		Client Info		29 Jun 2023	06 Mar 2023	13 Feb 2023
Ve recommend an early resample to monitor this	Machine Age	hrs	Client Info		32901	32873	32833
ondition. (Customer Sample Comment:	Oil Age	hrs	Client Info		600	600	600
op Up Amount: 1 LTR)	Oil Changed		Client Info		Not Changd	Oil Added	Changed
Vear	Sample Status				ABNORMAL	SEVERE	SEVERE
Il component wear rates are normal.			method	limit/base	current	history 1	history 2
Contamination				iiiiii/base	Current		
odium and/or potassium levels are high. Test for volume and/or potassium levels are high.	Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Fluid Condition	WEAR METAL	S	method	limit/base	current	history 1	history 2
e BN result indicates that there is suitable	Iron	ppm	ASTM D5185m	>120	3	37	42
alinity remaining in the oil. The condition of the	Chromium	ppm	ASTM D5185m	>20	<1	2	2
is suitable for further service.	Nickel	ppm	ASTM D5185m	>5	0	2	<1
	Titanium	ppm	ASTM D5185m	>2	0	0	0
	Silver	ppm	ASTM D5185m	>2	0	<1	0
	Aluminum	ppm	ASTM D5185m	>20	0	4	2
	Lead	nnm	ASTM D5185m	>40	2	16	21
	Copper	nnm	ASTM D5185m	>330	12	33	37
	Tin	ppm	ASTM D5185m	>15	-1	2	3
	Antimony	ppm	AGTM D5185m	>15	<1 	2	5
	Vanadium	ppm	ASTM D5185m		0		
	Cadmium	ppm	ACTM DE105m		.1	~ 1	<1
	Caumum	ррп	ASTM D3100III		<1	2	<
	ADDITIVES		method	limit/base	current	history 1	history 2
	Baran	nnm	ACTM DE10Em	0	2	96	101
	DOIOII	ppin	ASTIVI DOTODITI	0	-	50	101
	Barium	ppm	ASTM D5185m	0	0	4	0
	Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	0 0 60	0 82	4 217	0
	Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	0 82 <1	4 217 2	0 259 <1
	Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010	0 82 <1 758	4 217 2 678	0 259 <1 504
	Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070	0 82 <1 758 987	4 217 2 678 955	0 259 <1 504 642
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150	0 82 <1 758 987 929	4 217 2 678 955 900	0 259 <1 504 642 668
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150 1270	0 82 <1 758 987 929 1163	4 217 2 678 955 900 1058	0 259 <1 504 642 668 789
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150 1270 2060	0 82 <1 758 987 929 1163 3148	4 217 2 678 955 900 1058 2482	0 259 <1 504 642 668 789 2104
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150 1270 2060	0 82 <1 758 987 929 1163 3148 current	4 217 2 678 955 900 1058 2482 history 1	0 259 <1 504 642 668 789 2104 history 2
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150 1270 2060 limit/base	2 0 82 <1 758 987 929 1163 3148 current	4 217 2 678 955 900 1058 2482 history 1 9	0 259 <1 504 642 668 789 2104 history 2
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150 1270 2060 limit/base >25	2 0 82 <1 758 987 929 1163 3148 current 4 4	4 217 2 678 955 900 1058 2482 history 1 9 ↓ 1043	0 259 <1 504 642 668 789 2104 history 2 13 ▲ 1290
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20	2 0 82 <1 758 987 929 1163 3148 <u>current</u> 4 ▲ 62 ▲ 134	4 217 2 678 955 900 1058 2482 history 1 9 ▲ 1043 ▲ 1113	0 259 <1 504 642 668 789 2104 history 2 13 ▲ 1290 ▲ 1525
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20	2 0 82 <1 758 987 929 1163 3148 <u>current</u> 4 ▲ 62 ▲ 134 0.0	4 217 2 678 955 900 1058 2482 history 1 9 ▲ 1043 ▲ 1113 ● 0.20	0 259 <1 504 642 668 789 2104 history 2 13 ▲ 1290 ▲ 1525 ● 0.20
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m *ASTM D2982	0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20	2 0 82 <1 758 987 929 1163 3148 <i>current</i> 4 ▲ 62 ▲ 134 0.0	4 217 2 678 955 900 1058 2482 history 1 9 ▲ 1043 ▲ 1113 ● 0.20	0 259 <1 504 642 668 789 2104 history 2 13 ▲ 1290 ▲ 1525 ● 0.20
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm %	ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20 limit/base	2 0 82 <1 758 987 929 1163 3148 <u>current</u> 4 ▲ 62 ▲ 134 0.0 <u>current</u>	4 217 2 678 955 900 1058 2482 history 1 9 ▲ 1043 ▲ 1113 ● 0.20 history 1	0 259 <1 504 642 668 789 2104 history 2 13 ▲ 1290 ▲ 1525 ● 0.20 history 2
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm %	ASTM D5185m ASTM D5185m *ASTM D2982 method	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20 limit/base	2 0 82 <1 758 987 929 1163 3148 <u>current</u> 4 ▲ 62 ▲ 134 0.0 <u>current</u> 0.7	4 217 2 678 955 900 1058 2482 history 1 9 ▲ 1043 ▲ 1113 ● 0.20 history 1 1.7	0 259 <1 504 642 668 789 2104 history 2 13 ▲ 1290 ▲ 1525 ● 0.20 history 2 2.2
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m *ASTM D2982 method *ASTM D7844 *ASTM D7844	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >4 >20	2 0 82 <1 758 987 929 1163 3148 current 4 ▲ 62 ▲ 134 0.0 current 0.7	4 217 2 678 955 900 1058 2482 history 1 9 ▲ 1043 ▲ 1113 ● 0.20 history 1 1.7 21.1	0 259 <1 504 642 668 789 2104 history 2 13 ▲ 1290 ▲ 1525 ● 0.20 history 2 2.2 42.2
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m *ASTM D2982 method *ASTM D7844 *ASTM D7824	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >4 >20 >30	0 82 <1 758 987 929 1163 3148 current 4 ▲ 62 ▲ 134 0.0 current 0.7 9.2 21.4	4 217 2 678 955 900 1058 2482 history 1 9 ▲ 1043 ▲ 1113 ● 0.20 history 1 1.7 21.1 11.6	0 259 <1 504 642 668 789 2104 history 2 13 ▲ 1290 ▲ 1525 ● 0.20 history 2 2.2 42.2 0.0
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m ASTM D5185m *ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >20 limit/base >4 >20 >30 limit/base	0 82 <1 758 987 929 1163 3148 current 4 ▲ 62 ▲ 134 0.0 current 0.7 9.2 21.4	4 217 2 678 955 900 1058 2482 history 1 9 ▲ 1043 ▲ 1113 ● 0.20 history 1 1.7 21.1 11.6 history 1	0 259 <1 504 642 668 789 2104 history 2 13 ▲ 1290 ▲ 1525 ● 0.20 history 2 2.2 42.2 0.0 history 2
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI Oxidation	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm % Abs/cm Abs/cm Abs/1mm	ASTM D5185ml *ASTM D7842 *ASTM D78444 *ASTM D7624 *ASTM D7415 method *ASTM D7414	0 0 60 0 1010 1070 1150 1270 2060 limit/base >20 limit/base >4 >20 >30 limit/base >25	2 0 82 <1 758 987 929 1163 3148 current 4 ▲ 62 ▲ 134 0.0 current 0.7 9.2 21.4 current 17.3	4 217 2 678 955 900 1058 2482 history 1 9 ▲ 1043 ▲ 1113 ● 0.20 history 1 1.7 21.1 1.6 history 1 22.5	0 259 <1 504 642 668 789 2104 history 2 13 ▲ 1290 ▲ 1525 ● 0.20 history 2 2.2 42.2 0.0 history 2 35.6

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OIL ANALYSIS REPORT







VISUAL		method	limit/base	current	history 1	history 2
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	RTIES	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.4	14.3	15.8	▲ 23.5
GRAPHS						



Diagnostician : Don Baldridge

Certificate L2367

Test Package : FLEET 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)

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Report Id: GFL885 [WUSCAR] 05888244 (Generated: 07/04/2023 16:30:46) Rev: 1

Unique Number

Submitted By: TIMOTHY MOURER

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