

PROBLEM SUMMARY

Sample Rating Trend

FUEL



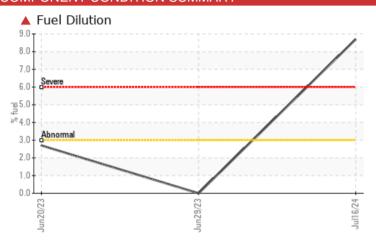
(YA163865) 711038 Component

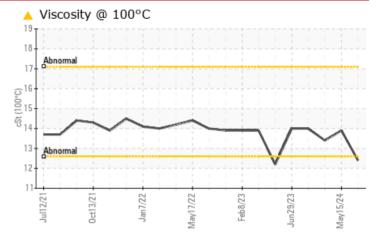
Diesel Engine

PETRO CANADA 15W40 (5 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	NORMAL			
Fuel	%	ASTM D3524	>3.0	A 8.7	<1.0	<1.0			
Visc @ 100°C	cSt	ASTM D445		12.4	13.9	13.4			

Customer Id: GFL017 Sample No.: GFL0125716 Lab Number: 06238775 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

15 May 2024 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. 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.



Resar

19 Feb 2024 Diag: Wes Davis



Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. 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.



NORMAL

13 Sep 2023 Diag: Don Baldridge



Resample at the next service interval to monitor. All component wear rates are normal. 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 acceptable for the time in service.



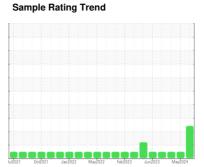


OIL ANALYSIS REPORT



(YA163865) 711038 Component **Diesel Engine**

PETRO CANADA 15W40 (5 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

Metal levels are typical for a new component breaking in.

▲ Contamination

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

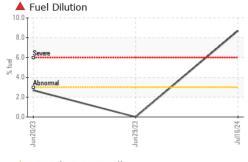
▲ Fluid Condition

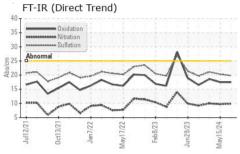
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

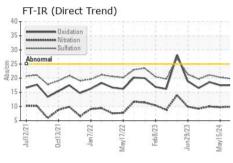
Sample Number Client Info GFL0125716 GFL0118413 GFL0088506 Sample Date Client Info 16 Jul 2024 15 May 2024 19 Feb 2024 Machine Age hrs Client Info 652 652 652 652 Oil Age hrs Client Info 130 430 599 Oil Age hrs Client Info N/A N/A N/A Changed Sample Status SEVERE NORMAL NORMAL NORMAL NORMAL Water Wc Method Imitivibase current history1 history2 WEAR METALS method limit/base current history1 history2 Iron ASTM D5185m >90 16 24 31 Iron ASTM D5185m >90 16 24 31 Iron ppm ASTM D5185m >2 <1	CAMPLE INFOR	MATION	method	limit/base	ourrent	history1	history?
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Titanium	Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Silver	Nickel	ppm	ASTM D5185m	>2	<1	0	<1
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Oxidation Abs/.1mm *ASTM D7414 >25 17.5 17.5 18.6	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm	ASTM D5185m ASTM D7844 *ASTM D7844	>25 >20 >3.0 limit/base >6 >20	0 52 2 829 944 939 1136 3137 current 4 8 6 ▲ 8.7 current 0.5 9.9	0 59 <1 935 1058 1014 1250 3248 history1 3 6 4 <1.0 history1 0.6 9.7	0 56 <1 888 1002 1011 1211 2721 history2 4 7 9 <1.0 history2 0.7 10.0
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m ASTM D3524 method *ASTM D7844 *ASTM D7624 *ASTM D76145	>25 >20 >3.0 limit/base >6 >20 >30	0 52 2 829 944 939 1136 3137 current 4 8 6 ▲ 8.7 current 0.5 9.9 19.8	0 59 <1 935 1058 1014 1250 3248 history1 3 6 4 <1.0 history1 0.6 9.7 20.3	0 56 <1 888 1002 1011 1211 2721 history2 4 7 9 <1.0 history2 0.7 10.0 21.1
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	ppm	ASTM D5185m Method ASTM D5185m ASTM D7624 *ASTM D7624 *ASTM D7624 *ASTM D7615 method	>25 >20 >3.0 limit/base >6 >20 >30 limit/base	0 52 2 829 944 939 1136 3137 current 4 8 6 ▲ 8.7 current 0.5 9.9 19.8 current	0 59 <1 935 1058 1014 1250 3248 history1 3 6 4 <1.0 history1 0.6 9.7 20.3 history1	0 56 <1 888 1002 1011 1211 2721 history2 4 7 9 <1.0 history2 0.7 10.0 21.1 history2

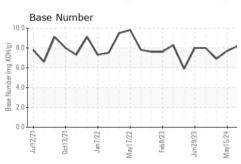


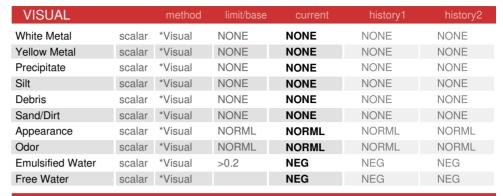
OIL ANALYSIS REPORT





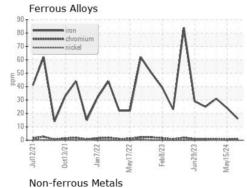


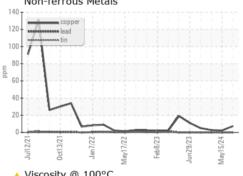


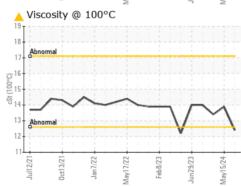


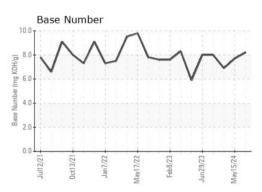
FLUID PROP	ERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	_	12.4	13.9	13.4

GRAPHS













Certificate 12367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0125716 Lab Number : 06238775 Unique Number : 11127609

Received : 17 Jul 2024 Tested Diagnosed

: 18 Jul 2024 : 18 Jul 2024 - Wes Davis

Test Package: FLEET (Additional Tests: FuelDilution, PercentFuel)

148 Stone Park Court Durham, NC US 27703

bill.waring@wearcheck.com T: (919)596-1363

To discuss this sample report, contact Customer Service at 1-800-237-1369. st - 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: (919)598-1852

GFL Environmental - 017 - Durham

Contact: