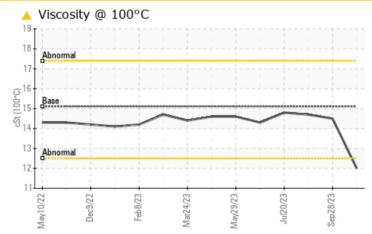


# CHECK

# Machine Id 731118

Component Natural Gas Engine Fluid PETRO CANADA DURON GEO LD 15W40 (--- GAL)

# COMPONENT CONDITION SUMMARY



# RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC	C TEST	RESULT	S			
Sample Status				ATTENTION	NORMAL	NORMAL
Visc @ 100°C	cSt	ASTM D445	15.1	<u> </u>	14.5	14.7

#### Customer Id: GFL836 Sample No.: GFL0095101 Lab Number: 05995257 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 <u>jhester@wearcheckusa.com</u>

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

# **RECOMMENDED ACTIONS**

There are no recommended actions for this sample.

### **HISTORICAL DIAGNOSIS**

### 28 Sep 2023 Diag: Wes Davis



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 suitable for further service.

#### 04 Sep 2023 Diag: Wes Davis



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 suitable for further service.

20 Jul 2023 Diag: Wes Davis

#### NORMAL



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 suitable for further service.



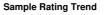




view report



# **OIL ANALYSIS REPORT**



VISCOSITY

# Machine Id 731118

Component Natural Gas Engine

Fluid

# PETRO CANADA DURON GEO LD 15W40 (--- GAL)

# DIAGNOSIS

### A Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

## Wear

All component wear rates are normal.

## Contamination

There is no indication of any contamination in the oil.

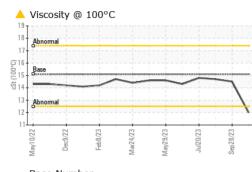
### Fluid Condition

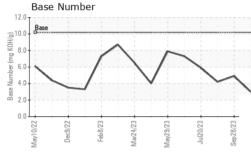
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0095101	GFL0090699	GFL0090648
Sample Date		Client Info		26 Oct 2023	28 Sep 2023	04 Sep 2023
Machine Age	hrs	Client Info		5714	5541	5395
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ATTENTION	NORMAL	NORMAL
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	29	8	10
Chromium	ppm	ASTM D5185m	>4	1	<1	1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	6	<1	2
Lead	ppm	ASTM D5185m	>30	11	2	<1
Copper	ppm	ASTM D5185m	>35	15	2	<1
Tin	ppm	ASTM D5185m	>4	2	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	nnm	ASTM D5185m	50	-		11
DOIOII	ppm	ASTIVI DOTODITI	50	7	11	11
Barium	ppm	ASTM D5185m		4	0	0
Barium	ppm	ASTM D5185m	5 50	4	0	0
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	5 50	4 51	0 52	0 54
Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5 50 0	4 51 4	0 52 <1	0 54 <1
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 50 0 560	4 51 4 780	0 52 <1 553	0 54 <1 583
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 50 0 560 1510	4 51 4 780 1147	0 52 <1 553 1633	0 54 <1 583 1693
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 50 0 560 1510 780	4 51 4 780 1147 722	0 52 <1 553 1633 685	0 54 <1 583 1693 697
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	5 50 0 560 1510 780 870	4 51 4 780 1147 722 865	0 52 <1 553 1633 685 937	0 54 <1 583 1693 697 980
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 50 0 560 1510 780 870 2040	4 51 4 780 1147 722 865 2021	0 52 <1 553 1633 685 937 2377	0 54 <1 583 1693 697 980 2827
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	5 50 0 560 1510 780 870 2040 limit/base	4 51 4 780 1147 722 865 2021 current	0 52 <1 553 1633 685 937 2377 history1	0 54 <1 583 1693 697 980 2827 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 50 0 560 1510 780 870 2040 Limit/base >+100	4 51 4 780 1147 722 865 2021 current 79	0 52 <1 553 1633 685 937 2377 history1 4	0 54 <1 583 1693 697 980 2827 history2 4
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	5 50 0 560 1510 780 870 2040 Limit/base >+100	4 51 4 780 1147 722 865 2021 current 79 8	0 52 <1 553 1633 685 937 2377 history1 4 8	0 54 <1 583 1693 697 980 2827 history2 4 7
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	5 50 0 560 1510 780 870 2040 <b>limit/base</b> >+100 >20	4 51 4 780 1147 722 865 2021 current 79 8 8 8	0 52 <1 553 1633 685 937 2377 history1 4 8 1	0 54 <1 583 1693 697 980 2827 history2 4 7 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	5 50 0 560 1510 780 870 2040 <b>limit/base</b> >+100 >20	4 51 4 780 1147 722 865 2021 current 79 8 8 8 8 202	0 52 <1 553 1633 685 937 2377 history1 4 8 1 1 history1	0 54 <1 583 1693 697 980 2827 history2 4 7 0 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm <b>TS</b> ppm ppm	ASTM D5185m ASTM D5185m *ASTM D7844	5 50 0 560 1510 780 870 2040 limit/base >+100 } 200 limit/base	4 51 4 780 1147 722 865 2021 current 79 8 8 8 8 2021	0 52 <1 553 1633 685 937 2377 history1 4 8 1 1 history1 0	0 54 <1 583 697 980 2827 history2 4 7 0 0 history2 0.1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm <b>TS</b> ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	5 50 0 560 1510 780 870 2040 limit/base >+100 >20 limit/base	4 51 4 780 1147 722 865 2021 current 79 8 8 8 8 current 0 13.0	0 52 <1 553 1633 685 937 2377 history1 4 8 1 1 history1 0 0 10.5	0 54 <1 583 1693 697 980 2827 history2 4 7 0 0 history2 0.1 10.8
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	5 50 0 560 1510 780 870 2040 Iimit/base >+100 	4 51 4 780 1147 722 865 2021 current 79 8 8 8 8 current 0 13.0 26.9 current	0 52 <1 553 1633 685 937 2377 history1 4 8 1 1 history1 0 10.5 21.0	0 54 <1 583 1693 697 980 2827 history2 4 7 0 history2 0.1 10.8 21.9
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm <b>TS</b> ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	5 50 0 560 1510 780 870 2040 limit/base >+100 	4 51 4 780 1147 722 865 2021 current 79 8 8 8 8 8 current 0 13.0 26.9	0 52 <1 553 1633 685 937 2377 history1 4 8 1 1 history1 0 10.5 21.0 history1	0 54 <1 583 1693 697 980 2827 history2 4 7 0 history2 0.1 10.8 21.9 history2



# **OIL ANALYSIS REPORT**

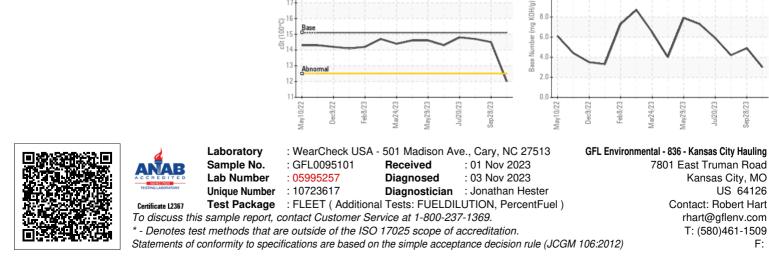




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	<b>12.0</b>	14.5	14.7
GRAPHS						
May10/22 Dec3/22 Feb8/23	Mar24/23	Jul20/23	Sep28/23			
Non-ferrous Meta	ls					
May10/22 Dec9/22 Feb8/23	Mar24/23	Jui2072a	Sep28/23			
≤ Viscosity @ 100°0			0			
				Base Number		

12.0

10



18

17

Contact/Location: See also GFL823, 834, 837, 840 - Robert Hart - GFL836

Sep28/23

Kansas City, MO

US 64126

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