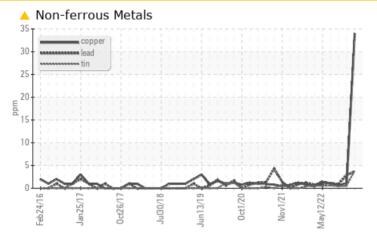


## **PROBLEM SUMMARY**

# 3631C AUTOCAR ISL

Natural Gas Engine Fluid PETRO CANADA DURON GEO LD 15W40 (48 QTS)

### COMPONENT CONDITION SUMMARY



### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS							
Sample Status				ABNORMAL	NORMAL	NORMAL	
Copper	ppm	ASTM D5185m	>35	<u> </u>	1	<1	
Tin	ppm	ASTM D5185m	>4	<b>4</b>	<1	<1	

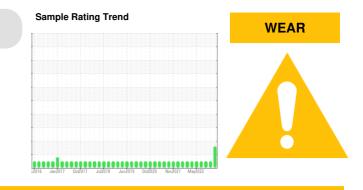
Customer Id: GFL001 Sample No.: GFL0056617 Lab Number: 05804588 Test Package: FLEET



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>

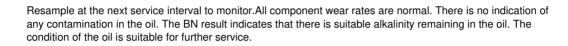


RECOMMENDED ACTIONS						
Action	Status	Date	Done By	Description		
Change Fluid			?	Oil and filter change at the time of sampling has been noted.		
Change Filter			?	Oil and filter change at the time of sampling has been noted.		
Other Action (see Note)	DONE	Apr 14 2023	?	No recommended actions		

### **HISTORICAL DIAGNOSIS**



24 Aug 2022 Diag: Don Baldridge





view report

### 01 Jul 2022 Diag: Don Baldridge

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.

#### 20 May 2022 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 suitable for further service.





### **OIL ANALYSIS REPORT**

Sample Rating Trend



### Machine Id 3631C AUTOCAR ISL

Natural Gas Engine

PETRO CANADA DURON GEO LD 15W40 (48 QTS)

DIAGNOSIS	
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#### Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

### 🔺 Wear

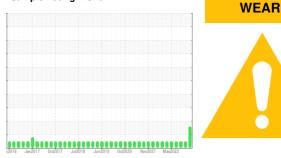
Bearing wear is indicated.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

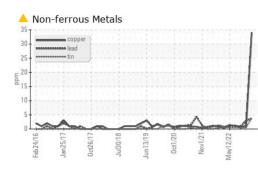
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

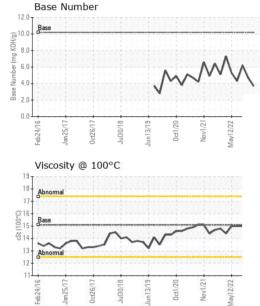


SAMPLE INFORM	MATION	method	limit/base	current	history 1	history 2
Sample Number		Client Info		GFL0056617	GFL0052331	GFL0052292
Sample Date		Client Info		24 Mar 2023	24 Aug 2022	01 Jul 2022
Machine Age	hrs	Client Info		22626	21304	20522
Oil Age	hrs	Client Info		1322	782	310
Oil Changed		Client Info		Changed	Changed	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
WEAR METAL	S	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>50	6	12	10
Chromium	ppm	ASTM D5185m	>4	<1	1	1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	2	4	2
Lead	ppm	ASTM D5185m	>30	4	3	<1
Copper	ppm	ASTM D5185m	>35	<b>A</b> 34	1	<1
Tin	ppm	ASTM D5185m	>4	<u> </u>	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	50	46	8	16
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	50	36	53	50
Molybdenum Manganese	ppm ppm		50 0	36 1	53 <1	50 <1
-						
Manganese	ppm	ASTM D5185m	0	1	<1	<1
Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m	0 560	1 534	<1 502	<1 568
Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 560 1510	1 534 1728	<1 502 1557	<1 568 1619
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 560 1510 780	1 534 1728 765	<1 502 1557 665	<1 568 1619 691
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 560 1510 780 870	1 534 1728 765 958	<1 502 1557 665 962	<1 568 1619 691 928
Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 560 1510 780 870 2040	1 534 1728 765 958 2771	<1 502 1557 665 962 2438	<1 568 1619 691 928 2823
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 560 1510 780 870 2040 limit/base	1 534 1728 765 958 2771 current	<1 502 1557 665 962 2438 history 1	<1 568 1619 691 928 2823 history 2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 560 1510 780 870 2040 limit/base	1 534 1728 765 958 2771 current 6	<1 502 1557 665 962 2438 history 1 10	<1 568 1619 691 928 2823 history 2 10
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 560 1510 780 870 2040 Iimit/base >+100	1 534 1728 765 958 2771 current 6 2	<1 502 1557 665 962 2438 history 1 10 8	<1 568 1619 691 928 2823 history 2 10 6
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 560 1510 780 870 2040 <b>limit/base</b> >+100 >20	1 534 1728 765 958 2771 current 6 2 1	<1 502 1557 665 962 2438 history 1 10 8 1	<1 568 1619 691 928 2823 history 2 10 6 0
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm <b>TS</b> ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 560 1510 780 870 2040 <b>limit/base</b> >+100 >20	1 534 1728 765 958 2771 current 6 2 1 1 current	<1 502 1557 665 962 2438 history 1 10 8 1 1 history 1	<1 568 1619 691 928 2823 history 2 10 6 0 Vistory 2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	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 ASTM D5185m ASTM D5185m	0 560 1510 780 870 2040 limit/base >200 limit/base	1 534 1728 765 958 2771 current 6 2 1 1 current 0.1	<1 502 1557 665 962 2438 history 1 10 8 1 1 history 1 0	<1 568 1619 691 928 2823 history 2 10 6 0 history 2 0.1
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	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 ASTM D5185m ASTM D5185m	0 560 1510 780 870 2040 Iimit/base >+100 >20 Iimit/base	1 534 1728 765 958 2771 current 6 2 1 current 0.1 12.0	<1 502 1557 665 962 2438 history 1 10 8 1 1 history 1 0 12.0	<1 568 1619 691 928 2823 history 2 10 6 0 history 2 0.1 10.3
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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7845	0 560 1510 780 870 2040 <b>limit/base</b> >20 <b>limit/base</b> >20 <b>limit/base</b>	1 534 1728 765 958 2771 current 6 2 1 current 0.1 12.0 25.7	<1 502 1557 665 962 2438 history 1 10 8 1 1 history 1 0 12.0 24.3	<1 568 1619 691 928 2823 history 2 10 6 0 history 2 0.1 10.3 20.3



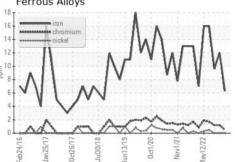
# **OIL ANALYSIS REPORT**





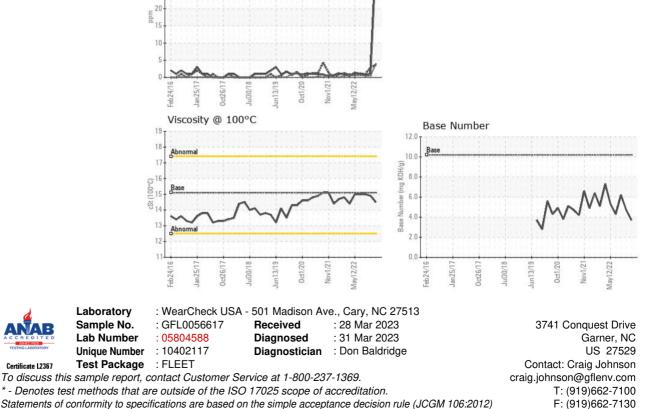
VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	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	15.1	14.5	14.9	15.0
GRAPHS						

Ferrous Alloys



Non-ferrous Metals 3!

30 25



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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