

WEAR NORMAL CONTAMINATION SEVERE FLUID CONDITION ABNORMAL

(YA134232)

2667C

Natural Gas Engine

PETRO CANADA DURON GEO LD 15W40 (12 GAL)

RECOMMENDATION

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.

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WEAR

All component wear rates are normal.

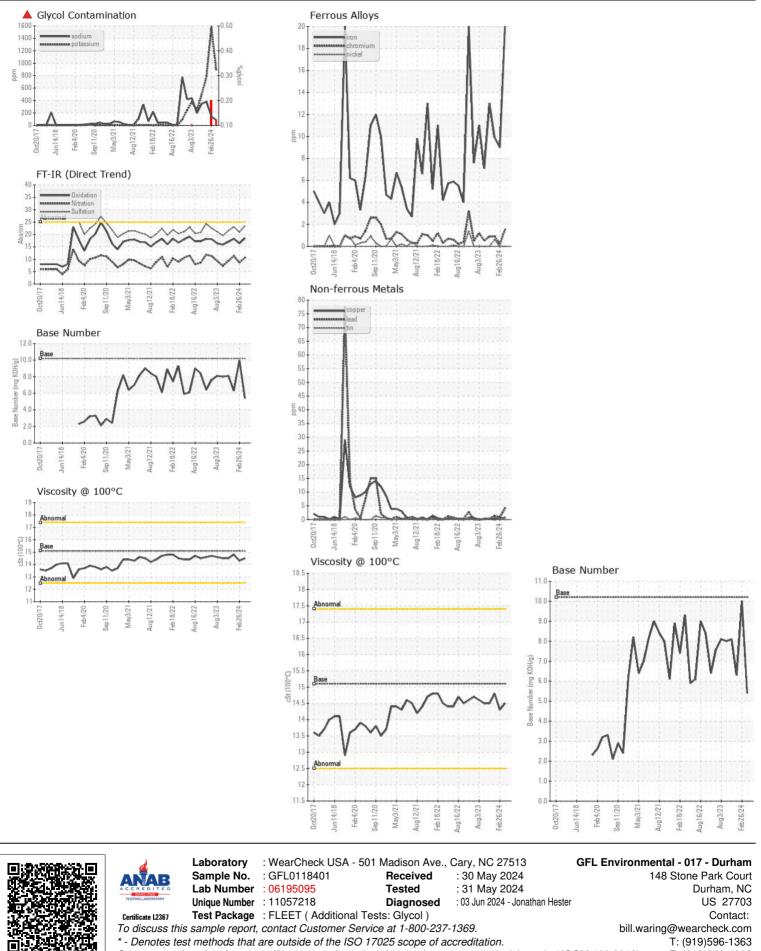
CONTAMINATION

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. The oil is no longer serviceable due to the presence of contaminants.

Test UOM Method Limit/Ab Current History1 History2 Sample Number Client Info GFL0118401 GFL0112223 GFL0098121 Sample Date Client Info G7021 G792 G712 G702 G72 </th <th>AL)</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	AL)						
Sample Date Client Info 30 May 2024 26 Feb 2024 04 Dec 2023 Machine Age hrs Client Info 590 581 556 Filter Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Filter Age hrs Client Info N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A N/A Iron ppm ASTM D5185m >50 20 9 10 Chromium ppm ASTM D5185m >3 <1 0 0 Silver ppm ASTM D5185m >3 <1 0 1 Auminum ppm ASTM D5185m >30 4 <1 0 0 Vanadium ppm ASTM D5185m >4 <1 0 0 0 Vanadium ppm ASTM D5185m >4 <1 0 </th <th>Test</th> <th>UOM</th> <th>Method</th> <th>Limit/Abn</th> <th>Current</th> <th>History1</th> <th>History2</th>	Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Date Client Info 30 May 2024 26 Feb 2024 04 Dec 2023 Machine Age hrs Client Info 6792 6792 6792 Oil Age hrs Client Info 590 581 556 Filter Age hrs Client Info N/A N/A N/A Filter Changed Client Info N/A N/A N/A N/A Sample Status - N/A N/A N/A N/A Iron ppm ASTM D5185m >50 20 9 10 Chromium ppm ASTM D5185m >4 2 <1 1 Titanium ppm ASTM D5185m >3 <1 0 <1 Auminum ppm ASTM D5185m >35 <1 <1 1 Copper ppm ASTM D5185m >44 <1 0 <1 Queat visual NONE NONE NONE NONE NONE Varadium	Sample Number		Client Info		GFL0118401	GFL0112923	GFL0098121
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Silver ppm ASTM D5185m >3 <1	Nickel	ppm	ASTM D5185m	>2	-		
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Barium ppm ASTM D5185m 5 0 8 0 Molybdenum ppm ASTM D5185m 50 53 50 62 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	50	7	16	11
Manganese ppm ASTM D5185m 0 <1	Barium			5	0	8	0
Magnesium ppm ASTM D5185m 560 550 500 523 Calcium ppm ASTM D5185m 1510 1742 1325 1515 Phosphorus ppm ASTM D5185m 780 693 774 636 Zinc ppm ASTM D5185m 870 1026 838 987 Sulfur ppm ASTM D5185m 2040 3192 2494 2699 Oxidation Abs/.1mm<*ASTM D7414 >25 18.5 16.4 18.3 Base Number (BN) mg KOH/g ASTM D2896 10.2 5.4 10.0 6.3	Molybdenum	ppm	ASTM D5185m	50	53	50	62
Calcium ppm ASTM D5185m 1510 1742 1325 1515 Phosphorus ppm ASTM D5185m 780 693 774 636 Zinc ppm ASTM D5185m 870 1026 838 987 Sulfur ppm ASTM D5185m 2040 3192 2494 2699 Oxidation Abs/.tmm *ASTM D7414 >25 18.5 16.4 18.3 Base Number (BN) mg KOH/g ASTM D2896 10.2 5.4 10.0 6.3	Manganese	ppm	ASTM D5185m	0	<1	0	<1
Phosphorus ppm ASTM D5185m 780 693 774 636 Zinc ppm ASTM D5185m 870 1026 838 987 Sulfur ppm ASTM D5185m 2040 3192 2494 2699 Oxidation Abs/.tmm *ASTM D7414 >25 18.5 16.4 18.3 Base Number (BN) mg KOH/g ASTM D2896 10.2 5.4 10.0 6.3	Magnesium	ppm	ASTM D5185m	560	550	500	523
Zinc ppm ASTM D5185m 870 1026 838 987 Sulfur ppm ASTM D5185m 2040 3192 2494 2699 Oxidation Abs/.tmm *ASTM D7141 >25 18.5 16.4 18.3 Base Number (BN) mg KOH/g ASTM D2896 10.2 5.4 10.0 6.3	Calcium	ppm	ASTM D5185m	1510	1742	1325	1515
Zinc ppm ASTM D5185m 870 1026 838 987 Sulfur ppm ASTM D5185m 2040 3192 2494 2699 Oxidation Abs/.tmm *ASTM D7144 >25 18.5 16.4 18.3 Base Number (BN) mg KOH/g ASTM D2896 10.2 5.4 10.0 6.3	Phosphorus		ASTM D5185m	780	693	774	636
Oxidation Abs/.1mm *ASTM D7414 >25 18.5 16.4 18.3 Base Number (BN) mg KOH/g ASTM D2896 10.2 5.4 10.0 6.3			ASTM D5185m	870	1026	838	987
Oxidation Abs/.1mm *ASTM D7414 >25 18.5 16.4 18.3 Base Number (BN) mg KOH/g ASTM D2896 10.2 5.4 10.0 6.3	Sulfur	ppm	ASTM D5185m	2040	3192	2494	2699
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.5	16.4	18.3
Visc @ 100°C cSt ASTM D445 15.1 14.5 14.3 14.8	Base Number (BN)	mg KOH/g	ASTM D2896	10.2	5.4	10.0	6.3
	Visc @ 100°C	cSt	ASTM D445	15.1	14.5	14.3	14.8



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

Submitted By: Ren - William Russel Page 2 of 2

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