

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 844003

Component Natural Gas Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

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.

			Aug2022	Jan2024		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0086722	GFL0056050	
Sample Date		Client Info		31 Jan 2024	13 Aug 2022	
Machine Age	hrs	Client Info		4256	703	
Oil Age	hrs	Client Info		4256	703	
Oil Changed		Client Info		Changed	Not Changd	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	14	12	
Chromium	ppm	ASTM D5185m	>4	<1	<1	
Nickel	ppm	ASTM D5185m	>2	0	0	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>9	2	3	
Lead	ppm	ASTM D5185m	>30	2	3	
Copper	ppm	ASTM D5185m	>35	<1	2	
Tin	ppm	ASTM D5185m	>4	<1	2	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
		mathad	12		In the transmission	histow.0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	11mit/base	current 21	9	nistory2
	ppm ppm					
Boron		ASTM D5185m	50	21	9	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	50 5	21 0	9 0	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	50 5 50	21 0 61	9 0 80	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 5 50 0	21 0 61 <1	9 0 80 <1	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 5 50 0 560	21 0 61 <1 661	9 0 80 <1 505	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 5 50 0 560 1510	21 0 61 <1 661 1793	9 0 80 <1 505 1701	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 5 50 0 560 1510 780	21 0 61 <1 661 1793 844	9 0 80 <1 505 1701 758	
Boron 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	50 5 50 0 560 1510 780 870	21 0 61 <1 661 1793 844 1101	9 0 80 <1 505 1701 758 1009	
Boron 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	50 5 50 0 560 1510 780 870 2040 limit/base	21 0 61 <1 661 1793 844 1101 2723	9 0 80 <1 505 1701 758 1009 2964	
Boron 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	50 5 50 0 560 1510 780 870 2040 limit/base	21 0 61 <1 661 1793 844 1101 2723 current	9 0 80 <1 505 1701 758 1009 2964 history1	 history2
Boron 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	50 5 50 0 560 1510 780 870 2040 limit/base	21 0 61 <1 661 1793 844 1101 2723 current 5	9 0 80 <1 505 1701 758 1009 2964 history1 5	 history2
Boron 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 ASTM D5185m ASTM D5185m ASTM D5185m	50 5 50 0 560 1510 780 870 2040 limit/base >+100	21 0 61 <1 661 1793 844 1101 2723 current 5 71	9 0 80 <1 505 1701 758 1009 2964 history1 5 20	 history2
Boron 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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 50 00 560 1510 780 870 2040 limit/base >+100	21 0 61 <1 661 1793 844 1101 2723 current 5 71 11	9 0 80 <1 505 1701 758 1009 2964 history1 5 20 3	 history2
Boron 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	50 5 50 0 560 1510 780 870 2040 2040 >+100 >20 >20 imit/base	21 0 61 <1 661 1793 844 1101 2723 current 5 71 11	9 0 80 <1 505 1701 758 1009 2964 history1 5 20 3 3 history1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	50 5 50 0 560 1510 780 870 2040 2040 >+100 >20 >20 imit/base	21 0 61 <1 661 1793 844 1101 2723 current 5 71 11 11 current 0	9 0 80 <1 505 1701 758 1009 2964 history1 5 20 3 history1 0.1	 history2 history2
Boron Barium Molybdenum 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	50 50 00 560 1510 780 870 2040 imit/base >+100 20 imit/base	21 0 61 <1 661 1793 844 1101 2723 current 5 71 11 current 0 12.7	9 0 80 <1 505 1701 758 1009 2964 history1 5 20 3 history1 0.1 11.0	 history2 history2
Boron 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 D7844 *ASTM D7844	50 50 560 1510 780 870 2040 Imit/base >20 Imit/base >20 Imit/base	21 0 61 <1 661 1793 844 1101 2723 current 5 71 11 current 0 12.7 25.1	9 0 80 <1 505 1701 758 1009 2964 history1 5 20 3 history1 0.1 11.0 23.9	 history2 history2 history2
Boron 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 D7844 *ASTM D7624 *ASTM D7415	50 50 560 1510 780 870 2040 >+100 >+100 >20 imit/base >20 >30 imit/base	21 0 61 <1 661 1793 844 1101 2723 <i>current</i> 5 71 11 <i>current</i> 0 12.7 25.1 <i>current</i>	9 0 80 <1 505 1701 758 1009 2964 history1 5 20 3 history1 0.1 11.0 23.9 history1	 history2 history2 history2 history2



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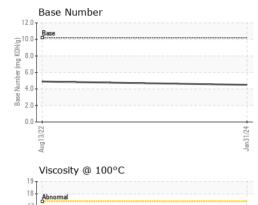
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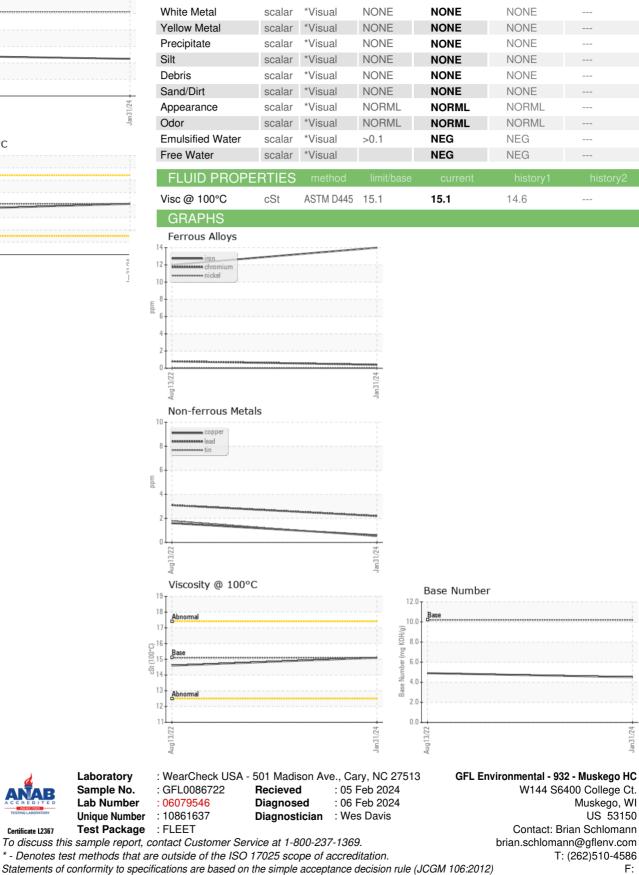
Aug13/22

Abnorma

OIL ANALYSIS REPORT

VISUAL





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