

## **OIL ANALYSIS REPORT**

Sample Rating Trend





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 components first oil change.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

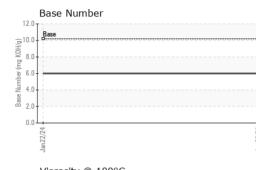
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

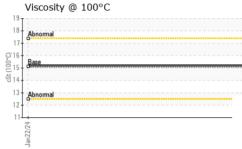
				Jan2024		
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0102757		
Sample Date		Client Info		22 Jan 2024		
Machine Age	hrs	Client Info		32340		
Oil Age	hrs	Client Info		32340		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	11		
Chromium	ppm	ASTM D5185m	>4	1		
Nickel	ppm	ASTM D5185m	>2	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>9	2		
Lead	ppm	ASTM D5185m	>30	0		
Copper	ppm	ASTM D5185m	>35	0		
Tin	ppm	ASTM D5185m	>4	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	17		
Barium	ppm	ASTM D5185m	5	<1		
Molybdenum	nnm	ASTM D5185m	50	50		
	ppm	ASTIVI DJIOJIII	50			
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	0	<1		
Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m	0 560	<1 521		
Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 560 1510	<1 521 1463		
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 560 1510 780	<1 521 1463 692		
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	<1 521 1463 692 886		  
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 560 1510 780 870 2040 <b>limit/base</b>	<1 521 1463 692 886 2112	   	   
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 560 1510 780 870 2040 <b>limit/base</b>	<1 521 1463 692 886 2112 current	    history1	    history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN <sup>®</sup> Silicon Sodium	ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	0 560 1510 780 870 2040 <b>limit/base</b>	<1 521 1463 692 886 2112 current 4	    history1	    history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> Silicon Sodium	ppm	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	<1 521 1463 692 886 2112 current 4 7	    history1 	   history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> Silicon Sodium Potassium INFRA-RED	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 560 1510 780 870 2040 2040 >+100 >20	<1 521 1463 692 886 2112 current 4 7 1	   history1 	    history2  
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> Silicon Sodium Potassium INFRA-RED Soot %	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> >20 <b>limit/base</b>	<1 521 1463 692 886 2112 current 4 7 1 current	   history1   history1	   history2   history2
Silicon Sodium Potassium	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 <b>limit/base</b> >20 <b>limit/base</b>	<1 521 1463 692 886 2112 current 4 7 1 current 0	   history1   history1  history1	   history2  history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> 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 <b>limit/base</b> >+100 >20 <b>limit/base</b>	<1 521 1463 692 886 2112 <b>current</b> 4 7 1 <b>current</b> 0 9.9	   history1  history1  history1	   history2  history2
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 D7624	0 560 1510 780 870 2040 <b>limit/base</b> >20 <b>limit/base</b> >20 <b>limit/base</b>	<1 521 1463 692 886 2112 current 4 7 1 current 0 9.9 21.0	   history1  history1	    history2  history2  history2

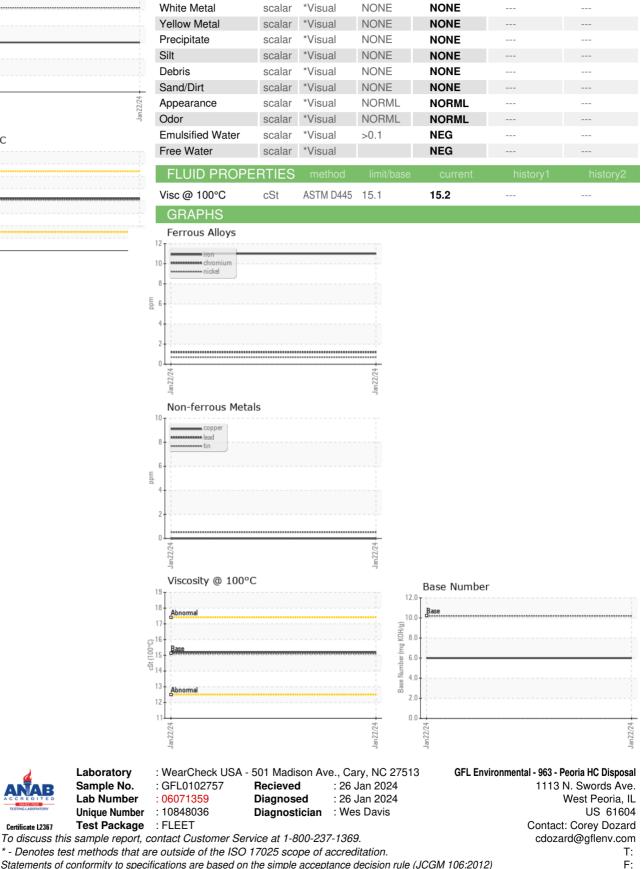


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VISUAL







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

Certificate L2367