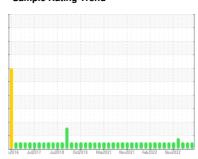


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id 3685C Component

Natural Gas Engine

PETRO CANADA DURON GEO LD 15W40 (

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

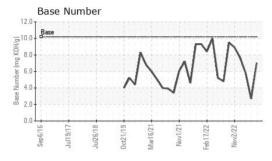
Fluid Condition

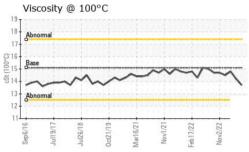
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sample Date Client Info 11 Nov 2023 26 Apr 2023 19 Jan 2023 10 Jan 2023	(40 GAL)	0 GAL)						
Sample Date Client Info 11 Nov 2023 26 Apr 2023 19 Jan 2023 10 Jan 2023	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2	
Machine Age hrs Client Info 11911 11066 10448 Oil Oage hrs Client Info 1964 1119 501 Oil Changed Client Info Changed Not Changd Not Changd Sample Status NORMAL NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 29 16 8 Chromium ppm ASTM D5185m >4 2 2 2 -1 Nickel ppm ASTM D5185m >2 <1	Sample Number		Client Info		GFL0098533	GFL0073837	GFL0069260	
Oil Age hrs Client Info 1964 1119 501 Oil Changed Client Info Changed Not Changd	Sample Date		Client Info		01 Nov 2023	26 Apr 2023	19 Jan 2023	
Oil Changed Sample Status Client Info Changed NORMAL Not Changd NoRMAND NOR	Machine Age	hrs	Client Info		11911	11066	10448	
NORMAL NORMAL WEAR METALS method limit/base current history1 history2	Oil Age	hrs	Client Info		1964	1119	501	
WEAR METALS	Oil Changed		Client Info		Changed	Not Changd	Not Changd	
Iron	Sample Status				NORMAL	NORMAL	NORMAL	
Chromium ppm ASTM D5185m >4 2 2 <1 Nickel ppm ASTM D5185m >2 <1	WEAR METAL	S	method	limit/base	current	history1	history2	
Nickel	Iron	ppm	ASTM D5185m	>50	29	16	8	
Titanium	Chromium	ppm	ASTM D5185m	>4	2	2	<1	
Silver	Nickel	ppm	ASTM D5185m	>2	<1	1	<1	
Aluminum ppm ASTM D5185m >9 10 3 1 Lead ppm ASTM D5185m >30 2 14 2 Copper ppm ASTM D5185m >35 2 1 <1	Titanium	ppm	ASTM D5185m			<1	0	
Lead ppm ASTM D5185m >30 2 14 2 Copper ppm ASTM D5185m >35 2 1 <1 Tin ppm ASTM D5185m >4 <1 <1 <1 Vanadium ppm ASTM D5185m <1 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 50 21 0 15 Barium ppm ASTM D5185m 50 0 0 0 Molybdenum ppm ASTM D5185m 50 54 58 49 Manganese ppm ASTM D5185m 50 54 58 49 Manganese ppm ASTM D5185m 0 1 1 <1 <1 Magnesium ppm ASTM D5185m 1510 1545 <td>Silver</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>3</td> <th></th> <td></td> <td></td>	Silver	ppm	ASTM D5185m	>3				
Copper ppm ASTM D5185m >35 2 1 <1 Tin ppm ASTM D5185m >4 <1	Aluminum	ppm	ASTM D5185m	>9	-			
Tin ppm ASTM D5185m >4 <1 <1 <1 Vanadium ppm ASTM D5185m <1 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 50 21 0 15 Barium ppm ASTM D5185m 50 0 0 0 Molybdenum ppm ASTM D5185m 50 54 58 49 Manganese ppm ASTM D5185m 50 54 58 49 Magnesium ppm ASTM D5185m 560 579 678 535 Calcium ppm ASTM D5185m 780 736 824 675 Phosphorus ppm ASTM D5185m 780 736 824 675 Zinc ppm ASTM D5185m 2040 2278	Lead	ppm	ASTM D5185m	>30	2	14	2	
Vanadium ppm ASTM D5185m <1 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 50 21 0 15 Barium ppm ASTM D5185m 50 0 0 0 Molybdenum ppm ASTM D5185m 50 54 58 49 Manganese ppm ASTM D5185m 50 54 58 49 Manganesium ppm ASTM D5185m 50 579 678 535 Calcium ppm ASTM D5185m 1510 1545 1897 1546 Phosphorus ppm ASTM D5185m 736 824 675 Zinc ppm ASTM D5185m 2040 2278 3361 2813 CONTAMINANTS method limit/base current history1 history2	Copper	ppm	ASTM D5185m	>35	_	1		
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 50 21 0 15 Barium ppm ASTM D5185m 5 0 0 0 Molybdenum ppm ASTM D5185m 50 54 58 49 Manganese ppm ASTM D5185m 50 54 58 49 Manganesium ppm ASTM D5185m 560 579 678 535 Calcium ppm ASTM D5185m 1510 1545 1897 1546 Phosphorus ppm ASTM D5185m 780 736 824 675 Zinc ppm ASTM D5185m 870 932 1112 931 Sulfur ppm ASTM D5185m >+100 8 7 4 CONTAMINANTS method limit/base current his	Tin	ppm	ASTM D5185m	>4	<1	<1		
ADDITIVES	Vanadium	ppm	ASTM D5185m		<1	0		
Boron ppm ASTM D5185m 50 21 0 15 Barium ppm ASTM D5185m 5 0 0 0 Molybdenum ppm ASTM D5185m 50 54 58 49 Manganese ppm ASTM D5185m 50 54 58 49 Magnesium ppm ASTM D5185m 560 579 678 535 Calcium ppm ASTM D5185m 560 579 678 535 Calcium ppm ASTM D5185m 780 736 824 675 Zinc ppm ASTM D5185m 780 736 824 675 Zinc ppm ASTM D5185m 870 932 1112 931 Sulfur ppm ASTM D5185m 2040 2278 3361 2813 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 <td>Cadmium</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <th>0</th> <td>0</td> <td>0</td>	Cadmium	ppm	ASTM D5185m		0	0	0	
Barium ppm ASTM D5185m 5 0 0 0 Molybdenum ppm ASTM D5185m 50 54 58 49 Manganese ppm ASTM D5185m 50 1 1 -1 Magnesium ppm ASTM D5185m 560 579 678 535 Calcium ppm ASTM D5185m 1510 1545 1897 1546 Phosphorus ppm ASTM D5185m 780 736 824 675 Zinc ppm ASTM D5185m 870 932 1112 931 Sulfur ppm ASTM D5185m 2040 2278 3361 2813 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 8 7 4 Sodium ppm ASTM D5185m 22 11 6 Potassium ppm ASTM D5185m 20	ADDITIVES		method	limit/base	current	history1	history2	
Molybdenum ppm ASTM D5185m 50 54 58 49 Manganese ppm ASTM D5185m 0 1 1 <1	Boron	ppm	ASTM D5185m	50	21	0	15	
Manganese ppm ASTM D5185m 0 1 1 <1 Magnesium ppm ASTM D5185m 560 579 678 535 Calcium ppm ASTM D5185m 1510 1545 1897 1546 Phosphorus ppm ASTM D5185m 780 736 824 675 Zinc ppm ASTM D5185m 870 932 1112 931 Sulfur ppm ASTM D5185m 2040 2278 3361 2813 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 8 7 4 Sodium ppm ASTM D5185m >20 10 2 2 Potassium ppm ASTM D5185m >20 10 2 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844		ppm	ASTM D5185m	5	0	0	0	
Magnesium ppm ASTM D5185m 560 579 678 535 Calcium ppm ASTM D5185m 1510 1545 1897 1546 Phosphorus ppm ASTM D5185m 780 736 824 675 Zinc ppm ASTM D5185m 870 932 1112 931 Sulfur ppm ASTM D5185m 2040 2278 3361 2813 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 8 7 4 Sodium ppm ASTM D5185m >20 10 2 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0 0.1 Nitration Abs/.1mm *ASTM D7415 >30 20.9 27.9 20.4 FLUID DEGRADATION *ASTM D7414 >25 <td< td=""><td>Molybdenum</td><td>ppm</td><td>ASTM D5185m</td><td>50</td><th>54</th><td>58</td><td>49</td></td<>	Molybdenum	ppm	ASTM D5185m	50	54	58	49	
Calcium ppm ASTM D5185m 1510 1545 1897 1546 Phosphorus ppm ASTM D5185m 780 736 824 675 Zinc ppm ASTM D5185m 870 932 1112 931 Sulfur ppm ASTM D5185m 2040 2278 3361 2813 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 8 7 4 Sodium ppm ASTM D5185m >20 10 2 2 Potassium ppm ASTM D5185m >20 10 2 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0 0.1 Nitration Abs/.1mm *ASTM D7415 >30 20.9 27.9 20.4 FLUID DEGRADATION method limit/	Manganese	ppm	ASTM D5185m	0	1	1	<1	
Phosphorus ppm ASTM D5185m 780 736 824 675 Zinc ppm ASTM D5185m 870 932 1112 931 Sulfur ppm ASTM D5185m 2040 2278 3361 2813 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 8 7 4 Sodium ppm ASTM D5185m >22 11 6 Potassium ppm ASTM D5185m >20 10 2 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0 0.1 Nitration Abs/cm *ASTM D7415 >30 20.9 27.9 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 <td< td=""><td>Magnesium</td><td>ppm</td><td>ASTM D5185m</td><td>560</td><th>579</th><td>678</td><td>535</td></td<>	Magnesium	ppm	ASTM D5185m	560	579	678	535	
Zinc ppm ASTM D5185m 870 932 1112 931 Sulfur ppm ASTM D5185m 2040 2278 3361 2813 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 8 7 4 Sodium ppm ASTM D5185m 22 11 6 Potassium ppm ASTM D5185m >20 10 2 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0 0.1 Nitration Abs/cm *ASTM D7624 >20 10.5 12.6 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 27.9 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25	Calcium	ppm	ASTM D5185m		1545	1897	1546	
Sulfur ppm ASTM D5185m 2040 2278 3361 2813 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 8 7 4 Sodium ppm ASTM D5185m 22 11 6 Potassium ppm ASTM D5185m >20 10 2 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0 0.1 Nitration Abs/cm *ASTM D7624 >20 10.5 12.6 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 27.9 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.3 23.8 17.0	Phosphorus	ppm	ASTM D5185m	780	736	824	675	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 8 7 4 Sodium ppm ASTM D5185m 22 11 6 Potassium ppm ASTM D5185m >20 10 2 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0 0.1 Nitration Abs/cm *ASTM D7624 >20 10.5 12.6 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 27.9 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.3 23.8 17.0	Zinc	ppm	ASTM D5185m	870	932	1112	931	
Silicon ppm ASTM D5185m >+100 8 7 4 Sodium ppm ASTM D5185m 22 11 6 Potassium ppm ASTM D5185m >20 10 2 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0 0.1 Nitration Abs/cm *ASTM D7624 >20 10.5 12.6 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 27.9 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.3 23.8 17.0	Sulfur	ppm	ASTM D5185m	2040	2278	3361	2813	
Sodium ppm ASTM D5185m 22 11 6 Potassium ppm ASTM D5185m >20 10 2 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0 0.1 Nitration Abs/cm *ASTM D7624 >20 10.5 12.6 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 27.9 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.3 23.8 17.0	CONTAMINAN	TS	method	limit/base	current	history1	history2	
Potassium ppm ASTM D5185m >20 10 2 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0 0.1 Nitration Abs/cm *ASTM D7624 >20 10.5 12.6 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 27.9 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.3 23.8 17.0	Silicon	ppm	ASTM D5185m	>+100	8	7	4	
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0 0.1 Nitration Abs/cm *ASTM D7624 >20 10.5 12.6 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 27.9 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.3 23.8 17.0	Sodium	ppm	ASTM D5185m		22	11	6	
Soot % % *ASTM D7844 0.1 0 0.1 Nitration Abs/cm *ASTM D7624 >20 10.5 12.6 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 27.9 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.3 23.8 17.0	Potassium	ppm	ASTM D5185m	>20	10	2	2	
Nitration Abs/cm *ASTM D7624 >20 10.5 12.6 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 27.9 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.3 23.8 17.0	INFRA-RED		method	limit/base	current	history1	history2	
Sulfation Abs/.1mm *ASTM D7415 >30 20.9 27.9 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.3 23.8 17.0	Soot %	%	*ASTM D7844		0.1	0	0.1	
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.3 23.8 17.0	Nitration	Abs/cm	*ASTM D7624	>20	10.5	12.6	10.6	
Oxidation Abs/.1mm *ASTM D7414 >25 17.3 23.8 17.0	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.9	27.9	20.4	
	FLUID DEGRA	OATION	method	limit/base	current	history1	history2	
Base Number (BN) mg KOH/g ASTM D2896 10.2 7.0 2.7 5.8	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.3	23.8	17.0	
	Base Number (BN)	mg KOH/g	ASTM D2896	10.2	7.0	2.7	5.8	



OIL ANALYSIS REPORT

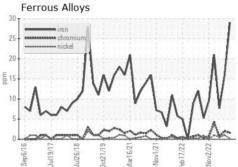


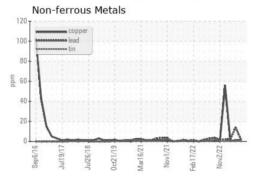


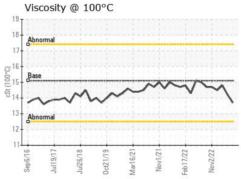
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

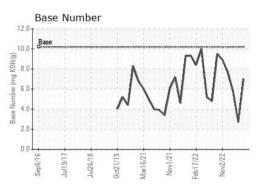
FLUID PROPE	RTIES	method				history2
Visc @ 100°C	cSt	ASTM D445	15.1	13.7	14.2	14.8

GRAPHS













Certificate L2367

Laboratory

Sample No. Lab Number **Unique Number** Test Package : FLEET

: GFL0098533 : 05997763

: 10726123

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 03 Nov 2023 Diagnosed : 06 Nov 2023

Diagnostician : Don Baldridge

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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F: (910)762-6880