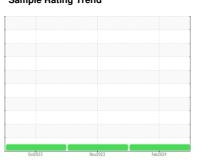


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



945016

Component **Natural Gas Engine**

PETRO CANADA DURON GEO LD 15W40

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

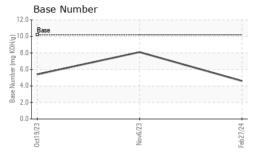
Fluid Condition

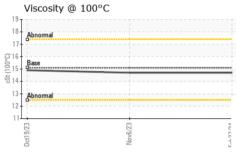
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION method method	00 OTC)						
Sample Number Client Info Changed No Nov 2023 19 Oct 2023 10	28 QTS)		Oc	2023	Nov2023 Feb20	124	
Colient Info Cilent Info Cilent Info Cilent Info 757 310 0 0 0 0 0 0 0 0 0	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 757 310 0 Oil Age hrs Client Info 310 0 0 Oil Oll Changed Client Info Changed Changed Changed Sample Status NORMAL NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2 Water WC Method >0.1 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 12 4 13 Iron ppm ASTM D5185m >50 12 4 13 Iron ppm ASTM D5185m >2 0 0 0 Chromium ppm ASTM D5185m >3 0 0 0 Silver ppm ASTM D5185m >3 0 0 0 2 Silver ppm<	Sample Number		Client Info		GFL0106765	GFL0084645	GFL0084622
Oil Age	Sample Date		Client Info		27 Feb 2024	06 Nov 2023	19 Oct 2023
Contained Client Info Changed NORMAL NORMAL NORMAL NORMAL NORMAL	Machine Age	hrs	Client Info		757	310	0
NORMAL NORMAL NORMAL NORMAL	Oil Age	hrs	Client Info		310	0	0
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.1 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 12 4 13 Chromium ppm ASTM D5185m >4 <1 0 <1 Nickel ppm ASTM D5185m >2 0 0 0 0 Alluminum ppm ASTM D5185m >3 0 0 0 0 Alluminum ppm ASTM D5185m >9 3 <1 2 Lead ppm ASTM D5185m >9 3 <1 2 Lead ppm ASTM D5185m >30 0 0 2 Copper ppm ASTM D5185m >35 13 2 15 Tin ppm ASTM D5185m >4 <1	Oil Changed		Client Info		Changed	Changed	Changed
Water WC Method >0.1 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 12 4 13 Chromium ppm ASTM D5185m >0 0 0 1 Nickel ppm ASTM D5185m >2 0 0 0 Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >9 3 <1 2 Lead ppm ASTM D5185m >0 0 0 0 Copper ppm ASTM D5185m >0 0 0 0	Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS	CONTAMINAT	ION	method	limit/base	current	history1	history2
Iron	Water		WC Method	>0.1	NEG	NEG	NEG
Chromium ppm ASTM D5185m >4 <1 0 <1 Nickel ppm ASTM D5185m >2 0 0 0 Titanium ppm ASTM D5185m >2 0 0 0 Silver ppm ASTM D5185m >9 3 <1	WEAR METAL	S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>50	12	4	13
Titanium	Chromium	ppm	ASTM D5185m	>4	<1	0	<1
Silver	Nickel	ppm	ASTM D5185m	>2	0	0	0
Silver	Titanium	ppm	ASTM D5185m		0	0	0
Aluminum ppm ASTM D5185m >9 3 <1 2 Lead ppm ASTM D5185m >30 0 0 2 Copper ppm ASTM D5185m >35 13 2 15 Tin ppm ASTM D5185m >4 <1 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 50 11 30 7 Barium ppm ASTM D5185m 50 11 30 7 Barium ppm ASTM D5185m 50 52 48 50 Manganesium ppm ASTM D5185m 50 52 48 50 Calcium ppm ASTM D5185m 560 545 586	Silver	ppm	ASTM D5185m	>3	0	0	0
Lead	Aluminum		ASTM D5185m	>9	3	<1	2
Copper ppm ASTM D5185m >35 13 2 15 Tin ppm ASTM D5185m >4 <1	Lead		ASTM D5185m	>30	0	0	2
Tin	Copper		ASTM D5185m	>35	13	2	15
Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 50 11 30 7 Barium ppm ASTM D5185m 50 0 0 0 Molybdenum ppm ASTM D5185m 50 52 48 50 Manganese ppm ASTM D5185m 50 52 48 50 Magnesium ppm ASTM D5185m 560 545 586 589 Calcium ppm ASTM D5185m 780 696 854 694 Zinc ppm ASTM D5185m 70 946 1035 903 Sulfur ppm ASTM D5185m 2040 2363 2689 2194 CONTAMINANTS method limit/base current history1 hist	• •		ASTM D5185m	>4	<1	0	0
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 50 11 30 7 Barium ppm ASTM D5185m 5 0 0 0 Molybdenum ppm ASTM D5185m 50 52 48 50 Manganese ppm ASTM D5185m 0 <1	Vanadium		ASTM D5185m		0	0	0
Boron	Cadmium				_		
Barium ppm ASTM D5185m 5 0 0 0 Molybdenum ppm ASTM D5185m 50 52 48 50 Manganese ppm ASTM D5185m 0 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 52 48 50 Manganese ppm ASTM D5185m 0 <1 0 <1 Magnesium ppm ASTM D5185m 560 545 586 589 Calcium ppm ASTM D5185m 560 545 586 589 Calcium ppm ASTM D5185m 1510 1594 1714 1452 Phosphorus ppm ASTM D5185m 780 696 854 694 Zinc ppm ASTM D5185m 870 946 1035 903 Sulfur ppm ASTM D5185m 2040 2363 2689 2194 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 3 3 4 Sodium ppm ASTM D5185m 7 4 8 Potassium ppm ASTM D5185m 20	Boron	ppm	ASTM D5185m	50	11	30	7
Manganese ppm ASTM D5185m 0 <1 0 <1 Magnesium ppm ASTM D5185m 560 545 586 589 Calcium ppm ASTM D5185m 1510 1594 1714 1452 Phosphorus ppm ASTM D5185m 780 696 854 694 Zinc ppm ASTM D5185m 870 946 1035 903 Sulfur ppm ASTM D5185m 2040 2363 2689 2194 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 3 3 4 Sodium ppm ASTM D5185m >20 <1	Barium	ppm	ASTM D5185m	5	0	0	0
Magnesium ppm ASTM D5185m 560 545 586 589 Calcium ppm ASTM D5185m 1510 1594 1714 1452 Phosphorus ppm ASTM D5185m 780 696 854 694 Zinc ppm ASTM D5185m 870 946 1035 903 Sulfur ppm ASTM D5185m 2040 2363 2689 2194 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 3 3 4 Sodium ppm ASTM D5185m >20 <1	Molybdenum	ppm	ASTM D5185m	50	52	48	50
Calcium ppm ASTM D5185m 1510 1594 1714 1452 Phosphorus ppm ASTM D5185m 780 696 854 694 Zinc ppm ASTM D5185m 870 946 1035 903 Sulfur ppm ASTM D5185m 2040 2363 2689 2194 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 3 3 4 Sodium ppm ASTM D5185m 7 4 8 Potassium ppm ASTM D5185m >20 <1	Manganese	ppm	ASTM D5185m	0	<1	0	<1
Phosphorus ppm ASTM D5185m 780 696 854 694 Zinc ppm ASTM D5185m 870 946 1035 903 Sulfur ppm ASTM D5185m 2040 2363 2689 2194 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 3 3 4 Sodium ppm ASTM D5185m 7 4 8 Potassium ppm ASTM D5185m >20 <1	Magnesium	ppm	ASTM D5185m	560	545	586	589
Zinc ppm ASTM D5185m 870 946 1035 903 Sulfur ppm ASTM D5185m 2040 2363 2689 2194 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 3 3 4 Sodium ppm ASTM D5185m 7 4 8 Potassium ppm ASTM D5185m >20 <1	Calcium	ppm	ASTM D5185m	1510	1594	1714	1452
Zinc ppm ASTM D5185m 870 946 1035 903 Sulfur ppm ASTM D5185m 2040 2363 2689 2194 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 3 3 4 Sodium ppm ASTM D5185m 7 4 8 Potassium ppm ASTM D5185m >20 <1 1 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 Nitration Abs/cm *ASTM D7624 >20 9.8 7.5 9.8 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 19.3 19.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 <	Phosphorus	ppm	ASTM D5185m	780	696	854	694
Sulfur ppm ASTM D5185m 2040 2363 2689 2194 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 3 3 4 Sodium ppm ASTM D5185m 7 4 8 Potassium ppm ASTM D5185m >20 <1	Zinc		ASTM D5185m	870	946	1035	903
Silicon ppm ASTM D5185m >+100 3 3 4 Sodium ppm ASTM D5185m 7 4 8 Potassium ppm ASTM D5185m >20 <1 1 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 Nitration Abs/cm *ASTM D7624 >20 9.8 7.5 9.8 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 19.3 19.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.9 16.7 17.8	Sulfur		ASTM D5185m	2040	2363	2689	2194
Sodium ppm ASTM D5185m 7 4 8 Potassium ppm ASTM D5185m >20 <1	CONTAMINAN	TS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <1 1 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 Nitration Abs/cm *ASTM D7624 >20 9.8 7.5 9.8 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 19.3 19.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.9 16.7 17.8	Silicon	ppm	ASTM D5185m	>+100	3	3	4
INFRA-RED	Sodium	ppm	ASTM D5185m		7	4	8
Soot % % *ASTM D7844 0 0 0 Nitration Abs/cm *ASTM D7624 >20 9.8 7.5 9.8 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 19.3 19.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.9 16.7 17.8	Potassium	ppm	ASTM D5185m	>20	<1	1	2
Nitration Abs/cm *ASTM D7624 >20 9.8 7.5 9.8 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 19.3 19.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.9 16.7 17.8	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 21.5 19.3 19.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.9 16.7 17.8	Soot %	%	*ASTM D7844		0	0	0
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.9 16.7 17.8	Nitration	Abs/cm	*ASTM D7624	>20	9.8	7.5	9.8
Oxidation Abs/.1mm *ASTM D7414 >25 17.9 16.7 17.8	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	19.3	19.7
	FLUID DEGRAE	OATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 10.2 4.6 8.1 5.4	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.9	16.7	17.8
	Base Number (BN)	mg KOH/g	ASTM D2896	10.2	4.6	8.1	5.4



OIL ANALYSIS REPORT

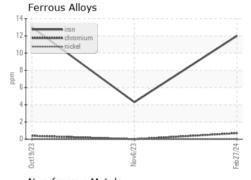


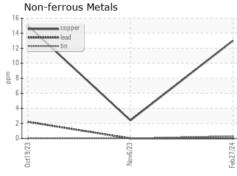


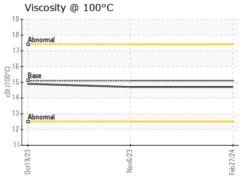
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

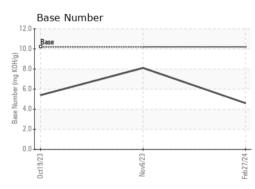
FLUID PROPE	:RHES	method				history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.7	14.7	14.9

GRAPHS













Certificate L2367

Laboratory Sample No.

: GFL0106765 Lab Number : 06103484 Unique Number : 10901714 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 28 Feb 2024 **Tested** : 01 Mar 2024

Diagnosed : 01 Mar 2024 - Wes Davis

GFL Environmental - 856 - Houston South

8515 Highway 6 South Houston, TX US 77083

Contact: Jose Gonzalez jgonzalez2@gflenv.com

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)

T:

F: