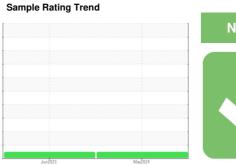


OIL ANALYSIS REPORT









Machine Id 733002 **Natural Gas Engine**

PETRO CANADA DURON

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. 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

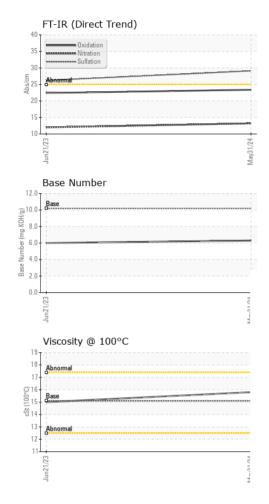
Fluid Condition

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

Oil Age Oil Changed Sample Status CONTAMINATIO Water WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES	hrs hrs	method Client Info Client Info Client Info Client Info Client Info Client Info Method WC Method Method ASTM D5185m	limit/base >50 >5 >4 >5 >3 >25 >40	current GFL0114763 31 May 2024 3566 2316 Changed NORMAL current NEG current 40 3 1 0 0 7 2 2 2 2 0	history1 GFL0082267 21 Jun 2023 1250 1250 Changed NORMAL history1 NEG history1 50 2 1 0 0 8 <1 0 0 8 <1 0	history2 history2 history2
Sample Date Machine Age Oil Age Oil Age Coll Changed Sample Status CONTAMINATION Water WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES	ppm ppm ppm ppm ppm ppm ppm ppm ppm	Client Info Client Info Client Info Client Info Client Info Client Info Method WC Method ASTM D5185m	>0.1 limit/base >50 >5 >4 >5 >4 >5 >4 >5 >4 >5 >3 >25 >40 >150	31 May 2024 3566 2316 Changed NORMAL current NEG current 40 3 1 0 0 7 2 2 2 2 0	21 Jun 2023 1250 1250 Changed NORMAL history1 NEG history1 50 2 1 0 0 8 <<1	history2 history2
Sample Date Machine Age Machine Age Dil Age Dil Age Dil Changed Sample Status CONTAMINATIO Water WEAR METALS ron Chromium Nickel Fitanium Silver Aluminum Lead Copper Fin Vanadium Cadmium ADDITIVES	ppm ppm ppm ppm ppm ppm ppm ppm ppm	Client Info Client Info Client Info Client Info Client Info Client Info Method WC Method ASTM D5185m	>0.1 limit/base >50 >5 >4 >5 >4 >5 >4 >5 >4 >5 >3 >25 >40 >150	31 May 2024 3566 2316 Changed NORMAL current NEG current 40 3 1 0 0 7 2 2 2 2 0	21 Jun 2023 1250 1250 Changed NORMAL history1 NEG history1 50 2 1 0 0 8 <<1	history2 history2
Machine Age Machine Age Dil Age Dil Age Dil Changed Sample Status CONTAMINATIO Water WEAR METALS ron Chromium Nickel Fitanium Silver Aluminum Lead Copper Fin Manadium Cadmium ADDITIVES	ppm ppm ppm ppm ppm ppm ppm ppm ppm	Client Info Client Info Client Info Client Info Method WC Method ASTM D5185m	>0.1 limit/base >50 >5 >4 >5 >4 >5 >4 >5 >4 >5 >3 >25 >40 >150	3566 2316 Changed NORMAL current NEG current 40 3 1 0 0 7 2 2 2 2 0	1250 1250 Changed NORMAL history1 NEG history1 50 2 1 0 0 8	history2 history2
Dil Age Proportion Proportion	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method WC Method Method ASTM D5185m	>0.1 limit/base >50 >5 >4 >5 >4 >5 >4 >5 >4 >5 >3 >25 >40 >150	Changed NORMAL current NEG current 40 3 1 0 7 2 2 2 0	1250 Changed NORMAL history1 NEG history1 50 2 1 0 0 8 <<1	history2 history2
Oil Changed Sample Status CONTAMINATIO Water WEAR METALS ron	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method WC Method method ASTM D5185m	>0.1 limit/base >50 >5 >4 >5 >4 >5 >4 >5 >4 >5 >3 >25 >40 >150	NORMAL current NEG current 40 3 1 0 0 7 2 2 2 0	NORMAL history1 NEG history1 50 2 1 0 0 8 <1	history2 history2
CONTAMINATION Water WEAR METALS ron	ppm ppm ppm ppm ppm ppm ppm ppm ppm	WC Method method ASTM D5185m	>0.1 limit/base >50 >5 >4 >5 >4 >5 >4 >5 >4 >5 >3 >25 >40 >150	NORMAL current NEG current 40 3 1 0 0 7 2 2 2 0	NORMAL history1 NEG history1 50 2 1 0 0 8 <1	history2 history2
Water WEAR METALS Iron	ppm ppm ppm ppm ppm ppm ppm ppm ppm	WC Method method ASTM D5185m	>0.1 limit/base >50 >5 >4 >5 >4 >5 >4 >5 >4 >5 >3 >25 >40 >150	NEG current 40 3 1 0 0 7 2 2 2 0	NEG history1 50 2 1 0 0 3 0 8 <1	history2
WEAR METALS Iron	ppm	method ASTM D5185m	limit/base >50 >5 >4 >5 >3 >25 >40 >150	current 40 3 1 0 0 7 2 2 2 0	history1 50 2 1 0 0 3 0 8 <1	
Chromium Chromium Nickel Fitanium Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES	ppm	ASTM D5185m	>50 >5 >4 >5 >3 >25 >40 >150	40 3 1 0 0 7 2 2 2 2	50 2 1 0 0 3 0 8 <1	
Chromium Nickel Fitanium Silver Aluminum Lead Copper Fin Vanadium Cadmium ADDITIVES	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	>5	3 1 0 0 7 2 2 2 2	2 1 0 0 3 0 8 <1	
Chromium Nickel Fitanium Silver Aluminum Lead Copper Fin Vanadium Cadmium ADDITIVES	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	>4 >5 >3 >25 >40 >150	1 0 0 7 2 2 2 2	1 0 0 3 0 8 <1	
Nickel pritanium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >3 >25 >40 >150	0 0 7 2 2 2 2	0 0 3 0 8 <1	
Fitanium Silver Aluminum Lead Copper Fin Vanadium Cadmium ADDITIVES	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>3 >25 >40 >150	0 7 2 2 2 2	0 3 0 8 <1	
Silver programmer prog	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >40 >150	7 2 2 2 2 0	3 0 8 <1	
Aluminum p Lead p Copper p Fin p Vanadium p Cadmium p ADDITIVES	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >40 >150	7 2 2 2 2 0	3 0 8 <1	
Lead F Copper F Fin F Vanadium F Cadmium F ADDITIVES	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>40 >150	2 2 2 0	0 8 <1	
Copper Fin Vanadium Cadmium ADDITIVES	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>150	2 2 0	8 <1	
Fin properties of the properti	ppm ppm	ASTM D5185m ASTM D5185m		2	<1	
Vanadium g Cadmium g ADDITIVES	ppm	ASTM D5185m		0		
ADDITIVES				-	O .	
ADDITIVES				0	0	
Boron p		method	limit/base	current	history1	history2
	ppm	ASTM D5185m	50	22	14	
Barium r	ppm	ASTM D5185m	5	<1	0	
	ppm	ASTM D5185m	50	77	71	
, ,	ppm		0	2	6	
	ppm	ASTM D5185m	560	843	789	
,	ppm	ASTM D5185m	1510	2251	1812	
	ppm	ASTM D5185m	780	1178	894	
	ppm	ASTM D5185m	870	1354	1105	
	ppm	ASTM D5185m	2040	3232	2989	
CONTAMINANT	S	method	limit/base	current	history1	history2
Silicon p	ppm	ASTM D5185m	>25	10	15	
	ppm	ASTM D5185m		8	5	
Potassium p	ppm	ASTM D5185m	>20	11	5	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0.1	0.1	
Nitration /	Abs/cm	*ASTM D7624	>20	13.2	12.0	
	Abs/.1mm	*ASTM D7415		29.1	26.2	
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Oxidation A	Abs/.1mm	*ASTM D7414	>25	23.4	22.4	
	mg KOH/g		-			



OIL ANALYSIS REPORT

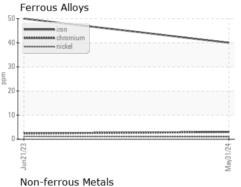


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
	DTIEO	and the selection	Para State and a		la fact a smooth	la la la ma O

15.8

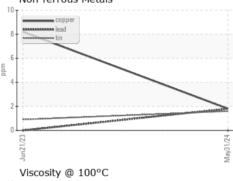
15.0

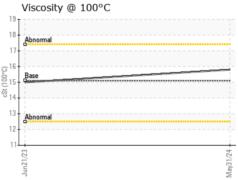
Visc @	100°C
GRA	PHS

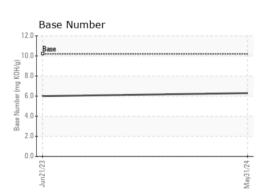


cSt

ASTM D445 15.1











Certificate 12367

Laboratory Sample No.

: GFL0114763 Lab Number : 06201193 Unique Number : 11063316 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 06 Jun 2024 Tested

: 07 Jun 2024 Diagnosed : 09 Jun 2024 - Don Baldridge

GFL Environmental - 963 - Peoria HC Disposal 1113 N. Swords Ave. West Peoria, IL US 61604 Contact: Corey Dozard

cdozard@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)

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F: