

OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id 714061 Component **Diesel Engine**

PETRO CANADA DUR

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

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.

N SHP 15W40 (2	25 GAL)			Nov2023		
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0089093		
Sample Date		Client Info		22 Nov 2023		
Machine Age	hrs	Client Info		940		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINA	ΓΙΟΝ	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METAI	_S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>120	13		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>5	2		
Titanium	ppm	ASTM D5185m	>2	0		
Silver	ppm	ASTM D5185m	>2	1		
Aluminum	ppm	ASTM D5185m	>20	3		
Lead	ppm	ASTM D5185m	>40	<1		
Copper	ppm	ASTM D5185m	>330	43		
Tin	ppm	ASTM D5185m	>15	1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history
Boron	ppm	ASTM D5185m	0	16		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m	60	60		
Manganese	ppm	ASTM D5185m	0	<1		
Magnesium	ppm	ASTM D5185m	1010	878		
Calcium	ppm	ASTM D5185m	1070	1074		
Phosphorus	mag	ASTM D5185m	1150	1061		

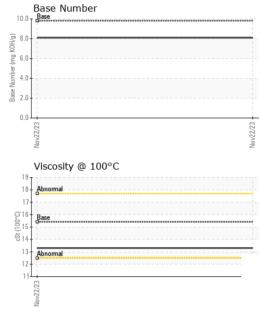
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Magnesium	ppm	ASTM D5185m	1010	878		
Calcium	ppm	ASTM D5185m	1070	1074		
Phosphorus	ppm	ASTM D5185m	1150	1061		
Zinc	ppm	ASTM D5185m	1270	1202		
Sulfur	ppm	ASTM D5185m	2060	2872		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	11		
Sodium	ppm	ASTM D5185m		7		
Potassium	ppm	ASTM D5185m	>20	6		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>4	0.3		
Nitration	Abs/cm	*ASTM D7624	>20	6.9		
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9		
FLUID DEGRAD	OITAC	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5		

8.1

Base Number (BN) mg KOH/g ASTM D2896 9.8



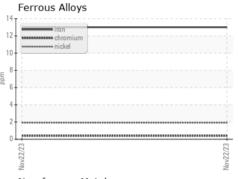
OIL ANALYSIS REPORT

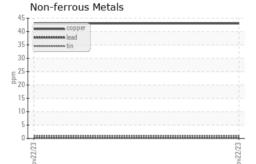


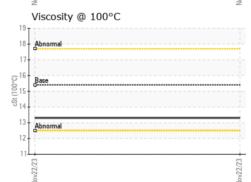
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
Free Water	scalar	*Visual		NEG		
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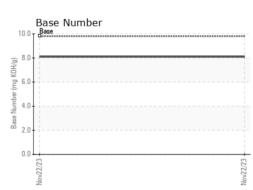
FLUID FROF		memod			HISTOLAL	HISTORYZ
Visc @ 100°C	cSt	ASTM D445	15.4	13.3		

GRAPHS











Certificate L2367

Laboratory Sample No. Lab Number

: GFL0089093 : 06017729 Unique Number : 10756873 Test Package : FLEET

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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 27 Nov 2023 Diagnosed : 28 Nov 2023 Diagnostician : Wes Davis

GFL Environmental - 415 - Michigan East 6200 Elmridge Sterling Heights, MI US 48313

Contact: Frank Wolak fwolak@gflenv.com T: (586)825-9514

* - 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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Submitted By: Frank Wolak