

## **OIL ANALYSIS REPORT**









(Mc9632) 825084 Component Diesel Engine

PETRO CANADA DURON SHP 15W40 (40 QTS)

# DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil

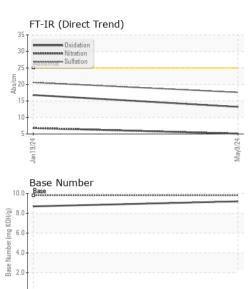
### **Fluid Condition**

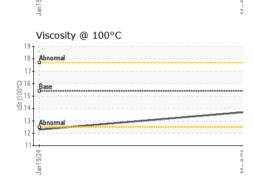
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

N SHP 15W40 (4	U Q 15)		Jan 2024	May2024		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0108544	GFL0108530	
Sample Date		Client Info		09 May 2024	19 Jan 2024	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	MARGINAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<b>▲</b> 3.7	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METAL	.S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>80	6	18	
Chromium	ppm	ASTM D5185m	>5	<1	1	
Nickel	ppm	ASTM D5185m	>2	0	0	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>30	1	3	
_ead	ppm	ASTM D5185m	>30	0	0	
Copper	ppm	ASTM D5185m	>150	<1	1	
Tin	ppm	ASTM D5185m	>5	0	0	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	26	
Barium	ppm	ASTM D5185m	0	0	0	
Molybdenum	ppm	ASTM D5185m	60	58	49	
Manganese	ppm	ASTM D5185m	0	0	<1	
Magnesium	ppm	ASTM D5185m	1010	976	641	
Calcium	ppm	ASTM D5185m	1070	1176	1450	
Phosphorus	ppm	ASTM D5185m	1150	1063	996	
Zinc	ppm	ASTM D5185m	1270	1225	1147	
Sulfur	ppm	ASTM D5185m	2060	3629	2895	
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	4	8	
Sodium	ppm	ASTM D5185m		2	4	
Potassium	ppm	ASTM D5185m	>20	0	0	
INFRA-RED		method	limit/base	current	history1	history2
		*ACTM D7044	>3	0.1	0.3	
Soot %	%	*ASTM D7844	- 0	<b>U.</b> .		
	% Abs/cm	*ASTM D7844	>20	5.1	6.8	
Soot %						
Soot % Nitration	Abs/cm Abs/.1mm	*ASTM D7624 *ASTM D7415	>20	5.1	6.8	
Soot % Nitration Sulfation	Abs/cm Abs/.1mm	*ASTM D7624 *ASTM D7415	>20 >30	5.1 17.6	6.8 20.6	



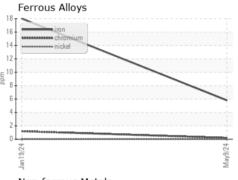
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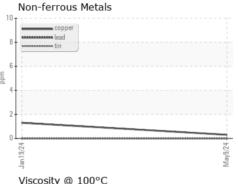


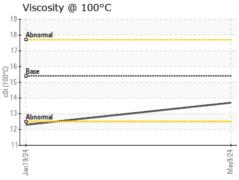


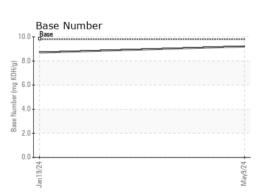
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	

FLUID PROP	ERIIES	metnoa	ilmit/base	current	nistory i	nistory2
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	12.3	













Unique Number : 11029698

Sample No. : GFL0108544 Lab Number : 06178372

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received : 14 May 2024 Tested : 14 May 2024 Diagnosed

: 14 May 2024 - Wes Davis

GFL Environmental - 938 - Hager City W9724 WIS-35

HAGER CITY, WI US 54014

T: (715)202-3420

Contact: ANDY KANE

Test Package : FLEET Certificate 12367 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)

Submitted By: See also GFL904,A,B,C, 927, 938 - Andy Kane

Report Id: GFL938 [WUSCAR] 06178372 (Generated: 05/14/2024 18:39:01) Rev: 1