

# **OIL ANALYSIS REPORT**

Area [1225533] 101012

Component **Diesel Engine** 

PETRO CANADA DURON SHP 10W30 (--- GAL)

# Sample Rating Trend



## 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

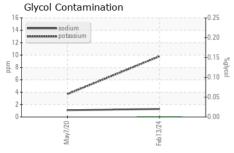
### **Fluid Condition**

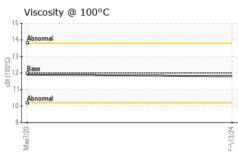
The condition of the oil is acceptable for the time in service.

GAL)			May2020	Feb 2024		
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0107921	GFL0006021	
Sample Date		Client Info		13 Feb 2024	07 May 2020	
Machine Age	hrs	Client Info		14674	9800	
Oil Age	hrs	Client Info		0	9800	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINA	TION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
WEAR METAI	LS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	18	13	
Chromium	ppm	ASTM D5185(m)	>20	<1	2	
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	
Titanium	ppm	ASTM D5185(m)		0	<1	
Silver	ppm	ASTM D5185(m)	>3	0	0	
Aluminum	ppm	ASTM D5185(m)	>20	15	5	
Lead	ppm	ASTM D5185(m)	>40	0	<1	
Copper	ppm	ASTM D5185(m)	>330	2	2	
Tin	ppm	ASTM D5185(m)	>15	<1	<1	
Antimony	ppm	ASTM D5185(m)		0	<1	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	<1	2	
Barium	ppm	ASTM D5185(m)	0	0	0	
Molybdenum	ppm	ASTM D5185(m)	50	58	59	
Manganese	ppm	ASTM D5185(m)	0	0	<1	
Magnesium	ppm	ASTM D5185(m)	950	956	982	
Calcium	ppm	ASTM D5185(m)	1050	1054	1050	
Phosphorus	ppm	ASTM D5185(m)	995	1015	1016	
Zinc	ppm	ASTM D5185(m)	1180	1180	1233	
Sulfur	ppm	ASTM D5185(m)	2600	2651	2521	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINA	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	3	2	
Sodium	ppm	ASTM D5185(m)		1	1	
Potassium	ppm	ASTM D5185(m)	>20	10	4	
Glycol	%	ASTM D7922*		0.0	NEG	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.5	0.5	
Nitration	Abs/cm	ASTM D7624*	>20	8.7	9.4	
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.4	24.2	



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FLUID DEGRAI	NOITAC	method				history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.8	16.5	
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE		
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		
<b>Emulsified Water</b>	scalar	Visual*	>0.2	NEG	NEG	
Free Water	scalar	Visual*		NEG	NEG	
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.8	11.9	

visc @ 100°C	CSI	ASTM D/2/9(m)	12.00	11.8	11.9	
GRAPHS						
Iron (ppm)				Lead (ppm)	)	
250 Severe				80 Severe		
E 150				E 60-		
	***************************************			10 1		-
50				20		
May7/20			Feb13/24	May7/20		Feb13/24
			윤			皇
Aluminum (pp	m)			Chromium	(ppm)	
40 - Severe				40 Severe		
Abnormal				Abnormal		
10+				10		1
0			4	0		4:
May7/20			Feb13/24	May7/20		Feb13/24 -
Copper (ppm)			ш.	Silicon (ppr	n)	
400 Severe				80 Severe		
300				60		
E 200 -				Abnormal		
0				20 - 9		
May7/20			Feb13/24	May7/20		Feb13/24 -
			是			Feb
Viscosity @ 10	0°C			Soot %		
Abnormal			0000	Severe		
Abnormal Base Abnormal				Abnormal		
Abnormal				°2.0		
8 02				0.0		4
May7/20			Feb13/24	May7/20		Feb13/24 -
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**CALA** ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02616923 Unique Number : 5734033

: GFL0107921

Received **Tested** 

Diagnosed Test Package: MOB 1 (Additional Tests: Glycol, Visual)

: 21 Feb 2024 : 22 Feb 2024 : 22 Feb 2024 - Kevin Marson

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 350 - Emeral Park Regina 2B Industrial Drive,, Great Plains Industrial Park, Emerald Park, SK

CA S4L 1B6 Contact: Vaughn Hortness vhortness@gflenv.com T: (877)244-9500

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

Validity of results and interpretation are based on the sample and information as supplied. F: (306)244-9501 Contact/Location: Vaughn Hortness - GFL350