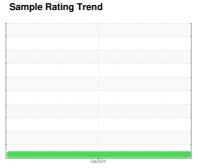


# **OIL ANALYSIS REPORT**

ЭТ



NORMAL



Machine Id **514042** 

Component **Diesel Engine** 

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

#### Wear

All component wear rates are normal.

### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

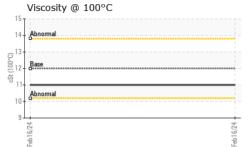
### **Fluid Condition**

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

iAL)				Feb2024		
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0107914		
Sample Date		Client Info		16 Feb 2024		
Machine Age	hrs	Client Info		1526		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINA	TION	method	limit/base	current	history1	history2
Fuel	11011	WC Method	>5	<1.0		
-uei Nater		WC Method		<1.0 NEG		
			>0.2			
Glycol		WC Method		NEG		
WEAR METAI	LS	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185(m)	>100	19		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>4	<1		
Γitanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	<1		
Aluminum	ppm	ASTM D5185(m)	>20	8		
_ead	ppm	ASTM D5185(m)	>40	1		
Copper	ppm	ASTM D5185(m)	>330	3		
Γin	ppm	ASTM D5185(m)	>15	<1		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	<1		
Barium	ppm	ASTM D5185(m)	0	0		
Molybdenum	ppm	ASTM D5185(m)	50	59		
Manganese	ppm	ASTM D5185(m)	0	0		
Magnesium	ppm	ASTM D5185(m)	950	976		
Calcium	ppm	ASTM D5185(m)	1050	1069		
Phosphorus	ppm	ASTM D5185(m)	995	1025		
Zinc	ppm	ASTM D5185(m)	1180	1182		
Sulfur	ppm	ASTM D5185(m)	2600	2662		
_ithium	ppm	ASTM D5185(m)		<1		
CONTAMINA	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	7		
Sodium	ppm	ASTM D5185(m)		4		
Potassium	ppm	ASTM D5185(m)	>20	18		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.2		
Nitration	Abs/cm	ASTM D7624*	>20	7.7		
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.6		



# **OIL ANALYSIS REPORT**



FLUID DEGRAD	DATION	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.9			
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			
Emulsified Water	scalar	Visual*	>0.2	NEG			
Free Water	scalar	Visual*		NEG			
FLUID PROPE	RTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.0			
GRAPHS							
Iron (ppm)			100	Lead (ppm)			
Severe			80	Severe			
0 - Abnormal			Edd 40	Abnormal			
0+			20				
0 + 4			724	724			
Feb 1 6/24			Feb 16/24	Feb 1 6/24			
Aluminum (ppm)				Chromium (p	pm)		
0 7 7			50	50 <b>T</b> :2			
Severe			40	Severe			
0 + Abnormal			≣ <sup>30</sup>	Abnormal			
0+				-			
0			0	-			
Feb 1 6/24			Feb16/24	Feb 16/24			
			2	_			
Copper (ppm)			80	Silicon (ppm)			
Severe			60	0			
0			트 40				
i				Abnormal			
0			20				
0/24			9/24	3/24			
Feb 16/2:			Feb 16/24	Feb 16/			
Viscosity @ 100°C				Soot %			
eT:			6.0	Severe			
AL I						•••••	
Abnormal 2 Base Abnormal			<sub>3</sub> e 4.0 59 2.0	Abnormal			



**CALA** ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number : 02616924

: GFL0107914

Unique Number : 5734034

Test Package : MOB 1 (Additional Tests: Visual)

Received

: 21 Feb 2024 **Tested** Diagnosed

: 21 Feb 2024 : 21 Feb 2024 - Wes Davis

: 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

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

T: (877)244-9500