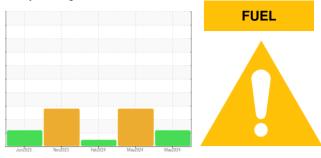


OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id 5599

Diesel Engine Fluid

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

DIAGNOSIS	SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
A Recommendation	Sample Number		Client Info		GFL0112523	GFL0118959	GFL0102588
The oil change at the time of sampling has been	Sample Date		Client Info		22 May 2024	03 May 2024	05 Feb 2024
noted. We recommend an early resample to	Machine Age	hrs	Client Info		21150	21234	0
monitor this condition.	Oil Age	hrs	Client Info		0	0	0
Wear	Oil Changed		Client Info		Changed	Changed	N/A
All component wear rates are normal.	Sample Status				ABNORMAL	SEVERE	NORMAL
Contamination There is a moderate amount of fuel present in the	CONTAMINA	TION	method	limit/base	current	history1	history2
il. Tests confirm the presence of fuel in the oil.	Water		WC Method	>0.2	NEG	NEG	NEG
Fluid Condition	Glycol		WC Method		NEG	NEG	NEG
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the	WEAR META	LS	method	limit/base	current	history1	history2
resence of contaminants.	Iron	ppm	ASTM D5185(m)	>120	3	7	12
	Chromium	ppm	ASTM D5185(m)	>20	0	0	<1
	Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
	Titanium	ppm	ASTM D5185(m)	>2	0	0	0
	Silver	ppm	ASTM D5185(m)	>2	0	0	0
	Aluminum	ppm	ASTM D5185(m)	>20	2	3	3
	Lead	ppm	ASTM D5185(m)	>40	0	0	<1
	Copper	ppm	ASTM D5185(m)	>330	<1	1	3
	Tin	ppm	ASTM D5185(m)	>15	0	0	0
	Antimony	ppm	ASTM D5185(m)		0	0	0
	Vanadium	ppm	ASTM D5185(m)		0	0	0
	Beryllium	ppm	ASTM D5185(m)		0	0	0
	Cadmium	ppm	ASTM D5185(m)		0	0	0
	ADDITIVES		method	limit/base	current	history1	history2
	Boron	ppm	ASTM D5185(m)	2	2	1	2
	Barium	ppm	ASTM D5185(m)	0	0	0	0
	Molybdenum	ppm	ASTM D5185(m)	50	53	50	60
	Manganese	ppm	ASTM D5185(m)	0	0	0	0
	Magnesium	ppm	ASTM D5185(m)	950	854	810	979
	Calcium	ppm	ASTM D5185(m)	1050	925	890	1092
	Phosphorus	ppm	ASTM D5185(m)	995	912	858	990
	Zinc	ppm	ASTM D5185(m)	1180	1030	997	1186
	Sulfur	ppm	ASTM D5185(m)	2600	2310	2223	2478
	Lithium	ppm	ASTM D5185(m)		<1	<1	<1
	CONTAMINA	NTS	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185(m)	>25	2	3	5
	Sodium	ppm	ASTM D5185(m)		52	45	9
	Potassium	ppm	ASTM D5185(m)	>20	2	2	5
	Fuel	%	ASTM D7593*	>3.0	<mark>人</mark> 4.9	▲ 15.3	0.8
	INFRA-RED		method	limit/base	current	history1	history2
	Soot %	%	ASTM D7844*	>4	0	0	0.2
	Nitration		ASTM D7624*		5.1	7.5	8.6
	Cultation	Ale of dier		00	10.0	17.0	00.0

Abs/.1mm ASTM D7415* >30

Sulfation

20.2

17.6

18.0



🔺 Viscosity @ 100°

35

30

25

Abs/cm

10

16

14 Abnormal

() 12 St (100-C) Ba

3

30

25 /ps/cm

> 15 10

OIL ANALYSIS REPORT

FT-IR (Direct Trend)	FLUID DEGRA		method	limit/base	current	history1	history2
0- Oxidation	Oxidation	Abs/.1mm	ASTM D7414*	>25	13.6	14.1	16.9
	VISUAL		method	limit/base	current	history1	history2
C	White Metal	scalar	Visual*	NONE	NONE	NONE	
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
	Precipitate	scalar	Visual*	NONE	NONE	NONE	
Jun28/23 - Nov22/23 - Feb5/24 - May3/24 -	Silt Debris		Visual*	NONE	NONE	NONE	
Juni Fet	—	scalar	Visual*	NONE	VLITE	NONE	
Viscosity @ 100°C	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
6	Appearance	scalar	Visual*	NORML	NORML	NORML	
4 - Abnormal	Odor Emulaified Water	scalar	Visual*	NORML	NORML	NORML	NORML
2 - Base	Emulsified Water Free Water	scalar scalar	Visual* Visual*	>0.2	NEG NEG	NEG NEG	NEG NEG
Abnormal							
	FLUID PROPI		method	limit/base	current	history1	history2
6	Visc @ 100°C	cSt	ASTM D7279(m)	12.00	▲ 9.8	8.4	11.2
Jun 28/23 Nov22/23 Feb5/24 May3/24	FICTOR (ppm)						
No Ann	Iron (ppm)			10	Lead (ppm)		
FT-IR (Direct Trend)	Severe			8	Sminne		
5 Oxidation	200 - Abnormal			E G	A1		
0 - Million Nitration Sulfation	B: 100		1				
5	0				0		
	Jun 28/23	Feb5/24	May3/24 .	May22/24 -	Jun28/23 - Vov22/23 -	Feb 5/24 .	May3/24
	nur ývoN	Fel	Ma	May	Jun	Fet	May
***************************************	Aluminum (ppm))		-	Chromium (p	opm)	
un28/23 + feb5/24 + May3/24 +	50 Severe			5	Sminn		
Jun 28/23 Nov 22/23 Feb 5/24 May 3/24	E 30			<u>الم</u>			
	10			1	0		
	un28/23 +	Feb5/24 -	May3/24 -		Jun28/23	Feb5/24 -	May3/24 - May3/24 - May22/24 -
	Jun2 Nov2	Feb	May	May22/24	Junž Nov2	Fer	May May2
	Copper (ppm)				Silicon (ppm))	
	400 Severe			8	U	1	
	300 - 톨 200 -			6 6 8	0-		
	100			음. ⁺ 2	Abnormal		
	0				0		
	Jun28/23	Feb5/24 -	May3/24 -	May22/24 -	Jun28/23 - Nov22/23 -	Feb5/24 -	May3/24 . May22/24 .
			Ma	May	Juni	Fet	May
	▲ Viscosity @ 100°	С		20.			
	14 Abnormal	1		15.	· ·		
	Base			15. 평 과 10. ※			\land
	Abnormal			5.		\backslash	
	6			0.		\sim	
	Jun28/23	Feb 5/24 -	May3/24 .	May22/24 .	Jun28/23 . Nov22/23 .	Feb5/24 -	May3/24 May22/24
	, nuľ	Fel	Ma	May	Juni	Fet	May
	www.wearCheck_C8-117	75 Apploby	Lino Burlin	aton ONLT		wirenmentel 554	Edmonton SW

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW Laboratory CALA Sample No. : GFL0112523 Received : 29 May 2024 8409 -15th Street NW Lab Number : 02638388 Tested : 30 May 2024 Edmonton, AB ISO 17025:2017 Accredited Laboratory CA T6P 0B8 Unique Number : 5787550 Diagnosed : 30 May 2024 - Wes Davis Contact: Tim Greig Test Package : MOB 1 (Additional Tests: PercentFuel, Visual) To discuss this sample report, contact Customer Service at 1-800-268-2131. tgreig@gflenv.com Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (780)231-0521 Validity of results and interpretation are based on the sample and information as supplied. F:

Report Id: GFL554 [WCAMIS] 02638388 (Generated: 05/30/2024 09:30:58) Rev: 1

Contact/Location: Tim Greig - GFL554 Page 2 of 2