

## [1276278]

219014

**Diesel Engine** 

## PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Besample at the next service interval to monitor	Sample Number		Client Info		GFL0118528	GFL0110706	
	Sample Date		Client Info		13 May 2024	24 Jan 2024	
	Machine Age	hrs	Client Info		8681	8221	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		N/A	Changed	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	mag	ASTM D5185(m)	>100	23	24	
All component wear rates are normal	Chromium	ppm	ASTM D5185(m)	>20	<1	<1	
Al component wear rates are normal.	Nickel	ppm	ASTM D5185(m)	>4	0	<1	
	Titanium	ppm	ASTM D5185(m)		0	0	
	Silver	ppm	ASTM D5185(m)	>3	0	0	
	Aluminum	ppm	ASTM D5185(m)	>20	4	7	
	Lead	ppm	ASTM D5185(m)	>40	<1	1	
	Copper	ppm	ASTM D5185(m)	>330	4	4	
	Tin	ppm	ASTM D5185(m)	>15	0	<1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	2	3	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	3	7	
	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method	0	NEG	0.0	
	Soot %	%	ASIM D/844*	>3	0.9	0.7	
	Nitration	Abs/cm	ASTM D7624*	>20	11.9	10.6	
	Sulfation	Abs/.1mm	ASIM D/415 <sup>°</sup>	>30	21.0	20.2	
	Emulsified Water	scalar	Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		3	2	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	0	2	3	
	Barium	ppm	ASTM D5185(m)	0	0	0	
	Molybdenum	ppm	ASTM D5185(m)	60	60	59	
	Manganese	ppm	ASTM D5185(m)	0	<1	<1	
	Magnesium	ppm	ASTM D5185(m)	1010	983	948	
	Calcium	ppm	ASTM D5185(m)	1070	1066	1064	
	Phosphorus	ppm	ASTM D5185(m)	1150	1016	1022	
	Zinc	ppm	ASTM D5185(m)	1270	1202	1188	
	Sulfur	nnm	ASTM D5185(m)	2060	2525	2767	

Oxidation

Visc @ 100°C cSt

Abs/.1mm ASTM D7414\* >25

ASTM D7279(m) 15.4

Contact/Location: Ian Patton - GFL207 Page 1 of 2

18.0

13.1

19.3

13.3

NORMAL WEAR CONTAMINATION NORMAL **FLUID CONDITION** NORMAL







Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 207 - Pickering SW CALA Sample No. Received 1034 TOY AVENUE, PICKERING YARD : GFL0118528 : 15 May 2024 Tested Lab Number : 02635579 : 15 May 2024 PICKERING, ON ISO 17025:2017 Accredited Laboratory Diagnosed Unique Number : 5776732 : 15 May 2024 - Kevin Marson CA L1W 3P1 Test Package : MOB 1 Contact: Ian Patton To discuss this sample report, contact Customer Service at 1-800-268-2131. ipatton@gflenv.com Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (905)831-6297 Validity of results and interpretation are based on the sample and information as supplied. F: (905)426-3577

Contact/Location: Ian Patton - GFL207 Page 2 of 2

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