

OIL ANALYSIS REPORT

Sample Rating Trend



FUEL

Machine Id **7824** Component

Diesel Engine

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

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

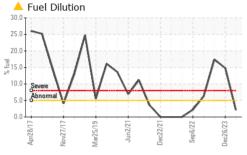
Fluid Condition

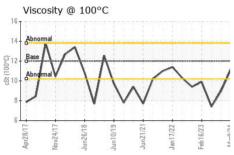
The condition of the oil is acceptable for the time in service.

.TR)		pr2017 Novi	2017 Jun2018 Jun201	9 Jun2021 Jan2022 Feb20	123 Mar202		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		GFL0102621	GFL0101741	GFL0093916	
Sample Date		Client Info		09 Mar 2024	26 Dec 2023	18 Sep 2023	
Machine Age	hrs	Client Info		23698	0	22695	
Oil Age	hrs	Client Info		0	0	0	
Oil Changed		Client Info		Changed	N/A	N/A	
Sample Status				MARGINAL	SEVERE	SEVERE	
CONTAMINATION		method	limit/base	current	history1	history2	
Water		WC Method	>0.2	NEG	NEG	NEG	
Glycol		WC Method		NEG	NEG	NEG	
WEAR METALS	S	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>110	11	37	15	
Chromium	ppm	ASTM D5185(m)	>4	<1	3	1	
Nickel	ppm	ASTM D5185(m)	>2	0	<1	0	
Titanium	ppm	ASTM D5185(m)		0	0	0	
Silver	ppm	ASTM D5185(m)	>2	0	0	0	
Aluminum	ppm	ASTM D5185(m)	>25	1	2	1	
Lead	ppm	ASTM D5185(m)	>45	0	<1	0	
Copper	ppm	ASTM D5185(m)	>85	<1	2	2	
Tin	ppm	ASTM D5185(m)	>4	0	<1	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	2	2	
Barium	ppm	ASTM D5185(m)	0	0	0	0	
Molybdenum	ppm	ASTM D5185(m)	50	59	47	43	
Manganese	ppm	ASTM D5185(m)	0	0	0	<1	
Magnesium	ppm	ASTM D5185(m)	950	948	743	692	
Calcium	ppm	ASTM D5185(m)	1050	1063	822	750	
Phosphorus	ppm	ASTM D5185(m)	995	959	785	761	
Zinc	ppm	ASTM D5185(m)	1180	1156	917	858	
Sulfur	ppm	ASTM D5185(m)	2600	2437	2024	1875	
Lithium	ppm	ASTM D5185(m)		<1	<1	<1	
CONTAMINAN	TS	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>30	6	6	4	
Sodium	ppm	ASTM D5185(m)		4	7	6	
Potassium	ppm	ASTM D5185(m)	>20	<1	1	0	
Fuel	%	ASTM D7593*	>5	<u>^</u> 2.1	1 4.8	▲ 17.4	
INFRA-RED		method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.4	1.3	0.6	
Nitration	Abs/cm	ASTM D7624*	>20	7.4	13.0	10.3	
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.2	26.0	25.9	



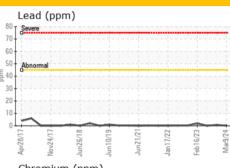
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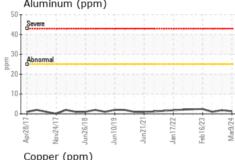


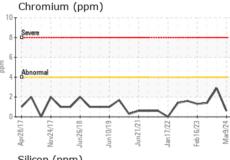


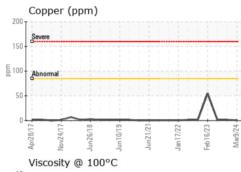
FLUID DEGRADATION method limit/base current history1 history						history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.0	28.3	▲ 30.7
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.2	4 9	▲ 7.4
GRAPHS						

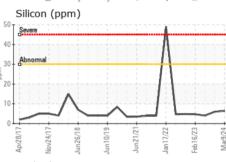
Iron (ppn	n)					
Severe						
150-						
Abnormal						
톱100						
50-						
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Apr28/17 Nov24/17	Jun26/18	10/19	Jun21/21	17/22	Feb 16/23	Mar9/24
Ap Nov	- In	Jun1	Jin	Jan1	귤	Σ
Aluminum (ppm)						

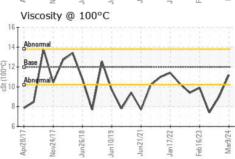


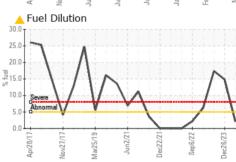














CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: GFL0102621 Lab Number : 02624194 Unique Number : 5749313

Received **Tested**

Diagnosed

: 25 Mar 2024

: 26 Mar 2024 : 26 Mar 2024 - Wes Davis

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW 8409 -15th Street NW Edmonton, AB CA T6P 0B8 Contact: Tim Greig tgreig@gflenv.com T: (780)231-0521

Test Package: MOB 1 (Additional Tests: PercentFuel) 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.