

## **OIL ANALYSIS REPORT**

Sample Rating Trend





D6M CAT Component

**Front Diesel Engine** Fluid

PETRO CANADA DURON SHP 15W40 (24 LTR)

DIAGNOSIS	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Recommendation	Sample Number		Client Info		GFL0092263	GFL0087360	
Confirm the source of the lubricant being utilized for	Sample Date		Client Info		11 Mar 2024	01 Aug 2023	
top-up/fill. Resample at the next service interval to	Machine Age	hrs	Client Info		25792	25282	
monitor.	Oil Age	hrs	Client Info		510	550	
Wear	Oil Changed		Client Info		Changed	Changed	
All component wear rates are normal.	Sample Status				NORMAL	NORMAL	
<b>Contamination</b> There is no indication of any contamination in the oil.	CONTAMINAT	ION	method	limit/base	current	history1	history2
	Fuel		WC Method	>5	<1.0	<1.0	
Fluid Condition Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	WEAR METAL	.S	method	limit/base	current	history1	history2
	Iron	ppm	ASTM D5185(m)	>100	13	10	
	Chromium	ppm	ASTM D5185(m)	>20	<1	<1	
	Nickel	ppm	ASTM D5185(m)	>2	0	<1	
	Titanium	ppm	ASTM D5185(m)	>2	0	0	
	Silver	ppm	ASTM D5185(m)	>2	0	0	
	Aluminum	ppm	ASTM D5185(m)	>25	1	2	
	Lead	ppm	ASTM D5185(m)	>40	1	2	
	Copper	ppm	ASTM D5185(m)	>330	2	2	
	Tin	ppm	ASTM D5185(m)	>15	0	<1	
	Antimony	ppm	ASTM D5185(m)		0	0	
	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	nnm	ASTM D5185(m)	0	26	62	
	Barium	nom	ASTM D5185(m)	0	0	0	
	Molybdenum	nnm	ASTM D5185(m)	60	60	43	
	Manganese	nnm	ASTM D5185(m)	0	0	~1	
	Magnesium	nnm	ASTM D5185(m)	1010	714	105	
	Calcium	nom	ASTM D5185(m)	1070	1553	2513	
	Phosphorus	nom	ASTM D5185(m)	1150	1000	1104	
	Zinc	nnm	ASTM D5185(m)	1270	1227	1254	
	Sulfur	nnm	ASTM D5185(m)	2060	2621	3003	
	Lithium	ppm	ASTM D5185(m)	2000	<1	<1	
				line it //e e e e		histowed	history O
	CONTAMINAN	115	method	limit/base	current	nistory I	nistory2
	Silicon	ppm	ASTM D5185(m)	>25	4	4	
	Sodium	ppm	ASTM D5185(m)	00	2	2	
	Potassium	ppm	ASTM D5185(m)	>20	<1	3	
	INFRA-RED		method	limit/base	current	history1	history2
	Soot %	%	ASTM D7844*	>3	0.1	0.1	
	Nitration	Abs/cm	ASTM D7624*	>20	10.3	9.9	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	22.3	21.8	

### Wear All component wear rates are norm

### Contamination

#### Fluid Condition



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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.

CALA

ISO 17025:2017 Accredited

Laboratory

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