

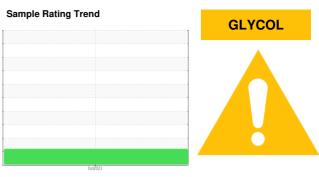
OIL ANALYSIS REPORT

SHARP BUS LINES Machine Id INTERNATIONAL 1304

Component

Diesel Engine

PETRO CANADA DURON HP 15W40 (--- GAL)



DIAGNOSIS

Recommendation

Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service (see recommendation).

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AL)				Dct2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0081371		
Sample Date		Client Info		04 Oct 2023		
Machine Age	kms	Client Info		262172		
Oil Age	kms	Client Info		2454		
Oil Changed	Turio	Client Info		Changed		
Sample Status		Chorte hino		ATTENTION		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>2.0	<1.0		
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	30		
Chromium	ppm	ASTM D5185(m)	>20	1		
Nickel	ppm	ASTM D5185(m)	>4	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	0		
Aluminum	ppm	ASTM D5185(m)	>20	6		
Lead	ppm	ASTM D5185(m)	>40	1		
Copper	ppm	ASTM D5185(m)	>330	<1		
Tin	ppm	ASTM D5185(m)	>15	0		
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
ADDITIVES Boron	ppm		limit/base	current 7	history1	history2
Boron	ppm	ASTM D5185(m)	0	7		
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	0	7 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 60	7 0 69		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 60 0	7 0 69 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 60 0 1010	7 0 69 0 960		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m)	0 0 60 0 1010 1070	7 0 69 0 960 1046		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 60 0 1010 1070 1150	7 0 69 0 960 1046 1019		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 60 0 1010 1070 1150	7 0 69 0 960 1046 1019		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 60 0 1010 1070 1150	7 0 69 0 960 1046 1019		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 60 0 1010 1070 1150	7 0 69 0 960 1046 1019 1187 2614		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 60 0 1010 1070 1150 1270 2060	7 0 69 0 960 1046 1019 1187 2614		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m)	0 0 60 0 1010 1070 1150 1270 2060	7 0 69 0 960 1046 1019 1187 2614 <1 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 60 0 1010 1070 1150 1270 2060	7 0 69 0 960 1046 1019 1187 2614 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25	7 0 69 0 960 1046 1019 1187 2614 <1 current 7 ▲ 295		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25	7 0 69 0 960 1046 1019 1187 2614 <1 current 7 \$\times 295 10		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium Glycol	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25	7 0 69 0 960 1046 1019 1187 2614 <1 current 7 295 10 0.0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7922* method	0 0 60 0 1010 1150 1270 2060 limit/base >25 >20	7 0 69 0 960 1046 1019 1187 2614 <1 current 7 ▲ 295 10 0.0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7922* method ASTM D7844*	0 0 60 0 1010 1150 1270 2060 limit/base >25 >20	7 0 69 0 960 1046 1019 1187 2614 <1 current 7 295 10 0.0 current		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7922* method ASTM D7844* ASTM D7624* ASTM D7624*	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20	7 0 69 0 960 1046 1019 1187 2614 <1 current 7 295 10 0.0 current 1.5		history2 history2



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : PC0081371 : 02593785

Received : 5670864

: 02 Nov 2023 Diagnosed : 03 Nov 2023 Diagnostician : Kevin Marson

Test Package : MOB 1 (Additional Tests: Glycol, KV40, VI) 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.

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