

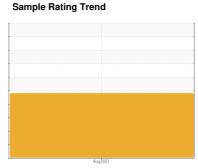
OIL ANALYSIS REPORT

SHARP BUS LINES **INTERNATIONAL 4DRBUSKPGDB257933**

Component

Diesel Engine

PETRO CANADA DURON HP 15W40 (--- GA





DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. 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

Test for glycol is positive. There is a moderate concentration of glycol present in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

AL)				Aug2023		
SAMPLE INFOR	NANTION	method	limit/base	current	history1	hiotom/0
	IVIA I ION		IIIIIII/Dase		HISTORY	history2
Sample Number		Client Info		PC0081362		
Sample Date		Client Info		04 Aug 2023		
Machine Age	kms	Client Info		240788		
Oil Age	kms	Client Info		3609		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>2.0	<1.0		
WEAR METAL	.S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	5		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>4	0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	<1		
Aluminum	ppm	ASTM D5185(m)	>20	<1		
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)	>10	0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium		ASTM D5185(m)		0		
	ppm	A01W D0100(III)		U		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	4		
Barium	ppm	ASTM D5185(m)	0	0		
Molybdenum	ppm	ASTM D5185(m)	60	59		
Manganese	ppm	ASTM D5185(m)	0	0		
Magnesium	ppm	ASTM D5185(m)	1010	949		
Calcium	ppm	ASTM D5185(m)	1070	1013		
Phosphorus	ppm	ASTM D5185(m)	1150			
Zinc		7101111 20100(111)	1130	1039		
	ppm	ASTM D5185(m)	1270	1039 1151		
Sulfur	ppm ppm					
Sulfur Lithium		ASTM D5185(m)	1270	1151		
	ppm	ASTM D5185(m) ASTM D5185(m)	1270	1151 2597		
Lithium	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1270 2060	1151 2597 <1		
Lithium CONTAMINAN	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	1270 2060 limit/base	1151 2597 <1 current	 history1	 history2
Lithium CONTAMINAN Silicon	ppm ppm ITS ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m)	1270 2060 limit/base	1151 2597 <1 current	 history1	history2
CONTAMINAN Silicon Sodium	ppm ppm ITS ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	1270 2060 limit/base >25	1151 2597 <1 current 5 10 70	 history1	 history2
CONTAMINAN Silicon Sodium Potassium	ppm ppm JTS ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1270 2060 limit/base >25	1151 2597 <1 current 5 \$\triangle 70 \$\triangle 18	history1	history2
CONTAMINAN Silicon Sodium Potassium Glycol	ppm ppm JTS ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1270 2060 limit/base >25 >20	1151 2597 <1 current 5 70 18 0.058	 history1 	 history2
CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot %	ppm ppm lTS ppm ppm ppm %	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7922* method ASTM D7844*	1270 2060 limit/base >25 >20 limit/base >3	1151 2597 <1 current 5 ▲ 70 ▲ 18 ▲ 0.058 current 0.1	history1 history1	history2 history2 history2
CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration	ppm ppm ITS ppm ppm ppm ppm % Abs/cm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7922* method ASTM D7922*	1270 2060 limit/base >25 >20 limit/base >3 >20	1151 2597 <1 current 5 70 18 0.058 current 0.1 4.9	history1 history1 history1	history2 history2 history2
CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm % % Abs/cm Abs/.1mm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7922* method ASTM D7844* ASTM D7624* ASTM D7415*	1270 2060 limit/base >25 >20 limit/base >3 >20 >30	1151 2597 <1 current 5 ▲ 70 ▲ 18 ▲ 0.058 current 0.1 4.9 18.7	history1 history1 history1	history2 history2 history2
CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm % % Abs/cm Abs/.1mm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7922* method ASTM D7844* ASTM D7624* ASTM D7415*	1270 2060 limit/base >25 >20 limit/base >3 >20	1151 2597 <1 current 5 70 18 0.058 current 0.1 4.9	history1 history1 history1	history2 history2 history2



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited

Laboratory Sample No. Lab Number Unique Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : PC0081362

: 02575815

Received Diagnosed : 5620866

: 15 Aug 2023 : 15 Aug 2023 Diagnostician : Wes Davis

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.

ICSB - Brantford 567 Oak Park Rd. Brantford, ON CA N3T 5L8 Contact: Doug Hall Djhall@sharpbus.com T: (519)751-3434