

OIL ANALYSIS REPORT

Sample Rating Trend





Component Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

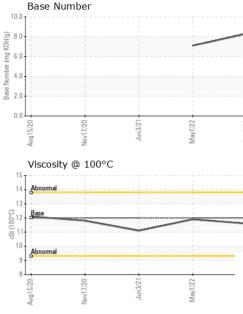
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

iAL)		Aug2020	Nov2020	Jun2021 May2022	Aug2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0102903	PCA0073274	PCA0051577
Sample Date		Client Info		02 Aug 2023	07 May 2022	03 Jun 2021
Machine Age	mls	Client Info		279750	196179	129782
Oil Age	mls	Client Info		19279	10000	30000
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	20	33	25
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		3	3	<1
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	6	11	9
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	1	3	3
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	5	9	11
Barium	ppm	ASTM D5185m	0	1	0	0
Molybdenum	ppm	ASTM D5185m	50	57	54	57
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	874	893	828
Calcium	ppm	ASTM D5185m	1050	1191	1254	1359
Phosphorus	ppm	ASTM D5185m	995	1005	987	1009
Zinc	ppm	ASTM D5185m	1180	1223	1175	1264
Sulfur	ppm	ASTM D5185m	2600	3007	2534	2383
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	6	7
Sodium	ppm	ASTM D5185m		<1	2	3
Potassium	ppm	ASTM D5185m	>20	3	8	17
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	0.9	0.7
Nitration	Abs/cm	*ASTM D7624	>20	8.1	10.2	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.3	22.4	22.3
		and the set	limit/base	ourropt	history1	history2
FLUID DEGRA	JATION	method	iiiiii/base	current	TIISTOLA	Thistory 2
FLUID DEGRAI	DATION Abs/.1mm	*ASTM D7414	>25	14.9	17.2	16



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VISUAL



White Metal *Visual NONE NONE NONE scalar NONE Yellow Metal NONE NONE NONE NONE scalar *Visual Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE NONE Debris *Visual NONE NONE scalar NONE Sand/Dirt scalar *Visual NONE NONE NONE Aug2/23 NORML Appearance *Visual NORML NORML NORML scalar NORML NORML NORML Odor scalar *Visual NORML **Emulsified Water** scalar *Visual >0.2 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG **FLUID PROPERTIES** Visc @ 100°C cSt ASTM D445 12.00 11.6 11.9 11.1 GRAPHS Iron (ppm) Lead (ppm) 250 100 200 80 150 60 ppm ppm 100 40 50 20 0 Aug 15/20 May7/22. Mav7/22 . 102/73 Aluminum (ppm) Chromium (ppm) 80 5 40 60 21 E. 40 Abnorma 20 10 0 Mav7/22 /av7/22 1 Buy ual Silicon (ppm) Copper (ppm) 400 80 S 30 60 ۲ 40 <u>ل</u> 200 100 20 Aug2/23 -/lav7/22 -May7/22 Viscosity @ 100°C Base Number 16 10.0 (mg KOH/g) 8.0 St (100°C) 6.0 mber 4.0 Base Nu Abnorma 2.0 0.0 8 Aug15/20 -May7/22 -Aug2/23 -Jun3/21 Mav7/22 Nov17/20 Vov17/20 a2/23 Aud 1 **MILLER TRUCK LEASING #118** Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. Received : PCA0102903 : 10 Aug 2023 2196 BENNETT ROAD Lab Number : 05921208 Diagnosed : 11 Aug 2023 PHILADELPHIA, PA Diagnostician : Wes Davis Unique Number : 10593122 US 19116 Test Package : MOB 1 (Additional Tests: TBN) Contact: ROSTY VITER To discuss this sample report, contact Customer Service at 1-800-237-1369. rviter@millertransgroup.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (215)552-9832 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (215)552-9892

