

OIL ANALYSIS REPORT

Sample Rating Trend





Diesel Engine

PETRO CANADA DURON SHP 10W30 (18 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

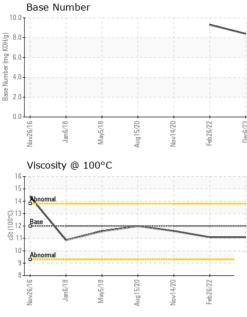
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	/ ATION	method	limit/base	current	history1	history2			
Sample Number		Client Info		PCA0112227	PCA0067669	PCA0017908			
Sample Date		Client Info		06 Dec 2023	26 Feb 2022	14 Nov 2020			
Machine Age	mls	Client Info		0	215516	182886			
Oil Age	mls	Client Info		9338	7000	11000			
Oil Changed		Client Info		Changed	Changed	Changed			
Sample Status				NORMAL	NORMAL	NORMAL			
CONTAMINATI	ON	method	limit/base	current	history1	history2			
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0			
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 D5185m	>90	27	28	17			
Chromium	ppm	ASTM D5185m	>20	<1	1	<1			
Nickel	ppm	ASTM D5185m	>2	<1	0	0			
Titanium	ppm	ASTM D5185m	>2	1	3	3			
Silver	ppm	ASTM D5185m	>2	0	0	0			
Aluminum	ppm	ASTM D5185m	>20	4	4	0			
Lead	ppm	ASTM D5185m	>40	0	0	0			
Copper	ppm	ASTM D5185m	>330	1	3	<1			
Tin	ppm	ASTM D5185m	>15	<1	<1	<1			
Antimony	ppm	ASTM D5185m				0			
Vanadium	ppm	ASTM D5185m		0	0	<1			
Cadmium	ppm	ASTM D5185m		<1	0	0			
ADDITIVES		method	limit/base	current	history1	history2			
Boron	ppm	ASTM D5185m	2	4	10	6			
Barium	ppm	ASTM D5185m	0	12	0	0			
Molybdenum	ppm	ASTM D5185m	50	58	56	54			
Manganese	ppm	ASTM D5185m	0	<1	<1	<1			
Magnesium	ppm	ASTM D5185m	950	878	856	882			
Calcium	ppm	ASTM D5185m	1050	1093	1186	1125			
Phosphorus	ppm	ASTM D5185m	995	963	1023	1070			
Zinc	ppm	ASTM D5185m	1180	1184	1219	1116			
Sulfur	ppm	ASTM D5185m	2600	3242	2622	2849			
CONTAMINAN	TS	method	limit/base	current	history1	history2			
Silicon	ppm	ASTM D5185m	>25	4	4	0			
Sodium	ppm	ASTM D5185m		0	0	0			
Potassium	ppm	ASTM D5185m	>20	6	4	2			
INFRA-RED		method	limit/base	current	history1	history2			
Soot %	%	*ASTM D7844	>6	0.7	0.7	0.8			
Nitration	Abs/cm	*ASTM D7624	>20	8.7	9	10			
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.3	20.1	20.5			
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2			
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	15.6	16.6			
Base Number (BN)	mg KOH/g	ASTM D2896		8.4	9.3				
5:09:05) Rev: 1 Contact/Location: BOSTY VITEB - MIL PHINE									

Contact/Location: ROSTY VITER - MILPHINE



OIL ANALYSIS REPORT



Certificate L2367	Laborato Sample N Lab Num Unique Nu Test Pac	No. : ber : mber : kage :	 MOB 1 (Additional Tests: TBN contact Customer Service at 1-800 are outside of the ISO 17025 scope 			d : 15 ed : 16 tician : W 3N)	: 15 Dec 2023 : 16 Dec 2023 ian : Wes Davis) D-237-1369.			IILLER TRUCK LEASING #118 2196 BENNETT ROAD PHILADELPHIA, PA US 19116 Contact: ROSTY VITER rviter@millertransgroup.com T: (215)552-9832 2) F: (215)552-9892			
		6 10 8	Abnormal 91/97/oN	May5/18 +	Aug15/20	Nov14/20 +	Dec6/23	0.0	Jan6/18	May5/18 +	Nov14/20	Feb26/22 +	Dec6/23 +
		cSt (100°C)	Abnormal Base				Base Mumber from KOH/A	Billo 8.0					
		16	Viscosity @	100°C				10.0 -	Base Numbe	r			
		(Nov26/16 - Jan6/18 -	May5/18	Aug15/20	Nov14/20	Dec6/23			May5/18 +	Nov14/20	Feb26/22 -	Dec6/23
		300 톰 200 100						60 - E. 40 - 20 -	Abnumal				
		400	Abnonnal	n)				80	Silicon (ppm))	1	1	
		10	Nov26/16 + Jan6/18 +	May5/18	Aug15/20	Nov14/20	Dec6/23 +		Jan6/18	May5/18	Nov14/20	Feb26/22	Dec6/73
		40 5.30 20	Abnormal					80 80 80 80 80 80 80 80 80 80 80 80 80 8	Abnormal				
		60 50	- I	opm)				⁵⁰ T	Chromium (p	opm)			
		5(Nov26/16	May5/18	Aug15/20	Nov14/20 +	Dec6/23		Jan6/18	May5/18 Aug15/20	Nov14/20	Feb26/22	Der6/73
Aug15/20	Nov14/20 Feb26/22	200 E 150 100	Abnorma	_				60- 60-	Abnormal				
	2	250	Severe .					¹⁰⁰ T	_ead (ppm) Severe				
			GRAPHS										
			Visc @ 100°C		cSt	ASTM D445	5 12.00		11.1	11.1		11.6	
			FLUID PR	OPE	RTIES	method	limit/ba	se	current	histor	y1	histor	ry2
			Free Water	lei	scalar	*Visual	>0.2		NEG	NEG		NEG	
Aug	Fet		Odor Emulsified Wa	+~*	scalar scalar	*Visual *Visual	NORML		NORML NEG	NORM NEG	L	NORM NEG	íL
Aug15/20	Nov14/20 - Feb26/22 -		Appearance		scalar	*Visual	NORML		NORML	NORM	L	NORM	IL
			Debris Sand/Dirt		scalar scalar	*Visual *Visual	NONE NONE		NONE	NONE		NONE NONE	
		Silt		scalar	*Visual	NONE		NONE	NONE		NONE		
			Precipitate		scalar	*Visual	NONE		NONE	NONE		NONE	
			Yellow Metal		scalar	*Visual	NONE		NONE	NONE		NONE	
		VISUAL White Metal		scalar	method *Visual	limit/ba		current	histor NONE		histor NONE		

Contact/Location: ROSTY VITER - MILPHINE