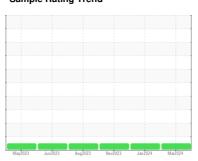


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



SJB1072

Component **Diesel Engine**

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

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.

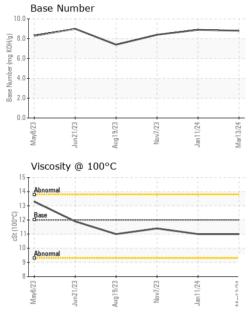
Fluid Condition

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

QTS)		May2023	Jun2023 Aug2023	Nov2023 Jan2024	Mar2024		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		PCA0116919	PCA0113584	PCA0105796	
Sample Date		Client Info			11 Jan 2024	07 Nov 2023	
Machine Age	mls	Client Info		82470	0	71363	
Oil Age	mls	Client Info		5491	5616	19586	
Oil Changed		Client Info	• • • • • • • • • • • • • • • • • • • •		Changed	Changed	
Sample Status				NORMAL		NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2	
Fuel		WC Method	>5	<1.0	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	NEG	
Glycol		WC Method		NEG	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	12		16	
Chromium	ppm	ASTM D5185m	>20	<1		1	
Nickel	ppm	ASTM D5185m	>4	0		0	
Titanium	ppm	ASTM D5185m		<1		0	
Silver	ppm	ASTM D5185m	>3	0		0	
Aluminum	ppm	ASTM D5185m	>20	3		2	
Lead	ppm	ASTM D5185m	>40	<1		0	
Copper	ppm	ASTM D5185m	>330	2		0	
Tin	ppm	ASTM D5185m	>15	<1		0	
Vanadium	ppm	ASTM D5185m		<1		0	
Cadmium	ppm	ASTM D5185m		0		0	
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	2	3		1	
Barium	ppm	ASTM D5185m	0	2		4	
Molybdenum	ppm	ASTM D5185m	50	62		67	
Manganese	ppm	ASTM D5185m	0	<1		0	
Magnesium	ppm	ASTM D5185m	950	935		903	
Calcium	ppm	ASTM D5185m	1050	1166		1295	
Phosphorus	ppm	ASTM D5185m	995	1075		1088	
Zinc	ppm	ASTM D5185m	1180	1242		1289	
Sulfur	ppm	ASTM D5185m	2600	3399		3509	
CONTAMINAN	TS	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	4		<1	
Sodium	ppm	ASTM D5185m		0		0	
Potassium	ppm	ASTM D5185m	>20	3		0	
INFRA-RED		method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.5	
Nitration	Abs/cm	*ASTM D7624	>20	8.2	8.5	9.6	
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	18.9	19.6	
FLUID DEGRA	OITAC	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.6	15.7	16.8	
Base Number (BN)	mg KOH/g	ASTM D2896		8.8	8.9	8.4	



OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.0	11.0	11.4

/isc @ 100°C	cSt	ASTM D445	12.00	11.0	11.0		11.4	
GRAPHS								
Iron (ppm)				Lead (ppm)				
Severe		<u> </u>		80 Severe				
Ab				60 Abnormal				
Abnormal				40 Abnormal				
				0				
May8/23 Jun21/23	Aug19/23	Nov7/23 -	Mar13/24	May8/23 Jun21/23	Aug19/23	Nov7/23	Jan11/24	
∠ ∠ Aluminum (ppn	< <		Σ	ے ج Chromium (_	Ť	
Severe				50 7				
				20				
Abnormal				Abnormal				
				10				
May8/23	Aug19/23 -	Nov7/23 +	Mar13/24	May8/23 +	Aug19/23	Nov7/23	Jan11/24 -	
7	Aug	No	Mar	7		N	Jan	
Copper (ppm)		-,		Silicon (ppm)			
Severe Abnormal				60				
		-		E 40				
				20 Abnormal				
- 53	23	23	24	3 3		23	24	
May8/23 Jun21/23	Aug19/23	Nov7/23	Mar13/24	May8/23 Jun21/23	Aug19/23	Nov7/23	Jan11/24	
Viscosity @ 100	0°C			Base Number	er			
Abnormal				0.8 (GH/8)				
Base				8.0 6.0 6.0 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2				
				4.0				
Abnormal				0.0				
May8/23 Jun21/23	Aug19/23	Nov7/23 -	Mar13/24	May8/23 Jun21/23	Aug19/23	Nov7/23	Jan11/24	
Σ m	Au	Z IB	×	∑ n	Au	2	Ja	



Laboratory Sample No.

Unique Number : 10938696

: PCA0116919 Lab Number : 06124545

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received **Tested** Test Package: MOB 1 (Additional Tests: TBN)

: 21 Mar 2024 : 21 Mar 2024

: 21 Mar 2024 - Wes Davis

Diagnosed

Contact: ED DAVIS

edavis@millertransgroup.com T: (856)214-3521 F: (856)214-3663

Contact/Location: ED DAVIS - MILLOG

MILLER TRUCK LEASING #114

63 REPAUPO STATION ROAD

LOGAN TOWNSHIP, NJ

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

US 08085