

OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id 740247 Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- 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.

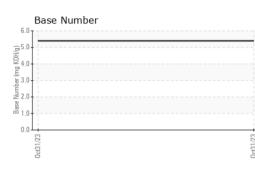
Fluid Condition

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

	VIATION	method	limit/base	current	nistory i	nistory2
Sample Number		Client Info		PCA0110471		
Sample Date		Client Info		31 Oct 2023		
Machine Age	mls	Client Info		0		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
-		and the set	Paral II.		In the transmission	history O
CONTAMINAT	IUN	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	47		
Chromium	ppm	ASTM D5185m	>20	2		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>20	14		
Lead	ppm	ASTM D5185m	>40	3		
Copper	ppm	ASTM D5185m	>330	11		
Tin	ppm	ASTM D5185m	>15	2		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	4		
Barium	ppm	ASTM D5185m	0	<1		
Molybdenum	ppm	ASTM D5185m	50	58		
Manganese	ppm	ASTM D5185m	0	2		
Magnesium	ppm	ASTM D5185m	950	916		
Calcium	ppm	ASTM D5185m	1050	1168		
Phosphorus						
	ppm	ASTM D5185m	995	972		
Zinc	ppm ppm	ASTM D5185m	995 1180			
			995	972		
Zinc	ppm ppm	ASTM D5185m	995 1180	972 1194 2687 current		
Zinc Sulfur	ppm ppm	ASTM D5185m ASTM D5185m method	995 1180 2600	972 1194 2687		
Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm TS	ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25	972 1194 2687 current	 history1	 history2
Zinc Sulfur CONTAMINAN Silicon	ppm ppm TS ppm	ASTM D5185m ASTM D5185m method ASTM D5185m	995 1180 2600 limit/base >25	972 1194 2687 current 19	 history1	 history2
Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25	972 1194 2687 current 19 0	 history1 	 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25 >20	972 1194 2687 current 19 0 44	 history1 	 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600 imit/base >25 >20 imit/base >3	972 1194 2687 current 19 0 44 current	 history1 history1	 history2 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844	995 1180 2600 imit/base >25 >20 imit/base >3	972 1194 2687 current 19 0 44 current 0.4	 history1 history1 	 history2 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624	995 1180 2600 limit/base >25 >20 limit/base >3 >20	972 1194 2687 <u>current</u> 19 0 44 <u>current</u> 0.4 10.8	 history1 history1 	 history2 history2 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7824 *ASTM D7824	995 1180 2600 imit/base >25 >20 imit/base >3 >20 >30	972 1194 2687 current 19 0 44 current 0.4 10.8 23.7	 history1 history1 history1 	 history2 history2 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	ppm ppm TS ppm ppm ppm ppm % Abs/cm Abs/cm Abs/1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624 *ASTM D7415	995 1180 2600 limit/base >25 >20 limit/base >30 >30	972 1194 2687 current 19 0 44 current 0.4 10.8 23.7 current	 history1 history1 history1 history1	 history2 history2 history2 history2



OIL ANALYSIS REPORT







ppm

VISUAL *Visual NONE NONE White Metal scalar Yellow Metal *Visual NONE NONE scalar Precipitate scalar *Visua NONE NONE Silt scalar *Visual NONE NONE Debris *Visual NONE NONE scalar Sand/Dirt NONE scalar *Visual NONE NORML Appearance *Visual NORML scalar Odor *Visual NORML NORML scalar **Emulsified Water** scalar *Visual >0.2 NEG Free Water scalar *Visual NEG **FLUID PROPERTIES** Visc @ 100°C cSt ASTM D445 12.00 11.2 GRAPHS Iron (ppm) Lead (ppm) 100 200 80 150 60 ppm 100 40 50 20 0 0ct31/23 -0ct31/23 Aluminum (ppm) Chromium (ppm) 50 5 40 40 30 31 10 10 0 0 0ct31/23 0ct31 Dct31 Silicon (ppm) Copper (ppm) 400 80 300 6 <u>ل</u> 200 ۲,40 100 20 Π Viscosity @ 100°C Base Number 16 6 (B/HO) B 4.0 100 Umper 2.0 12 , ts Abnorma ag 1.0 8 0.0 0ct31/23 -**MILLER TRUCK LEASING #119** : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 13 Nov 2023 **39 INDUSTRIAL AVE** : PCA0110471 : 15 Nov 2023 HASBROUCK HEIGHTS, NJ : 06005347 Diagnosed Diagnostician : Jonathan Hester : 10739109 US 07604



Unique Number Test Package : MOB 1 (Additional Tests: TBN) Contact: MIKE LONGETTE Certificate L2367 mlongette@millertransgroup.com 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)

Laboratory

Sample No.

Lab Number

F: (201)528-7053

Т: