

OIL ANALYSIS REPORT



Machine Id 131240

Component Diesel Engine

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

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

Elui

Metal levels are typical for a components first oil change.

Contamination

Light fuel dilution occurring.

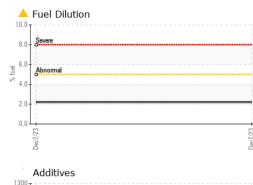
Fluid Condition

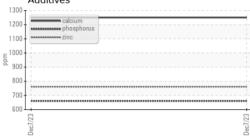
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

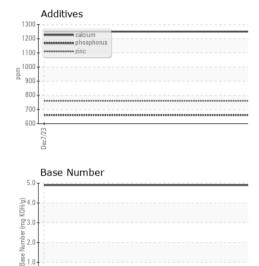
SAMPLE INFORM	/ ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0112266		
Sample Date		Client Info		07 Dec 2023		
Machine Age	mls	Client Info		9078		
Oil Age	mls	Client Info		9078		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	15		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m	~ 1	<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum		ASTM D5185m	>20	9		
Lead	ppm	ASTM D5185m	>20	9 <1		
	ppm		>330	<1 49		
Copper	ppm			49 <1		
Tin Vanadium	ppm	ASTM D5185m	>15			
	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	5 0		
Barium	ppm	ASTM D5185m	0	15		
Molybdenum	ppm	ASTM D5185m	50	1 37		
Manganese	ppm	ASTM D5185m	0	10		
Magnesium		ACTM DE10Em	950	368		
Magnesium	ppm	ASTM D5185m	950	300		
Calcium	ppm	ASTM D5185m ASTM D5185m	1050	1250		
-						
Calcium Phosphorus Zinc	ppm	ASTM D5185m	1050	1250		
Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m	1050 995	1250 ▲ 661		
Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180	1250 ▲ 661 ▲ 761		
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base	1250 ▲ 661 ▲ 761 2821		
Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1050 995 1180 2600 limit/base	1250 ▲ 661 ▲ 761 2821 current		 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m	1050 995 1180 2600 limit/base	1250 ▲ 661 ▲ 761 2821 current 47	 history1	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25 >20	1250 ▲ 661 ▲ 761 2821 <u>current</u> 47 5	 history1 	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25 >20	1250 ▲ 661 ▲ 761 2821 <u>current</u> 47 5 6	 history1 	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25 >20 >5	1250 ▲ 661 ▲ 761 2821 <u>current</u> 47 5 6 ▲ 2.2	 history1 	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm TS ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25 >20 >5	1250 ▲ 661 ▲ 761 2821 current 47 5 6 ▲ 2.2 current	 history1 history1	 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm TS ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D51854	1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20	1250 ▲ 661 ▲ 761 2821 current 47 5 6 ▲ 2.2 current 0	 history1 history1 	 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm % % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844	1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20	1250 ▲ 661 ▲ 761 2821 current 47 5 6 ▲ 2.2 current 0 9.2	 history1 history1 history1	 history2 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm % % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 *ASTM D7824 *ASTM D7844 *ASTM D7844	1050 995 1180 2600 limit/base >25 limit/base >3 >20 >30 limit/base	1250 ▲ 661 ▲ 761 2821 current 47 5 6 ▲ 2.2 current 0 9.2 21.1	 history1 history1	 history2 history2



OIL ANALYSIS REPORT

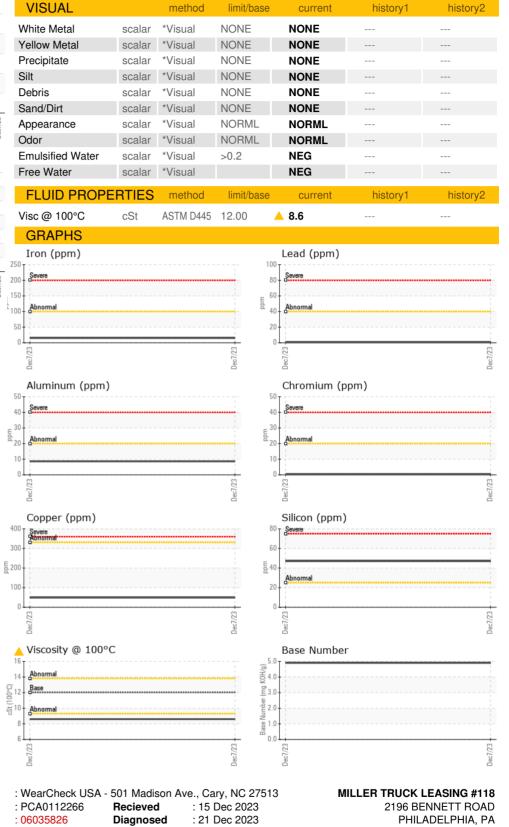






0.0 C//Dec

Ĕ



Unique Number : 10791055 **Diagnostician** : Wes Davis Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN) Certificate L2367 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. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Laboratory

Sample No.

Lab Number

Contact/Location: ROSTY VITER - MILPHINE

US 19116

Contact: ROSTY VITER

T: (215)552-9832

F: (215)552-9892