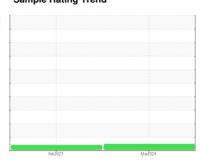


OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id
501
Component
Diesel Engine

PETRO CANADA DURON HP 15W40 (--- 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.

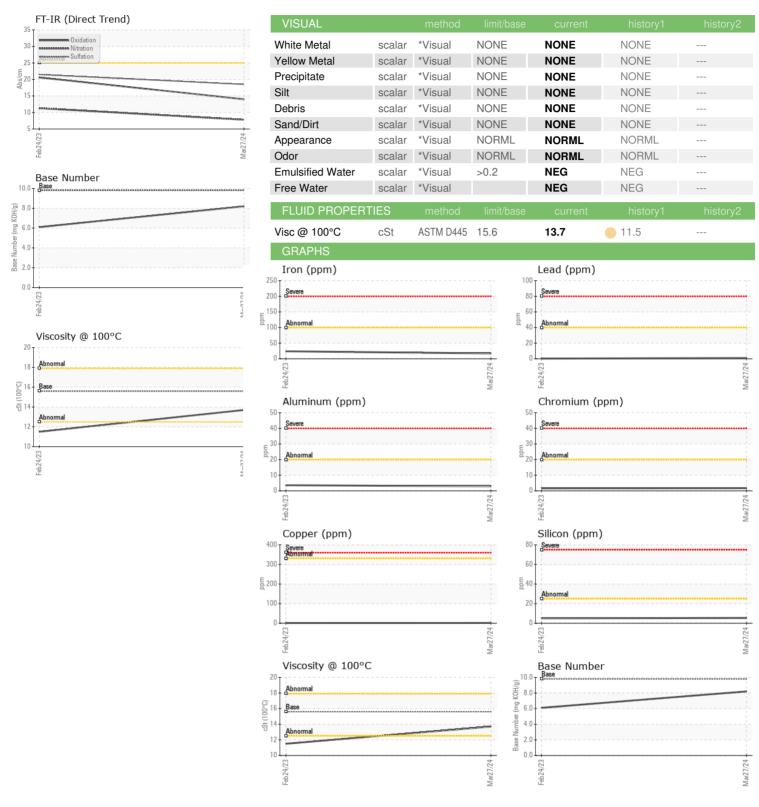
Fluid Condition

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

Client Info	ıL)			Feb 2023	Mar2024		
Client Info	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age mls Client Info 154188 141006	Sample Number		Client Info		WC0905934	WC0792773	
Oil Age	Sample Date		Client Info		27 Mar 2024	24 Feb 2023	
Colient Info Not Change Not Change Not Change Normal ATTENTION CONTAMINATION method limit/base current history1 history2 history2 history2 www. Method So.2 NEG NE	Machine Age	mls	Client Info		154188	141006	
CONTAMINATION	Oil Age	mls	Client Info		5000	0	
Fuel	Oil Changed		Client Info		Not Changd	N/A	
Fuel	Sample Status				NORMAL	ATTENTION	
Water Glycol WC Method >0.2 NEG NEG	CONTAMINATIO	N	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>5	<1.0	0.5	
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 17 24 Chromium ppm ASTM D5185m >20 2 2 Nickel ppm ASTM D5185m >4 <1	Water		WC Method	>0.2	NEG	NEG	
ASTM D5185m	Glycol		WC Method		NEG	0.0	
Chromium	WEAR METALS		method	limit/base	current	history1	history2
Nickel	ron	ppm	ASTM D5185m	>100	17	24	
Titanium	Chromium	ppm	ASTM D5185m	>20	2	2	
Silver	Nickel	ppm	ASTM D5185m	>4	<1	<1	
Aluminum	Titanium	ppm	ASTM D5185m		<1	0	
Lead	Silver	ppm					
Copper	Aluminum	ppm	ASTM D5185m			4	
Tin	Lead	ppm					
Vanadium ppm ASTM D5185m <1 0 Cadmium ppm ASTM D5185m <1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 4 9 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 57 70 Manganese ppm ASTM D5185m 57 70 Magnesium ppm ASTM D5185m 838 819 Calcium ppm ASTM D5185m 1387 1279 Phosphorus ppm ASTM D5185m 1067 1028 Zinc ppm ASTM D5185m 1292 1232 Sulfur ppm ASTM D5185m >25 5 5 CONTAMINANTS method limit/base current histo		ppm					
ASTM D5185m				>15			
ADDITIVES		ppm					
Boron		ppm	ASTM D5185m		<1	0	
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 57 70 Manganese ppm ASTM D5185m <1	Boron	ppm	ASTM D5185m				
Manganese ppm ASTM D5185m <1 <1 Magnesium ppm ASTM D5185m 838 819 Calcium ppm ASTM D5185m 1387 1279 Phosphorus ppm ASTM D5185m 1067 1028 Zinc ppm ASTM D5185m 1292 1232 Sulfur ppm ASTM D5185m 3565 3417 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 5 Sodium ppm ASTM D5185m 7 22 Potassium ppm ASTM D5185m >20 17 59 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.4 0.2 Sulfation Abs/:1mm	Barium	ppm	ASTM D5185m		-	0	
Magnesium ppm ASTM D5185m 838 819 Calcium ppm ASTM D5185m 1387 1279 Phosphorus ppm ASTM D5185m 1067 1028 Zinc ppm ASTM D5185m 1292 1232 Sulfur ppm ASTM D5185m 3565 3417 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 5 Sodium ppm ASTM D5185m >20 17 59 Potassium ppm ASTM D5185m >20 17 59 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 7.8 11.3 Sulfation Abs/.1mm *ASTM D7415 >30 18.5 21.5 <tr< td=""><td>Molybdenum</td><td>ppm</td><td>ASTM D5185m</td><td></td><td></td><td></td><td></td></tr<>	Molybdenum	ppm	ASTM D5185m				
Calcium ppm ASTM D5185m 1387 1279 Phosphorus ppm ASTM D5185m 1067 1028 Zinc ppm ASTM D5185m 1292 1232 Sulfur ppm ASTM D5185m 3565 3417 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 5 Sodium ppm ASTM D5185m 7 22 Potassium ppm ASTM D5185m >20 17 59 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.4 0.2 Nitration Abs/.1mm *ASTM D7415 >30 18.5 21.5 FLUID DEGRADATION method limit/base current history1 history2 <tr< td=""><td>•</td><td>ppm</td><td></td><td></td><td></td><td></td><td></td></tr<>	•	ppm					
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Sulfur ppm ASTM D5185m 3565 3417 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 5 Sodium ppm ASTM D5185m 7 22 Potassium ppm ASTM D5185m >20 17 59 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.4 0.2 Nitration Abs/cm *ASTM D7624 >20 7.8 11.3 Sulfation Abs/.1mm *ASTM D7415 >30 18.5 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0 20.6	•						
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 5 Sodium ppm ASTM D5185m 7 22 Potassium ppm ASTM D5185m >20 17 59 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.4 0.2 Nitration Abs/cm *ASTM D7624 >20 7.8 11.3 Sulfation Abs/.1mm *ASTM D7415 >30 18.5 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0 20.6	-						
Silicon ppm ASTM D5185m >25 5 5 Sodium ppm ASTM D5185m 7 22 Potassium ppm ASTM D5185m >20 17 59 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.4 0.2 Nitration Abs/cm *ASTM D7624 >20 7.8 11.3 Sulfation Abs/.1mm *ASTM D7415 >30 18.5 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0 20.6					3565	3417	
Sodium ppm ASTM D5185m 7 22 Potassium ppm ASTM D5185m >20 17 59 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.4 0.2 Nitration Abs/cm *ASTM D7624 >20 7.8 11.3 Sulfation Abs/.1mm *ASTM D7415 >30 18.5 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0 20.6		5		limit/base	current		history2
Potassium ppm ASTM D5185m >20 17 59 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.4 0.2 Nitration Abs/cm *ASTM D7624 >20 7.8 11.3 Sulfation Abs/.1mm *ASTM D7415 >30 18.5 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0 20.6		ppm		>25			
INFRA-RED		ppm					
Soot % % *ASTM D7844 >3 0.4 0.2 Nitration Abs/cm *ASTM D7624 >20 7.8 11.3 Sulfation Abs/.1mm *ASTM D7415 >30 18.5 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0 20.6	Potassium	ppm	ASTM D5185m	>20	17	59	
Nitration Abs/cm *ASTM D7624 >20 7.8 11.3 Sulfation Abs/.1mm *ASTM D7415 >30 18.5 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0 20.6	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 18.5 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0 20.6	Soot %	%	*ASTM D7844	>3	0.4	0.2	
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0 20.6	Nitration	Abs/cm	*ASTM D7624	>20	7.8	11.3	
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	21.5	
	FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 9.8 8.2 6.1	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.0	20.6	
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.2	6.1	



OIL ANALYSIS REPORT





Certificate 12367

Laboratory Sample No.

Lab Number : 06143631 Unique Number : 10968439

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0905934

Test Package : MOB 1 (Additional Tests: TBN)

Received **Tested** Diagnosed

: 09 Apr 2024 : 10 Apr 2024 : 10 Apr 2024 - Wes Davis

1603 SALEM CHURCH RD GOLDSBORO, NC US 27530

WAYNE CO SCHOOL BUS GARAGE

Contact: BRANDON BRIGGS brandonbriggs@wcps.org

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)

Report Id: WAYGOL [WUSCAR] 06143631 (Generated: 04/10/2024 14:54:41) Rev: 1

Contact/Location: BRANDON BRIGGS - WAYGOL

T:

F: