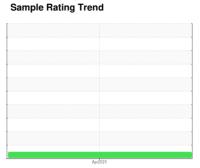


OIL ANALYSIS REPORT



NORMAL



Machine Id **DT663**

Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- G

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

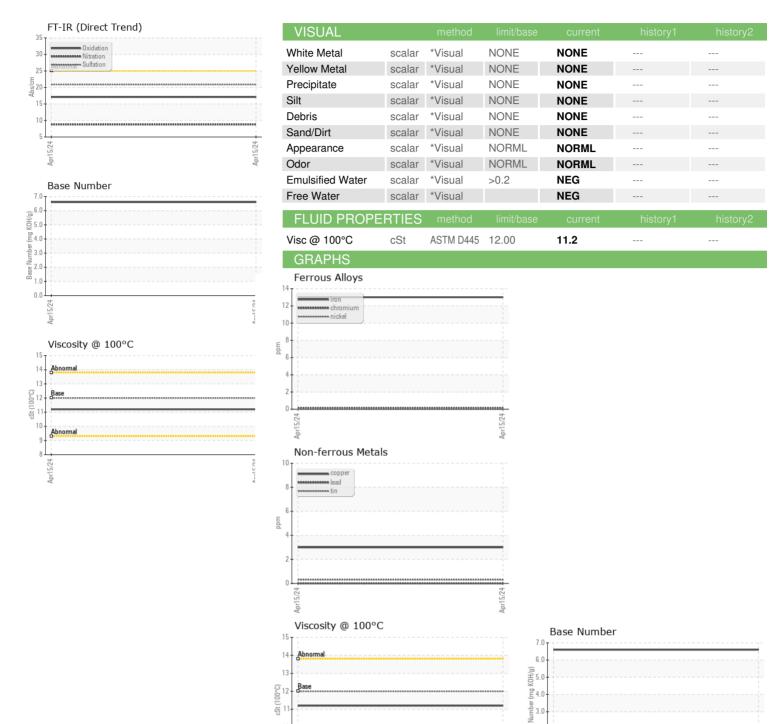
Fluid Condition

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

Sample Number Client Info PCA0102242	AL)				Apr2024		
Sample Date Client Info 15 Apr 2024	SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Machine Age mls Client Info 0	Sample Number		Client Info		PCA0102242		
Oil Changed	Sample Date		Client Info		15 Apr 2024		
Contained Client Info Changed Changed Contained Contai	Machine Age	mls	Client Info		0		
CONTAMINATION	Oil Age	mls	Client Info		0		
CONTAMINATION method limit/base current history1 history1 Fuel WC Method >5 <1.0	Oil Changed		Client Info		Changed		
Fuel	Sample Status				NORMAL		
Water WC Method WC Method NEG	CONTAMINAT	ΓΙΟΝ	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>5	<1.0		
WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >100 13 Chromium ppm ASTM D5185m >20 <1	Water		WC Method	>0.2	NEG		
Chromium	Glycol		WC Method		NEG		
Chromium	WEAR METAL	_S	method	limit/base	current	history1	history2
Nickel	ron	ppm	ASTM D5185m	>100	13		
Silver	Chromium	ppm	ASTM D5185m	>20	<1		
Silver	Nickel	ppm	ASTM D5185m	>4	0		
Aluminum	Titanium	ppm	ASTM D5185m		<1		
December December	Silver	ppm	ASTM D5185m	>3	0		
Description	Aluminum	ppm	ASTM D5185m	>20	4		
Tin	_ead	ppm	ASTM D5185m	>40	0		
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 5 Barium ppm ASTM D5185m 0 2 Molybdenum ppm ASTM D5185m 50 61 Manganese ppm ASTM D5185m 950 920 Magnesium ppm ASTM D5185m 950 920 Phosphorus ppm ASTM D5185m 995 1039 Phosphorus ppm ASTM D5185m 995 1039 Zinc ppm ASTM D5185m 995 1039 Cilicon ppm ASTM D5185m 2600 3232	Copper	ppm	ASTM D5185m	>330	3		
ADDITIVES	Γin	ppm	ASTM D5185m	>15	<1		
ADDITIVES	Vanadium	ppm	ASTM D5185m		0		
Soron ppm ASTM D5185m 2 5	Cadmium	ppm	ASTM D5185m		0		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 61 Manganese ppm ASTM D5185m 0 1 Magnesium ppm ASTM D5185m 950 920 Calcium ppm ASTM D5185m 1050 1169 Phosphorus ppm ASTM D5185m 995 1039 Zinc ppm ASTM D5185m 995 1039 Sulfur ppm ASTM D5185m 2600 3232 Sulfur ppm ASTM D5185m >25 5 Solicon ppm ASTM D5185m >25 5 Solicon ppm ASTM D5185m >20 5 Potassium ppm ASTM D5185m >20 5 Soot % *ASTM D5185m >20	Boron	ppm	ASTM D5185m	2	5		
Manganese ppm ASTM D5185m 0 1 Magnesium ppm ASTM D5185m 950 920 Calcium ppm ASTM D5185m 1050 1169 Phosphorus ppm ASTM D5185m 995 1039 Zinc ppm ASTM D5185m 1180 1273 Sulfur ppm ASTM D5185m 2600 3232 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m >5 Potassium ppm ASTM D5185m >20 5 Potassium ppm ASTM D5185m >20 5 Soot % % *ASTM D7844 >3	Barium	ppm	ASTM D5185m	0	2		
Magnesium ppm ASTM D5185m 950 920 Calcium ppm ASTM D5185m 1050 1169 Phosphorus ppm ASTM D5185m 995 1039 Zinc ppm ASTM D5185m 1180 1273 Sulfur ppm ASTM D5185m 2600 3232 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 5 Potassium ppm ASTM D5185m >20 5 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7414 <td>Molybdenum</td> <td>ppm</td> <td>ASTM D5185m</td> <td>50</td> <td>61</td> <td></td> <td></td>	Molybdenum	ppm	ASTM D5185m	50	61		
Calcium ppm ASTM D5185m 1 050 1 169 Phosphorus ppm ASTM D5185m 995 1039 Zinc ppm ASTM D5185m 1180 1273 Sulfur ppm ASTM D5185m 2600 3232 CONTAMINANTS method limit/base current history1 history1 history1 Solicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 5 Potassium ppm ASTM D5185m >20 5 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7844 >3 0.5 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 FLUID DEGRADATION *ASTM D7414	Manganese	ppm	ASTM D5185m	0	1		
Phosphorus ppm ASTM D5185m 995 1039 Zinc ppm ASTM D5185m 1180 1273 Sulfur ppm ASTM D5185m 2600 3232 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 5 Potassium ppm ASTM D5185m >20 5 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7844 >3 0.5 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 FLUID DEGRADATION method limit/base current history1 history Dxidation Abs/.1mm *ASTM D7	Magnesium	ppm	ASTM D5185m	950	920		
Zinc ppm ASTM D5185m 1180 1273 Sulfur ppm ASTM D5185m 2600 3232	Calcium	ppm	ASTM D5185m	1050	1169		
Sulfur ppm ASTM D5185m 2600 3232 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 5 Potassium ppm ASTM D5185m >20 5 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7844 >3 0.5 Sulfation Abs/.1mm *ASTM D7624 >20 8.8 FLUID DEGRADATION method limit/base current history1 history1 Dxidation Abs/.1mm *ASTM D7414 >25 17.1	Phosphorus	ppm	ASTM D5185m	995	1039		
CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 5 Potassium ppm ASTM D5185m >20 5 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7844 >3 0.5 Sulfration Abs/.mm *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 FLUID DEGRADATION method limit/base current history1 history1 Oxidation Abs/.1mm *ASTM D7414 >25 17.1	Zinc	ppm	ASTM D5185m	1180	1273		
Solition ppm ASTM D5185m >25 5	Sulfur	ppm	ASTM D5185m	2600	3232		
Sodium	CONTAMINAN	NTS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 5 INFRA-RED method limit/base current history1 history Soot % % *ASTM D7844 >3 0.5 Nitration Abs/cm *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 FLUID DEGRADATION method limit/base current history1 history Oxidation Abs/.1mm *ASTM D7414 >25 17.1	Silicon	ppm	ASTM D5185m	>25	5		
INFRA-RED	Sodium	ppm	ASTM D5185m		5		
Soot %	Potassium	ppm	ASTM D5185m	>20	5		
Nitration Abs/cm *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 FLUID DEGRADATION method limit/base current history1 history Oxidation Abs/.1mm *ASTM D7414 >25 17.1	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 20.9 FLUID DEGRADATION method limit/base current history1 history Oxidation Abs/.1mm *ASTM D7414 >25 17.1	Soot %	%	*ASTM D7844	>3	0.5		
FLUID DEGRADATION method limit/base current history1 history Oxidation Abs/.1mm *ASTM D7414 >25 17.1	Nitration	Abs/cm	*ASTM D7624	>20	8.8		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.9		
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Rasa Number (RN) ma KOH/a ASTM D2896 66	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.1		
Dasc Number (DIN) highory Activides 0.0	Base Number (BN)	mg KOH/g	ASTM D2896		6.6		



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

: PCA0102242 Lab Number : 06155768 Unique Number : 10991191 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 22 Apr 2024 **Tested**

: 23 Apr 2024 Diagnosed : 23 Apr 2024 - Wes Davis

100 INDEPENDENCE BLVD COLUMBIA, SC US 29210

Contact: GEORGE EDWARDS gedwards@nwwhite.com

NW WHITE & CO - COLUMBIA DIVISION

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)

0.0

Report Id: NWWCOL [WUSCAR] 06155768 (Generated: 04/23/2024 11:38:48) Rev: 1

Contact/Location: GEORGE EDWARDS - NWWCOL

T:

F: