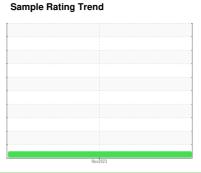


OIL ANALYSIS REPORT



NORMAL



Machine Id 426145-4623

Component

Diesel Engine

PETRO CANADA DURON SHP 15W40 (--- G

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Engine oil sample)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

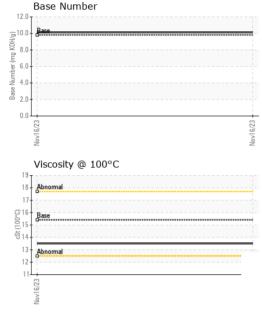
Fluid Condition

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

SAMPLE INFORMATION method limit/base current history2 history2 sample Date Client Info 16 Nov 2023 Machine Age hrs Client Info 18320 Machine Age hrs Client Info 18320							
Cample Number Client Info GFL0100484	AL)				Nov2023		
Compage Comp	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age	Sample Number		Client Info		GFL0100484		
Dit Changed	Sample Date		Client Info		16 Nov 2023		
Contample Cont	Machine Age	hrs	Client Info		18320		
CONTAMINATION method limit/base current history1 history2	Oil Age	hrs	Client Info		18320		
CONTAMINATION method limit/base current history1 history2	Oil Changed		Client Info		Not Changd		
Victor V	Sample Status				NORMAL		
Wester Wc Method So.2 NEG Silycol Wc Method NEG Wc Method NEG Wc Method Wc Method Neg Silycol Wc Method Neg Silycol Wc Method Neg Silycol Wc Method Neg Silycol Wc Method Silycol Silycol	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS	uel		WC Method	>5	<1.0		
WEAR METALS method limit/base current history1 history2 ron ppm ASTM D5185m >100 17 Chromium ppm ASTM D5185m >20 <1	Vater		WC Method	>0.2	NEG		
Chromium	Glycol		WC Method		NEG		
ASTM D5185m	WEAR METAL	.S	method	limit/base	current	history1	history2
Silver	ron	ppm	ASTM D5185m	>100	17		
Silver	Chromium	ppm	ASTM D5185m	>20	<1		
Silver	Nickel	ppm	ASTM D5185m	>4	0		
Ast Ast	- itanium	ppm	ASTM D5185m		<1		
December December	Silver	ppm	ASTM D5185m	>3	0		
Copper	Aluminum	ppm	ASTM D5185m	>20	6		
Acade Acad	_ead	ppm	ASTM D5185m	>40	<1		
Acade Acad	Copper	ppm	ASTM D5185m	>330	32		
ADDITIVES		ppm	ASTM D5185m	>15	<1		
ADDITIVES	/anadium	ppm	ASTM D5185m		<1		
Soron ppm ASTM D5185m 0 397	Cadmium		ASTM D5185m		0		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Sarium	Boron	ppm	ASTM D5185m	0	397		
Manganese ppm ASTM D5185m 0 5 Magnesium ppm ASTM D5185m 1010 723 Calcium ppm ASTM D5185m 1070 15555 Phosphorus ppm ASTM D5185m 1150 738 Zinc ppm ASTM D5185m 1270 901 Sulfur ppm ASTM D5185m 2060 2716 CONTAMINANTS method limit/base current history1 history2 Soliticon ppm ASTM D5185m >25 19 Soliticon ppm ASTM D5185m >20 18 Potassium ppm ASTM D5185m >20 18 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 <td>Barium</td> <td></td> <td>ASTM D5185m</td> <td>0</td> <td>2</td> <td></td> <td></td>	Barium		ASTM D5185m	0	2		
Manganese ppm ASTM D5185m 0 5 Magnesium ppm ASTM D5185m 1010 723 Calcium ppm ASTM D5185m 1070 15555 Phosphorus ppm ASTM D5185m 1150 738 Zinc ppm ASTM D5185m 1270 901 Sulfur ppm ASTM D5185m 2060 2716 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 19 Godium ppm ASTM D5185m >20 18 Potassium ppm ASTM D5185m >20 18 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624	Molybdenum		ASTM D5185m	60	128		
Magnesium ppm ASTM D5185m 1010 723 Calcium ppm ASTM D5185m 1070 1555 Phosphorus ppm ASTM D5185m 1150 738 Zinc ppm ASTM D5185m 1270 901 Sulfur ppm ASTM D5185m 2060 2716 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 19 Sodium ppm ASTM D5185m >20 18 Potassium ppm ASTM D5185m >20 18 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 5.0 Sulfration Abs/.1mm *ASTM D7414	-		ASTM D5185m	0	5		
Calcium ppm ASTM D5185m 1 070 1555 Phosphorus ppm ASTM D5185m 1 150 738 Cinc ppm ASTM D5185m 1 270 901 Sulfur ppm ASTM D5185m 2060 2716 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 19 Sodium ppm ASTM D5185m >20 18 Potassium ppm ASTM D5185m >20 18 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 Sulfation Abs/.1mm *ASTM D7415 >30 22.8 FLUID DEGRADATION method <td< td=""><td>•</td><td></td><td>ASTM D5185m</td><td>1010</td><td>723</td><td></td><td></td></td<>	•		ASTM D5185m	1010	723		
Phosphorus ppm ASTM D5185m 1150 738 Zinc ppm ASTM D5185m 1270 901 Sulfur ppm ASTM D5185m 2060 2716 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 19 Sodium ppm ASTM D5185m >20 18 Potassium ppm ASTM D5185m >20 18 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 Sulfation Abs/.1mm *ASTM D7415 >30 22.8 FLUID DEGRADATION method limit/base current history1 history2 Dxidation Abs/.1mm *ASTM	-		ASTM D5185m	1070	1555		
Soulfur	Phosphorus		ASTM D5185m	1150	738		
Gulfur ppm ASTM D5185m 2060 2716 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 19 Godium ppm ASTM D5185m 11 Potassium ppm ASTM D5185m >20 18 INFRA-RED method limit/base current history1 history2 Goot % % *ASTM D7844 >3 0.1 Sulfation Abs/.1mm *ASTM D7624 >20 5.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.9			ASTM D5185m	1270	901		
Solicon ppm ASTM D5185m >25 19	Sulfur		ASTM D5185m	2060	2716		
Sodium	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 18 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 Sultration Abs/cm *ASTM D7624 >20 5.0 Sulfation Abs/.1mm *ASTM D7415 >30 22.8 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.9	Silicon	ppm	ASTM D5185m	>25	19		
Potassium ppm ASTM D5185m >20 18 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 Nitration Abs/cm *ASTM D7624 >20 5.0 Sulfation Abs/.1mm *ASTM D7415 >30 22.8 FLUID DEGRADATION method limit/base current history1 history2 Dxidation Abs/.1mm *ASTM D7414 >25 15.9	Sodium		ASTM D5185m		11		
Goot % % *ASTM D7844 >3 0.1 Nitration Abs/cm *ASTM D7624 >20 5.0 Gulfation Abs/.1mm *ASTM D7415 >30 22.8 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.9	Potassium	ppm	ASTM D5185m	>20	18		
Nitration Abs/cm *ASTM D7624 >20 5.0 Sulfation Abs/.1mm *ASTM D7415 >30 22.8 FLUID DEGRADATION method limit/base current history1 history2 Dxidation Abs/.1mm *ASTM D7414 >25 15.9	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 22.8 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.9	Goot %	%	*ASTM D7844	>3	0.1		
Sulfation Abs/.1mm *ASTM D7415 >30 22.8 FLUID DEGRADATION method limit/base current history1 history2 Dxidation Abs/.1mm *ASTM D7414 >25 15.9	Nitration	Abs/cm	*ASTM D7624	>20	5.0		
Dxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.8		
	FLUID DEGRAI	DATION	method	limit/base	current	history1	history2
	 Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9		
	Base Number (BN)	mg KOH/g			10.1		



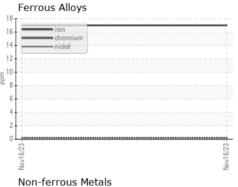
OIL ANALYSIS REPORT

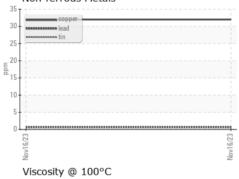


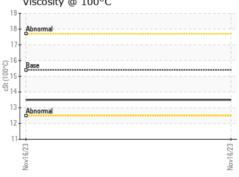
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
Free Water	scalar	*Visual		NEG		
FLUID DDODE			11 1.0			

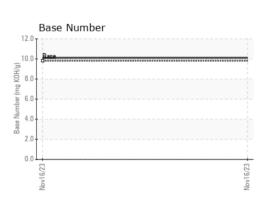
FLUID PROPE	ERITES	method	limit/base		history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.5		

GRAPHS











Laboratory Sample No. Lab Number

Unique Number : 10753962

: GFL0100484 : 06014818

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 22 Nov 2023 Diagnosed

: 25 Nov 2023 Diagnostician : Don Baldridge

Test Package : FLEET Certificate L2367 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)

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7213 East Mount Houston Road Houston, TX US 77050

Contact: Jose Gonzalez

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F: