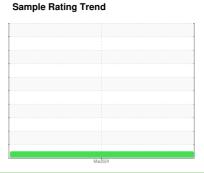


OIL ANALYSIS REPORT

(310770) Somerset Service-D-TRUCK [Somerset Service-D-TRUCK] 248D9133

Diesel Engine

PETRO CANADA DURON SHP 10W30 (20 GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

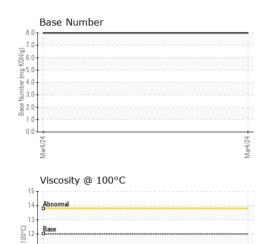
Fluid Condition

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	āAL)				Mar2024		
Client Info	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Machine Age mis Client Info 63125	Sample Number		Client Info		PCA0116526		
Oil Age mls Client Info 6052	Sample Date		Client Info		04 Mar 2024		
Contained Client Info Changed Client Info NORMAL Contained Conta	Machine Age	mls	Client Info		63125		
CONTAMINATION	Oil Age	mls	Client Info		6052		
CONTAMINATION	Oil Changed		Client Info		Changed		
Fuel	Sample Status				NORMAL		
Water WC Method >0.2 NEG Glycol WC Method Imitibase current history1 history2 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 11 Chromium ppm ASTM D5185m >20 <1 Nickel ppm ASTM D5185m >4 <1 Silver ppm ASTM D5185m >4 <1 Silver ppm ASTM D5185m >20 9 Aluminum ppm ASTM D5185m >40 <1 Lead ppm ASTM D5185m >40 <1 Copper ppm ASTM D5185m >15 0 Vanadium ppm ASTM D5185m >16	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>2.0	<1.0		
WEAR METALS method limit/base current history1 history2	Water		WC Method	>0.2	NEG		
ASTM D5185m STM D5185m ST	Glycol		WC Method		NEG		
Chromium	WEAR METAL	S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>100	11		
Titanium	Chromium	ppm	ASTM D5185m	>20	<1		
Silver	Nickel	ppm	ASTM D5185m	>4	<1		
Aluminum	Titanium	ppm	ASTM D5185m		0		
Lead	Silver	ppm	ASTM D5185m	>3	0		
Copper ppm ASTM D5185m >330 6 Tin ppm ASTM D5185m >15 0 Vanadium ppm ASTM D5185m <1	Aluminum	ppm	ASTM D5185m	>20	9		
Tin	Lead	ppm	ASTM D5185m	>40	<1		
Vanadium ppm ASTM D5185m <1 Cadmium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 16 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 63 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 992 Calcium ppm ASTM D5185m 995 1088 Phosphorus ppm ASTM D5185m 995 1088 Zinc ppm ASTM D5185m 2600 3157 CONTAMINANTS method limit/base current history1	Copper	ppm	ASTM D5185m	>330	6		
ADDITIVES	Tin	ppm	ASTM D5185m	>15	0		
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 16 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 63 Manganese ppm ASTM D5185m 0 <1	Vanadium	ppm	ASTM D5185m		<1		
Boron	Cadmium	ppm	ASTM D5185m		<1		
Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 63 Manganese ppm ASTM D5185m 0 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 63 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 992 Calcium ppm ASTM D5185m 1050 1144 Phosphorus ppm ASTM D5185m 995 1088 Zinc ppm ASTM D5185m 995 1088 Zinc ppm ASTM D5185m 2600 3157 Sulfur ppm ASTM D5185m 2600 3157 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m >20 6 Potassium ppm ASTM D7844	Boron	ppm	ASTM D5185m	2	16		
Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 992 Calcium ppm ASTM D5185m 1050 1144 Phosphorus ppm ASTM D5185m 995 1088 Zinc ppm ASTM D5185m 1180 1305 Sulfur ppm ASTM D5185m 2600 3157 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 6 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3	Barium	ppm	ASTM D5185m	0	0		
Magnesium ppm ASTM D5185m 950 992 Calcium ppm ASTM D5185m 1050 1144 Phosphorus ppm ASTM D5185m 1088 Zinc ppm ASTM D5185m 1180 1305 Sulfur ppm ASTM D5185m 2600 3157 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 6 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 <td>Molybdenum</td> <td>ppm</td> <td>ASTM D5185m</td> <td>50</td> <td>63</td> <td></td> <td></td>	Molybdenum	ppm	ASTM D5185m	50	63		
Calcium ppm ASTM D5185m 1050 1144 Phosphorus ppm ASTM D5185m 995 1088 Zinc ppm ASTM D5185m 1180 1305 Sulfur ppm ASTM D5185m 2600 3157 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 6 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION *ASTM D7414 >25 <td< td=""><td>Manganese</td><td>ppm</td><td>ASTM D5185m</td><td>0</td><td><1</td><td></td><td></td></td<>	Manganese	ppm	ASTM D5185m	0	<1		
Phosphorus ppm ASTM D5185m 995 1088 Zinc ppm ASTM D5185m 1180 1305 Sulfur ppm ASTM D5185m 2600 3157 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 6 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 Nitration Abs/cm *ASTM D7624 >20 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION *ASTM D7414 >25 </td <td>Magnesium</td> <td>ppm</td> <td>ASTM D5185m</td> <td>950</td> <td>992</td> <td></td> <td></td>	Magnesium	ppm	ASTM D5185m	950	992		
Zinc	Calcium	ppm	ASTM D5185m	1050	1144		
Sulfur ppm ASTM D5185m 2600 3157 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 6 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 Nitration Abs/.1mm *ASTM D7624 >20 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.7	Phosphorus	ppm		995	1088		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 6 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 Nitration Abs/cm *ASTM D7624 >20 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.7	Zinc	ppm	ASTM D5185m	1180	1305		
Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 6 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 Nitration Abs/cm *ASTM D7624 >20 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.7	Sulfur	ppm	ASTM D5185m	2600	3157		
Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 6 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 Nitration Abs/cm *ASTM D7624 >20 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.7	CONTAMINAN	TS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 6 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 Nitration Abs/cm *ASTM D7624 >20 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.7	Silicon	ppm	ASTM D5185m	>25	5		
INFRA-RED	Sodium	ppm	ASTM D5185m		3		
Soot % *ASTM D7844 >3 0.7 Nitration Abs/cm *ASTM D7624 >20 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.7	Potassium	ppm	ASTM D5185m	>20	6		
Nitration Abs/cm *ASTM D7624 >20 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.7	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.7	Soot %	%	*ASTM D7844	>3	0.7		
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.7	Nitration	Abs/cm	*ASTM D7624	>20	9.3		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4		
	FLUID DEGRA	OATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 8.0	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7		
	Base Number (BN)	mg KOH/g	ASTM D2896		8.0		



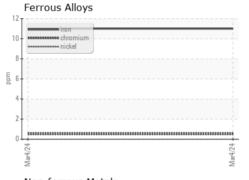
OIL ANALYSIS REPORT



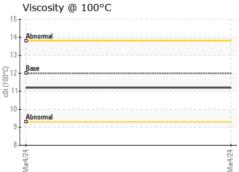
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML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

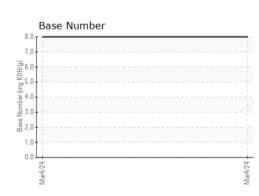
FLUID PROPE	RHES	method			history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.2		

GRAPHS



¹⁰ T	Non-ferrous Metals
8 -	copper teaseassassiplead
6 -	
udd 4-	
2-	
0	724
	Mar4/24 Mar4/24







Laboratory Sample No. Lab Number : 06112434

Unique Number : 10915931

Test Package : FLEET

: PCA0116526

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** Diagnosed

: 08 Mar 2024 : 08 Mar 2024 : 08 Mar 2024 - Wes Davis

Transervice - Shop 2480 - Somerset Service

606 E. Bourne Avenue Somerset, KY US 42501

Contact: Bart Beshears Shop2480@transervice.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)

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F: