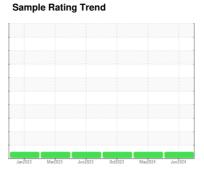


OIL ANALYSIS REPORT

(97199X) Walgreens - Tractor [Walgreens - Tractor] 136A62110

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 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

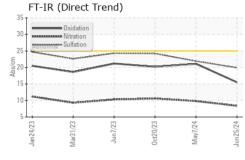
Fluid Condition

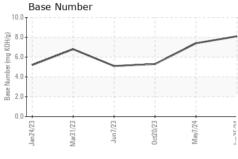
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

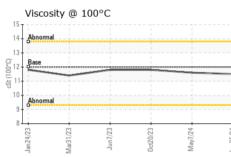
Sample Number Client Info PCA0127129 PCA01111094 PCA0107383 Sample Date Client Info 25 Jun 2024 07 May 2024 20 Oct 2023 Machine Age mls Client Info 626954 549647 549647 50000 Client Info Changed C	SAMPLE INFORMA	ATION	method	limit/base	current	history1	history2	
Client Info						•	•	
Machine Age mls Client Info 626954 549647 549647 50000 Oil Age mis Client Info 77307 549647 50000 Oil Changed Client Info Changed Changed Changed Changed Changed Changed Changed NoRMAL NORMAL CONTAMINATION method limitibase current history1 history2 Fuel WC Method >5.5 <1.0								
Oil Age mls Client Info 77307 549647 50000 Oil Changed Sample Status Client Info Changed Cha		mle				,		
Client Info Changed Changed NORMAL NORMAL NORMAL								
CONTAMINATION	-	1110						
CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0	-		Olioni iilio			Ü	Ü	
Fuel	·	DN	method	limit/base				
Water Glycol WC Method WC Method >0.2 NEG NEG NEG NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >80 13 33 22 Chromium ppm ASTM D5185m >5 1 2 1 Nickel ppm ASTM D5185m >2 0 0 0 Silver ppm ASTM D5185m >2 0 0 0 Silver ppm ASTM D5185m >30 0 0 0 Aluminum ppm ASTM D5185m >30 0 0 0 Copper ppm ASTM D5185m >30 0 0 0 Copper ppm ASTM D5185m >5 0 <1								
WEAR METALS								
WEAR METALS				70.L	-			
Pron				limit/hase				
Chromium								
Nickel	- 1							
Description								
Silver				>2				
Aluminum ppm ASTM D5185m >30 4 18 12 Lead ppm ASTM D5185m >30 0 0 0 Copper ppm ASTM D5185m >150 11 6 5 Tin ppm ASTM D5185m >5 0 <1					-			
Lead							_	
Copper ppm ASTM D5185m >150 11 6 5 Tin ppm ASTM D5185m >5 0 <1					-			
Tin								
Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 1 2 4 Barium ppm ASTM D5185m 0 0 0 0 0 Molybdenum ppm ASTM D5185m 50 60 62 63 Manganese ppm ASTM D5185m 950 948 946 984 Calcium ppm ASTM D5185m 995 1080 1016 1093 Zinc ppm ASTM D5185m 1180 1307 1276 1321 Sulfur ppm ASTM D5185m 2600 3300 2652 2631 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 <t< td=""><td></td><td></td><td></td><td></td><th></th><td></td><td></td></t<>								
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 1 2 4 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 50 60 62 63 Manganese ppm ASTM D5185m 0 0 <1				>5				
ADDITIVES								
Boron		ppm	ASTM D5185m		0	0		
Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 50 60 62 63 Manganese ppm ASTM D5185m 0 0 <1 <1 Magnesium ppm ASTM D5185m 950 948 946 984 Calcium ppm ASTM D5185m 1050 1092 1149 1108 Phosphorus ppm ASTM D5185m 995 1080 1016 1093 Zinc ppm ASTM D5185m 2600 3300 2652 2631 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 6 5 Sodium ppm ASTM D5185m >20 2 3 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7824 <t< th=""><th>ADDITIVES</th><th></th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></t<>	ADDITIVES		method	limit/base	current	history1	history2	
Molybdenum ppm ASTM D5185m 50 60 62 63 Manganese ppm ASTM D5185m 0 0 <1 <1 Magnesium ppm ASTM D5185m 950 948 946 984 Calcium ppm ASTM D5185m 1050 1092 1149 1108 Phosphorus ppm ASTM D5185m 995 1080 1016 1093 Zinc ppm ASTM D5185m 1180 1307 1276 1321 Sulfur ppm ASTM D5185m 2600 3300 2652 2631 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 6 5 Sodium ppm ASTM D5185m >20 2 3 1 INFRA-RED method limit/base current history1 history2 Soot % * ASTM D7844 >3	Boron	ppm				2		
Manganese ppm ASTM D5185m 0 0 <1 <1 Magnesium ppm ASTM D5185m 950 948 946 984 Calcium ppm ASTM D5185m 1050 1092 1149 1108 Phosphorus ppm ASTM D5185m 995 1080 1016 1093 Zinc ppm ASTM D5185m 1180 1307 1276 1321 Sulfur ppm ASTM D5185m 2600 3300 2652 2631 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 6 5 Sodium ppm ASTM D5185m >20 2 3 1 Potassium ppm ASTM D5185m >20 2 3 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844	Barium	ppm	ASTM D5185m	0	0	0	0	
Magnesium ppm ASTM D5185m 950 948 946 984 Calcium ppm ASTM D5185m 1050 1092 1149 1108 Phosphorus ppm ASTM D5185m 995 1080 1016 1093 Zinc ppm ASTM D5185m 1180 1307 1276 1321 Sulfur ppm ASTM D5185m 2600 3300 2652 2631 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 6 5 Sodium ppm ASTM D5185m >20 2 3 1 Potassium ppm ASTM D5185m >20 2 3 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.8 1.3 Nitration Abs/cm *ASTM D741	Molybdenum	ppm			60	62	63	
Calcium ppm ASTM D5185m 1050 1092 1149 1108 Phosphorus ppm ASTM D5185m 995 1080 1016 1093 Zinc ppm ASTM D5185m 1180 1307 1276 1321 Sulfur ppm ASTM D5185m 2600 3300 2652 2631 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 6 5 Sodium ppm ASTM D5185m >20 2 3 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.8 1.3 Nitration Abs/cm *ASTM D7624 >20 8.4 9.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 19.9 21.9 24.2 <td colspan<="" td=""><td>Manganese</td><td>ppm</td><td>ASTM D5185m</td><td>0</td><th>0</th><td><1</td><td><1</td></td>	<td>Manganese</td> <td>ppm</td> <td>ASTM D5185m</td> <td>0</td> <th>0</th> <td><1</td> <td><1</td>	Manganese	ppm	ASTM D5185m	0	0	<1	<1
Phosphorus ppm ASTM D5185m 995 1080 1016 1093 Zinc ppm ASTM D5185m 1180 1307 1276 1321 Sulfur ppm ASTM D5185m 2600 3300 2652 2631 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 6 5 Sodium ppm ASTM D5185m >20 2 3 1 Potassium ppm ASTM D5185m >20 2 3 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.8 1.3 Nitration Abs/cm *ASTM D7624 >20 8.4 9.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 19.9 21.9 24.2 FLUID DEGRADATION meth	Magnesium	ppm	ASTM D5185m	950	948	946		
Zinc ppm ASTM D5185m 1180 1307 1276 1321 Sulfur ppm ASTM D5185m 2600 3300 2652 2631 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 6 5 Sodium ppm ASTM D5185m >20 2 3 1 Potassium ppm ASTM D5185m >20 2 3 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.8 1.3 Nitration Abs/cm *ASTM D7624 >20 8.4 9.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 19.9 21.9 24.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm	Calcium	ppm	ASTM D5185m	1050	1092	1149	1108	
Sulfur ppm ASTM D5185m 2600 3300 2652 2631 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 6 5 Sodium ppm ASTM D5185m >20 2 1 2 1 Potassium ppm ASTM D5185m >20 2 3 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.8 1.3 Nitration Abs/cm *ASTM D7624 >20 8.4 9.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 19.9 21.9 24.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.5 21.1 20.2	Phosphorus	ppm	ASTM D5185m	995	1080	1016	1093	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 6 5 Sodium ppm ASTM D5185m <1	Zinc	ppm	ASTM D5185m	1180	1307	1276	1321	
Silicon ppm ASTM D5185m >20 1 6 5 Sodium ppm ASTM D5185m <1 2 1 Potassium ppm ASTM D5185m >20 2 3 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.8 1.3 Nitration Abs/cm *ASTM D7624 >20 8.4 9.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 19.9 21.9 24.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.5 21.1 20.2	Sulfur	ppm	ASTM D5185m	2600	3300	2652	2631	
Sodium ppm ASTM D5185m <1 2 1 Potassium ppm ASTM D5185m >20 2 3 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.8 1.3 Nitration Abs/cm *ASTM D7624 >20 8.4 9.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 19.9 21.9 24.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.5 21.1 20.2	CONTAMINANT	S	method	limit/base	current	history1	history2	
Potassium ppm ASTM D5185m >20 2 3 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.8 1.3 Nitration Abs/cm *ASTM D7624 >20 8.4 9.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 19.9 21.9 24.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.5 21.1 20.2	Silicon	ppm		>20	1			
INFRA-RED		ppm	ASTM D5185m		<1		1	
Soot % % *ASTM D7844 >3 0.6 0.8 1.3 Nitration Abs/cm *ASTM D7624 >20 8.4 9.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 19.9 21.9 24.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.5 21.1 20.2	Potassium	ppm	ASTM D5185m	>20	2	3	1	
Nitration Abs/cm *ASTM D7624 >20 8.4 9.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 19.9 21.9 24.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.5 21.1 20.2	INFRA-RED		method	limit/base	current	history1	history2	
Sulfation Abs/.1mm *ASTM D7415 >30 19.9 21.9 24.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.5 21.1 20.2	Soot %	%	*ASTM D7844	>3	0.6	0.8	1.3	
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.5 21.1 20.2	Nitration	Abs/cm	*ASTM D7624	>20	8.4	9.8	10.6	
Oxidation Abs/.1mm *ASTM D7414 >25 15.5 21.1 20.2	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9	21.9	24.2	
	FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	21.1	20.2	
			ASTM D2896		8.1	7.4	5.3	



OIL ANALYSIS REPORT



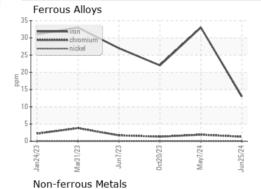




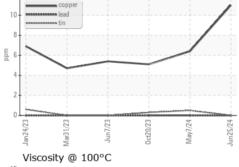
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

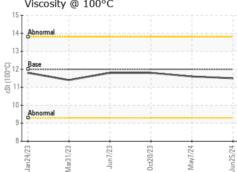
FLUID PROP	ERHES	method				history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.5	11.6	11.8

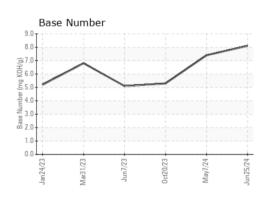
GRAPHS















Certificate 12367

Laboratory Sample No.

: PCA0127129 Lab Number : 06235412 Unique Number : 11124246 Test Package : FLEET

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

: 15 Jul 2024 : 15 Jul 2024 Diagnosed : 15 Jul 2024 - Wes Davis

Transervice - Shop 1370 - Berkeley-Perrysburg

28727 Oregon Road Perrysburg, OH US 43551

Contact: Curtis Hart chart@transervice.com T: (419)666-3277

Submitted By: Curtis Hart

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)

F: (419)666-3279