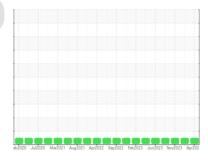


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id 1926735

Diesel Engine

PETRO CANADA DURON SHP 10W30 (36 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil

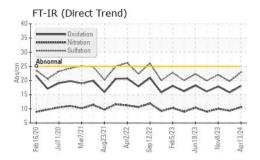
Fluid Condition

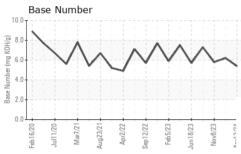
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

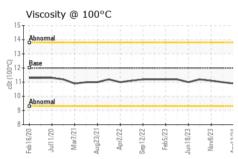
Sample Number Client Info PCA0124559 PCA0114757 PCA01109 Sample Date Client Info 13 Apr 2024 30 Jan 2024 08 Nov 202 Machine Age mls Client Info 0 20000 40000 40000 Client General Info 0 20000 40000 40000 Changed Not Changed Not Changed NormAL NOR	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Date Client Info 13 Apr 2024 30 Jan 2024 08 Nov 2026 Machine Age mls Client Info 0 447616 0 0 0 0 0 0 0 0 0		,,,,,				•	•
Machine Age mls Client Info 447616 0 0 0 Oil Age mls Client Info 0 20000 40000 40000 Oil Changed Client Info Changed Not Changed Changed NoRMAL NEG							
Oil Age mls Client Info 0 20000 40000 Oil Changed Client Info Changed Not Changed Changed Changed Not Changed Changed Nor MAL		mls			•		
Client Info Changed Nor Changed NorMAL	3-					_	-
NORMAL NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history1 history1 water WC Method >0.2 NEG NEG	-	11110			•		
CONTAMINATION method limit/base current history1 history1 Fuel WC Method <6.0	-		Olichi iilio			Ŭ	Ü
Fuel		DN	method	limit/base			
Water WC Method >0.2 NEG NEG <t< td=""><td></td><td></td><td></td><td></td><th></th><td></td><td></td></t<>							
WEAR METALS							
WEAR METALS				70.2			
Irron							
Chromium	WEAR METALS		method	limit/base	current	history1	history2
Nickel	-	ppm		>100			
Titanium	Chromium	ppm	ASTM D5185m	>20	<1		<1
Silver	Nickel	ppm		>2			
Aluminum ppm ASTM D5185m >25 3 2 2 Lead ppm ASTM D5185m >40 2 2 1 Copper ppm ASTM D5185m >330 6 3 5 Tin ppm ASTM D5185m >15 1 1 1 Vanadium ppm ASTM D5185m <1	Titanium	ppm	ASTM D5185m		10	1	<1
Lead	Silver	ppm	ASTM D5185m	>2	<1		
Copper ppm ASTM D5185m >330 6 3 5 Tin ppm ASTM D5185m >15 1 1 1 Vanadium ppm ASTM D5185m <1	Aluminum	ppm	ASTM D5185m	>25	3	2	2
Tin	Lead	ppm	ASTM D5185m	>40	2	2	1
Vanadium ppm ASTM D5185m <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	Copper	ppm	ASTM D5185m	>330	6	3	5
Cadmium ppm ASTM D5185m <1 <1 <1 <1 ADDITIVES method limit/base current history1 history Boron ppm ASTM D5185m 2 18 4 0 Barium ppm ASTM D5185m 0 1 0 12 Molybdenum ppm ASTM D5185m 50 55 51 60 Manganese ppm ASTM D5185m 0 1 <1	Tin	ppm	ASTM D5185m	>15	1	1	1
ADDITIVES	Vanadium	ppm	ASTM D5185m		<1	<1	0
Boron ppm ASTM D5185m 2 18 4 0 12	Cadmium	ppm	ASTM D5185m		<1	<1	<1
Barium ppm ASTM D5185m 0 1 0 12 Molybdenum ppm ASTM D5185m 50 55 51 60 Manganese ppm ASTM D5185m 0 1 <1 <1 Magnesium ppm ASTM D5185m 950 812 847 915 Calcium ppm ASTM D5185m 1050 1129 1007 1057 Phosphorus ppm ASTM D5185m 995 889 946 948 Zinc ppm ASTM D5185m 1180 1166 1077 1218 Sulfur ppm ASTM D5185m 2600 2669 3146 2822 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >25 5 3 5 Sodium ppm ASTM D5185m >20 4 3 4 INFRA-RED method limit/base	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 55 51 60 Manganese ppm ASTM D5185m 0 1 <1 <1 Magnesium ppm ASTM D5185m 950 812 847 915 Calcium ppm ASTM D5185m 950 812 847 915 Calcium ppm ASTM D5185m 1050 1129 1007 1057 Phosphorus ppm ASTM D5185m 995 889 946 948 Zinc ppm ASTM D5185m 995 889 946 948 Zinc ppm ASTM D5185m 1180 1166 1077 1218 Sulfur ppm ASTM D5185m 2600 2669 3146 2822 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 5 3 5 Sodium ppm ASTM D5185m	Boron	ppm	ASTM D5185m	2	18	4	0
Manganese ppm ASTM D5185m 0 1 <1 <1 Magnesium ppm ASTM D5185m 950 812 847 915 Calcium ppm ASTM D5185m 1050 1129 1007 1057 Phosphorus ppm ASTM D5185m 995 889 946 948 Zinc ppm ASTM D5185m 1180 1166 1077 1218 Sulfur ppm ASTM D5185m 2600 2669 3146 2822 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >25 5 3 5 Sodium ppm ASTM D5185m 11 8 8 Potassium ppm ASTM D5185m 20 4 3 4 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7624 >20 10.6<	Barium	ppm	ASTM D5185m	0	1	0	12
Magnesium ppm ASTM D5185m 950 812 847 915 Calcium ppm ASTM D5185m 1050 1129 1007 1057 Phosphorus ppm ASTM D5185m 995 889 946 948 Zinc ppm ASTM D5185m 1180 1166 1077 1218 Sulfur ppm ASTM D5185m 2600 2669 3146 2822 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 5 3 5 Sodium ppm ASTM D5185m >20 4 3 4 INFRA-RED method limit/base current history1 history Soot % % *ASTM D7844 >3 0.6 0.4 0.5 Nitration Abs/cm *ASTM D7624 >20 10.6 9.3 10.0 Sulfation Abs/.1mm *ASTM D7414 </td <td>Molybdenum</td> <td>ppm</td> <td>ASTM D5185m</td> <td>50</td> <th>55</th> <td>51</td> <td>60</td>	Molybdenum	ppm	ASTM D5185m	50	55	51	60
Calcium ppm ASTM D5185m 1050 1129 1007 1057 Phosphorus ppm ASTM D5185m 995 889 946 948 Zinc ppm ASTM D5185m 1180 1166 1077 1218 Sulfur ppm ASTM D5185m 2600 2669 3146 2822 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >25 5 3 5 Sodium ppm ASTM D5185m 11 8 8 Potassium ppm ASTM D5185m >20 4 3 4 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7844 >3 0.6 0.4 0.5 Nitration Abs/cm *ASTM D7415 >30 22.9 19.7 22.0 FLUID DEGRADATION method limit/ba	Manganese	ppm	ASTM D5185m	0	1	<1	<1
Phosphorus ppm ASTM D5185m 995 889 946 948 Zinc ppm ASTM D5185m 1180 1166 1077 1218 Sulfur ppm ASTM D5185m 2600 2669 3146 2822 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >25 5 3 5 Sodium ppm ASTM D5185m >20 4 3 4 INFRA-RED method limit/base current history1 history Soot % % *ASTM D7844 >3 0.6 0.4 0.5 Nitration Abs/cm *ASTM D7624 >20 10.6 9.3 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 22.9 19.7 22.0 FLUID DEGRADATION method limit/base current history1 history Oxidation Abs/.1mm	Magnesium	ppm	ASTM D5185m	950	812	847	915
Zinc ppm ASTM D5185m 1180 1166 1077 1218 Sulfur ppm ASTM D5185m 2600 2669 3146 2822 CONTAMINANTS method limit/base current history Silicon ppm ASTM D5185m >25 5 3 5 Sodium ppm ASTM D5185m 11 8 8 Potassium ppm ASTM D5185m >20 4 3 4 INFRA-RED method limit/base current history1 history Soot % % *ASTM D7844 >3 0.6 0.4 0.5 Nitration Abs/cm *ASTM D7624 >20 10.6 9.3 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 22.9 19.7 22.0 FLUID DEGRADATION method limit/base current history1 history Oxidation Abs/.1mm *ASTM D7414 >25 <td>Calcium</td> <td>ppm</td> <td>ASTM D5185m</td> <td>1050</td> <th>1129</th> <td>1007</td> <td>1057</td>	Calcium	ppm	ASTM D5185m	1050	1129	1007	1057
Sulfur ppm ASTM D5185m 2600 2669 3146 2822 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >25 5 3 5 Sodium ppm ASTM D5185m 11 8 8 Potassium ppm ASTM D5185m >20 4 3 4 INFRA-RED method limit/base current history1 history Soot % % *ASTM D7844 >3 0.6 0.4 0.5 Nitration Abs/cm *ASTM D7624 >20 10.6 9.3 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 22.9 19.7 22.0 FLUID DEGRADATION method limit/base current history1 history Oxidation Abs/.1mm *ASTM D7414 >25 18.0 15.8 17.9	Phosphorus	ppm	ASTM D5185m	995	889	946	948
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 3 5 Sodium ppm ASTM D5185m 11 8 8 Potassium ppm ASTM D5185m >20 4 3 4 INFRA-RED method limit/base current history1 history Soot % % *ASTM D7844 >3 0.6 0.4 0.5 Nitration Abs/cm *ASTM D7624 >20 10.6 9.3 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 22.9 19.7 22.0 FLUID DEGRADATION method limit/base current history1 history Oxidation Abs/.1mm *ASTM D7414 >25 18.0 15.8 17.9	Zinc	ppm	ASTM D5185m	1180	1166	1077	1218
Silicon ppm ASTM D5185m >25 5 3 5 Sodium ppm ASTM D5185m 11 8 8 Potassium ppm ASTM D5185m >20 4 3 4 INFRA-RED method limit/base current history1 history Soot % % *ASTM D7844 >3 0.6 0.4 0.5 Nitration Abs/cm *ASTM D7624 >20 10.6 9.3 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 22.9 19.7 22.0 FLUID DEGRADATION method limit/base current history1 history Oxidation Abs/.1mm *ASTM D7414 >25 18.0 15.8 17.9	Sulfur	ppm	ASTM D5185m	2600	2669	3146	2822
Sodium ppm ASTM D5185m 11 8 8 Potassium ppm ASTM D5185m >20 4 3 4 INFRA-RED method limit/base current history1 history Soot % % *ASTM D7844 >3 0.6 0.4 0.5 Nitration Abs/cm *ASTM D7624 >20 10.6 9.3 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 22.9 19.7 22.0 FLUID DEGRADATION method limit/base current history1 history Oxidation Abs/.1mm *ASTM D7414 >25 18.0 15.8 17.9	CONTAMINANT	S	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 4 3 4 INFRA-RED method limit/base current history1 history Soot % % *ASTM D7844 >3 0.6 0.4 0.5 Nitration Abs/cm *ASTM D7624 >20 10.6 9.3 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 22.9 19.7 22.0 FLUID DEGRADATION method limit/base current history1 history Oxidation Abs/.1mm *ASTM D7414 >25 18.0 15.8 17.9	Silicon	ppm	ASTM D5185m	>25	5	3	5
INFRA-RED	Sodium	ppm	ASTM D5185m		11	8	8
Soot % % *ASTM D7844 >3 0.6 0.4 0.5 Nitration Abs/cm *ASTM D7624 >20 10.6 9.3 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 22.9 19.7 22.0 FLUID DEGRADATION method limit/base current history1 history1 history1 Oxidation Abs/.1mm *ASTM D7414 >25 18.0 15.8 17.9	Potassium	ppm	ASTM D5185m	>20	4	3	4
Nitration Abs/cm *ASTM D7624 >20 10.6 9.3 10.0 Sulfation Abs/.1mm *ASTM D7615 >30 22.9 19.7 22.0 FLUID DEGRADATION method limit/base current history1 history Oxidation Abs/.1mm *ASTM D7414 >25 18.0 15.8 17.9	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 22.9 19.7 22.0 FLUID DEGRADATION method limit/base current history1 history1 history1 Oxidation Abs/.1mm *ASTM D7414 >25 18.0 15.8 17.9	Soot %	%	*ASTM D7844	>3	0.6	0.4	0.5
Sulfation Abs/.1mm *ASTM D7415 >30 22.9 19.7 22.0 FLUID DEGRADATION method limit/base current history1 history1 history Oxidation Abs/.1mm *ASTM D7414 >25 18.0 15.8 17.9	Nitration	Abs/cm	*ASTM D7624	>20	10.6	9.3	10.0
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30			22.0
	FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Dase Multiper (DIN) Highvilly ASTIVID2030 3.4 0.2 0.0	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.0	15.8	17.9



OIL ANALYSIS REPORT



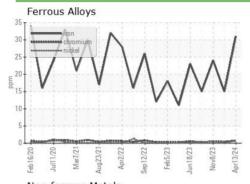


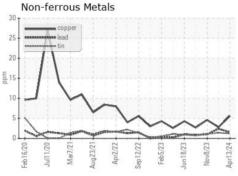


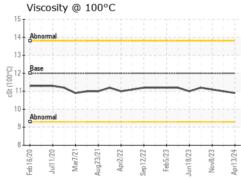
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

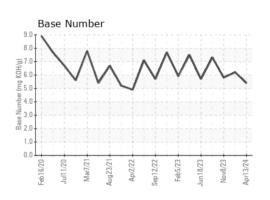
FLUID PROPE	RHES	method			history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	10.9	11.0	11.1

GRAPHS













Certificate 12367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0124559 Lab Number : 06219444 Unique Number : 11097641

Test Package : FLEET

Received : 25 Jun 2024 **Tested** : 26 Jun 2024 Diagnosed

: 26 Jun 2024 - Wes Davis

PERDUE FARMS - GEORGETOWN

20621 SAVANAH RD GEORGETOWN, DE US 19947

Contact: ROBERT LOCKWOOD Robert.Lockwood@Perdue.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)

T:

F: