

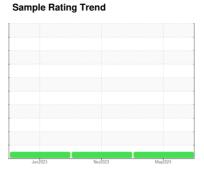
OIL ANALYSIS REPORT

Area

(97168X) Walgreens - Tractor [Walgreens - Tractor] 136A62079

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 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.

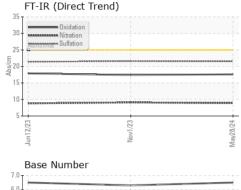
Fluid Condition

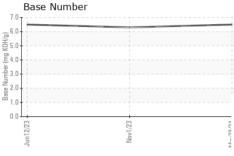
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

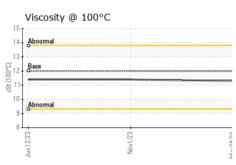
Sample Number Client Info PCA0127106 PCA0107376 PCA009605 PCA0107376 PCA009605 PCA0107376 PCA009605 PCA0107376 PCA009605 PCA0107376 PCA009605 PCA0107376 PCA009605 PCA009605 PCA0107376 PCA009605 PCA009605 PCA0107376 PCA009605 P	CAMPLE INCOR		on other terms	11.001111		la tarangan da managan	المائية المائية
Sample Date	SAMPLE INFORMA	ATION		limit/base			history2
Machine Age mls Client Info 552812 495979 446577	Sample Number				PCA0127106	PCA0107376	PCA0096038
Coli Age	Sample Date				28 May 2024	01 Nov 2023	12 Jun 2023
Client Info Changed Changed NORMAL NEG	Machine Age	mls	Client Info		552812	495979	446577
NORMAL NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2 history3 hi	Oil Age	mls	Client Info		56833	50000	50000
CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0	Oil Changed		Client Info		Changed	Changed	Changed
Fuel	Sample Status				NORMAL	NORMAL	NORMAL
Water Glycol WC Method >0.2 NEG NEG NEG NEG NEG NEG WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >80 29 19 25 Chromium ppm ASTM D5185m >5 2 2 2 Nickel ppm ASTM D5185m >0 0 0 0 Silver ppm ASTM D5185m >3 0 0 0 0 Aluminum ppm ASTM D5185m >30 0 0 0 0 0 Aluminum ppm ASTM D5185m >30 0 <th>CONTAMINATIO</th> <th>N</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	CONTAMINATIO	N	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>5	<1.0	<1.0	<1.0
WEAR METALS	Water		WC Method	>0.2	NEG	NEG	NEG
Chromium	Glycol		WC Method		NEG	NEG	NEG
Chromium	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron p	opm	ASTM D5185m	>80	29	19	25
Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >30 13 9 9 Lead ppm ASTM D5185m >30 0 0 0 Copper ppm ASTM D5185m >150 5 6 10 Tin ppm ASTM D5185m >5 <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	Chromium	opm	ASTM D5185m	>5	2	2	2
Silver	Nickel	opm	ASTM D5185m	>2	0	<1	0
Aluminum	Titanium	opm	ASTM D5185m		0	0	0
Lead	Silver	opm	ASTM D5185m	>3	0	0	0
Copper ppm ASTM D5185m >150 5 6 10 Tin ppm ASTM D5185m >5 <1	Aluminum	opm	ASTM D5185m	>30	13	9	9
Tin ppm ASTM D5185m >5	Lead	opm	ASTM D5185m	>30	0	0	0
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 3 2 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 59 58 65 Manganese ppm ASTM D5185m 0 <1 <1 <1 <1 Magnesium ppm ASTM D5185m 950 910 867 919 Calcium ppm ASTM D5185m 950 910 867 919 Calcium ppm ASTM D5185m 995 989 1044 981 Zinc ppm ASTM D5185m 2600 2501 2506 2823 CONTAMINANTS method limit/base current history1	Copper	opm	ASTM D5185m	>150	5	6	10
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 <1	Tin p	opm	ASTM D5185m	>5	<1	<1	<1
ADDITIVES	Vanadium	opm	ASTM D5185m		0	0	0
Boron ppm ASTM D5185m 2	Cadmium p	opm	ASTM D5185m		0	0	0
Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 50 59 58 65 Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 950 910 867 919 Calcium ppm ASTM D5185m 1050 1076 1028 1096 Phosphorus ppm ASTM D5185m 1050 1076 1028 1096 Phosphorus ppm ASTM D5185m 995 989 1044 981 Zinc ppm ASTM D5185m 1180 1237 1205 1244 Sulfur ppm ASTM D5185m 2600 2501 2506 2823 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 4 4 Sodium ppm ASTM D	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 59 58 65 Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 950 910 867 919 Calcium ppm ASTM D5185m 1050 1076 1028 1096 Phosphorus ppm ASTM D5185m 995 989 1044 981 Zinc ppm ASTM D5185m 995 989 1044 981 Zinc ppm ASTM D5185m 2600 2501 2506 2823 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 4 4 Sodium ppm ASTM D5185m >20 5 4 4 Potassium ppm ASTM D5185m >20 <1 2 3 INFRA-RED method limit/base	Boron p	opm	ASTM D5185m	2	<1	3	2
Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 950 910 867 919 Calcium ppm ASTM D5185m 1050 1076 1028 1096 Phosphorus ppm ASTM D5185m 995 989 1044 981 Zinc ppm ASTM D5185m 1180 1237 1205 1244 Sulfur ppm ASTM D5185m 2600 2501 2506 2823 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 4 4 Sodium ppm ASTM D5185m 3 4 4 Potassium ppm ASTM D5185m >20 <1 2 3 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20	Barium	opm	ASTM D5185m	0	0	0	0
Magnesium ppm ASTM D5185m 950 910 867 919 Calcium ppm ASTM D5185m 1050 1076 1028 1096 Phosphorus ppm ASTM D5185m 995 989 1044 981 Zinc ppm ASTM D5185m 2600 2501 2506 2823 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 4 4 Sodium ppm ASTM D5185m >20 5 4 4 Potassium ppm ASTM D5185m >20 <1	Molybdenum p	opm	ASTM D5185m	50	59	58	65
Calcium ppm ASTM D5185m 1050 1076 1028 1096 Phosphorus ppm ASTM D5185m 1050 1076 1028 1096 Zinc ppm ASTM D5185m 995 989 1044 981 Zinc ppm ASTM D5185m 1180 1237 1205 1244 Sulfur ppm ASTM D5185m 2600 2501 2506 2823 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 4 4 Sodium ppm ASTM D5185m >20 <1	Manganese p	opm	ASTM D5185m	0	<1	<1	<1
Phosphorus ppm ASTM D5185m 995 989 1044 981 Zinc ppm ASTM D5185m 1180 1237 1205 1244 Sulfur ppm ASTM D5185m 2600 2501 2506 2823 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 4 4 Sodium ppm ASTM D5185m >20 <1	Magnesium	opm	ASTM D5185m	950	910	867	919
Zinc ppm ASTM D5185m 1180 1237 1205 1244 Sulfur ppm ASTM D5185m 2600 2501 2506 2823 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 4 4 Sodium ppm ASTM D5185m 3 4 4 Potassium ppm ASTM D5185m >20 <1	Calcium	opm	ASTM D5185m	1050	1076	1028	1096
Sulfur ppm ASTM D5185m 2600 2501 2506 2823 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 4 4 Sodium ppm ASTM D5185m 3 4 4 Potassium ppm ASTM D5185m >20 <1 2 3 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.8 0.8 0.7 Nitration Abs/cm *ASTM D7624 >20 8.9 9.1 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 21.6 21.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 17.4 17.9	Phosphorus p	opm	ASTM D5185m	995	989	1044	981
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 4 4 Sodium ppm ASTM D5185m 3 4 4 Potassium ppm ASTM D5185m >20 <1	Zinc	opm	ASTM D5185m	1180	1237	1205	1244
Silicon ppm ASTM D5185m >20 5 4 4 Sodium ppm ASTM D5185m 3 4 4 Potassium ppm ASTM D5185m >20 <1 2 3 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.8 0.8 0.7 Nitration Abs/cm *ASTM D7624 >20 8.9 9.1 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 21.6 21.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 17.4 17.9	Sulfur p	opm	ASTM D5185m	2600	2501	2506	2823
Sodium ppm ASTM D5185m 3 4 4 Potassium ppm ASTM D5185m >20 <1	CONTAMINANT	S	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <1 2 3 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.8 0.8 0.7 Nitration Abs/cm *ASTM D7624 >20 8.9 9.1 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 21.6 21.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 17.4 17.9	Silicon	opm	ASTM D5185m	>20	5	4	4
INFRA-RED	Sodium	opm	ASTM D5185m		3	4	4
Soot % % *ASTM D7844 >3 0.8 0.8 0.7 Nitration Abs/cm *ASTM D7624 >20 8.9 9.1 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 21.6 21.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 17.4 17.9	Potassium p	opm	ASTM D5185m	>20	<1	2	3
Nitration Abs/cm *ASTM D7624 >20 8.9 9.1 8.8 Sulfation Abs/.1mm *ASTM D7615 >30 21.5 21.6 21.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 17.4 17.9	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 21.5 21.6 21.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 17.4 17.9	Soot %	%	*ASTM D7844	>3	8.0	0.8	0.7
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 17.4 17.9	Nitration /	Abs/cm	*ASTM D7624	>20	8.9	9.1	8.8
Oxidation Abs/.1mm *ASTM D7414 >25 17.6 17.4 17.9	Sulfation /	Abs/.1mm	*ASTM D7415	>30	21.5	21.6	21.4
	FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2
	Oxidation /	Abs/.1mm	*ASTM D7414	>25	17.6	17.4	17.9
	Base Number (BN)	ng KOH/g	ASTM D2896		6.5	6.3	6.5

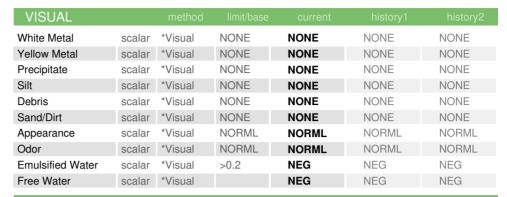


OIL ANALYSIS REPORT



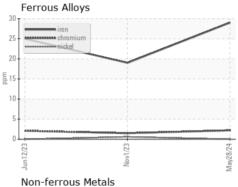


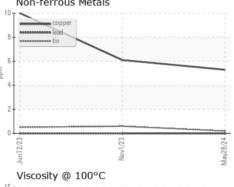


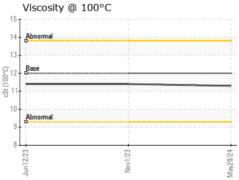


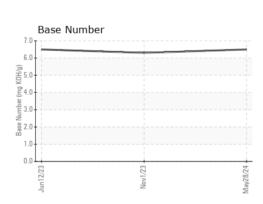
FLUID PROPI	ERHES	method				history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.3	11.4	11.4

GRAPHS













Certificate 12367

Laboratory Sample No.

: PCA0127106 **Lab Number** : 06198532 Unique Number : 11060655 Test Package : FLEET

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

Received : 03 Jun 2024 **Tested** : 04 Jun 2024 Diagnosed

: 04 Jun 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

F: (419)666-3279

To discuss this sample report, contact Customer Service at 1-800-237-1369. st - 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)