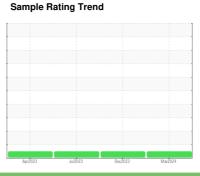


OIL ANALYSIS REPORT

(89628X) Walgreens - Tractor [Walgreens - Tractor] 136A68016

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

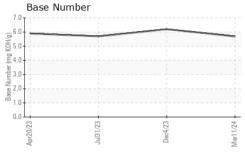
Fluid Condition

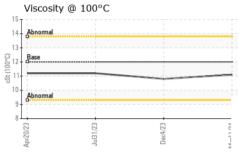
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age mis Client Info 220309 207889 198161	Sample Number		Client Info		PCA0110510	PCA0110537	PCA0093487
Oil Age mls Client Info N/A Changed Changed Sample Status NORMAL NORMAL NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0	Sample Date		Client Info		11 Mar 2024	04 Dec 2023	31 Jul 2023
Cilient Info N/A Changed Changed NORMAL NORMAL NORMAL NORMAL NORMAL	Machine Age	mls	Client Info		220309	207899	198161
NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2 history2	Oil Age	mls	Client Info		0	9738	11904
CONTAMINATION	Oil Changed		Client Info		N/A	Changed	Changed
Fuel WC Method S5 C1.0 C1.0 C1.0 C1.0	Sample Status				NORMAL	NORMAL	NORMAL
Water Glycol WC Method WC Method >0.2 NEG NEG NEG NEG NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >80 23 21 29 Chromium ppm ASTM D5185m >5 1 <1 1 Nickel ppm ASTM D5185m >2 <1 <1 0 Silver ppm ASTM D5185m >2 <1 <1 0 Aluminum ppm ASTM D5185m >30 4 5 8 Lead ppm ASTM D5185m >30 <1 0 <1 Copper ppm ASTM D5185m >5 <1 <1 0 Vanadium ppm ASTM D5185m >5 <1 <1 0 Cadmium ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0 0	CONTAMINATI	ION	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
Pron	Glycol		WC Method		NEG	NEG	NEG
Chromium ppm ASTM D5185m >5 1 <1	WEAR METALS	S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>80	23	21	29
Description	Chromium	ppm	ASTM D5185m	>5	1	<1	1
Description	Nickel			>2	<1	<1	0
Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >30 4 5 8 Lead ppm ASTM D5185m >30 <1 0 <1 Copper ppm ASTM D5185m >150 3 1 2 Tin ppm ASTM D5185m >5 <1 <1 0 Vanadium ppm ASTM D5185m >5 <1 <1 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 1 Boron ppm ASTM D5185m 0 0 0 1 Molybdenum ppm ASTM D5185m 0 43 50 46 Manganesium ppm ASTM D5185m 0 43 104 <t< td=""><th>Titanium</th><td>ppm</td><td>ASTM D5185m</td><td></td><th>23</th><td>6</td><td>13</td></t<>	Titanium	ppm	ASTM D5185m		23	6	13
Aluminum ppm ASTM D5185m >30 4 5 8 Lead ppm ASTM D5185m >30 <1	Silver		ASTM D5185m	>3	0	0	0
Lead	Aluminum	ppm	ASTM D5185m	>30	4	5	8
Copper ppm ASTM D5185m >150 3 1 2 Tin ppm ASTM D5185m >5 <1	Lead			>30	<1	0	<1
Tin	Copper		ASTM D5185m	>150	3	1	2
Vanadium ppm ASTM D5185m <1 <1 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 19 16 10 Barium ppm ASTM D5185m 0 0 0 1 Molybdenum ppm ASTM D5185m 50 43 50 46 Mangaese ppm ASTM D5185m 50 43 50 46 Magnesium ppm ASTM D5185m 950 740 780 722 Calcium ppm ASTM D5185m 950 740 780 722 Calcium ppm ASTM D5185m 995 966 842 905 Zinc ppm ASTM D5185m 995 966 842 905 Sulfur ppm ASTM D5185m 2600 3359 2769	Tin				<1	<1	0
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 19 16 10 Barium ppm ASTM D5185m 0 0 0 1 Molybdenum ppm ASTM D5185m 50 43 50 46 Manganese ppm ASTM D5185m 0 <1	Vanadium	• • • • • • • • • • • • • • • • • • • •	ASTM D5185m		<1	<1	0
ADDITIVES	Cadmium				0	0	0
Barium ppm ASTM D5185m 0 0 0 1 Molybdenum ppm ASTM D5185m 50 43 50 46 Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 950 740 780 722 Calcium ppm ASTM D5185m 950 740 1049 1240 Phosphorus ppm ASTM D5185m 1050 1304 1049 1240 Phosphorus ppm ASTM D5185m 995 966 842 905 Zinc ppm ASTM D5185m 2600 3359 2769 2986 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 6 5 7 Sodium ppm ASTM D5185m >20 4 6 13 INFRA-RED	ADDITIVES		method	limit/base	current	history1	history2
Barium ppm ASTM D5185m 0 0 0 1 Molybdenum ppm ASTM D5185m 50 43 50 46 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	2	19	16	10
Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 950 740 780 722 Calcium ppm ASTM D5185m 1050 1304 1049 1240 Phosphorus ppm ASTM D5185m 995 966 842 905 Zinc ppm ASTM D5185m 1180 1178 1063 1108 Sulfur ppm ASTM D5185m 2600 3359 2769 2986 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 6 5 7 Sodium ppm ASTM D5185m 2 2 2 6 Potassium ppm ASTM D5185m >20 4 6 13 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844	Barium		ASTM D5185m	0	0	0	1
Magnesium ppm ASTM D5185m 950 740 780 722 Calcium ppm ASTM D5185m 1050 1304 1049 1240 Phosphorus ppm ASTM D5185m 1050 1304 1049 1240 Phosphorus ppm ASTM D5185m 995 966 842 905 Zinc ppm ASTM D5185m 1180 1178 1063 1108 Sulfur ppm ASTM D5185m 2600 3359 2769 2986 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 6 5 7 Sodium ppm ASTM D5185m >20 4 6 13 INFRA-RED method limit/base current history1 history2 Soot % "ASTM D7624 >20 10.1 9.7 10.7 Sulfation Abs/.1mm "ASTM D7415 <t< td=""><th>Molybdenum</th><td>ppm</td><td>ASTM D5185m</td><td>50</td><th>43</th><td>50</td><td>46</td></t<>	Molybdenum	ppm	ASTM D5185m	50	43	50	46
Magnesium ppm ASTM D5185m 950 740 780 722 Calcium ppm ASTM D5185m 1050 1304 1049 1240 Phosphorus ppm ASTM D5185m 1050 1304 1049 1240 Phosphorus ppm ASTM D5185m 995 966 842 905 Zinc ppm ASTM D5185m 1180 1178 1063 1108 Sulfur ppm ASTM D5185m 2600 3359 2769 2986 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 6 5 7 Sodium ppm ASTM D5185m >20 4 6 13 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 10.1 9.7 10.7 Sulfation Abs/.1mm *ASTM D7	Manganese		ASTM D5185m	0	<1	<1	<1
Calcium ppm ASTM D5185m 1050 1304 1049 1240 Phosphorus ppm ASTM D5185m 995 966 842 905 Zinc ppm ASTM D5185m 1180 1178 1063 1108 Sulfur ppm ASTM D5185m 2600 3359 2769 2986 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 6 5 7 Sodium ppm ASTM D5185m 2 2 6 Potassium ppm ASTM D5185m >20 4 6 13 INFRA-RED method limit/base current history1 history2 Soot % "ASTM D7844 >3 0.6 0.5 0.7 Nitration Abs/cm "ASTM D7624 >20 10.1 9.7 10.7 Sulfation Abs/.1mm "ASTM D7415 >30<	Magnesium		ASTM D5185m	950	740	780	722
Phosphorus ppm ASTM D5185m 995 966 842 905 Zinc ppm ASTM D5185m 1180 1178 1063 1108 Sulfur ppm ASTM D5185m 2600 3359 2769 2986 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 6 5 7 Sodium ppm ASTM D5185m 2 2 2 6 Potassium ppm ASTM D5185m >20 4 6 13 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.5 0.7 Nitration Abs/cm *ASTM D7624 >20 10.1 9.7 10.7 Sulfation Abs/.1mm *ASTM D7415 >30 22.1 20.6 22.7 FLUID DEGRADATION *ASTM D7414	Calcium		ASTM D5185m	1050	1304	1049	1240
Zinc ppm ASTM D5185m 1180 1178 1063 1108 Sulfur ppm ASTM D5185m 2600 3359 2769 2986 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 6 5 7 Sodium ppm ASTM D5185m 2 2 6 Potassium ppm ASTM D5185m >20 4 6 13 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.5 0.7 Nitration Abs/cm *ASTM D7624 >20 10.1 9.7 10.7 Sulfation Abs/.1mm *ASTM D7415 >30 22.1 20.6 22.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM	Phosphorus		ASTM D5185m	995	966	842	905
Sulfur ppm ASTM D5185m 2600 3359 2769 2986 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 6 5 7 Sodium ppm ASTM D5185m 2 2 6 Potassium ppm ASTM D5185m >20 4 6 13 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.5 0.7 Nitration Abs/cm *ASTM D7624 >20 10.1 9.7 10.7 Sulfation Abs/.1mm *ASTM D7415 >30 22.1 20.6 22.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2 16.4 18.8	Zinc		ASTM D5185m	1180	1178	1063	1108
Silicon ppm ASTM D5185m >20 6 5 7 Sodium ppm ASTM D5185m 2 2 6 Potassium ppm ASTM D5185m >20 4 6 13 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.5 0.7 Nitration Abs/cm *ASTM D7624 >20 10.1 9.7 10.7 Sulfation Abs/.1mm *ASTM D7415 >30 22.1 20.6 22.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2 16.4 18.8	Sulfur		ASTM D5185m	2600	3359	2769	2986
Sodium ppm ASTM D5185m 2 2 6 Potassium ppm ASTM D5185m >20 4 6 13 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.5 0.7 Nitration Abs/cm *ASTM D7624 >20 10.1 9.7 10.7 Sulfation Abs/.1mm *ASTM D7415 >30 22.1 20.6 22.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2 16.4 18.8	CONTAMINAN	TS	method	limit/base	current	history1	history2
Sodium ppm ASTM D5185m 2 2 6 Potassium ppm ASTM D5185m >20 4 6 13 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.5 0.7 Nitration Abs/cm *ASTM D7624 >20 10.1 9.7 10.7 Sulfation Abs/.1mm *ASTM D7415 >30 22.1 20.6 22.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2 16.4 18.8	Silicon	ppm	ASTM D5185m	>20	6	5	7
Potassium ppm ASTM D5185m >20 4 6 13 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.5 0.7 Nitration Abs/cm *ASTM D7624 >20 10.1 9.7 10.7 Sulfation Abs/.1mm *ASTM D7415 >30 22.1 20.6 22.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2 16.4 18.8	Sodium	• •				2	6
Soot % % *ASTM D7844 >3 0.6 0.5 0.7 Nitration Abs/cm *ASTM D7624 >20 10.1 9.7 10.7 Sulfation Abs/.1mm *ASTM D7415 >30 22.1 20.6 22.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2 16.4 18.8	Potassium		ASTM D5185m	>20		6	13
Nitration Abs/cm *ASTM D7624 >20 10.1 9.7 10.7 Sulfation Abs/.1mm *ASTM D7415 >30 22.1 20.6 22.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2 16.4 18.8	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 22.1 20.6 22.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2 16.4 18.8	Soot %	%	*ASTM D7844	>3	0.6	0.5	0.7
Sulfation Abs/.1mm *ASTM D7415 >30 22.1 20.6 22.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2 16.4 18.8	Nitration						
Oxidation Abs/.1mm *ASTM D7414 >25 18.2 16.4 18.8	Sulfation						
	FLUID DEGRAD	OATION	method	limit/base	current	history1	history2
	Out de tiere	Aba/1mm	*ACTM D7414	05	40.0	10.4	10.0
	Oxidation	ADS/, IIIIIII	ASTW D/414	>25	18.2	16.4	18.8



OIL ANALYSIS REPORT

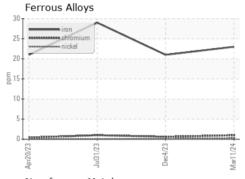


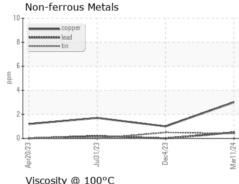


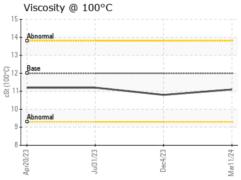
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

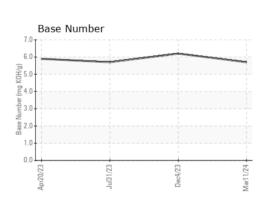
FLUID PROPI	ERTIES	method				history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.1	10.8	11.2

GRAPHS











Laboratory Sample No.

: PCA0110510 Lab Number : 06121375 Unique Number : 10930208 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 18 Mar 2024 **Tested** : 19 Mar 2024

Diagnosed : 19 Mar 2024 - Wes Davis

Transervice - Shop 1376 - Berkeley-Linden

3425 Tremley Point Road Linden, NJ US 07036

Contact: Shop 1376 Oil Analysis shop1376@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)

T:

F: