

OIL ANALYSIS REPORT

Sample Rating Trend



Area

(66510ME) Walgreens - Tractor [Walgreens - Tractor] 136D25697

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

Fluid

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

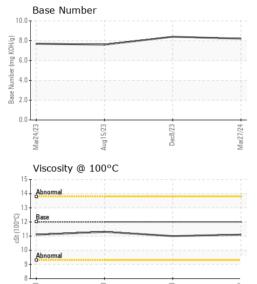
Fluid Condition

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

Sample Date	GAL)		Mar202	3 Aug2023	Dec2023 M	≈2024	
Client Info 27 Mar 2024 08 Dec 2023 15 Aug 2023 15 Aug 2023 383592 383	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age mls Client Info 89835 87003 83592	Sample Number		Client Info		PCA0110582	PCA0110527	PCA0093535
Oil Age mls Client Info 89835 3411 75605 Oil Changed Client Info N/A Changed Changed Sample Status NORMAL NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <th< td=""><td>Sample Date</td><td></td><td>Client Info</td><td></td><th>27 Mar 2024</th><td>08 Dec 2023</td><td>15 Aug 2023</td></th<>	Sample Date		Client Info		27 Mar 2024	08 Dec 2023	15 Aug 2023
Cilient Info	Machine Age	mls	Client Info		89835	87003	83592
NORMAL NORMAL NORMAL CONTAMINATION method militiplase current history1 history2	Oil Age	mls	Client Info		89835	3411	75605
NORMAL NORMAL NORMAL CONTAMINATION method militipase current history1 history2	Oil Changed		Client Info		N/A	Changed	Changed
Fuel	Sample Status				NORMAL		
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 >110 18 12 20 Chromium ppm ASTM D5185m >4 <1	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>5	<1.0	<1.0	<1.0
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >1110 18 12 20 Chromium ppm ASTM D5185m >4 <1	Water		WC Method	>0.2	NEG	NEG	NEG
Description	Glycol		WC Method		NEG	NEG	NEG
Chromium	WEAR METAL	.S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>110	18	12	
Description	Chromium	ppm	ASTM D5185m	>4	<1	0	0
Silver	Nickel	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	Titanium	ppm	ASTM D5185m		24	6	33
Lead	Silver	ppm	ASTM D5185m	>2	0	0	0
Copper ppm ASTM D5185m >85 0 0 <1 Tin ppm ASTM D5185m >4 1 <1	Aluminum	ppm	ASTM D5185m	>25	2	1	2
Tin	Lead	ppm	ASTM D5185m	>45	<1	0	0
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	>85	0	0	<1
ADDITIVES	Tin	ppm	ASTM D5185m	>4	1	<1	0
ADDITIVES	Vanadium	ppm	ASTM D5185m		<1	<1	<1
Boron ppm ASTM D5185m 2 54 21 50 50 60 60 60 60 60 60	Cadmium	ppm	ASTM D5185m		0	0	0
Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 50 40 48 27 Manganese ppm ASTM D5185m 0 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 40 48 27 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	2	54	21	50
Manganese ppm ASTM D5185m 0 <1 <1 0 Magnesium ppm ASTM D5185m 950 742 794 576 Calcium ppm ASTM D5185m 1050 1405 1115 1589 Phosphorus ppm ASTM D5185m 995 1031 945 934 Zinc ppm ASTM D5185m 1180 1248 1151 1171 Sulfur ppm ASTM D5185m 2600 4275 3024 3912 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 5 3 4 Sodium ppm ASTM D5185m >20 1 1 2 Potassium ppm ASTM D5185m >20 1 1 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844	Barium	ppm	ASTM D5185m	0	0	0	0
Magnesium ppm ASTM D5185m 950 742 794 576 Calcium ppm ASTM D5185m 1050 1405 1115 1589 Phosphorus ppm ASTM D5185m 995 1031 945 934 Zinc ppm ASTM D5185m 1180 1248 1151 1171 Sulfur ppm ASTM D5185m 2600 4275 3024 3912 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 5 3 4 Sodium ppm ASTM D5185m 2 <1	Molybdenum	ppm	ASTM D5185m	50	40	48	27
Calcium ppm ASTM D5185m 1050 1405 1115 1589 Phosphorus ppm ASTM D5185m 995 1031 945 934 Zinc ppm ASTM D5185m 1180 1248 1151 1171 Sulfur ppm ASTM D5185m 2600 4275 3024 3912 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 5 3 4 Sodium ppm ASTM D5185m >20 1 1 2 Potassium ppm ASTM D5185m >20 1 1 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.2 0.2 0.3 Nitration Abs/.1mm *ASTM D7415 >30 17.5 17.4 17.3 FLUID DEGRADATION method </td <td>Manganese</td> <td>ppm</td> <td>ASTM D5185m</td> <td>0</td> <th><1</th> <td><1</td> <td>0</td>	Manganese	ppm	ASTM D5185m	0	<1	<1	0
Phosphorus ppm ASTM D5185m 995 1031 945 934 Zinc ppm ASTM D5185m 1180 1248 1151 1171 Sulfur ppm ASTM D5185m 2600 4275 3024 3912 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 5 3 4 Sodium ppm ASTM D5185m 2 <1	Magnesium	ppm	ASTM D5185m	950	742	794	576
Zinc ppm ASTM D5185m 1180 1248 1151 1171 Sulfur ppm ASTM D5185m 2600 4275 3024 3912 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 5 3 4 Sodium ppm ASTM D5185m 2 <1	Calcium	ppm	ASTM D5185m	1050	1405	1115	1589
Zinc ppm ASTM D5185m 1180 1248 1151 1171 Sulfur ppm ASTM D5185m 2600 4275 3024 3912 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 5 3 4 Sodium ppm ASTM D5185m 2 <1	Phosphorus	ppm	ASTM D5185m	995	1031	945	934
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 5 3 4 Sodium ppm ASTM D5185m 2 <1	Zinc	ppm	ASTM D5185m	1180	1248	1151	1171
Silicon ppm ASTM D5185m >30 5 3 4 Sodium ppm ASTM D5185m 2 <1 2 Potassium ppm ASTM D5185m >20 1 1 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.2 0.2 0.3 Nitration Abs/cm *ASTM D7624 >20 6.9 6.3 7.9 Sulfation Abs/.1mm *ASTM D7415 >30 17.5 17.4 17.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.2 12.9 12.2	Sulfur	ppm	ASTM D5185m	2600	4275	3024	3912
Sodium ppm ASTM D5185m 2 <1 2 Potassium ppm ASTM D5185m >20 1 1 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.2 0.2 0.3 Nitration Abs/cm *ASTM D7624 >20 6.9 6.3 7.9 Sulfation Abs/.1mm *ASTM D7415 >30 17.5 17.4 17.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.2 12.9 12.2	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 1 1 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.2 0.2 0.3 Nitration Abs/cm *ASTM D7624 >20 6.9 6.3 7.9 Sulfation Abs/.1mm *ASTM D7415 >30 17.5 17.4 17.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.2 12.9 12.2	Silicon	ppm	ASTM D5185m	>30	5	3	4
INFRA-RED	Sodium	ppm	ASTM D5185m		2	<1	2
Soot % % *ASTM D7844 >3 0.2 0.2 0.3 Nitration Abs/cm *ASTM D7624 >20 6.9 6.3 7.9 Sulfation Abs/.1mm *ASTM D7415 >30 17.5 17.4 17.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.2 12.9 12.2	Potassium	ppm	ASTM D5185m	>20	1	1	2
Nitration Abs/cm *ASTM D7624 >20 6.9 6.3 7.9 Sulfation Abs/.1mm *ASTM D7415 >30 17.5 17.4 17.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.2 12.9 12.2	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 17.5 17.4 17.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.2 12.9 12.2	Soot %	%	*ASTM D7844	>3	0.2	0.2	0.3
Sulfation Abs/.1mm *ASTM D7415 >30 17.5 17.4 17.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.2 12.9 12.2	Nitration	Abs/cm	*ASTM D7624	>20	6.9	6.3	7.9
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30		17.4	17.3
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 8.2 8.4 7.6	Oxidation	Abs/.1mm	*ASTM D7414	>25	13.2	12.9	12.2
	Base Number (BN)	mg KOH/g	ASTM D2896		8.2	8.4	7.6



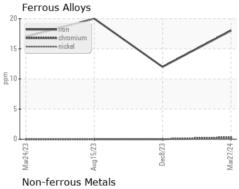
OIL ANALYSIS REPORT

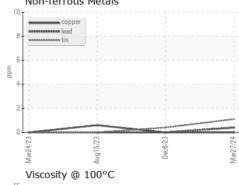


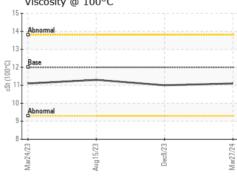
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

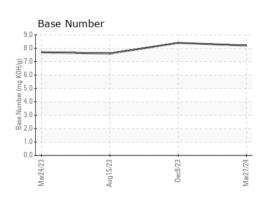
FLUID PROP	EKITES	method	ilmit/base		nistory i	nistory2
Visc @ 100°C	cSt	ASTM D445	12.00	11.1	11.0	11.3

GRAPHS













Certificate L2367

Report Id: TSV1376 [WUSCAR] 06136851 (Generated: 04/03/2024 14:31:14) Rev: 1

Laboratory Sample No.

Lab Number : 06136851 Unique Number: 10956316

Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0110582

Received **Tested** Diagnosed

: 02 Apr 2024 : 03 Apr 2024

: 03 Apr 2024 - Wes Davis

Transervice - Shop 1376 - Berkeley-Linden

3425 Tremley Point Road Linden, NJ US 07036

Contact: Shop 1376 Oil Analysis

shop1376@transervice.com T:

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)

Submitted By: Ryan Booth

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