

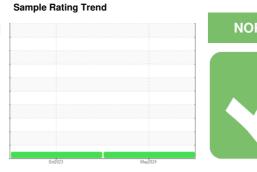
OIL ANALYSIS REPORT

Area

(89557X) Walgreens - Tractor [Walgreens - Tractor] 136A67122

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 PCA0122385 PCA0103707 Sample Date Client Info 13 May 2024 19 Oct 2023 Machine Age mls Client Info 585892 553613 Oil Age mls Client Info Not Changd Changed Oil Changed Client Info Not Changd Changed Sample Status NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0 <1.0 Water WC Method NEG NEG Blycol WC Method NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >110 9 13 WEAR METALS method limit/base current history1 his	āAL)			0ct2023	May2024		
Sample Date Client Info 13 May 2024 19 Oct 2023	SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Date Client Info 13 May 2024 19 Oct 2023	Sample Number		Client Info		PCA0122385	PCA0103707	
Machine Age mis Client Info 585892 553613 Oil Age mis Client Info S50471 23613 Oil Changed Client Info Not Changed NORMAL CONTAMINATION method Imit/base current history1 history2 Fuel	Sample Date		Client Info		13 May 2024	19 Oct 2023	
Oil Age mls Client Info 550471 23613	Machine Age	mls	Client Info		-	553613	
CONTAMINATION	Oil Age	mls	Client Info		550471	23613	
CONTAMINATION	-		Client Info		Not Changd	Changed	
Fuel WC Method S5 <1.0 <1.0	Sample Status				NORMAL	NORMAL	
Water WC Method Solution NEG NEG	CONTAMINA	TION	method	limit/base	current	history1	history2
WEAR METALS method limit/base current history1 history2	Fuel		WC Method	>5	<1.0	<1.0	
WEAR METALS	Water		WC Method	>0.2	NEG	NEG	
Iron	Glycol		WC Method		NEG	NEG	
Chromium ppm ASTM D5185m >4 0 <1 ··· Nickel ppm ASTM D5185m >2 <1	WEAR METAI	LS	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>110	9	13	
Titanium	Chromium	ppm	ASTM D5185m	>4	0	<1	
Silver	Nickel	ppm	ASTM D5185m	>2	<1	0	
Aluminum ppm ASTM D5185m >25 3 3 Lead ppm ASTM D5185m >45 0 0 Copper ppm ASTM D5185m >85 3 <1	Titanium	ppm	ASTM D5185m		<1	1	
Lead ppm ASTM D5185m >45 0 0	Silver	ppm	ASTM D5185m	>2	0	0	
Copper ppm ASTM D5185m >85 3 <1 Tin ppm ASTM D5185m >4 <1	Aluminum	ppm	ASTM D5185m	>25	3	3	
Tin	Lead	ppm	ASTM D5185m	>45	0	0	
Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 5 6 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 50 51 58 Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 950 867 947 Calcium ppm ASTM D5185m 950 1274 1053 Phosphorus ppm ASTM D5185m 995 1112 1057 Zinc ppm ASTM D5185m 2600 3911 3096 CONTAMINANTS method limit/base current history1	Copper	ppm	ASTM D5185m	>85	3	<1	
Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 5 6 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 50 51 58 Manganese ppm ASTM D5185m 0 <1	Tin	ppm	ASTM D5185m	>4	<1	0	
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 5 6 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 50 51 58 Manganese ppm ASTM D5185m 0 <1	Vanadium	ppm	ASTM D5185m		0	0	
Boron	Cadmium	ppm	ASTM D5185m		0	0	
Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 50 51 58 Manganese ppm ASTM D5185m 0 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 51 58 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	2	5	6	
Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 950 867 947 Calcium ppm ASTM D5185m 1050 1274 1053 Phosphorus ppm ASTM D5185m 995 1112 1057 Zinc ppm ASTM D5185m 1180 1248 1265 Sulfur ppm ASTM D5185m 2600 3911 3096 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 5 4 Sodium ppm ASTM D5185m >20 4 <1	Barium	ppm	ASTM D5185m	0	0	0	
Magnesium ppm ASTM D5185m 950 867 947 Calcium ppm ASTM D5185m 1050 1274 1053 Phosphorus ppm ASTM D5185m 995 1112 1057 Zinc ppm ASTM D5185m 1180 1248 1265 Sulfur ppm ASTM D5185m 2600 3911 3096 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 5 4 Sodium ppm ASTM D5185m >20 4 <1	Molybdenum	ppm	ASTM D5185m	50	51	58	
Calcium ppm ASTM D5185m 1050 1274 1053 Phosphorus ppm ASTM D5185m 995 1112 1057 Zinc ppm ASTM D5185m 1180 1248 1265 Sulfur ppm ASTM D5185m 2600 3911 3096 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 5 4 Sodium ppm ASTM D5185m >30 1 Potassium ppm ASTM D5185m >20 4 <1	Manganese	ppm	ASTM D5185m	0	<1	<1	
Phosphorus ppm ASTM D5185m 995 1112 1057 Zinc ppm ASTM D5185m 1180 1248 1265 Sulfur ppm ASTM D5185m 2600 3911 3096 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 5 4 Sodium ppm ASTM D5185m 3 1 Potassium ppm ASTM D5185m >20 4 <1	Magnesium	ppm	ASTM D5185m	950	867	947	
Zinc ppm ASTM D5185m 1180 1248 1265 Sulfur ppm ASTM D5185m 2600 3911 3096 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 5 4 Sodium ppm ASTM D5185m 3 1 Potassium ppm ASTM D5185m >20 4 <1	Calcium	ppm	ASTM D5185m	1050	1274	1053	
Sulfur ppm ASTM D5185m 2600 3911 3096 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 5 4 Sodium ppm ASTM D5185m 3 1 Potassium ppm ASTM D5185m >20 4 <1	Phosphorus	ppm	ASTM D5185m	995	1112	1057	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 5 4 Sodium ppm ASTM D5185m 3 1 Potassium ppm ASTM D5185m >20 4 <1	Zinc	ppm	ASTM D5185m	1180	1248	1265	
Silicon ppm ASTM D5185m >30 5 4 Sodium ppm ASTM D5185m 3 1 Potassium ppm ASTM D5185m >20 4 <1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 8.8 8.2 Sulfation Abs/.1mm *ASTM D7415 >30 19.5 18.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.3 15.1	Sulfur	ppm	ASTM D5185m	2600	3911	3096	
Sodium ppm ASTM D5185m 3 1 Potassium ppm ASTM D5185m >20 4 <1	CONTAMINA	NTS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 4 <1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 8.8 8.2 Sulfation Abs/.1mm *ASTM D7415 >30 19.5 18.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.3 15.1	Silicon	ppm	ASTM D5185m	>30	5	4	
INFRA-RED	Sodium	ppm	ASTM D5185m		3	1	
Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 8.8 8.2 Sulfation Abs/.1mm *ASTM D7415 >30 19.5 18.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.3 15.1	Potassium	ppm	ASTM D5185m	>20	4	<1	
Nitration Abs/cm *ASTM D7624 >20 8.8 8.2 Sulfation Abs/.1mm *ASTM D7415 >30 19.5 18.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.3 15.1	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 19.5 18.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.3 15.1	Soot %	%	*ASTM D7844	>3	0.3	0.3	
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.3 15.1	Nitration	Abs/cm	*ASTM D7624	>20	8.8	8.2	
Oxidation Abs/.1mm *ASTM D7414 >25 15.3 15.1	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	18.7	
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.3	15.1	
	Base Number (BN)	mg KOH/g			7.4	8.4	



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No. Lab Number : 06214124 Unique Number : 11086988 Test Package : FLEET

: PCA0122385

:St (100°C)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 18 Jun 2024 **Tested** : 20 Jun 2024

Diagnosed : 20 Jun 2024 - Wes Davis

(B/T.0 (B/HO) 6.0

£ 5.0 흩 4.0 8 2.0 1.0 0.0

Transervice - Shop 1374 - Berkeley-Hartford

80 International Drive Windsor, CT US 06095

Contact: Paul Santanella psantanella@transervice.com T: (860)687-1037

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) F: (860)687-1476

Report Id: TSV1374 [WUSCAR] 06214124 (Generated: 06/21/2024 19:15:38) Rev: 1

Contact/Location: Paul Santanella - TSV1374