

OIL ANALYSIS REPORT

Area (97183X) Walgreens Machine Id [Walgreens] 136A62094 Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Eluid

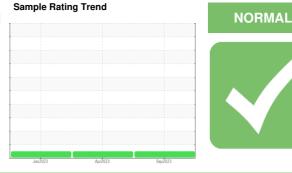
All component wear rates are normal.

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 INFORM	MATION	method	limit/base	current		history2
Sample Number		Client Info		PCA0103825	PCA0094715	PCA0089870
Sample Date		Client Info		11 Sep 2023	28 Apr 2023	13 Jan 2023
Machine Age	mls	Client Info		381255	355590	327984
Oil Age	mls	Client Info		25665	27189	53183
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S .	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	34	22	18
Chromium	ppm	ASTM D5185m	>5	2	2	2
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	15	5	9
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>150	6	5	6
Tin	ppm	ASTM D5185m	>5	<1	<1	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	0	3	0
Barium	ppm	ASTM D5185m	0	0	0	0
	ppm	ASTIVI DOTODITI	0	U	0	0
Molybdenum	ppm	ASTM D5185m	50	65	64	60
				-	64 <1	
Molybdenum	ppm	ASTM D5185m	50 0 950	65	64 <1 952	60 <1 922
Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m	50 0	65 <1	64 <1	60 <1
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950	65 <1 1061 1163 1033	64 <1 952 1077 1017	60 <1 922 1050 923
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180	65 <1 1061 1163	64 <1 952 1077 1017 1270	60 <1 922 1050 923 1144
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995	65 <1 1061 1163 1033	64 <1 952 1077 1017	60 <1 922 1050 923
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180	65 <1 1061 1163 1033 1293	64 <1 952 1077 1017 1270	60 <1 922 1050 923 1144 2844 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600	65 <1 1061 1163 1033 1293 3157	64 <1 952 1077 1017 1270 2905	60 <1 922 1050 923 1144 2844
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base	65 <1 1061 1163 1033 1293 3157 current	64 <1 952 1077 1017 1270 2905 history1	60 <1 922 1050 923 1144 2844 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base	65 <1 1061 1163 1033 1293 3157 current 5	64 <1 952 1077 1017 1270 2905 history1 4	60 <1 922 1050 923 1144 2844 history2 5
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >20	65 <1 1061 1163 1033 1293 3157 current 5 3	64 <1 952 1077 1017 1270 2905 history1 4 <1	60 <1 922 1050 923 1144 2844 history2 5 0
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >20	65 <1 1061 1163 1033 1293 3157 current 5 3 2	64 <1 952 1077 1017 1270 2905 history1 4 <1 2	60 <1 922 1050 923 1144 2844 history2 5 0 0
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600 imit/base >20 imit/base	65 <1 1061 1163 1033 1293 3157 current 5 3 2 2 current	64 <1 952 1077 1017 1270 2905 history1 4 <1 2 history1	60 <1 922 1050 923 1144 2844 history2 5 0 0 0
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600 <i>limit/base</i> >20 >20 <i>limit/base</i> >3	65 <1 1061 1163 1033 1293 3157 current 5 3 2 2 current 0.8	64 <1 952 1077 1017 1270 2905 history1 4 <1 2 history1 0.5	60 <1 922 1050 923 1144 2844 history2 5 0 0 0 history2 0.8
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624	50 0 950 1050 995 1180 2600 limit/base >20 limit/base >20	65 <1 1061 1163 1033 1293 3157 current 5 3 2 2 current 0.8 9.8	64 <1 952 1077 1017 1270 2905 history1 4 <1 2 history1 0.5 8.0	60 <1 922 1050 923 1144 2844 history2 5 0 0 0 history2 0.8 10.1
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624	50 0 950 1050 995 1180 2600 limit/base >20 limit/base >3 >20 >30	65 <1 1061 1163 1033 1293 3157 current 5 3 2 current 0.8 9.8 22.6	64 <1 952 1077 1017 1270 2905 history1 4 <1 2 history1 0.5 8.0 18.1	60 <1 922 1050 923 1144 2844 history2 5 0 0 0 history2 0.8 10.1 23.0

5.6

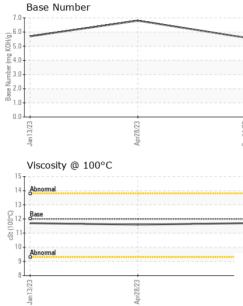
Base Number (BN) mg KOH/g ASTM D2896

5.7

6.8



OIL ANALYSIS REPORT



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NEG bry1 history2
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11.7

Submitted By: Erien White

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