

# **OIL ANALYSIS REPORT**

#### Area (97191X) Walgreens Machine Id [Walgreens] 136A62102 Component

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

Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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.

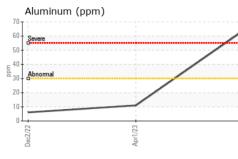
AL)		Dec	2022	Apr2023 Jul202	13	
SAMPLE INFORM	<b>/</b> ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0100234	PCA0094643	PCA0087897
Sample Date		Client Info		12 Jul 2023	01 Apr 2023	02 Dec 2022
Machine Age	mls	Client Info		419673	393573	374073
Oil Age	mls	Client Info		26100	43571	24071
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	27	17	13
Chromium	ppm	ASTM D5185m	>5	4	1	1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	64	11	6
Lead	ppm	ASTM D5185m	>30	0	0	<1
Copper	ppm	ASTM D5185m	>150	6	3	4
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	3	2	2
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	62	64	64
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	1030	966	998
Calcium	ppm	ASTM D5185m	1050	1191	1051	1137
Phosphorus	ppm	ASTM D5185m	995	1058	961	1043
Zinc	ppm	ASTM D5185m	1180	1318	1259	1250
Sulfur	ppm	ASTM D5185m	2600	3629	3206	3492
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	5	4	4
Sodium	ppm	ASTM D5185m		2	<1	1
Potassium	ppm	ASTM D5185m	>20	119	1	<1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	0.7	0.6
Nitration	Abs/cm	*ASTM D7624	>20	8.5	8.9	8.9
Sulfation	Abs/.1mm	*ASTM D7415		20.9	20.3	21.2
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
FLUID DEGRAD Oxidation	ATION Abs/.1mm	method *ASTM D7414		current 16.8	history1 16.2	history2 17.3

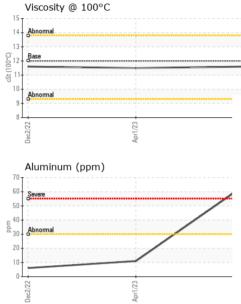
Sample Rating Trend

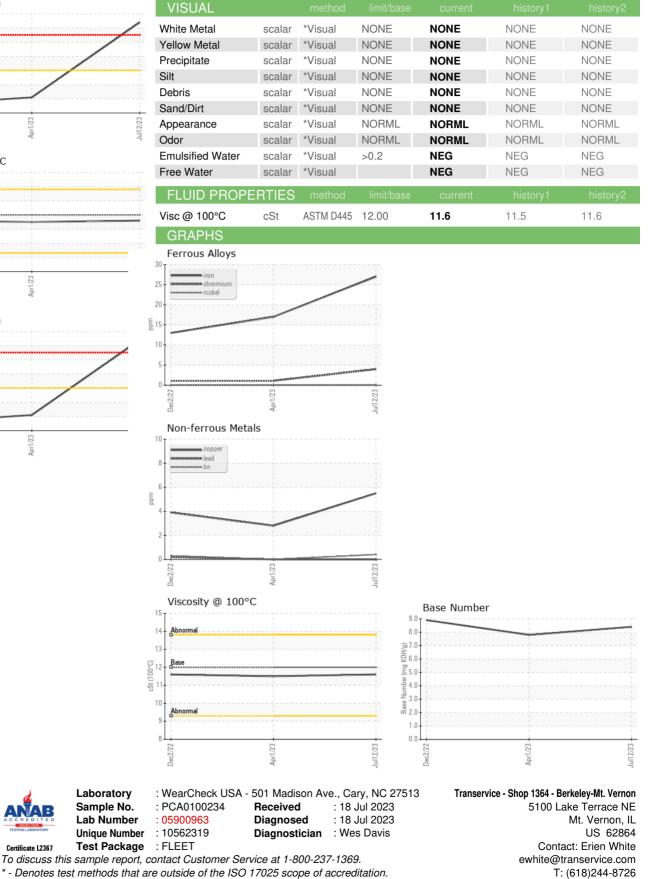
NORMAL



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\* - 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)

Certificate L2367

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