

## **OIL ANALYSIS REPORT**

#### Sample Rating Trend



### Machine Id 739250

Component Diesel Engine

Fluid PETRO CANADA DURON SHP 10W30 (--- QTS)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

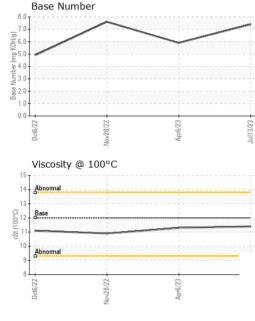
#### Fluid Condition

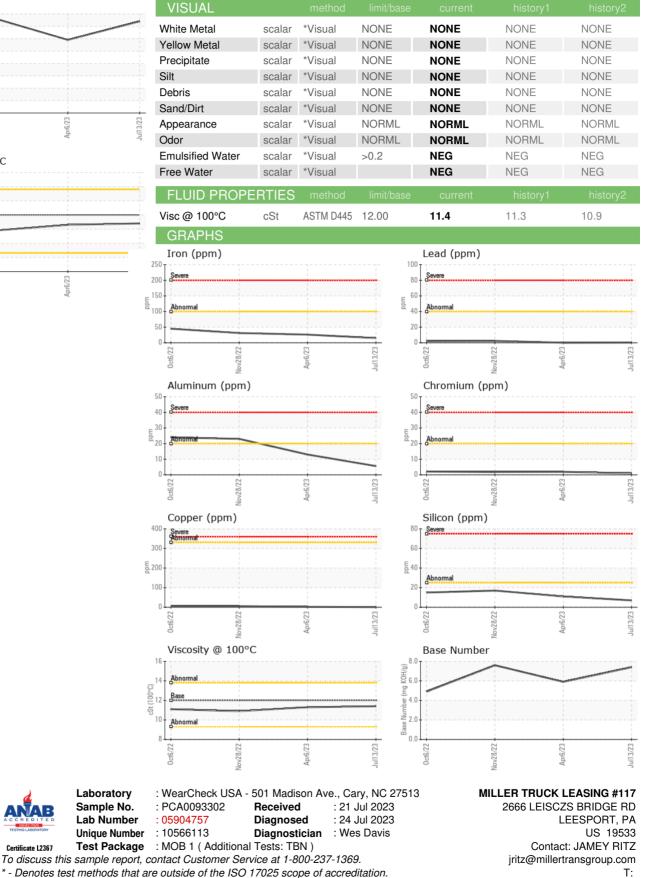
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

ITS)		Oct202	2 Nov2022	Apr2023 Ju	12023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0093302	PCA0078803	PCA0078739
Sample Date		Client Info		13 Jul 2023	06 Apr 2023	28 Nov 2022
Machine Age	mls	Client Info		133298	106839	68958
Oil Age	mls	Client Info		0	0	30000
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	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	>100	15	26	31
Chromium	ppm	ASTM D5185m	>20	1	2	2
Nickel	ppm	ASTM D5185m	>4	<1	1	<1
Titanium	ppm	ASTM D5185m		7	6	1
Silver	ppm	ASTM D5185m	>3	<1	<1	0
Aluminum	ppm	ASTM D5185m		6	13	23
Lead		ASTM D5185m	>40	٥ <1	0	2
Copper	ppm	ASTM D5185m		<1	2	6
Tin	ppm		>330	<1	<1	1
Vanadium	ppm		>10		< 1	0
Cadmium	ppm	ASTM D5185m ASTM D5185m		0	0	0
	ppm		limit/base	-	-	-
ADDITIVES		method		current	history1	history2
Boron	ppm	ASTM D5185m	2	8	8	7
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	50	58	58	59
Manganese	ppm	ASTM D5185m	0	<1	1	1
Magnesium	ppm	ASTM D5185m	950	954	938	937
Calcium	ppm	ASTM D5185m	1050	1221	1170	1239
Phosphorus	ppm	ASTM D5185m	995	1038	1014	1015
Zinc	ppm	ASTM D5185m	1180	1317	1285	1285
Sulfur	ppm	ASTM D5185m	2600	3658	3487	3294
CONTAMINAN	ITS	method			history1	history2
Ciliaan						
Shicon	ppm	ASTM D5185m	>25	7	11	17
	ppm ppm	ASTM D5185m ASTM D5185m	>25	7 2	11 3	17 2
Sodium						
Sodium	ppm	ASTM D5185m		2	3	2
Sodium Potassium INFRA-RED	ppm	ASTM D5185m ASTM D5185m	>20	2 11	3 29	2 60
Sodium Potassium INFRA-RED Soot %	ppm ppm	ASTM D5185m ASTM D5185m method	>20 limit/base	2 11 current	3 29 history1	2 60 history2
Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm %	ASTM D5185m ASTM D5185m method *ASTM D7844	>20 limit/base >3	2 11 current 0.3	3 29 history1 0.4	2 60 history2 0.4
Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	>20 limit/base >3 >20	2 11 current 0.3 9.0	3 29 history1 0.4 9.3	2 60 history2 0.4 10.4
Soot % Nitration Sulfation	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	>20 limit/base >3 >20 >30 limit/base	2 11 0.3 9.0 20.9	3 29 history1 0.4 9.3 19.6	2 60 history2 0.4 10.4 22.3



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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

Laboratory

Sample No.

Lab Number

F: