

## **OIL ANALYSIS REPORT**

#### Sample Rating Trend



### Machine Id 605571

Component Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- GAL)

#### DIAGNOSIS

#### Recommendation

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

#### Wear

Elui

Metal levels are typical for a new component breaking in.

#### Contamination

There is no indication of any contamination in the oil.

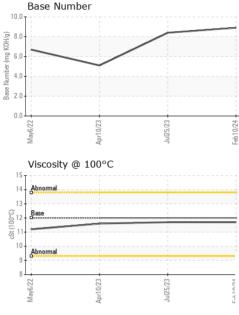
#### Fluid Condition

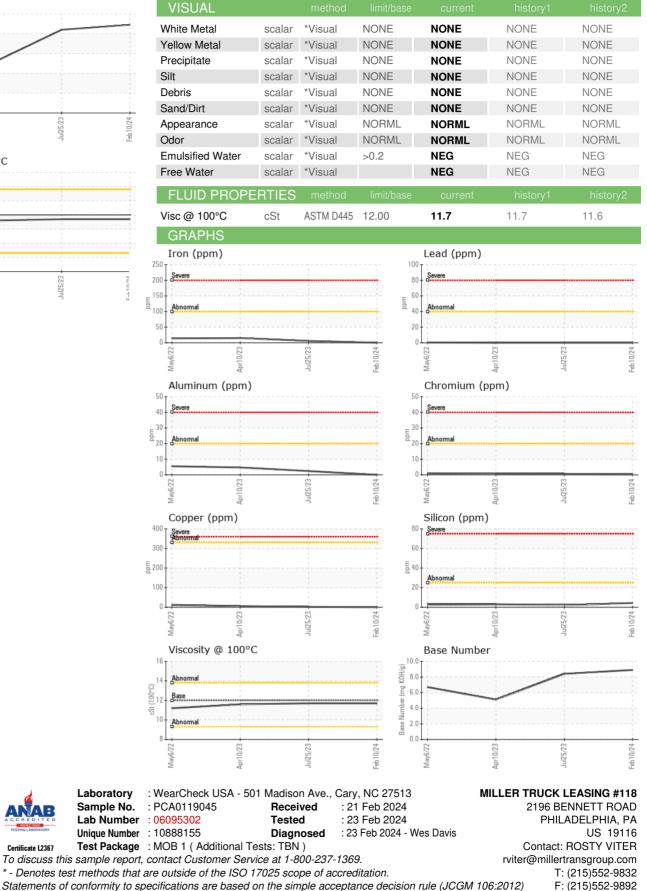
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

AL)		May202	2 Apr2023	Jul2023 Fet	2024	
SAMPLE INFORM	<b>/</b> ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0119045	PCA0102930	PCA0095754
Sample Date		Client Info		10 Feb 2024	25 Jul 2023	10 Apr 2023
Machine Age	mls	Client Info		8895	65415	61840
Oil Age	mls	Client Info		8895	65415	61840
Oil Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>100	0	6	15
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		17	2	7
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	2	5
_ead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	0	2	6
Гin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	44	4	6
Barium	ppm	ASTM D5185m	0	0	1	0
Volybdenum	ppm	ASTM D5185m	50	36	56	51
Vanganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm					
	ppm	ASTM D5185m	950	683	867	805
Calcium	ppm	ASTM D5185m ASTM D5185m	950 1050	683 1021		
					867	805
Phosphorus	ppm	ASTM D5185m	1050	1021	867 1168	805 1203
Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m	1050 995	1021 851	867 1168 1015	805 1203 921
Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180	1021 851 1026	867 1168 1015 1210	805 1203 921 1183
Phosphorus Zinc Sulfur CONTAMINAN <sup>*</sup>	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600	1021 851 1026 2683	867 1168 1015 1210 3112	805 1203 921 1183 2859 history2 3
Phosphorus Zinc Sulfur CONTAMINAN <sup>-</sup> Silicon	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1050 995 1180 2600 limit/base	1021 851 1026 2683 current	867 1168 1015 1210 3112 history1 2 <1	805 1203 921 1183 2859 history2
Phosphorus Zinc Sulfur CONTAMINAN <sup>®</sup> Silicon Sodium	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m	1050 995 1180 2600 limit/base >25	1021 851 1026 2683 current 4	867 1168 1015 1210 3112 history1 2	805 1203 921 1183 2859 history2 3
Phosphorus Zinc Sulfur CONTAMINAN <sup>®</sup> Silicon Sodium	ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25	1021 851 1026 2683 current 4 0	867 1168 1015 1210 3112 history1 2 <1	805 1203 921 1183 2859 history2 3 2
Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 <i>limit/base</i> >25 >20	1021 851 1026 2683 current 4 0 0	867 1168 1015 1210 3112 history1 2 <1 2	805 1203 921 1183 2859 history2 3 2 6 history2 0.5
Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25 >20	1021 851 1026 2683 current 4 0 0 0 current	867 1168 1015 1210 3112 history1 2 <1 2 x history1	805 1203 921 1183 2859 history2 3 2 6 history2
Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 imit/base >25 >20 imit/base >3	1021 851 1026 2683 current 4 0 0 0 current 0.1	867 1168 1015 1210 3112 history1 2 <1 2 <1 2 history1 0.2	805 1203 921 1183 2859 history2 3 2 6 history2 0.5
Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm TS ppm ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844	1050 995 1180 2600 imit/base >25 >20 imit/base >3 >20	1021 851 1026 2683 current 4 0 0 0 current 0.1 5.3	867 1168 1015 1210 3112 history1 2 <1 2 <1 2 history1 0.2 8.1	805 1203 921 1183 2859 history2 3 2 6 history2 0.5 9.5
Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm TS ppm ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844	1050 995 1180 2600 <b>limit/base</b> >25 >20 <b>limit/base</b> >3 >20 >30	1021 851 1026 2683 current 4 0 0 0 current 0.1 5.3 17.8	867 1168 1015 1210 3112 history1 2 <1 2 <1 2 history1 0.2 8.1 18.6	805 1203 921 1183 2859 history2 3 2 6 history2 0.5 9.5 20.7



# **OIL ANALYSIS REPORT**





Certificate L2367

Contact/Location: ROSTY VITER - MILPHINE