

OIL ANALYSIS REPORT

Sample Rating Trend





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.

RTS)		May2021	Oct2021 Jul2022	Nov2022 Mar2023	Jui2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101362	PCA0092397	PCA0083530
Sample Date		Client Info		17 Jul 2023	03 Mar 2023	04 Nov 2022
Machine Age	mls	Client Info		164255	152882	146416
Oil Age	mls	Client Info		0	0	0
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	18	8	24
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	5	4	3
Lead	ppm	ASTM D5185m	>40	2	0	2
Copper	ppm	ASTM D5185m	>330	1	<1	1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	5	12	9
Barium	ppm	ASTM D5185m	0	0	0	2
Molybdenum	ppm	ASTM D5185m	50	65	65	69
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	977	822	888
Calcium	ppm	ASTM D5185m	1050		011	
Dhaanharua			1050	1188	1146	1183
Phosphorus	ppm	ASTM D5185m	995	1188 1054		1183 1023
Zinc	ppm ppm				1146	
•		ASTM D5185m	995	1054	1146 921	1023
Zinc	ppm ppm	ASTM D5185m ASTM D5185m	995 1180	1054 1267	1146 921 1124	1023 1264
Zinc Sulfur	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600	1054 1267 3617	1146 921 1124 3053	1023 1264 3297
Zinc Sulfur CONTAMINAN	ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m method	995 1180 2600 limit/base	1054 1267 3617 current	1146 921 1124 3053 history1	1023 1264 3297 history2
Zinc Sulfur CONTAMINAN Silicon	ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	995 1180 2600 limit/base	1054 1267 3617 current 3	1146 921 1124 3053 history1 2	1023 1264 3297 history2 4
Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25	1054 1267 3617 current 3 5	1146 921 1124 3053 history1 2 2	1023 1264 3297 history2 4 2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25 >20	1054 1267 3617 current 3 5 3	1146 921 1124 3053 history1 2 2 2 1	1023 1264 3297 history2 4 2 3
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844	995 1180 2600 limit/base >25 >20 limit/base >3	1054 1267 3617 current 3 5 3 2 current 1.3	1146 921 1124 3053 history1 2 2 2 1 1 history1 0.8	1023 1264 3297 history2 4 2 3 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25 >20 limit/base >3 >20	1054 1267 3617 current 3 5 3 2 current	1146 921 1124 3053 history1 2 2 1 1 history1	1023 1264 3297 history2 4 2 3 history2 2.2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm TS ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7824 *ASTM D7415	995 1180 2600 limit/base >25 >20 limit/base >3 >20	1054 1267 3617 current 3 5 3 current 1.3 10.7	1146 921 1124 3053 history1 2 2 2 1 history1 0.8 8.7	1023 1264 3297 history2 4 2 3 history2 2.2 14
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm TS ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7824 *ASTM D7415	995 1180 2600 limit/base >25 >20 limit/base >3 >20 >30 limit/base	1054 1267 3617 current 3 5 3 current 1.3 10.7 20.7	1146 921 1124 3053 history1 2 2 1 1 history1 0.8 8.7 18.9	1023 1264 3297 history2 4 2 3 history2 2.2 14 26.1



cSt (100°C) B

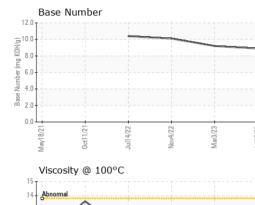
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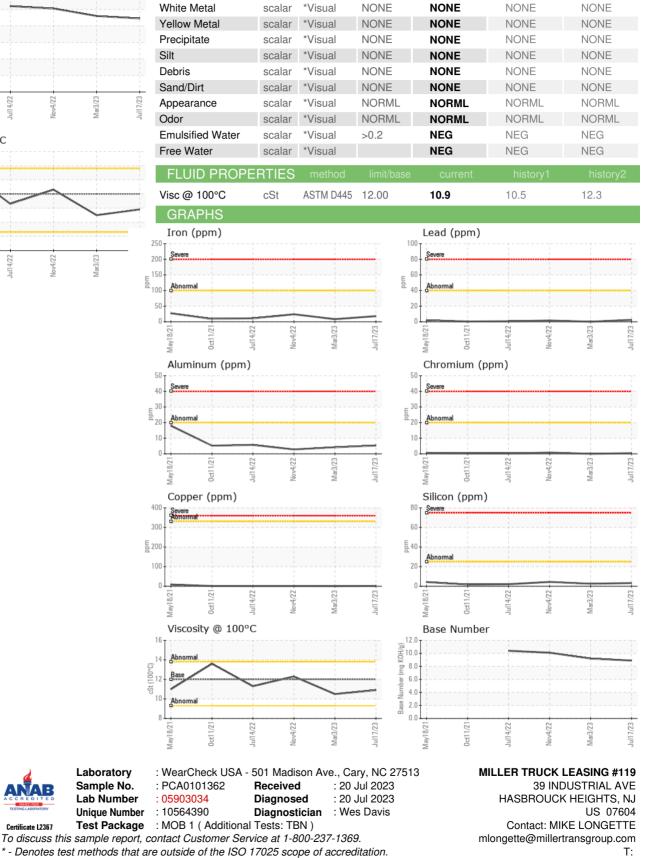
VISUAL



Jul14/22

Vov4/77

Mar3/23 -



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367

Laboratory

Sample No.

Contact/Location: MIKE LONGETTE - MILRUT

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