

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 630786 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.

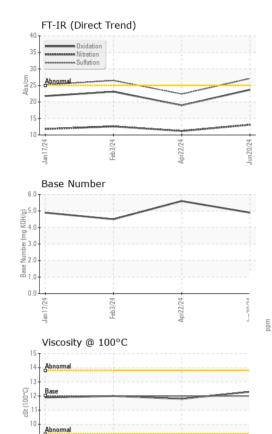
	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0128909	PCA0123972	PCA0117070
Sample Date		Client Info		20 Jun 2024	22 Apr 2024	03 Feb 2024
Machine Age	mls	Client Info		107600	83582	0
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	55	38	85
Chromium	ppm	ASTM D5185m		<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	2
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m		12	9	25
Lead	ppm	ASTM D5185m	>40	< <u>1</u>	0	0
Copper	ppm	ASTM D5185m		7	4	12
Tin	ppm	ASTM D5185m		، <1	<1	1
Vanadium	ppm	ASTM D5185m	210	<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
	pp			•	0	0
ADDITIVES		method	limit/base	current	historv1	historv2
ADDITIVES	nom	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	2	0	6
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0	2 0	0	6 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	2 0 69	0 0 64	6 0 58
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	2 0 69 <1	0 0 64 <1	6 0 58 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	2 0 69 <1 1053	0 0 64 <1 1068	6 0 58 <1 953
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	2 0 69 <1 1053 1244	0 0 64 <1 1068 1227	6 0 58 <1 953 1243
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	2 0 69 <1 1053 1244 1364	0 0 64 <1 1068 1227 1143	6 0 58 <1 953 1243 1025
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	2 0 69 <1 1053 1244	0 0 64 <1 1068 1227	6 0 58 <1 953 1243
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180	2 0 69 <1 1053 1244 1364 1467	0 0 64 <1 1068 1227 1143 1361	6 0 58 <1 953 1243 1025 1254
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	2 0 69 <1 1053 1244 1364 1467 3048 current	0 0 64 <1 1068 1227 1143 1361 3600 history1	6 0 58 <1 953 1243 1025 1254 2912 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	2 0 50 950 1050 995 1180 2600	2 0 69 <1 1053 1244 1364 1467 3048 <i>current</i> 12	0 0 64 <1 1068 1227 1143 1361 3600 history1 8	6 0 58 <1 953 1243 1025 1254 2912 history2 12
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base	2 0 69 <1 1053 1244 1364 1467 3048 current	0 0 64 <1 1068 1227 1143 1361 3600 history1	6 0 58 <1 953 1243 1025 1254 2912 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm 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	2 0 50 950 1050 995 1180 2600 limit/base	2 0 69 <1 1053 1244 1364 1467 3048 <u>current</u> 12 2	0 0 64 <1 1068 1227 1143 1361 3600 history1 8 2	6 0 58 <1 953 1243 1025 1254 2912 history2 12 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	2 0 69 <1 1053 1244 1364 1467 3048 current 12 2 2 27	0 0 64 <1 1068 1227 1143 1361 3600 history1 8 2 18	6 0 58 <1 953 1243 1025 1254 2912 history2 12 2 2 68
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 -20 limit/base	2 0 69 <1 1053 1244 1364 1467 3048 <u>current</u> 12 2 2 27 <u>current</u>	0 0 64 <1 1068 1227 1143 1361 3600 history1 8 2 18 18 history1	6 0 58 <1 953 1243 1025 1254 2912 history2 12 2 68 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	2 0 69 <1 1053 1244 1364 1467 3048 <i>current</i> 12 2 27 27 <i>current</i> 0.9	0 0 64 <1 1068 1227 1143 1361 3600 history1 8 2 18 18 history1 0.6	6 0 58 <1 953 1243 1025 1254 2912 history2 12 2 68 history2 0.7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 i mit/base >25 >20 i mit/base >3 >20	2 0 69 <1 1053 1244 1364 1467 3048 <i>current</i> 12 2 27 <i>current</i> 0.9 13.1	0 0 64 <1 1068 1227 1143 1361 3600 history1 8 2 18 2 18 history1 0.6 11.2	6 0 58 <1 953 1243 1025 1254 2912 history2 12 2 68 history2 0.7 12.6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 imit/base >25 imit/base >3 >20	2 0 69 <1 1053 1244 1364 1467 3048 <u>current</u> 12 2 27 <u>current</u> 0.9 13.1 27.1	0 0 64 <1 1068 1227 1143 1361 3600 history1 8 2 18 2 18 history1 0.6 11.2 22.4	6 0 58 <1 953 1243 1025 1254 2912 history2 12 2 68 history2 0.7 12.6 26.5



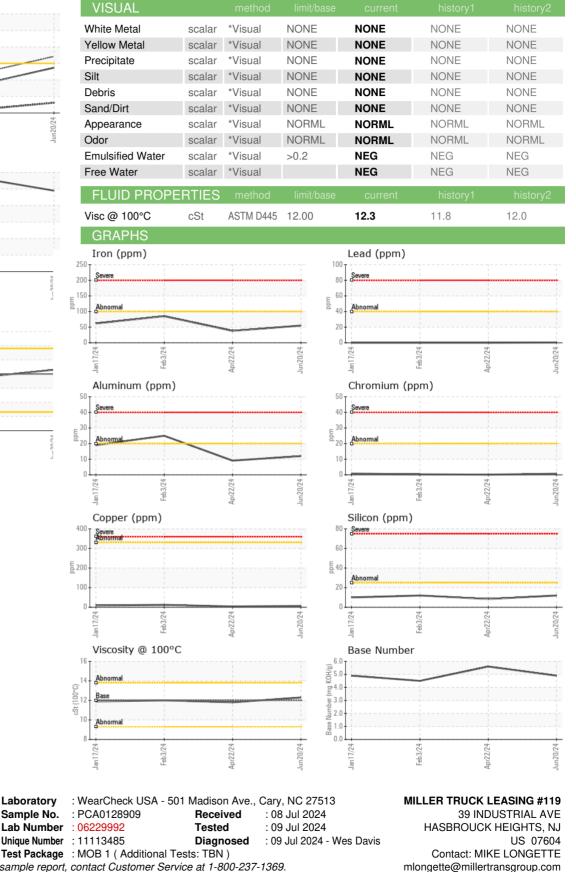
Jan 17/24

Feb3/24

OIL ANALYSIS REPORT



\pr22/24



To discuss this sample report, contact Customer Service at 1-800-237-1369.

(100°C)

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Laboratory

Sample No.

Lab Number

* - 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)

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Report Id: MILRUT [WUSCAR] 06229992 (Generated: 07/09/2024 10:36:40) Rev: 1

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