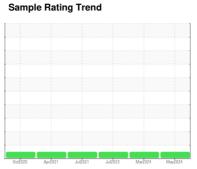


OIL ANALYSIS REPORT



NORMAL



Machine Id 402154

Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- Q

DIAGNOSIS

Recommendation

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

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

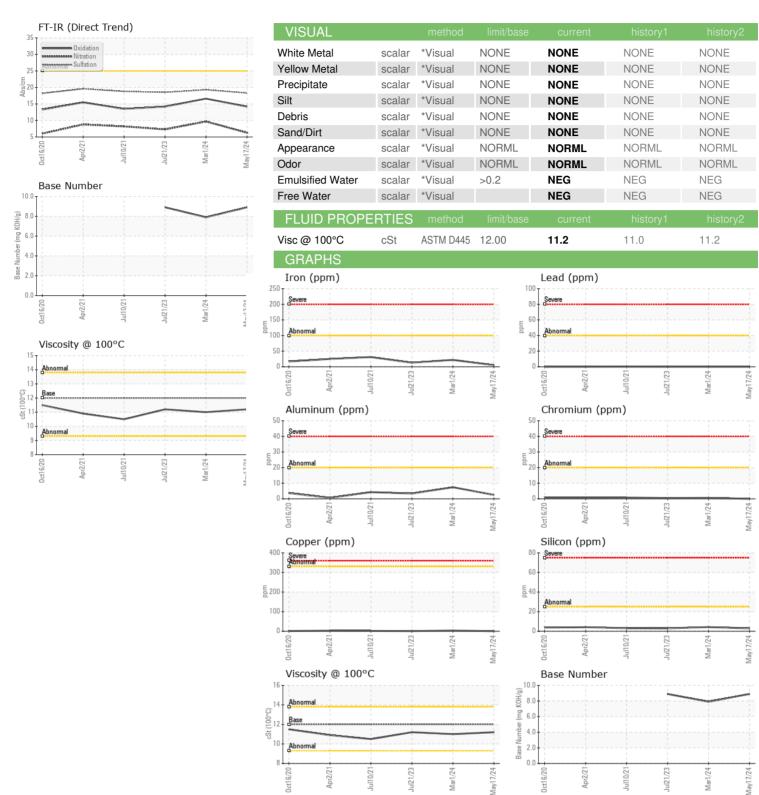
Fluid Condition

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

QTS)		Oct2020	Apr2021 Jul2021	Jul2023 Mar2024	May2024	
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0125219	PCA0118990	PCA0095776
Sample Date		Client Info		17 May 2024	01 Mar 2024	21 Jul 2023
Machine Age	mls	Client Info		141631	136997	118370
Oil Age	mls	Client Info		141631	136997	16469
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	5	22	13
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		4	<1	2
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	7	3
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	<1	3	<1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	20	5	8
Barium		AOTAL DELOC	0	^		
	ppm	ASTM D5185m	U	0	0	1
Molybdenum	ppm	ASTM D5185m ASTM D5185m	50	51	61	1 58
				-		
Molybdenum	ppm	ASTM D5185m	50	51	61	58
Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m	50	51 <1	61	58 <1
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995	51 <1 891	61 0 965	58 <1 879
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050	51 <1 891 1098	61 0 965 1258	58 <1 879 1146
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995	51 <1 891 1098 1069	61 0 965 1258 1201	58 <1 879 1146 1011
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	50 0 950 1050 995 1180	51 <1 891 1098 1069 1201	61 0 965 1258 1201 1324	58 <1 879 1146 1011 1189
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600	51 <1 891 1098 1069 1201 3693	61 0 965 1258 1201 1324 3652	58 <1 879 1146 1011 1189 3397
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600	51 <1 891 1098 1069 1201 3693	61 0 965 1258 1201 1324 3652 history1	58 <1 879 1146 1011 1189 3397 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m	50 0 950 1050 995 1180 2600	51 <1 891 1098 1069 1201 3693 current	61 0 965 1258 1201 1324 3652 history1	58 <1 879 1146 1011 1189 3397 history2 3
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25	51 <1 891 1098 1069 1201 3693 current 3 <1	61 0 965 1258 1201 1324 3652 history1 4	58 <1 879 1146 1011 1189 3397 history2 3 <1
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25 >20	51 <1 891 1098 1069 1201 3693 current 3 <1	61 0 965 1258 1201 1324 3652 history1 4 <1	58
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25 >20	51 <1 891 1098 1069 1201 3693 current 3 <1 2 current	61 0 965 1258 1201 1324 3652 history1 4 <1 9	58 <1 879 1146 1011 1189 3397 history2 3 <1 3 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base	51 <1 891 1098 1069 1201 3693 current 3 <1 2 current 0.2	61 0 965 1258 1201 1324 3652 history1 4 <1 9 history1 0.4	58 <1 879 1146 1011 1189 3397 history2 3 <1 3 history2 0.3
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base	51 <1 891 1098 1069 1201 3693 current 3 <1 2 current 0.2 6.3	61 0 965 1258 1201 1324 3652 history1 4 <1 9 history1 0.4 9.7	58 <1 879 1146 1011 1189 3397 history2 3 <1 3 history2 0.3 7.3
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20 >30	51 <1 891 1098 1069 1201 3693 current 3 <1 2 current 0.2 6.3 18.3	61 0 965 1258 1201 1324 3652 history1 4 <1 9 history1 0.4 9.7 19.3	58 <1 879 1146 1011 1189 3397 history2 3 <1 3 history2 0.3 7.3 18.5



OIL ANALYSIS REPORT







Certificate 12367

Report Id: MILPHINE [WUSCAR] 06195262 (Generated: 05/31/2024 12:33:18) Rev: 1

Sample No.

Laboratory Lab Number : 06195262 Unique Number : 11057385

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0125219

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

 st - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Received Test Package : MOB 1 (Additional Tests: TBN)

Tested : 31 May 2024 Diagnosed

: 31 May 2024 - Wes Davis

: 30 May 2024

PHILADELPHIA, PA US 19116 Contact: ROSTY VITER rviter@millertransgroup.com T: (215)552-9832

MILLER TRUCK LEASING #118

2196 BENNETT ROAD

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

Contact/Location: ROSTY VITER - MILPHINE

F: (215)552-9892