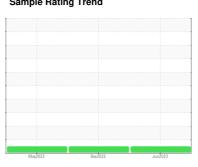


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id **610934**

Component **Diesel Engine**

PETRO CANADA DURON SHP 10W30 (--- 0

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.

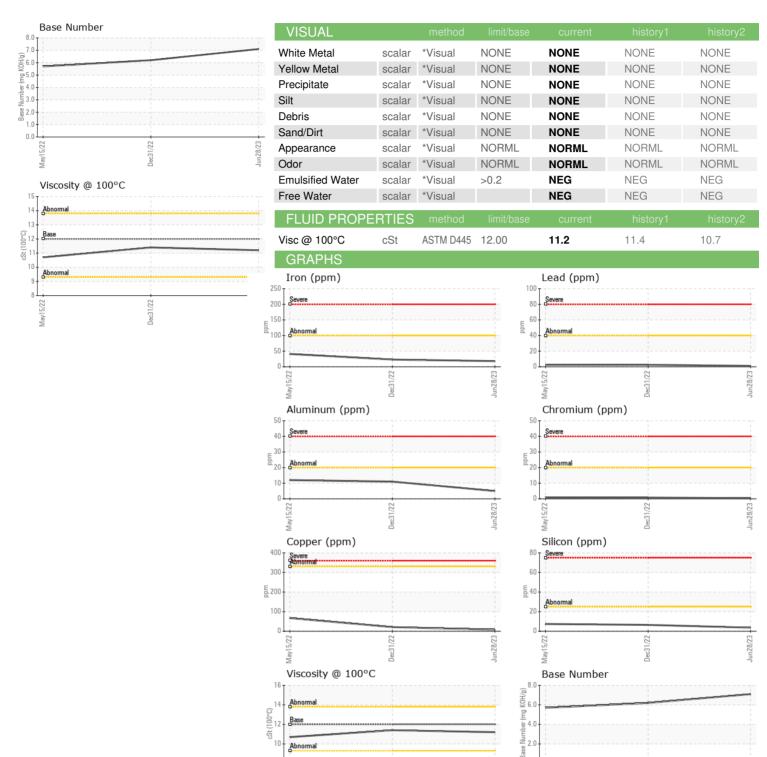
Fluid Condition

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

GAL)		Ma	y2022	Dec2022 Jun20	23	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0097322	PCA0071701	PCA0061118
Sample Date		Client Info		28 Jun 2023	31 Dec 2022	15 May 2022
Machine Age	mls	Client Info		92708	74099	51761
Oil Age	mls	Client Info		18609	22338	26055
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	23	41
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	1	2
Titanium	ppm	ASTM D5185m		20	62	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	5	11	12
Lead	ppm	ASTM D5185m	>40	1	3	3
Copper	ppm	ASTM D5185m	>330	8	21	67
Tin	ppm	ASTM D5185m	>15	2	2	4
Vanadium	ppm	ASTM D5185m		0	1	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	10	22	11
		ACTM DE10Em	0		0	0
Barium	ppm	ASTM D5185m	U	0	0	U
Molybdenum	ppm	ASTM D5185m	50	47	20	50
			50	-		
Molybdenum	ppm	ASTM D5185m	50	47	20	50
Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m	50	47 <1	20 <1	50
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950	47 <1 770	20 <1 544	50 1 761
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050	47 <1 770 1217	20 <1 544 1741	50 1 761 1152
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995	47 <1 770 1217 979	20 <1 544 1741 930	50 1 761 1152 748
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	47 <1 770 1217 979 1213	20 <1 544 1741 930 1174	50 1 761 1152 748 1039
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	47 <1 770 1217 979 1213 3111	20 <1 544 1741 930 1174 3750	50 1 761 1152 748 1039 2376
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 limit/base	47 <1 770 1217 979 1213 3111 current	20 <1 544 1741 930 1174 3750 history1	50 1 761 1152 748 1039 2376 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base	47 <1 770 1217 979 1213 3111 current 4	20 <1 544 1741 930 1174 3750 history1	50 1 761 1152 748 1039 2376 history2
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	47 <1 770 1217 979 1213 3111 current 4	20 <1 544 1741 930 1174 3750 history1 6	50 1 761 1152 748 1039 2376 history2 7
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	47 <1 770 1217 979 1213 3111 current 4 2 12	20 <1 544 1741 930 1174 3750 history1 6 4 29	50 1 761 1152 748 1039 2376 history2 7 2
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	47 <1 770 1217 979 1213 3111 current 4 2 12 current	20 <1 544 1741 930 1174 3750 history1 6 4 29	50 1 761 1152 748 1039 2376 history2 7 2 32
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	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base	47 <1 770 1217 979 1213 3111 current 4 2 12 current 0.3	20 <1 544 1741 930 1174 3750 history1 6 4 29 history1 0.4	50 1 761 1152 748 1039 2376 history2 7 2 32 history2 0.4
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	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base	47 <1 770 1217 979 1213 3111 current 4 2 12 current 0.3 8.7	20 <1 544 1741 930 1174 3750 history1 6 4 29 history1 0.4 9.5	50 1 761 1152 748 1039 2376 history2 7 2 32 history2 0.4 9.5
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 D7844 *ASTM D7624 *ASTM D7614	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20 >30	47 <1 770 1217 979 1213 3111 current 4 2 12 current 0.3 8.7 19.2	20 <1 544 1741 930 1174 3750 history1 6 4 29 history1 0.4 9.5 22.6	50 1 761 1152 748 1039 2376 history2 7 2 32 history2 0.4 9.5 21.4



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No.

Lab Number **Unique Number**

: 05984534 : 10701829

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : PCA0097322

: 20 Oct 2023 Diagnosed : 23 Oct 2023 Diagnostician : Wes Davis

Test Package : MOB 1 (Additional Tests: TBN)

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

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

MILLER TRUCK LEASING #123

66 KELLER AVENUE LANCASTER, PA US 17601 Contact: RON ROBERTS

rroberts@millertransgroup.com

Contact/Location: RON ROBERTS - MILLAN

T: (717)945-6205 F: (717)945-5818

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