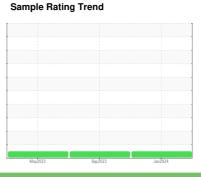


OIL ANALYSIS REPORT

(89632X) Walgreens - Tractor [Walgreens - Tractor] 136A68020

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

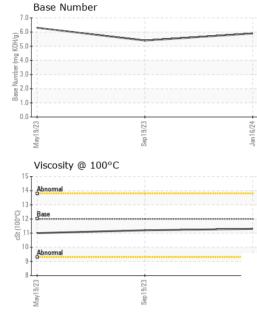
Fluid Condition

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

07 WH 22 H H 01 H	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0110578	PCA0093477	PCA0093511
Sample Date		Client Info		16 Jan 2024	19 Sep 2023	19 May 2023
Machine Age	mls	Client Info		196531	186473	174263
Oil Age	mls	Client Info		196531	186473	174263
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	>80	53	46	36
Chromium	ppm	ASTM D5185m	>5	1	1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	~ L	5	20	6
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	4	2	3
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm		>150	2	1	1
Tin		ASTM D5185m	>5	0	0	<1
Vanadium	ppm ppm	ASTM D5185m	>5	ں <1	<1	<1
Cadmium		ASTM D5185m		0	0	0
ADDITIVES	ppm		limit/base			
		method		current	history1	history2
Boron	ppm	ASTM D5185m	2	11	11	10
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm ppm	ASTM D5185m	50	51	41	50
Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m	50	51 <1	41 <1	50 <1
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950	51 <1 800	41 <1 801	50 <1 827
Molybdenum Manganese Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050	51 <1 800 1114	41 <1 801 1344	50 <1 827 1330
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995	51 <1 800 1114 901	41 <1 801 1344 977	50 <1 827 1330 1035
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180	51 <1 800 1114 901 1181	41 <1 801 1344 977 1223	50 <1 827 1330 1035 1273
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 <1 800 1114 901	41 <1 801 1344 977 1223 3415	50 <1 827 1330 1035 1273 3857
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	50 0 950 1050 995 1180 2600	51 <1 800 1114 901 1181 2814	41 <1 801 1344 977 1223 3415 history1	50 <1 827 1330 1035 1273 3857 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 0 950 1050 995 1180 2600	51 <1 800 1114 901 1181 2814 current	41 <1 801 1344 977 1223 3415 history1	50 <1 827 1330 1035 1273 3857 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	51 <1 800 1114 901 1181 2814	41 <1 801 1344 977 1223 3415 history1 8	50 <1 827 1330 1035 1273 3857 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 0 950 1050 995 1180 2600	51 <1 800 1114 901 1181 2814 current	41 <1 801 1344 977 1223 3415 history1	50 <1 827 1330 1035 1273 3857 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >20	51 <1 800 1114 901 1181 2814 current 6 2	41 <1 801 1344 977 1223 3415 history1 8	50 <1 827 1330 1035 1273 3857 history2 7
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >20	51 <1 800 1114 901 1181 2814 current 6 2	41 <1 801 1344 977 1223 3415 history1 8 3 2	50 <1 827 1330 1035 1273 3857 history2 7 2 4
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >20 >20	51 <1 800 1114 901 1181 2814 current 6 2 1 current	41 <1 801 1344 977 1223 3415 history1 8 3 2	50 <1 827 1330 1035 1273 3857 history2 7 2 4 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >20 >20 limit/base	51 <1 800 1114 901 1181 2814 current 6 2 1 current 0.8	41 <1 801 1344 977 1223 3415 history1 8 3 2 history1 0.8	50 <1 827 1330 1035 1273 3857 history2 7 2 4 history2 0.7
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 D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	50 0 950 1050 995 1180 2600 limit/base >20 >20	51 <1 800 1114 901 1181 2814 current 6 2 1 current 0.8 11.0	41 <1 801 1344 977 1223 3415 history1 8 3 2 history1 0.8 11.2	50 <1 827 1330 1035 1273 3857 history2 7 2 4 history2 0.7 10.3
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 D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	50 0 950 1050 995 1180 2600 limit/base >20 >20 limit/base >3 >20 >30	51 <1 800 1114 901 1181 2814 current 6 2 1 current 0.8 11.0 22.8	41 <1 801 1344 977 1223 3415 history1 8 3 2 history1 0.8 11.2 23.5	50 <1 827 1330 1035 1273 3857 history2 7 2 4 history2 0.7 10.3 22.2



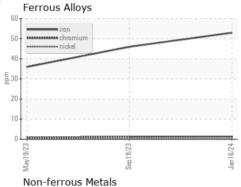
OIL ANALYSIS REPORT

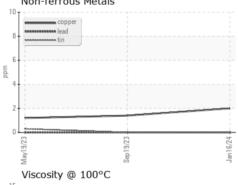


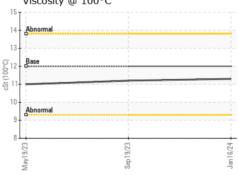
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

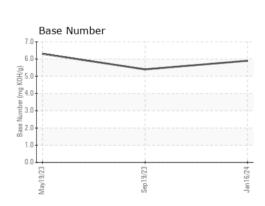
FLUID PROP	ERIIES	method			riistory i	History2
Visc @ 100°C	cSt	ASTM D445	12.00	11.3	11.2	11.0

GRAPHS











Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10844012 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0110578 : 06067335

Recieved : 22 Jan 2024 Diagnosed : 23 Jan 2024

Diagnostician : Wes Davis

Transervice - Shop 1376 - Berkeley-Linden

3425 Tremley Point Road Linden, NJ US 07036

Contact: Shop 1376 Oil Analysis shop1376@transervice.com

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.

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

T:

F: