

OIL ANALYSIS REPORT

Sample Rating Trend WEAR

VOLVO TRACTOR MANUAL 26360 (S/N EN173859)

Diesel Engine

PETRO CANADA DURON SHP 10W30 (44 QTS)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

📥 Wear

Valve wear is indicated. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

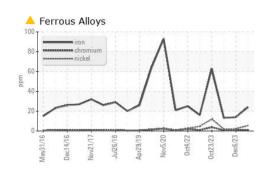
Fluid Condition

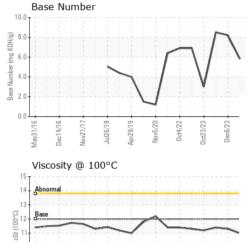
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

			16 Nov2017 Jul2018 Ap	r2019 Nov2020 Oct2022 Oct2023		
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0111474	PCA0108047	PCA0108043
Sample Date		Client Info		30 Jan 2024	06 Dec 2023	13 Nov 2023
Machine Age	mls	Client Info		475621	0	490172
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	24	14	13
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<u> </u>	2	2
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	9	7	6
Lead	ppm	ASTM D5185m	>40	<1	1	<1
Copper	ppm	ASTM D5185m	>330	3	2	2
Tin	ppm	ASTM D5185m		1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
	ppm	method ASTM D5185m	limit/base	current <1	<mark>history1</mark> 2	history2 2
Boron	ppm ppm					
ADDITIVES Boron Barium Molybdenum		ASTM D5185m	2	<1	2	2
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0	<1 0	2	2 0
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	<1 0 58	2 0 61	2 0 60
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	<1 0 58 <1	2 0 61 <1	2 0 60 <1
Boron Barium Molybdenum	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	<1 0 58 <1 932	2 0 61 <1 1046	2 0 60 <1 922
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	<1 0 58 <1 932 990 1003	2 0 61 <1 1046 1133	2 0 60 <1 922 1051
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	<1 0 58 <1 932 990	2 0 61 <1 1046 1133 1110	2 0 60 <1 922 1051 999
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180	<1 0 58 <1 932 990 1003 1211	2 0 61 <1 1046 1133 1110 1327	2 0 60 <1 922 1051 999 1189
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	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	<1 0 58 <1 932 990 1003 1211 2710	2 0 61 <1 1046 1133 1110 1327 3196	2 0 60 <1 922 1051 999 1189 3050
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	<1 0 58 <1 932 990 1003 1211 2710 current 8	2 0 61 <1 1046 1133 1110 1327 3196 history1 6	2 0 60 <1 922 1051 999 1189 3050 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	<1 0 58 <1 932 990 1003 1211 2710 current	2 0 61 <1 1046 1133 1110 1327 3196 history1	2 0 60 <1 922 1051 999 1189 3050 history2 6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	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 >25	<1 0 58 <1 932 990 1003 1211 2710 current 8 16	2 0 61 <1 1046 1133 1110 1327 3196 history1 6 11	2 0 60 <1 922 1051 999 1189 3050 history2 6 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20	<1 0 58 <1 932 990 1003 1211 2710 current 8 16 19 current	2 0 61 <1 1046 1133 1110 1327 3196 history1 6 11 15	2 0 60 <1 922 1051 999 1189 3050 history2 6 8 8 16
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm i ppm i	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	<1 0 58 <1 932 990 1003 1211 2710 current 8 16 19 current 0.3	2 0 61 <1 1046 1133 1110 1327 3196 history1 6 11 15 history1 0.2	2 0 60 <1 922 1051 999 1189 3050 history2 6 8 16 8 16
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 .20 limit/base >3 >20	<1 0 58 <1 932 990 1003 1211 2710 current 8 16 19 current	2 0 61 <1 1046 1133 1110 1327 3196 history1 6 11 15 history1	2 0 60 <1 922 1051 999 1189 3050 history2 6 8 16 8 16
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 ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 .20 limit/base >3 >20	<1 0 58 <1 932 990 1003 1211 2710 current 8 16 19 current 0.3 9.4	2 0 61 <1 1046 1133 1110 1327 3196 history1 6 11 15 history1 0.2 7.3	2 0 60 <1 922 1051 999 1189 3050 history2 6 8 16 8 16 history2 0.1 6.8
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 ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25 	<1 0 58 <1 932 990 1003 1211 2710 current 8 16 19 current 0.3 9.4 20.8	2 0 61 <1 1046 1133 1110 1327 3196 history1 6 11 15 history1 0.2 7.3 19.0	2 0 60 <1 922 1051 999 1189 3050 history2 6 8 16 8 16 0.1 6.8 19.2



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 PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.0	11.3	11.4
GRAPHS						

Mav31 Decl

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14

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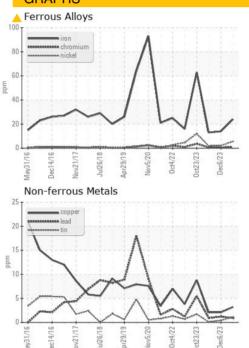
10

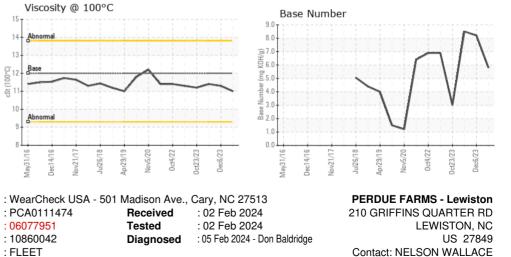
Abnorm

: PCA0111474

May31/16 Dec14/16 Nov21/17

cSt (100°C)







Abnorm

May31/16

Dec14/16

126/18 29/19

> Test Package : FLEET Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. nelson.wallace2@perdue.com * - 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)

Laboratory

Sample No.

Lab Number : 06077951

Unique Number : 10860042

Oct23/23 Dec6/23 -

0ct4/22

Contact/Location: NELSON WALLACE - PERLEWNC

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