

OIL ANALYSIS REPORT

Area (89820X) Walgreens - Tractor [Walgreens - Tractor] 136A68032

Diesel Engine

Fluid PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

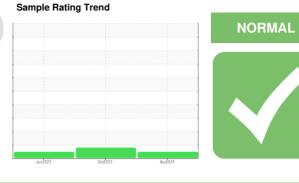
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

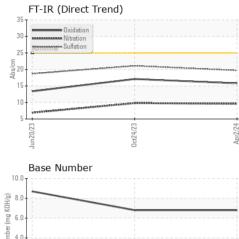
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

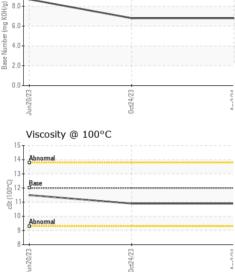


SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0123044	PCA0093468	PCA0093545
Sample Date		Client Info		02 Apr 2024	24 Oct 2023	20 Jun 2023
Machine Age	mls	Client Info		170219	162848	151911
Oil Age	mls	Client Info		170219	10937	151911
Oil Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	ABNORMAL	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	40	43	24
Chromium	ppm	ASTM D5185m	>5	1	2	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		2	12	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	8	4	3
Lead	ppm	ASTM D5185m	>30	0	2	<1
Copper	ppm	ASTM D5185m	>150	34	1 70	8
Tin	ppm	ASTM D5185m	>5	<1	1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 10	history1 13	history2 81
	ppm ppm					
Boron		ASTM D5185m	2	10	13	81
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0	10 0	13 1	81 11
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	10 0 55	13 1 49	81 11 43
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	10 0 55 <1	13 1 49 1	81 11 43 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	10 0 55 <1 901	13 1 49 1 792	81 11 43 1 269
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	10 0 55 <1 901 1179	13 1 49 1 792 1274	81 11 43 1 269 2116
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	10 0 55 <1 901 1179 963	13 1 49 1 792 1274 891	81 11 43 1 269 2116 1060
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	10 0 55 <1 901 1179 963 1221	13 1 49 1 792 1274 891 1196	81 11 43 1 269 2116 1060 1250
Boron Barium 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 ASTM D5185m	2 0 50 950 1050 995 1180 2600	10 0 55 <1 901 1179 963 1221 3438	13 1 49 1 792 1274 891 1196 2955	81 11 43 1 269 2116 1060 1250 4019
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 ASTM D5185m	2 0 50 950 1050 995 1180 2600	10 0 555 <1 901 1179 963 1221 3438 current	13 1 49 1 792 1274 891 1196 2955 history1	81 11 43 1 269 2116 1060 1250 4019 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 ASTM D5185m	2 0 50 950 1050 995 1180 2600	10 0 555 <1 901 1179 963 1221 3438 current 5	13 1 49 1 792 1274 891 1196 2955 history1 9	81 11 43 1 269 2116 1060 1250 4019 history2 16
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 >20	10 0 55 <1 901 1179 963 1221 3438 current 5 3	13 1 49 1 792 1274 891 1196 2955 history1 9 7	81 11 43 1 269 2116 1060 1250 4019 history2 16 13
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 >20	10 0 55 <1 901 1179 963 1221 3438 current 5 3 3 3	13 1 49 1 792 1274 891 1196 2955 history1 9 7 7	81 11 43 1 269 2116 1060 1250 4019 history2 16 13 14
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 Imit/base >20	10 0 55 <1 901 1179 963 1221 3438 current 5 3 3 3 3	13 1 49 1 792 1274 891 1196 2955 history1 9 7 7 7	81 11 43 1 269 2116 1060 1250 4019 history2 16 13 14 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 >20 20 limit/base >20	10 0 55 <1 901 1179 963 1221 3438 current 5 3 3 3 current 0.6	13 1 49 1 792 1274 891 1196 2955 history1 9 7 7 history1 0.7	81 11 43 1 269 2116 1060 1250 4019 history2 16 13 14 history2 0.3
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 50 950 1050 995 1180 2600 <i>imit/base</i> >20 <i>imit/base</i> >3 >20	10 0 55 <1 901 1179 963 1221 3438 current 5 3 3 3 current 0.6 9.6	13 1 49 1 792 1274 891 1196 2955 history1 9 7 7 history1 0.7 9.8	81 11 43 1 269 2116 1060 1250 4019 history2 16 13 14 history2 0.3 6.9
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 D7844 *ASTM D7624 *ASTM D7415	2 0 0 50 0 950 1050 995 1180 2600 imit/base >20 20 20 imit/base >3 >20 3 3	10 0 55 <1 901 1179 963 1221 3438 <i>current</i> 5 3 3 3 <i>current</i> 0.6 9.6 19.7 <i>current</i>	13 1 49 1 792 1274 891 1196 2955 history1 9 7 7 history1 0.7 9.8 21.1 history1	81 11 43 1 269 2116 1060 1250 4019 history2 16 13 14 history2 0.3 6.9 18.7 history2
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 0 950 1050 995 1180 2600 imit/base >20 imit/base >3 >20 >3 >20	10 0 55 <1 901 1179 963 1221 3438 <u>current</u> 5 3 3 3 3 <u>current</u> 0.6 9.6 19.7	13 1 49 1 792 1274 891 1196 2955 history1 9 7 7 history1 0.7 9.8 21.1	81 11 43 1 269 2116 1060 1250 4019 history2 16 13 14 history2 0.3 6.9 18.7

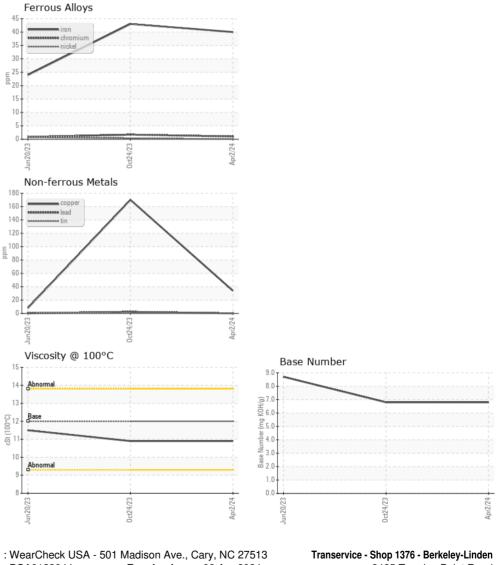


OIL ANALYSIS REPORT





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	10.9	10.9	11.5
GRAPHS						



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0123044 Sample No. Received : 08 Apr 2024 3425 Tremley Point Road Lab Number : 06141985 Tested : 09 Apr 2024 Linden, NJ Unique Number : 10966793 Diagnosed : 09 Apr 2024 - Wes Davis US 07036 Test Package : FLEET Contact: Shop 1376 Oil Analysis Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. shop1376@transervice.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Т: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Submitted By: Ryan Booth Page 2 of 2