

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

(94693X) Walgreens - Tractor [Walgreens - Tractor] 136A62052

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.

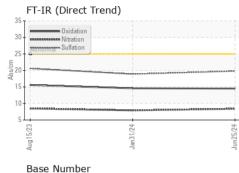
Fluid Condition

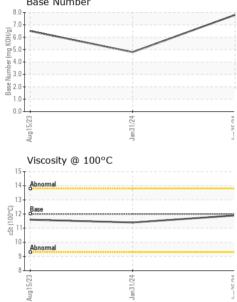
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0123068	PCA0110558	PCA0093534
Sample Date		Client Info		25 Jun 2024	31 Jan 2024	15 Aug 2023
Machine Age	mls	Client Info		520333	466052	466052
Oil Age	mls	Client Info		54281	466052	44371
Oil Changed		Client Info		Changed	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	20.2	NEG	NEG	NEG
-	_			NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	34	49	35
Chromium	ppm	ASTM D5185m		3	5	3
Nickel	ppm	ASTM D5185m	>2	0	<1	1
Titanium	ppm	ASTM D5185m		20	5	3
Silver	ppm	ASTM D5185m	>3	<1	0	2
Aluminum	ppm	ASTM D5185m		16	<u> </u>	14
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m		4	8	9
Tin	ppm	ASTM D5185m	>5	<1	1	1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 16	history1 9	history2 4
	ppm ppm					
Boron		ASTM D5185m	2	16	9	4
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0	16 <1	9 0	4 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	16 <1 48	9 0 56	4 0 69
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	16 <1 48 <1	9 0 56 <1	4 0 69 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	16 <1 48 <1 813	9 0 56 <1 881 1199 997	4 0 69 <1 1058 1434 1228
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	16 <1 48 <1 813 1303	9 0 56 <1 881 1199	4 0 69 <1 1058 1434 1228 1466
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	16 <1 48 <1 813 1303 945	9 0 56 <1 881 1199 997	4 0 69 <1 1058 1434 1228
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	16 <1 48 <1 813 1303 945 1222	9 0 56 <1 881 1199 997 1214	4 0 69 <1 1058 1434 1228 1466
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 0 950 1050 995 1180 2600	16 <1 48 <1 813 1303 945 1222 3037	9 0 56 <1 881 1199 997 1214 2944	4 0 69 <1 1058 1434 1228 1466 3454
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	2 0 50 950 1050 995 1180 2600	16 <1 48 <1 813 1303 945 1222 3037 current	9 0 56 <1 881 1199 997 1214 2944 history1	4 0 69 <1 1058 1434 1228 1466 3454 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	16 <1 48 <1 813 1303 945 1222 3037 current 5	9 0 56 <1 881 1199 997 1214 2944 history1 5	4 0 69 <1 1058 1434 1228 1466 3454 history2 6
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	2 0 50 0 950 1050 995 1180 2600 limit/base >20	16 <1 48 <1 813 1303 945 1222 3037 current 5 0	9 0 56 <1 881 1199 997 1214 2944 history1 5 2	4 0 69 <1 1058 1434 1228 1466 3454 history2 6 2
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 imit/base >20	16 <1 48 <1 813 1303 945 1222 3037 current 5 0 2	9 0 56 <1 881 1199 997 1214 2944 history1 5 2 2 <1	4 0 69 <1 1058 1434 1228 1466 3454 history2 6 2 3
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 0 950 1050 995 1180 2600 Imit/base >20 >20	16 <1 48 <1 813 1303 945 1222 3037 current 5 0 2 2	9 0 56 <1 881 1199 997 1214 2944 history1 5 2 <1 history1	4 0 69 <1 1058 1434 1228 1466 3454 history2 6 2 3 3 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	16 <1 48 <1 813 1303 945 1222 3037 <i>current</i> 5 0 2 <i>current</i> 0.7	9 0 56 <1 881 1199 997 1214 2944 history1 5 2 <1 5 2 <1 history1 0.7	4 0 69 <1 1058 1434 1228 1466 3454 history2 6 2 3 3 history2 0.9
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> >20	16 <1 48 <1 813 1303 945 1222 3037 <i>current</i> 5 0 2 <i>current</i> 0.7 8.4	9 0 56 <1 881 1199 997 1214 2944 history1 5 2 2 <1 5 2 1 0.7 7.9	4 0 69 <1 1058 1434 1228 1466 3454 history2 6 2 3 3 history2 0.9 8.5
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 >30	16 <1 48 <1 813 1303 945 1222 3037 current 5 0 2 current 0.7 8.4 19.8	9 0 56 <1 881 1199 997 1214 2944 history1 5 2 <1 5 2 <1 0.7 7.9 18.9	4 0 69 <1 1058 1434 1228 1466 3454 history2 6 2 3 history2 0.9 8.5 20.6 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 D7844 *ASTM D7844	2 0 0 50 0 950 1050 995 1180 2600 2600 20 20 20 20 20 3 20 20 20 3 3 20 20 20 20 20 20 20 20 20 20 20 20 20	16 <1 48 <1 813 1303 945 1222 3037 current 5 0 2 2 current 0.7 8.4 19.8	9 0 56 <1 881 1199 997 1214 2944 history1 5 2 2 <1 5 2 <1 0.7 7.9 18.9 history1	4 0 69 <1 1058 1434 1228 1466 3454 history2 6 2 3 history2 0.9 8.5 20.6



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	ERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.9	11.4	11.6
GRAPHS Ferrous Alloys						
A0 iron iron iron iron irokel 30 20 0 CS2 10 0 CS2 10 0 Non-ferrous Meta	+571Eurer Ils		Jun25/24			
8 - Copper Seat	Jan31/24		Jun25/24			
₹ Viscosity @ 100°			٦٢	De se Nissel		
¹⁵			8.0	Base Number		
14 Abnormal			7.0			
13-						
12 Base			(B)HOX BW HOX BW 190 4.0		\checkmark	
			E.		1	

4.0 4.0 Vumper 3.0 ase 2.0 1.0 0.0

Aug15/23

Jun25/24 -

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Transervice - Shop 1376 - Berkeley-Linden Sample No. : PCA0123068 Received : 15 Jul 2024 3425 Tremley Point Road Lab Number : 06235515 Tested : 15 Jul 2024 Linden, NJ Unique Number : 11124349 US 07036 Diagnosed : 15 Jul 2024 - Wes Davis 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. T: F:

Jan31/24

Aug15/23

St (100°C)

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

Jan31/24