

OIL ANALYSIS REPORT

Sample Rating Trend



BM-167

Component Diesel Engine Fluid

PETRO CANADA DURON SHP 10W30 (10 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.

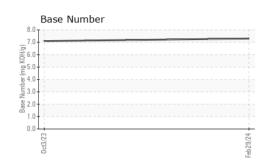
Fluid Condition

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

)			0ct2023	Feb2024		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0114012	PCA0105189	
Sample Date		Client Info		29 Feb 2024	03 Oct 2023	
Machine Age	mls	Client Info		96762	32272	
Oil Age	mls	Client Info		34328	32272	
Oil Changed		Client Info		Changed	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	21	33	
Chromium	ppm	ASTM D5185m	>20	0	0	
Nickel	ppm	ASTM D5185m	>4	0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	0	<1	
Aluminum	ppm	ASTM D5185m	>20	10	24	
Lead	ppm	ASTM D5185m	>40	0	0	
Copper	ppm	ASTM D5185m	>330	0	6	
Tin	ppm	ASTM D5185m	>15	<1	1	
Vanadium	ppm	ASTM D5185m		0	<1	
Cadmium	ppm	ASTM D5185m		0	0	
	pp	No I III Bortoolii		U	0	
ADDITIVES	PP	method	limit/base	current	history1	history2
	ppm		limit/base		-	history2
ADDITIVES		method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	2	current <1	history1 2	
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0	current <1 1	history1 2 0	
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current <1 1 61	history1 2 0 59	
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current <1 1 61 0	history1 2 0 59 <1	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current <1 1 61 0 973	history1 2 0 59 <1 1009	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	Current <1 1 61 0 973 1093	history1 2 0 59 <1 1009 1166	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	Current <1 61 0 973 1093 1064	history1 2 0 59 <1 1009 1166 1035	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180	current <1 1 61 0 973 1093 1064 1273	history1 2 0 59 <1 1009 1166 1035 1294	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	Current <1 1 61 0 973 1093 1064 1273 2704	history1 2 0 59 <1 1009 1166 1035 1294 3110	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	current <1 1 61 0 973 1093 1064 1273 2704 current	history1 2 0 59 <1 1009 1166 1035 1294 3110 history1	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	current <1 1 61 0 973 1093 1064 1273 2704 current 6	history1 2 0 59 <1 1009 1166 1035 1294 3110 history1 8	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	<1 1 61 0 973 1093 1064 1273 2704 current 6 0	history1 2 0 59 <1 1009 1166 1035 1294 3110 history1 8 2	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20	<1 1 61 0 973 1093 1064 1273 2704 current 6 0 20	history1 2 0 59 <1 1009 1166 1035 1294 3110 history1 8 2 65	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 -20 limit/base	<1 1 61 0 973 1093 1064 1273 2704 current 6 0 20 current	history1 2 0 59 <1 1009 1166 1035 1294 3110 history1 8 2 65 history1	 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base	current <1 1 61 0 973 1093 1064 1273 2704 current 6 0 20 current 0.5	history1 2 0 59 <1 1009 1166 1035 1294 3110 history1 8 2 65 history1 0.4	 history2 history2
ADDITIVES 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	method ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> >3 >20	current <1 1 61 0 973 1093 1064 1273 2704 current 6 0 20 current 0.5 9.8	history1 2 0 59 <1 1009 1166 1035 1294 3110 history1 8 2 65 history1 0.4 9.9	 history2 history2
ADDITIVES 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	method ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >25 20 imit/base >3 >20 >3	<1 1 61 0 973 1093 1064 1273 2704 current 6 0 20 current 0.5 9.8 20.4	history1 2 0 59 <1 1009 1166 1035 1294 3110 history1 8 2 65 history1 0.4 9.9 20.4	 history2 history2 history2
ADDITIVES 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	method ASTM D5185m ASTM D7185M *ASTM D7624 *ASTM D7415 method	2 0 50 0 950 1050 995 1180 2600 imit/base >25 >20 imit/base >3 >20 >30	<1 1 61 0 973 1093 1064 1273 2704 current 6 0 20 current 0.5 9.8 20.4	history1 2 0 59 <1 1009 1166 1035 1294 3110 history1 8 2 65 history1 0.4 9.9 20.4 history1	 history2 history2 history2 history2

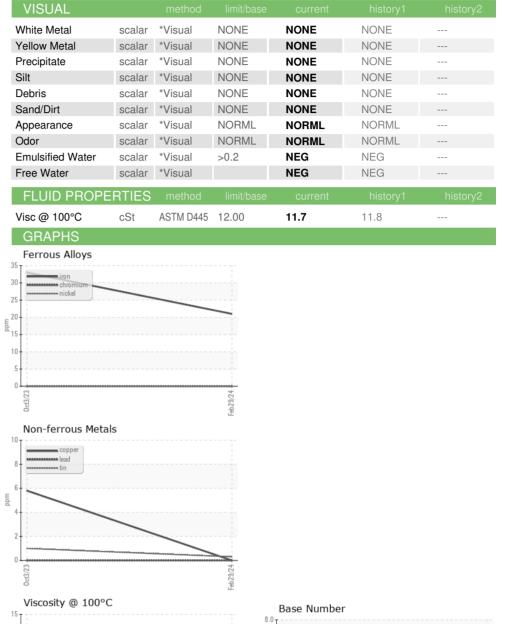


OIL ANALYSIS REPORT



Viscosity @ 100°C 15 14





7.0

(B/HOX Bu);

u) 4.0 Mumber 3.0 88 2.0

> 1.0 0.0

Feb29/24

: 05 Mar 2024

:06 Mar 2024



Unique Number : 10912662 : 06 Mar 2024 - Wes Davis Diagnosed Test Package : FLEET Contact: Jody Greer Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. jgreer@bluemaxtrucking.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (980)225-9968 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (704)588-2901

Received

Tested

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

14

13

8

Laboratory

Sample No.

Lab Number : 06109165

0ct3/23

: PCA0114012

Abnorma

St (100°C)

BLUE MAX TRUCKING

CHARLOTTE, NC

US 28273

1015 E. WESTINGHOUSE BLVD.