

OIL ANALYSIS REPORT

Sample Rating Trend





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.

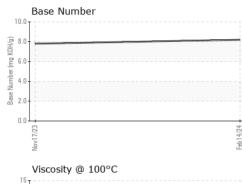
Fluid Condition

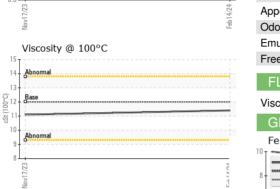
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0107928	PCA0110778	
Sample Date		Client Info		14 Feb 2024	17 Nov 2023	
Machine Age	mls	Client Info		223365	0	
Oil Age	mls	Client Info		10710	15322	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METAL	9	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>120	8	10	
Chromium	ppm	ASTM D5185m	>20	<1	<1	
Nickel	ppm	ASTM D5185m	>5	<1	2	
Titanium	ppm	ASTM D5185m	>2	0	0	
Silver	ppm	ASTM D5185m	>2	0	<1 3	
Aluminum	ppm	ASTM D5185m	>20	3		
Lead	ppm	ASTM D5185m	>40	0	<1	
Copper	ppm	ASTM D5185m	>330	1	2	
Tin	ppm	ASTM D5185m	>15	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
		ACTM DE10Em		•	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES	ppm	ASTM D5185m method	limit/base	0 current	0 history1	history2
	ppm ppm		limit/base	-	-	
ADDITIVES		method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	2 0 50	current 3	history1 2	history2
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	2 0	current 3 0	history1 2 0	history2
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 3 0 56 <1 901	history1 2 0 55 <1 902	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	current 3 0 56 <1 901 1022	history1 2 0 55 <1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	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 3 0 56 <1 901 1022 986	history1 2 0 55 <1 902 1042 1067	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180	current 3 0 56 <1 901 1022 986 1195	history1 2 0 55 <1 902 1042 1067 1224	history2
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	2 0 50 0 950 1050 995	current 3 0 56 <1 901 1022 986	history1 2 0 55 <1 902 1042 1067	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	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 ASTM D5185m	2 0 50 950 1050 995 1180	current 3 0 56 <1 901 1022 986 1195	history1 2 0 55 <1 902 1042 1067 1224	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	current 3 0 56 <1 901 1022 986 1195 2871 current 4	history1 2 0 55 <1 902 1042 1067 1224 2907 history1 6	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	current 3 0 56 <1 901 1022 986 1195 2871 current	history1 2 0 55 <1 902 1042 1067 1224 2907 history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	current 3 0 56 <1 901 1022 986 1195 2871 current 4	history1 2 0 55 <1 902 1042 1067 1224 2907 history1 6	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	current 3 0 56 <1 901 1022 986 1195 2871 current 4 2	history1 2 0 55 <1 902 1042 1067 1224 2907 history1 6 4	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 50 950 1050 995 1180 2600 limit/base >25 >20	current 3 0 56 <1 901 1022 986 1195 2871 current 4 2 <1 current 0 3 0 1 2 <1 current 0.3	history1 2 0 55 <1 902 1042 1067 1224 2907 history1 6 4 3 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	2 0 50 0 950 1050 995 1180 2600 Imit/base >25 >20	current 3 0 56 <1 901 1022 986 1195 2871 current 4 2 <1 ourrent 0 .3 .3 .3 .3 .3 .3 .3	history1 2 0 55 <1 902 1042 1067 1224 2907 history1 6 4 3 history1 0.4 8.0	history2 history2 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 >20	current 3 0 56 <1 901 1022 986 1195 2871 current 4 2 <1 current 0 3 0 1 2 <1 current 0.3	history1 2 0 55 <1 902 1042 1067 1224 2907 history1 6 4 3 history1 0.4	history2 history2 history2 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	2 0 50 950 1050 995 1180 2600 <i>imit/base</i> >25 >20 <i>imit/base</i> >4 >20	current 3 0 56 <1 901 1022 986 1195 2871 current 4 2 <1 ourrent 0 .3 .3 .3 .3 .3 .3 .3	history1 2 0 55 <1 902 1042 1067 1224 2907 history1 6 4 3 history1 0.4 8.0	history2 <tr tr=""></tr>
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 >4 >20 >30	current 3 0 56 <1 901 1022 986 1195 2871 current 4 2 <1 current 0.3 7.0 18.5	history1 2 0 55 <1 902 1042 1067 1224 2907 history1 6 4 3 history1 0.4 8.0 19.3	history2 history2 history2 history2 history2 history2 history2 history2



OIL ANALYSIS REPORT





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual	20.2	NEG	NEG	
FLUID PROPEI		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.4	11.1	
	001	7101111 0110	12.00	11.4		
GRAPHS						
Ferrous Alloys						
iron chromium						
8 - nickel						
6 -						
4						
2						
2-						
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0	*********************		24			
0	****************		14/24			
and the state of t	*****	1-2245 billion	Feb14/24			
0.17/23	*****		Feb14/24			
EZ/LINON Non-ferrous Metals	**************************************	Nama (1997)	Feb14/24			
Non-ferrous Metals	**************************************		Feb14/24			
Non-ferrous Metals	**************************************	Name of the Operation of States of S	Feb14/24			
Non-ferrous Metals	5	*****	Feb14/24			
Non-ferrous Metals	5	**************************************	Feb14/24			
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Non-ferrous Metals	5	*****	Feb14/24			
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Non-ferrous Metals	5		Feb14/24			
Non-ferrous Metals	5					
Non-ferrous Metals	5					
Non-ferrous Metals	5					
Non-ferrous Metals	5		Feb14/24			
Non-ferrous Metals	5		Feb14/24	Base Number		
Non-ferrous Metals	5		Esb14/24	Base Number		
Non-ferrous Metals	5		-0.e -0.8	Base Number		
Non-ferrous Metals	5		-0.e -0.8	Base Number		
Non-ferrous Metals	5		-0.e -0.8	Base Number		
Non-ferrous Metals	5		-0.e -0.8	Base Number		
Non-ferrous Metals	5		-0.e -0.8	Base Number		
Non-ferrous Metals	5		-0.e -0.8	Base Number		
Non-ferrous Metals	5		-0.e -0.8	Base Number		
Non-ferrous Metals	5		Esb14/24	Base Number		
Non-ferrous Metals	5		9.0 8.0 (8,0 (8,0 14,0 14,0 10,0 14,0 10,0 10,0 10,0 10	Base Number		
Non-ferrous Metals	5		9.0 8.0 8.0 (0) (0) 10) 10 (0) 10 10 10 10 10 10 10 10 10 10 10 10 10	Base Number		
Non-ferrous Metals	5		9.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9			
Non-ferrous Metals	5		9.0 8.0 8.0 (0) (0) 10) 10 (0) 10 10 10 10 10 10 10 10 10 10 10 10 10	Base Number		
Non-ferrous Metals	5		9.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9			



 Unique Number
 : 10890429
 Diagnosed
 : 23 Feb 2024 - Wes Davis
 US 28273

 Certificate L2367
 Test Package
 : FLEET
 Contact: Jody Greer

 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

: 22 Feb 2024

: 23 Feb 2024

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

Laboratory Sample No.

Lab Number : 06097576

: PCA0107928

BLUE MAX TRUCKING

CHARLOTTE, NC

1015 E. WESTINGHOUSE BLVD.