

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

Component **Diesel Engine**

PETRO CANADA DURON SHP 10W30 (--- 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

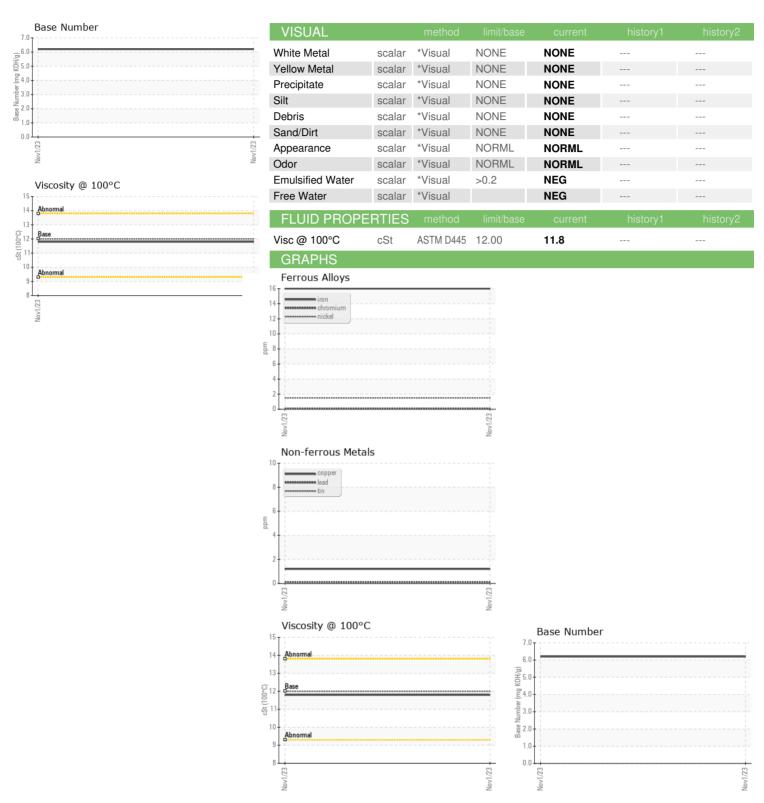
Fluid Condition

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

Sample Date	GAL)				Nov2023		
Client Info	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 1206	Sample Number		Client Info		PCA0107998		
Oil Age hrs Client Info 1206 Oil Changed Client Info Changed Sample Status NORMAL CONTAMINATION Imition bistory2 Imition bistory2 Fuel WC Method >5 <1.0 Glycol WC Method >5 <1.0 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 16 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >20 <1 WEAR METALS method limit/base current Ilvinium ppm ASTM D5185m >20 4 Vilvarium <t< td=""><td>Sample Date</td><td></td><td>Client Info</td><td></td><td>01 Nov 2023</td><td></td><td></td></t<>	Sample Date		Client Info		01 Nov 2023		
Contamped Client Info Changed Changed Contample Status Con	Machine Age	hrs	Client Info		7063		
Contamped Client Info NoRMAL Contamped Conta	Oil Age	hrs	Client Info		1206		
Fuel	Oil Changed		Client Info		Changed		
Fuel	Sample Status				NORMAL		
WEAR METALS	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 16	Fuel		WC Method	>5	<1.0		
Irron	Glycol		WC Method		NEG		
Chromium	WEAR METAL	S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>100	16		
Titanium	Chromium	ppm	ASTM D5185m	>20	<1		
Silver	Nickel	ppm	ASTM D5185m	>4	2		
Aluminum ppm ASTM D5185m >20 4 Copper ppm ASTM D5185m >40 <1	Titanium	ppm	ASTM D5185m		0		
Lead	Silver	ppm	ASTM D5185m	>3	<1		
Copper ppm ASTM D5185m >330 1 Tin ppm ASTM D5185m >15 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 60 Manganese ppm ASTM D5185m 0 <1	Aluminum	ppm	ASTM D5185m	>20	4		
Tin	Lead	ppm	ASTM D5185m	>40	<1		
Vanadium ppm ASTM D5185m <1 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 2 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 60 Mangaese ppm ASTM D5185m 950 936 Calcium ppm ASTM D5185m 995 1052 Phosphorus ppm ASTM D5185m 100 1258 Sulfur ppm ASTM D5185m 2600 2738 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >20 10 <th< td=""><td>Copper</td><td>ppm</td><td>ASTM D5185m</td><td>>330</td><td>1</td><td></td><td></td></th<>	Copper	ppm	ASTM D5185m	>330	1		
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 2 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 60 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 936 Calcium ppm ASTM D5185m 950 936 Phosphorus ppm ASTM D5185m 995 1025 Zinc ppm ASTM D5185m 995 1025 Sulfur ppm ASTM D5185m 2600 2738 CONTAMINANTS method limit/base current	Tin	ppm	ASTM D5185m	>15	0		
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 2 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 60 Manganese ppm ASTM D5185m 0 <1	Vanadium	ppm	ASTM D5185m		<1		
Boron	Cadmium	ppm	ASTM D5185m		0		
Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 60 Manganese ppm ASTM D5185m 0 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 60 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 936 Calcium ppm ASTM D5185m 1050 1052 Phosphorus ppm ASTM D5185m 995 1025 Zinc ppm ASTM D5185m 1180 1258 Sulfur ppm ASTM D5185m 2600 2738 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 3 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m 3 INFRA-RED method limit/base current history1	Boron	ppm	ASTM D5185m	2	2		
Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 936 Calcium ppm ASTM D5185m 1050 1052 Phosphorus ppm ASTM D5185m 995 1025 Zinc ppm ASTM D5185m 1180 1258 Sulfur ppm ASTM D5185m 2600 2738 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 6 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3	Barium	ppm	ASTM D5185m	0	0		
Magnesium ppm ASTM D5185m 950 936 Calcium ppm ASTM D5185m 1050 1052 Phosphorus ppm ASTM D5185m 995 1025 Zinc ppm ASTM D5185m 1180 1258 Sulfur ppm ASTM D5185m 2600 2738 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 6 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 10 INFRA-RED method limit/base current history1 history2 Soot % *ASTM D7844 >3 0.9 Nitration Abs/cm *ASTM D7415 >30 22.5 <td>Molybdenum</td> <td>ppm</td> <td>ASTM D5185m</td> <td>50</td> <td>60</td> <td></td> <td></td>	Molybdenum	ppm	ASTM D5185m	50	60		
Calcium ppm ASTM D5185m 1050 1052 Phosphorus ppm ASTM D5185m 995 1025 Zinc ppm ASTM D5185m 1180 1258 Sulfur ppm ASTM D5185m 2600 2738 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 6 Sodium ppm ASTM D5185m >20 10 Potassium ppm ASTM D5185m >20 10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.9 Nitration Abs/.1mm *ASTM D7415 >30 22.5 FLUID DEGRADATION *ASTM D7414 <	Manganese	ppm	ASTM D5185m	0	<1		
Phosphorus ppm ASTM D5185m 995 1025 Zinc ppm ASTM D5185m 1180 1258 Sulfur ppm ASTM D5185m 2600 2738 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 6 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.9 Nitration Abs/cm *ASTM D7624 >20 10.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.5 FLUID DEGRADATION *ASTM D7414 >25	Magnesium	ppm	ASTM D5185m	950	936		
Zinc ppm ASTM D5185m 1180 1258 Sulfur ppm ASTM D5185m 2600 2738 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 6 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.9 Nitration Abs/cm *ASTM D7624 >20 10.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414	Calcium	ppm	ASTM D5185m	1050	1052		
Sulfur ppm ASTM D5185m 2600 2738 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 6 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.9 Nitration Abs/cm *ASTM D7624 >20 10.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4	Phosphorus	ppm	ASTM D5185m	995	1025		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 6 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.9 Nitration Abs/cm *ASTM D7624 >20 10.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4	Zinc	ppm	ASTM D5185m	1180	1258		
Silicon ppm ASTM D5185m >25 6 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.9 Nitration Abs/cm *ASTM D7624 >20 10.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4			ASTM D5185m	2600	2738		
Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.9 Nitration Abs/cm *ASTM D7624 >20 10.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 10 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.9 Nitration Abs/cm *ASTM D7624 >20 10.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4	Silicon	ppm	ASTM D5185m	>25	6		
INFRA-RED	Sodium	ppm	ASTM D5185m		3		
Soot % % *ASTM D7844 >3 0.9 Nitration Abs/cm *ASTM D7624 >20 10.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4	Potassium	ppm	ASTM D5185m	>20	10		
Nitration Abs/cm *ASTM D7624 >20 10.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4	Soot %	%	*ASTM D7844	>3	0.9		
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm 'ASTM D7414 >25 18.4	Nitration	Abs/cm	*ASTM D7624	>20	10.3		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5		
	FLUID DEGRAI	DATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 6.2	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.4		
	Base Number (BN)	mg KOH/g	ASTM D2896		6.2		



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number Test Package : FLEET

Unique Number

: PCA0107998 : 06008949 : 10742711

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 15 Nov 2023 Diagnosed : 17 Nov 2023 : Wes Davis Diagnostician

BLUE MAX TRUCKING 1015 E. WESTINGHOUSE BLVD. CHARLOTTE, NC

US 28273 Contact: Jody Greer

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - 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)

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