

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Blue Bird 4655

Component

Diesel Engine

Diesel Engine

PETRO CANADA DURON SHP 10W30 (18 QTS)

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

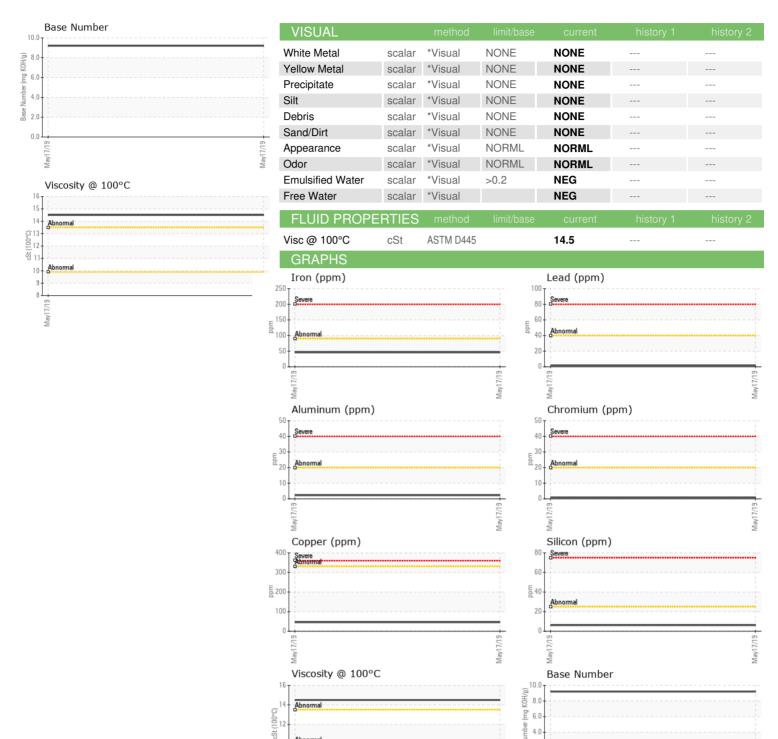
Fluid Condition

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

Comparison	RTS)				May2019		
Client Info	SAMPLE INFORM	ATION	method	limit/base	current	history 1	history 2
Machine Age mis Client Info 3292	Sample Number		Client Info		PCA0003551		
Oil Age	Sample Date		Client Info		17 May 2019		
Oil Changed Client Info Not Changd NORMAL Not Changd NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL N	Machine Age	mls	Client Info		13292		
CONTAMINATION method milit/base current history 1 history 2	Oil Age	mls	Client Info		3265		
CONTAMINATION	Oil Changed		Client Info		Not Changd		
Fuel	Sample Status				NORMAL		
WEAR METALS	CONTAMINATIO	N	method	limit/base	current	history 1	history 2
WEAR METALS	Fuel		WC Method	>3.0	<1.0		
Chromium	Glycol		WC Method		NEG		
Chromium	WEAR METALS		method	limit/base	current	history 1	history 2
Chromium	Iron	ppm	ASTM D5185m	>90	46		
Nickel			ASTM D5185m	>20	<1		
Titanium			ASTM D5185m		<1		
Silver			ASTM D5185m	>2	<1		
Aluminum			ASTM D5185m	>2	0		
Lead			ASTM D5185m	>20	2		
Copper ppm ASTM D5185m >330 46 Tin ppm ASTM D5185m >15 0 Antimony ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history 1 history 2 Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 59 Manganese ppm ASTM D5185m 1001 Magnesium ppm ASTM D5185m 1089 Phosphorus ppm ASTM D5185m 991 Sulfur ppm ASTM D5185m 2548			ASTM D5185m	>40	1		
Trin			ASTM D5185m	>330	46		
Antimony			ASTM D5185m	>15	0		
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history 1 history 2 Boron ppm ASTM D5185m 4 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 59 Manganese ppm ASTM D5185m 1001 Magnesium ppm ASTM D5185m 1089 Calcium ppm ASTM D5185m 991 Phosphorus ppm ASTM D5185m 991 Sulfur ppm ASTM D5185m 2548 CONTAMINANTS method limit/base current history 1 history 2 Silicon ppm ASTM D5185m >20 <th< td=""><td></td><td></td><td>ASTM D5185m</td><td></td><td>0</td><td></td><td></td></th<>			ASTM D5185m		0		
ADDITIVES			ASTM D5185m		0		
Boron ppm ASTM D5185m Q			ASTM D5185m		0		
Barium	ADDITIVES		method	limit/base	current	history 1	history 2
Barium	Boron	ppm	ASTM D5185m		4		
Molybdenum ppm ASTM D5185m 59 Manganese ppm ASTM D5185m 1001 Magnesium ppm ASTM D5185m 1089 Calcium ppm ASTM D5185m 991 Phosphorus ppm ASTM D5185m 991 Zinc ppm ASTM D5185m 2548 Sulfur ppm ASTM D5185m 2548 CONTAMINANTS method limit/base current history 1 history 2 Silicon ppm ASTM D5185m 25 6 Sodium ppm ASTM D5185m 20 0 Potassium ppm ASTM D5185m 20 0 INFRA-RED method limit/base current history 1 history 2 Soot % %			ASTM D5185m		0		
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Magnesium ppm ASTM D5185m 1001 Calcium ppm ASTM D5185m 1089 Phosphorus ppm ASTM D5185m 991 Zinc ppm ASTM D5185m 1189 Sulfur ppm ASTM D5185m 2548 CONTAMINANTS method limit/base current history 1 history 2 Silicon ppm ASTM D5185m >25 6 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 0 INFRA-RED method limit/base current history 1 history 2 Soot % % *ASTM D7844 >6 0.6 Nitration Abs/cm *ASTM D7415 >30 19.4 FLUID DEGR			ASTM D5185m		<1		
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Table			ASTM D5185m		991		
CONTAMINANTS method limit/base current history 1 history 2 Silicon ppm ASTM D5185m >25 6 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 0 INFRA-RED method limit/base current history 1 history 2 Soot % % *ASTM D7844 >6 0.6 Nitration Abs/cm *ASTM D7624 >20 7.8 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history 1 history 2 Oxidation Abs/.1mm *ASTM D7414 >25 14.8			ASTM D5185m		1189		
Silicon ppm ASTM D5185m >25 6 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 0 INFRA-RED method limit/base current history 1 history 2 Soot % % *ASTM D7844 >6 0.6 Nitration Abs/cm *ASTM D7624 >20 7.8 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history 1 history 2 Oxidation Abs/.1mm *ASTM D7414 >25 14.8	Sulfur	ppm	ASTM D5185m		2548		
Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 0 INFRA-RED method limit/base current history 1 history 2 Soot % % *ASTM D7844 >6 0.6 Nitration Abs/cm *ASTM D7624 >20 7.8 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history 1 history 2 Oxidation Abs/.1mm *ASTM D7414 >25 14.8	CONTAMINANT	S	method	limit/base	current	history 1	history 2
Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 0 INFRA-RED method limit/base current history 1 history 2 Soot % % *ASTM D7844 >6 0.6 Nitration Abs/cm *ASTM D7624 >20 7.8 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history 1 history 2 Oxidation Abs/.1mm *ASTM D7414 >25 14.8	Silicon	ppm	ASTM D5185m	>25	6		
Potassium ppm ASTM D5185m >20 0 INFRA-RED method limit/base current history 1 history 2 Soot % % *ASTM D7844 >6 0.6 Nitration Abs/cm *ASTM D7624 >20 7.8 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history 1 history 2 Oxidation Abs/.1mm *ASTM D7414 >25 14.8					2		
Soot % % *ASTM D7844 >6 0.6 Nitration Abs/cm *ASTM D7624 >20 7.8 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history 1 history 2 Oxidation Abs/.1mm *ASTM D7414 >25 14.8			ASTM D5185m	>20	0		
Nitration Abs/cm *ASTM D7624 >20 7.8 Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history 1 history 2 Oxidation Abs/.1mm *ASTM D7414 >25 14.8	INFRA-RED		method	limit/base	current	history 1	history 2
Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history 1 history 2 Oxidation Abs/.1mm *ASTM D7414 >25 14.8	Soot %	%	*ASTM D7844	>6	0.6		
Sulfation Abs/.1mm *ASTM D7415 >30 19.4 FLUID DEGRADATION method limit/base current history 1 history 2 Oxidation Abs/.1mm *ASTM D7414 >25 14.8		Abs/cm		>20			
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30			
	FLUID DEGRAD	NOITA	method	limit/base	current	history 1	history 2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.8		
			ASTM D2896		9.2		



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number

Unique Number

: 04730577 : 8627356 Test Package : MOB1+

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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : PCA0003551 : 10 Jun 2019 Diagnosed : 11 Jun 2019

Diagnostician : Don Baldridge

Sase 1 0.0

Topeka, KS US 66612 Contact: Carlos Silva-Aguirre c.aguirre@illinois-central.com T:

* - 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)

F:

ICSB587 - Topeka

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