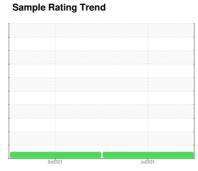


OIL ANALYSIS REPORT



NORMAL



Machine Id **BM-160**

Component
Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- G

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

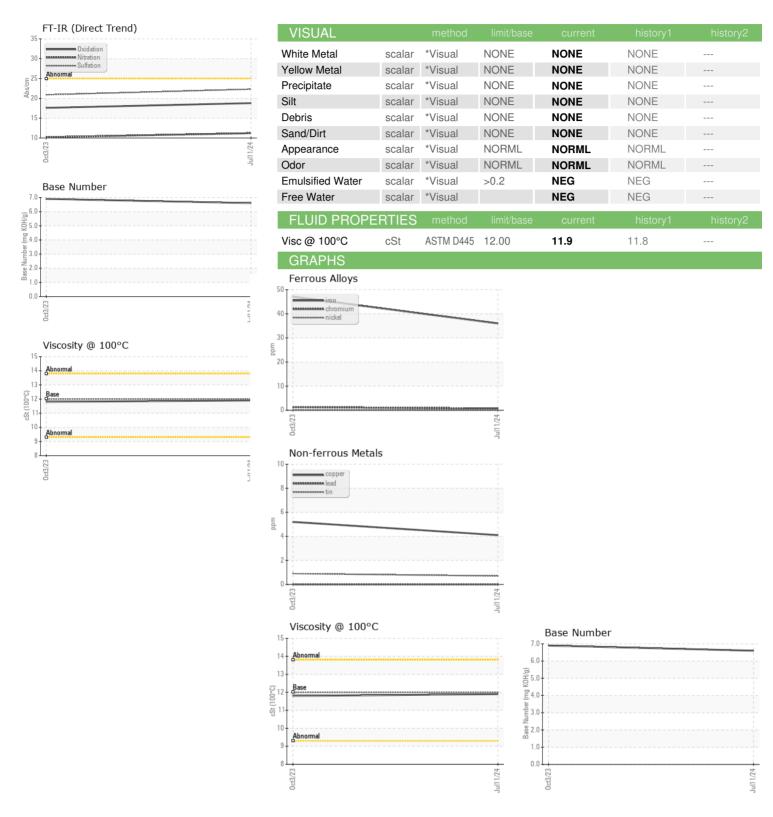
Fluid Condition

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

Cample Date Client Info 83667 37635	AL)			0ct2023	Julz024		
Company Comp	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Cample Date Client Info 83667 37635	Sample Number		Client Info		PCA0130579	PCA0105185	
Dil Changed	Sample Date		Client Info		11 Jul 2024	03 Oct 2023	
Clichanged Clicht Info NORMAL N	Machine Age	mls	Client Info		83667	37635	
CONTAMINATION method milibase current history1 history2	Oil Age	mls	Client Info		46032	37635	
CONTAMINATION	Oil Changed		Client Info		Changed	Changed	
Vicinity Vicinity	Sample Status				NORMAL	NORMAL	
Wester Wc Method So.2 NEG	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS	⁼ uel		WC Method	>5	<1.0	<1.0	
WEAR METALS method limit/base current history1 history2 ron ppm ASTM D5185m >100 36 47	Water		WC Method	>0.2	NEG	NEG	
Chromium	Glycol		WC Method		NEG	NEG	
Chromium	WEAR METAL	.S	method	limit/base	current	history1	history2
Silver	ron	ppm	ASTM D5185m	>100	36	47	
Silver	Chromium	ppm	ASTM D5185m	>20	<1	1	
Silver	Nickel	ppm	ASTM D5185m	>4	0	0	
ASTM D5185m >20	Titanium	ppm	ASTM D5185m		<1	0	
December December	Silver	ppm	ASTM D5185m	>3	<1	<1	
Description	Aluminum	ppm	ASTM D5185m	>20	13	29	
Sin	.ead	ppm	ASTM D5185m	>40	0	0	
Anadium	Copper	ppm	ASTM D5185m	>330	4	5	
ADDITIVES	in	ppm	ASTM D5185m	>15	<1	<1	
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 1 1 Barium ppm ASTM D5185m 0 <1	/anadium	ppm	ASTM D5185m		<1	<1	
Soron ppm ASTM D5185m 2 1 1	Cadmium	ppm	ASTM D5185m		0	0	
Description	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 68 58 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	2	1	1	
Manganese ppm ASTM D5185m 0 <1 1 Magnesium ppm ASTM D5185m 950 1011 990 Calcium ppm ASTM D5185m 1050 1243 1144 Phosphorus ppm ASTM D5185m 995 1041 1015 Zinc ppm ASTM D5185m 1180 1359 1268 Sulfur ppm ASTM D5185m 2600 2972 3018 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 11 9 Godium ppm ASTM D5185m >20 33 80 Potassium ppm ASTM D5185m >20 33 80 INFRA-RED method limit/base current history1 history2 Soot % *ASTM D7844 >3	Barium	ppm	ASTM D5185m	0	<1	0	
Manganese ppm ASTM D5185m 0 <1 1 Magnesium ppm ASTM D5185m 950 1011 990 Calcium ppm ASTM D5185m 1050 1243 1144 Phosphorus ppm ASTM D5185m 995 1041 1015 Zinc ppm ASTM D5185m 2600 2972 3018 Sulfur ppm ASTM D5185m 2600 2972 3018 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 11 9 Goldium ppm ASTM D5185m >20 33 80 Potassium ppm ASTM D5185m >20 33 80 INFRA-RED method limit/base current history1 history2 Soot % "ASTM D7844 >3	Molybdenum	ppm	ASTM D5185m	50	68	58	
Magnesium ppm ASTM D5185m 950 1011 990 Calcium ppm ASTM D5185m 1050 1243 1144 Phosphorus ppm ASTM D5185m 995 1041 1015 Zinc ppm ASTM D5185m 1180 1359 1268 Sulfur ppm ASTM D5185m 2600 2972 3018 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 11 9 Potassium ppm ASTM D5185m >20 33 80 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.4 Sulfation Abs/.1mm *ASTM D7624 >20 11.2 10.2 FLUID DEGRADATION method	-		ASTM D5185m	0	<1	1	
Calcium ppm ASTM D5185m 1050 1243 1144 Phosphorus ppm ASTM D5185m 995 1041 1015 Pinc ppm ASTM D5185m 1180 1359 1268 Sulfur ppm ASTM D5185m 2600 2972 3018 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >25 11 9 Solicon ppm ASTM D5185m >20 33 80 Potassium ppm ASTM D5185m >20 33 80 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.4 Sulfation Abs/.1mm *ASTM D7415 >30 22.3 20.9 FLUID DEGRADATION method <td< td=""><td>/lagnesium</td><td></td><td>ASTM D5185m</td><td>950</td><td>1011</td><td>990</td><td></td></td<>	/lagnesium		ASTM D5185m	950	1011	990	
Phosphorus ppm ASTM D5185m 995 1041 1015 Zinc ppm ASTM D5185m 1180 1359 1268 Sulfur ppm ASTM D5185m 2600 2972 3018 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >25 11 9 Solicon ppm ASTM D5185m >20 33 80 Potassium ppm ASTM D5185m >20 33 80 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.4 Sulfation Abs/.1mm *ASTM D7415 >30 22.3 20.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *AS	-		ASTM D5185m	1050	1243	1144	
Time	Phosphorus		ASTM D5185m	995	1041	1015	
Sulfur ppm ASTM D5185m 2600 2972 3018 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 11 9 Godium ppm ASTM D5185m 0 1 Potassium ppm ASTM D5185m >20 33 80 INFRA-RED method limit/base current history1 history2 Goot % % *ASTM D7844 >3 0.5 0.4 Sulfation Abs/cm *ASTM D7624 >20 11.2 10.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.8 17.6			ASTM D5185m	1180	1359	1268	
Solicon ppm ASTM D5185m >25 11 9	Sulfur		ASTM D5185m	2600		3018	
Sodium ppm ASTM D5185m 0 1 Potassium ppm ASTM D5185m >20 33 80 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.4 Vitration Abs/cm *ASTM D7624 >20 11.2 10.2 Sulfation Abs/.1mm *ASTM D7415 >30 22.3 20.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.8 17.6	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Sodium ppm ASTM D5185m 0 1 Potassium ppm ASTM D5185m >20 33 80 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.4 Vitration Abs/cm *ASTM D7624 >20 11.2 10.2 Sulfation Abs/.1mm *ASTM D7415 >30 22.3 20.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.8 17.6	Silicon	ppm	ASTM D5185m	>25	11	9	
Potassium ppm ASTM D5185m >20 33 80 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.4 Nitration Abs/cm *ASTM D7624 >20 11.2 10.2 Sulfation Abs/.1mm *ASTM D7415 >30 22.3 20.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.8 17.6	Sodium		ASTM D5185m		0	1	
Goot % % *ASTM D7844 >3 0.5 0.4 Nitration Abs/cm *ASTM D7624 >20 11.2 10.2 Sulfation Abs/.1mm *ASTM D7415 >30 22.3 20.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.8 17.6	Potassium	ppm	ASTM D5185m	>20	33	80	
Nitration Abs/cm *ASTM D7624 >20 11.2 10.2 Sulfation Abs/.1mm *ASTM D7415 >30 22.3 20.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.8 17.6	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 22.3 20.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.8 17.6	Soot %	%	*ASTM D7844	>3	0.5	0.4	
Sulfation Abs/.1mm *ASTM D7415 >30 22.3 20.9 FLUID DEGRADATION method limit/base current history1 history2 Dxidation Abs/.1mm *ASTM D7414 >25 18.8 17.6	Nitration	Abs/cm	*ASTM D7624	>20	11.2	10.2	
Dxidation			*ASTM D7415	>30			
	FLUID DEGRA	NOITAC	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.8	17.6	
	Base Number (BN)	mg KOH/g	ASTM D2896		6.6	6.9	



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0130579 Lab Number : 06235571 Unique Number : 11124405

Received **Tested**

: 15 Jul 2024 Diagnosed : 15 Jul 2024 - Wes Davis

: 15 Jul 2024

BLUE MAX TRUCKING 1015 E. WESTINGHOUSE BLVD.

CHARLOTTE, NC US 28273

T: (980)225-9968

F: (704)588-2901

Contact: Jody Greer jgreer@bluemaxtrucking.com

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)