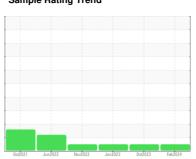


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id 120376

Component **Diesel Engine**

PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the

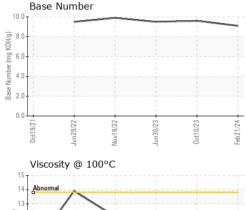
Fluid Condition

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

		0ct2021	Jun2022 Nov2022	Jun2023 Oct2023	Feb2024	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0116859	PCA0105776	PCA0097739
Sample Date		Client Info		21 Feb 2024	10 Oct 2023	30 Jun 2023
Machine Age	mls	Client Info		70647	0	0
Oil Age	mls	Client Info		6010	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	42	44	55
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	4	3	5
Lead	ppm	ASTM D5185m	>40	1	1	1
Copper	ppm	ASTM D5185m	>330	11	8	23
Tin	ppm	ASTM D5185m	>15	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base		history1	history2
				current		
Boron	ppm	ASTM D5185m	2	current	5	11
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2	current 6 2	5 0	11
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 6 2 65 <1 870	5 0 56 <1 838	11 0 66 <1 945
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current 6 2 65 <1 870 1216	5 0 56 <1	11 0 66 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 6 2 65 <1 870	5 0 56 <1 838	11 0 66 <1 945
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180	current 6 2 65 <1 870 1216 1014 1202	5 0 56 <1 838 1241 881 1163	11 0 66 <1 945 1136 1006 1229
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	current 6 2 65 <1 870 1216 1014	5 0 56 <1 838 1241 881	11 0 66 <1 945 1136 1006
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180	current 6 2 65 <1 870 1216 1014 1202	5 0 56 <1 838 1241 881 1163	11 0 66 <1 945 1136 1006 1229
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	current 6 2 65 <1 870 1216 1014 1202 3259 current 5	5 0 56 <1 838 1241 881 1163 3121 history1	11 0 66 <1 945 1136 1006 1229 3375 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	current 6 2 65 <1 870 1216 1014 1202 3259 current 5 7	5 0 56 <1 838 1241 881 1163 3121 history1	11 0 66 <1 945 1136 1006 1229 3375 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	current 6 2 65 <1 870 1216 1014 1202 3259 current 5	5 0 56 <1 838 1241 881 1163 3121 history1	11 0 66 <1 945 1136 1006 1229 3375 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	current 6 2 65 <1 870 1216 1014 1202 3259 current 5 7 5	5 0 56 <1 838 1241 881 1163 3121 history1 4 6 3	11 0 66 <1 945 1136 1006 1229 3375 history2 5 4 1
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	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20	current 6 2 65 <1 870 1216 1014 1202 3259 current 5 7 5 current 0.7	5 0 56 <1 838 1241 881 1163 3121 history1 4 6 3 history1	11 0 66 <1 945 1136 1006 1229 3375 history2 5 4 1 history2
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	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20	current 6 2 65 <1 870 1216 1014 1202 3259 current 5 7 5 current 0.7 8.3	5 0 56 <1 838 1241 881 1163 3121 history1 4 6 3 history1 1.2 9.1	11 0 66 <1 945 1136 1006 1229 3375 history2 5 4 1 history2 1.1 8.5
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	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20	current 6 2 65 <1 870 1216 1014 1202 3259 current 5 7 5 current 0.7	5 0 56 <1 838 1241 881 1163 3121 history1 4 6 3 history1	11 0 66 <1 945 1136 1006 1229 3375 history2 5 4 1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D76145	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20	current 6 2 65 <1 870 1216 1014 1202 3259 current 5 7 5 current 0.7 8.3	5 0 56 <1 838 1241 881 1163 3121 history1 4 6 3 history1 1.2 9.1	11 0 66 <1 945 1136 1006 1229 3375 history2 5 4 1 history2 1.1 8.5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D76145	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20 >30	current 6 2 65 <1 870 1216 1014 1202 3259 current 5 7 5 current 0.7 8.3 19.1	5 0 56 <1 838 1241 881 1163 3121 history1 4 6 3 history1 1.2 9.1 20.4	11 0 66 <1 945 1136 1006 1229 3375 history2 5 4 1 history2 1.1 8.5 19.9

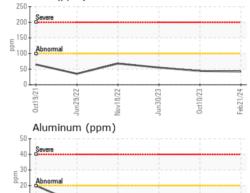


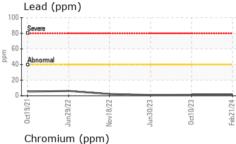
OIL ANALYSIS REPORT

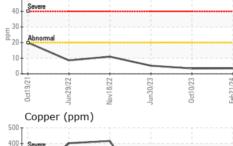


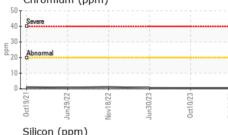
VISUAL		method				history2	
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE	
Precipitate	scalar	*Visual		NONE	NONE	NONE	
Silt	scalar	*Visual		NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	NONE	
Sand/Dirt	scalar	r *Visual NONE	NONE	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG	
Free Water	scalar *Visual			NEG	NEG	NEG	
	DTIES	mothod	limit/bass	ou was a t	hiotomit	history	

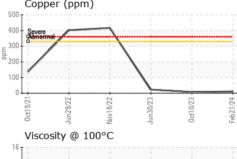
14-	Abnormal	FLUID PROPER	TIES	method	limit/base	current	history1	history2
12	Base	Visc @ 100°C	St	ASTM D445	12.00	11.2	11.8	11.5
11-		GRAPHS						
9	Abnormal	Iron (ppm)				Lead (ppm)		

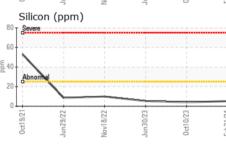


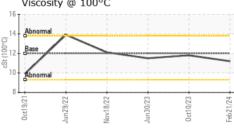


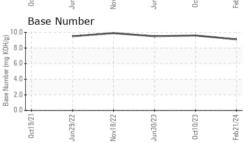














Laboratory Sample No.

: PCA0116859 Lab Number : 06124522 Unique Number : 10938673

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

: 21 Mar 2024 **Tested** : 21 Mar 2024 Diagnosed

: 21 Mar 2024 - Wes Davis

63 REPAUPO STATION ROAD LOGAN TOWNSHIP, NJ US 08085

MILLER TRUCK LEASING #114

Contact: ED DAVIS edavis@millertransgroup.com T: (856)214-3521

Test Package : MOB 1 (Additional Tests: TBN) 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) F: (856)214-3663 Contact/Location: ED DAVIS - MILLOG