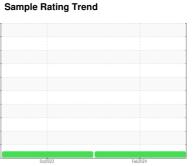


OIL ANALYSIS REPORT



NORMAL



Machine Id **538**Component

Diesel Engine

PETRO CANADA DURON HP 15W40 (--- GAL)

D.1. (S.1. 10 G.10

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

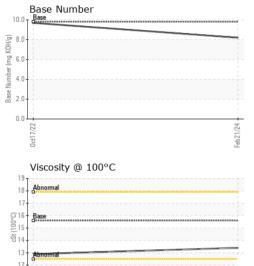
Fluid Condition

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

AL)			Det2022	Feb 2074		
SAMPLE INFORMA	TION	method	limit/base	current	history1	history2
			mme bass			
Sample Number		Client Info		WC0792734 21 Feb 2024	WC0727340	
Sample Date		Client Info		40224	17 Oct 2022	
3-		Client Info			20973	
- 3-		Client Info Client Info		5000 Changed	N/A	
Oil Changed		Cilent into		Changed NORMAL	NORMAL	
Sample Status						
CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron p	pm	ASTM D5185m	>100	12	7	
Chromium p	pm .	ASTM D5185m	>20	<1	<1	
Nickel p	pm	ASTM D5185m	>4	<1	0	
Titanium p	pm .	ASTM D5185m		0	2	
Silver p	pm	ASTM D5185m	>3	0	0	
Aluminum p	pm .	ASTM D5185m	>20	11	3	
Lead p	pm	ASTM D5185m	>40	2	<1	
Copper	pm .	ASTM D5185m	>330	<1	<1	
T.		AOTAL DELOE	>15	•	4	
Tin p	ppm	ASTM D5185m	>10	0	<1	
		ASTM D5185m ASTM D5185m	>10	<1	0	
Vanadium p	pm .		>10	-		
Vanadium p	pm	ASTM D5185m	limit/base	<1	0	
Vanadium p Cadmium p ADDITIVES	opm .	ASTM D5185m ASTM D5185m		<1 0	0	
Vanadium p Cadmium p ADDITIVES Boron p	opm .	ASTM D5185m ASTM D5185m method		<1 0 current	0 0 history1	history2
Vanadium p Cadmium p ADDITIVES Boron p Barium p	opm a	ASTM D5185m ASTM D5185m method ASTM D5185m		<1 0 current	0 0 history1 320	history2
Vanadium processing pr	opm a	ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m		<1 0 current 5	0 0 history1 320 0	history2
Vanadium processing pr	opm appm appm appm appm appm appm appm a	ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 0 current 5 0 61	0 0 history1 320 0 121	history2
Vanadium Cadmium p ADDITIVES Boron Barium Molybdenum Manganese Magnesium p	opm opm opm opm opm opm opm opm	ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 0 current 5 0 61 <1	0 0 history1 320 0 121 <1	 history2
Vanadium Cadmium p ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium p Calcium	ppm	ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 0 current 5 0 61 <1 981	0 0 history1 320 0 121 <1 672	 history2
Vanadium Cadmium pi ADDITIVES Boron pi Barium Molybdenum Manganese Magnesium Calcium Phosphorus	opm	ASTM D5185m ASTM D5185m method ASTM D5185m		<1 0 current 5 0 61 <1 981 1127	0 0 history1 320 0 121 <1 672 1547	history2
Vanadium Cadmium Pi ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Pi	opm	ASTM D5185m ASTM D5185m method ASTM D5185m		<1 0 current 5 0 61 <1 981 1127 1073	0 0 history1 320 0 121 <1 672 1547 707	 history2
Vanadium Cadmium Pi ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Pi	opm	ASTM D5185m method ASTM D5185m		<1 0 current 5 0 61 <1 981 1127 1073 1278	0 0 history1 320 0 121 <1 672 1547 707 822	 history2
Vanadium Cadmium Pi ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	opm	ASTM D5185m Method ASTM D5185m Method ASTM D5185m	limit/base	<1 0 current 5 0 61 <1 981 1127 1073 1278 3008	0 0 history1 320 0 121 <1 672 1547 707 822 3134	history2
Vanadium Cadmium Pi Cadmium Pi ADDITIVES Boron Pi Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Pi	opm	ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base	<1 0 current 5 0 61 <1 981 1127 1073 1278 3008 current	0 0 history1 320 0 121 <1 672 1547 707 822 3134 history1	history2 history2
Vanadium Cadmium Pi Cadmium Pi ADDITIVES Boron Pi Barium Molybdenum Pi Manganese Magnesium Calcium Phosphorus Zinc Sulfur Pi CONTAMINANTS Silicon Sodium Pi Sodium Pi Sodium Pi Salpi Sa	opm	ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base limit/base >25	<1 0 current 5 0 61 <1 981 1127 1073 1278 3008 current	0 0 history1 320 0 121 <1 672 1547 707 822 3134 history1	history2 history2
Vanadium Cadmium Pi Cadmium Pi ADDITIVES Boron Pi Barium Molybdenum Pi Manganese Magnesium Calcium Phosphorus Zinc Sulfur Pi CONTAMINANTS Silicon Sodium Pi Sodium Pi Sodium Pi Salpi Sa	opm	ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base limit/base >25	<1 0 current 5 0 61 <1 981 1127 1073 1278 3008 current 4 2	0 0 history1 320 0 121 <1 672 1547 707 822 3134 history1 5	history2 history2 history2
Vanadium Cadmium Pi Cadmium Pi ADDITIVES Boron Pi Barium Molybdenum Manganese Magnesium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	opm	ASTM D5185m method ASTM D5185m	limit/base limit/base >25 >20	<1 0 current 5 0 61 <1 981 1127 1073 1278 3008 current 4 2 2	0 0 history1 320 0 121 <1 672 1547 707 822 3134 history1 5 0	history2 history2 history2
Vanadium Cadmium Pi Cadmium Pi ADDITIVES Boron Pi Barium Molybdenum Manganese Pi Magnesium Calcium Phosphorus Zinc Sulfur Posodium Potassium Potas	opm	ASTM D5185m method ASTM D5185m method ASTM D5185m Method	limit/base limit/base >25 >20 limit/base	<1 0 current 5 0 61 <1 981 1127 1073 1278 3008 current 4 2 2 current	0 0 history1 320 0 121 <1 672 1547 707 822 3134 history1 5 0 0 history1	history2 history2 history2 history2 history2
Vanadium Cadmium Cadmium Pi ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium A	opm	ASTM D5185m method ASTM D5185m	limit/base limit/base >25 >20 limit/base >3	<1 0 current 5 0 61 <1 981 1127 1073 1278 3008 current 4 2 2 current 0.4	0 0 history1 320 0 121 <1 672 1547 707 822 3134 history1 5 0 0	history2 history2 history2 history2 history2
Vanadium Cadmium Cadmium Pi ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium A Nifration A	opm	ASTM D5185m method ASTM D5185m Method ASTM D5185m Method *ASTM D5185m ASTM D5185m	limit/base limit/base >25 >20 limit/base >3 >20	<1 0 current 5 0 61 <1 981 1127 1073 1278 3008 current 4 2 2 current 0.4 8.7	0 0 history1 320 0 121 <1 672 1547 707 822 3134 history1 5 0 0 history1 1.3	history2 history2 history2 history2 history2
Vanadium Cadmium Cadmium Pi ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Potas	opm	ASTM D5185m method ASTM D5185m method ASTM D5185m Method ASTM D5185m ASTM D5185m	limit/base limit/base s25 s20 limit/base s3 s20 s30 s30 s30 s30 s40 s40	<1 0 current 5 0 61 <1 981 1127 1073 1278 3008 current 4 2 2 current 0.4 8.7 19.2	0 0 history1 320 0 121 <1 672 1547 707 822 3134 history1 5 0 0 history1 1.3 11.5 23.9	history2 history2 history2 history2 history2



OIL ANALYSIS REPORT



VISUAL		method				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		NEG	NEG	
FLUID PROPERT	IES	method	limit/base	current	history1	history2

Visc @ 100°C	cSt	ASTM D445	15.6	13.4	12.9	
GRAPHS						
Iron (ppm)				Lead (ppm	1)	
250 Severe				Severe		
				00		
150 Abnormal	***************************************	***************************************		Abnormal		
50+				20		
0727	-		 - - -	0/227		124
0ct17/22			Feb21/24	0ct17/22		Feb21/24
Aluminum (ppm)				Chromium	(ppm)	
Severe				Severe		
Abnormal				30 Abnormal		
20 Abnormal	******************			B ₂₀ Abnormal	***************************************	***************************************
10				10		
Oct17/22			Feb21/24	Oct17/22 +		Feb21/24 -
			Feb2			Feb2
Copper (ppm)				Silicon (pp	m)	
Severe Abritonmal 300				60		
E 200				E 40		
100				Abnormal		
0				0		
Oct17/22			Feb21/24	0ct17/22		Feb21/24 -
			Feb			Feb
Viscosity @ 100°C	; 			Base Num	ber 	
18 Abnormal		***************************************		8.0 + 0.0 8.0 + 0.0 8.0 + 0.0 8.0 + 0.0 8.0 + 0.		
00 16 - Base Abnormal				E 6.0		
Abnomal				98 2.0		
10				0.0		
Oct17/22			Feb21/24	0ct17/22		Feb21/24
0			귤	00		至





Certificate L2367

Laboratory Sample No.

Lab Number : 06100761 Unique Number : 10898991

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0792734 Received

: 26 Feb 2024 **Tested** : 27 Feb 2024 Diagnosed : 27 Feb 2024 - Wes Davis

WAYNE CO SCHOOL BUS GARAGE 1603 SALEM CHURCH RD

GOLDSBORO, NC US 27530

Contact: BRANDON BRIGGS brandonbriggs@wcps.org

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)

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F: