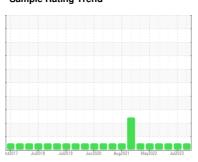


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



INTERNATIONAL 40

Component

Diesel Engine

PETRO CANADA DURON HP 15W40 (8 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

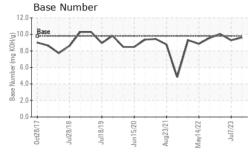
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

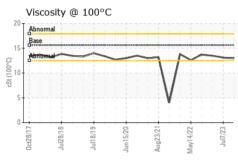
AL)		ict2017 Ji	u2018 Jul2019 Ju	un2020 Aug2021 May2022	Jul2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0109623	PCA0090558	PCA0071941
Sample Date		Client Info		05 Feb 2024	07 Jul 2023	18 Jan 2023
Machine Age	mls	Client Info		315808	311442	304738
Oil Age	mls	Client Info		4366	6704	4557
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<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	>90	19	23	22
Chromium	ppm	ASTM D5185m	>20	<1	1	1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	7	6	7
Lead	ppm	ASTM D5185m	>40	2	3	1
Copper	ppm	ASTM D5185m	>330	1	2	<1
Tin	ppm	ASTM D5185m	>15	1	1	1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		11	4	9
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		59	67	58
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		886	1005	883
Calcium	ppm	ASTM D5185m		960	1218	1056
Phosphorus	ppm	ASTM D5185m		979	1120	939
Zinc	ppm	ASTM D5185m		1145	1322	1193
Sulfur	ppm	ASTM D5185m		2855	3301	3370
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	5	4
Sodium	ppm	ASTM D5185m		3	2	2
Potassium	ppm	ASTM D5185m	>20	18	10	18
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	0.1	1.1	1
Nitration	Abs/cm	*ASTM D7624	>20	5.3	8.6	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.0	20.8	19.3
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.8	16.0	13.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.62	9.29	10.03



OIL ANALYSIS REPORT

GRAPHS





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	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

FLUID FROF	EULIES	memou			HISTOLAL	HISTORYZ
Visc @ 100°C	cSt	ASTM D445	15.6	13.0	13.1	13.5

GRA	APHS						
Iron	(ppm))					Lead (ppm)
Severe		1777	1111	111			80 Severe
50 - Abnom	nal						E 40 - Abnomal
50-			~/	\checkmark			20
Oct28/17	Jul28/18	Jul18/19	Jun15/20	Aug23/21-	May14/22	Jul7/23	0c(28/17 = Jul/28/18 - Jul/28/18 - Jun/28/18 - Jun/28/20 - Jun/28/21 - Jun/28/
Alum	inum	(ppm)					Chromium (ppm)
Severe		7777		777			50 40 Severe
Abnom	nal						30 - Abnomal
0							10-
0ct28/17	Jul28/18	91/81/nC	Jun15/20	Aug23/21	May14/22	Jul7/23	Oct28/17 Jul28/18 Jul18/19 Jul18/
Сорр	er (pp	om)	,		_		Silicon (ppm)
Severe Abritom	ıal	7					80 - Severe
0			1111				60
0							E 40 Abnormal
0							20
0ct28/17	Jul28/18	61/81lnr	Jun15/20	Aug23/21	May14/22	Jul7/23	0ct28/17
		100°		4	≥		Base Number
Abnom							
Abnom		_			~		9 8.0
Abnom					/		12.0 Base (ud NO) HOND Base (u
5				V			## 4.0 ##
							80 2.0



Certificate L2367

Laboratory Sample No.

Lab Number : 06084980 Unique Number : 10872425 Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0109623 Received : 09 Feb 2024 **Tested** : 12 Feb 2024

Diagnosed

: 12 Feb 2024 - Wes Davis

J F PRICE 611 PLEASANT ST E WEYMOUTH, MA US 02189 Contact: JOHN LANG

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F: (781)337-4150

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)

Report Id: JFPEWE [WUSCAR] 06084980 (Generated: 02/12/2024 10:10:17) Rev: 1

Submitted By: JOHN LANG