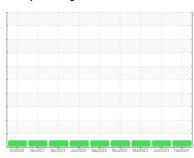


OIL ANALYSIS REPORT

Sample Rating Trend







INTERNATIONAL 32

Component

Diesel Engine

PETRO CANADA DURON HP 15W40 (--- 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

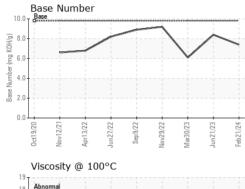
Fluid Condition

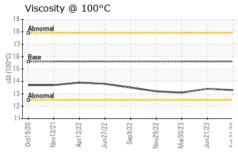
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

AL)		Oct2020 No	v2021 Apr2022 Jun2022	Sep2022 Nov2022 Mar2023 Jun20	23 Feb2024	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0108307	PCA0096631	PCA0088238
Sample Date		Client Info		21 Feb 2024	21 Jun 2023	30 Mar 2023
Machine Age	mls	Client Info		515650	685205	662806
Oil Age	mls	Client Info		23208	22299	40696
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	>165	20	18	28
Chromium	ppm	ASTM D5185m	>5	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m	>2	5	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	1	1
Lead	ppm	ASTM D5185m	>150	1	<1	1
Copper	ppm	ASTM D5185m	>90	<1	<1	<1
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		6	9	3
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		61	65	59
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		939	997	871
Calcium	ppm	ASTM D5185m		1198	1207	1175
Phosphorus	ppm	ASTM D5185m		1142	1063	1001
Zinc	ppm	ASTM D5185m		1280	1282	1257
Sulfur	ppm	ASTM D5185m		3184	3686	3024
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>35	6	4	6
Sodium	ppm	ASTM D5185m		0	2	0
Potassium	ppm	ASTM D5185m	>20	2	0	2
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>7.5	0.7	0.5	0.8
Nitration	Abs/cm	*ASTM D7624	>20	9.3	8.8	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	19.2	19.9
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.1	14.5	15.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.4	8.4	6.1



OIL ANALYSIS REPORT





VISUAL		method	limit/base	current	history1	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
ELLUD DDODE	DTIES					

FLUID PROPI	ERHES	method			history1	history2
Visc @ 100°C	cSt	ASTM D445	15.6	13.3	13.4	13.1

		API																	
300 T	Iron		m)							300	Lea Seve	d (pp	om)						
250 - 200 - 150 -	Abnor									250 200 <u>E</u> 150 100	Abno	ormal							
50	0ct19/20	Nov12/21+-	Apr13/22	Jun27/22 -	Sep9/22	Nov29/22	Mar30/23 -	Jun21/23	Feb21/24	50 0	0ct19/20	Nov12/21	Apr13/22 -	Jun27/22 -	Sep9/22	Nov29/22	Mar30/23	Jun21/23	Feb21/24
40 T	Alun		m (pį	om)						12 10 8			ım (p	pm)					
된 20 - 10 -	Abnor	mal								Ed 6 4 2	Abno	ormal							
	Oct19/20	Nov12/21-	Apr13/22 -	Jun27/22 +	Sep 9/22	Nov29/22 -	Mar30/23 -	Jun21/23	Feb21/24	0	0ct19/20	Nov12/21+	Apr13/22 -	Jun27/22 +	Sep9/22 -	Nov29/22-	Mar30/23 +	Jun21/23 +	Feb21/24 -
²⁰⁰ T	Cop		(ppm)						80	Silid	con (ppm)						
150-										60	Seve								
100 - 50 -	Abnor	mal								된 40 20	Abno	ormal							
	0ct19/20	Nov12/21-	Apr13/22 -	Jun27/22 -	Sep 9/22 -	Nov29/22 -	Mar30/23 -	Jun21/23 -	Feb21/24	0	0ct19/20	Nov12/21-	Apr13/22 -	Jun27/22 -	Sep9/22-	Nov29/22 -	Mar30/23 -	Jun21/23 +	Feb21/24 -
²⁰ T	Visc	osity	@ 1	00°C						_10.0		e Nu	mber						
- 18 - 16 - C) - 14 - C)	Abnor	mal								Base Number (mg KOH/g) 0.7 0.7 0.8		-	_				\		\





Laboratory Sample No.

Lab Number : 06112562 Unique Number : 10916059

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0108307

Received **Tested**

Diagnosed Test Package: MOB 1 (Additional Tests: TBN)

: 11 Mar 2024

: 08 Mar 2024

: 11 Mar 2024 - Wes Davis To discuss this sample report, contact Customer Service at 1-800-237-1369.

3085 IL RT 71 OTTAWA, IL US 61350 Contact: JEFF jeff@driveawt.com T: (815)587-2947

* - 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)

AREA WIDE TRANSPORTATION

F: