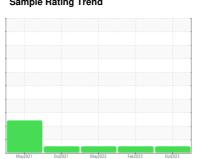


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



144 (S/N J414120)

Componen **Diesel Engine**

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

DIAGNOSIS

Recommendation

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

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

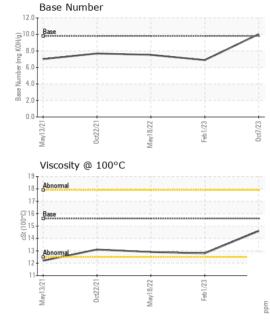
Fluid Condition

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

ΓR)		May2021	0ct2021	May2022 Feb2023	Oct2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0044174	PCA0044139	PCA0044230
Sample Date		Client Info		07 Oct 2023	01 Feb 2023	18 May 2022
Machine Age	mls	Client Info		139508	114540	89761
Oil Age	mls	Client Info		24968	24779	24544
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
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	.S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	8	55	44
Chromium	ppm	ASTM D5185m	>20	<1	6	6
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	1
Aluminum	ppm	ASTM D5185m	>20	4	45	53
Lead	ppm	ASTM D5185m	>40	1	3	2
Copper	ppm	ASTM D5185m	>330	<1	3	2
Tin	ppm	ASTM D5185m	>15	<1	1	2
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		1	0	6
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		60	60	58
Manganese	ppm	ASTM D5185m		0	1	<1
Magnesium	ppm	ASTM D5185m		1084	938	974
Calcium	ppm	ASTM D5185m		1208	1065	974
Phosphorus	ppm	ASTM D5185m		1074	969	981
Zinc	ppm	ASTM D5185m		1549	1242	1168
Sulfur	ppm	ASTM D5185m		3852	3139	2592
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	15	8
Sodium	ppm	ASTM D5185m		<1	3	4
Potassium	ppm	ASTM D5185m	>20	11	111	149
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.8	0.7
Nitration	Abs/cm	*ASTM D7624	>20	5.7	12.7	12.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.2	23.8	23.4
FLUID DEGRAI	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.7	19.0	19.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	10.03	6.89	7.52



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
FLUID PROPE	RTIFS	method	limit/base	current	historv1	historv2

FLUID PROPE	RTIES	method	limit/base	e current	history1	histo	ory2
Visc @ 100°C	cSt	ASTM D445	15.6	14.6	12.8	12.9	
GRAPHS							
Iron (ppm)				Lead (ppm)			
Severe				80 - Severe			
0			mdd	60-			
O - Abnormal		<u> </u>		40 Abnormal	:		
				20			
May13/21 Oct22/21	May18/22	Feb1/23 ·	0ct7/23	May13/21 Oct22/21	May18/22	Feb 1/23	5
≤ dluminum (ppm)	Ma	ш.	J	≧ o Chromium (p		Œ	
Aldinindin (ppin)				50 T			
				40 - Severe			
Severe				20 Abnormal		********	
Abnormal				10-			
12 12	22			217		23	
May13/21 0ct22/21	May18/22	Feb1/23	0ct7/23 ·	May13/21 Oct22/21	May18/22	Feb1/23	CC1 54-0
Copper (ppm)				Silicon (ppm)			
Severe Pabinoimal		——————————————————————————————————————		80 - Severe	 		
0				60			
0			0	Abnormal			
				20			_
May13/21	May18/22 -	Feb1/23 -	0ct7/23	May13/21	May18/22 -	Feb1/23 -	50 57
2		골	0	2		Ē	c
Viscosity @ 100°C	; 		1	Base Number			
Abnormal			ise Number (mg KOH/g)	0.0 Base			
- Base - Abnormal			Jer (mg	6.0			
Abnormal 2			Numb	4.0			





Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10697928

: PCA0044174 : 05980633

Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 16 Oct 2023

Diagnosed : 17 Oct 2023 Diagnostician : Wes Davis

GARY INGRAM GRADING & PAVING

1767 GRIFFIN SHOULS RD DADEVILLE, AL US 36853

Feb1/23

Contact: RON INGRAM

ron.ingram@ingrampaving.com T: (256)825-6878

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: GARDAD [WUSCAR] 05980633 (Generated: 10/23/2023 09:30:47) Rev: 1

Contact/Location: RON INGRAM - GARDAD

F: