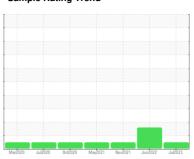


OIL ANALYSIS REPORT

Sample Rating Trend







TRUCK 9

Component **Diesel Engine**

PETRO CANADA DURON SHP 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

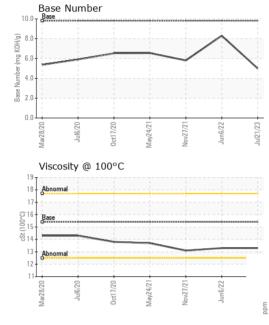
Fluid Condition

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

MAL)		Mar2020	Jul2020 Oct2020	May2021 Nov2021 Jun2022	Jul2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0096388	PCA0054214	PCA0053884
Sample Date		Client Info		21 Jul 2023	06 Jun 2022	27 Nov 2021
Machine Age	mls	Client Info		621659	572380	551404
Oil Age	mls	Client Info		20000	20000	20000
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	14	14	10
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	5	4	4
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	2	2	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Antimony	ppm	ASTM D5185m				0
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	0	4	8	<1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	67	57	60
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	1013	883	1119
Calcium	ppm	ASTM D5185m	1070	1183	1077	1338
Phosphorus	ppm	ASTM D5185m	1150	1030	937	1141
Zinc	ppm	ASTM D5185m	1270	1322	1140	1338
Sulfur	ppm	ASTM D5185m	2060	3272	2736	3028
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	19	△ 34	17
Sodium	ppm	ASTM D5185m		2	2	3
Potassium	ppm	ASTM D5185m	>20	3	0	3
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	10.6	10.5	11
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	22.6	25.7
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.5	20.5	25
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.0	8.30	5.81



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	RTIES	method	limit/base	current	history1	history2

FLUID FROF	ENTIES	method			HISTOLAL	HISTOLYZ
Visc @ 100°C	cSt	ASTM D445	15.4	13.3	13.3	13.1

GRAPHS	3												
Iron (ppm))					100	Lead	l (ppm)				
Severe						80	Severe						
						Edd 40							
Abnormal		-				- 40 - 20 -	Abnor	mai					
						0.		_					
Mar28/20	Oct17/20	May24/21	Nov27/21	Jun6/22	Jul21/23		Mar28/20	Jul6/20	0ct17/20	May24/21	Nov27/21	Jun6/22	Jul21/23
≊ Aluminum		Σ	Z	,	7				(ppm)	Σ	Z	,	
Severe						50	Severe						
						40 ·							
Abnormal						E 30.	Abnorr	mal					
						10 -							
Marz 6/20 - Jul 6/20 -	0ct17/20	May24/21	Nov27/21-	Jun6/22 -	Jul21/23	0.	Mar28/20 -	Jul6/20 -	Oct17/20 -	May24/21-	Nov27/21-	Jun6/22 -	Jul21/23
E Copper (pp		Ma	No	5	٦			on (ppi		Ma	N	7	7
Severe	JIII)					80-	Severe	лі (ррі	11)				
						60-							
						₩ 40 ·	Abnorr	mal				^	
						20	-				_		
Mar28/20	1/20	4/21	12/2	Jun6/22 -	Jui21/23	0.	3/20	Jul6/20 +	1/20	4/21	-12//	Jun6/22 +	Jul21/23
≥	Oct17/20	May24/21	Nov27/21	Jun	Jul2		Mar28/20	3	Oct17/20	May24/21	Nov27/21	Jun	Jul
Viscosity @	100°C					10.0	Base	Numb	oer				
Abnormal						K0H/g)							
Base						se Number (mg KOH/g) 0.9 2.0							/
Abnormal			***************************************			qun 4.0							





Laboratory

Sample No. Lab Number

Unique Number : 10655056

: PCA0096388 : 05953843

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

: 18 Sep 2023 : 19 Sep 2023 Diagnostician : Wes Davis

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. **B & B HARVESTING**

2842 LADD RD MODESTO, CA US 95356

Contact: Service Manager drcalvalley@gmail.com T: (209)545-8300

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)