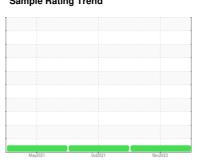


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



PETERBILT 16

Component

Diesel Engine

PETRO CANADA DURON XL SYN BLEND

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

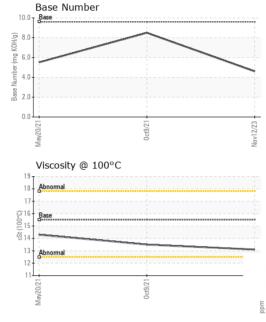
Fluid Condition

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

5W40 (GAL)		Mar	Z021	Oct2021 Nov202	23	
SAMPLE INFORM	NOITAN	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0096392	PCA0053875	PCA003046
Sample Date		Client Info		12 Nov 2023	09 Oct 2021	20 May 202
Machine Age	mls	Client Info		461088	439058	420033
Oil Age	mls	Client Info		20000	20000	20000
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS	S ,	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>100	18	10	13
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	8	5	2
_ead	ppm	ASTM D5185m	>40	<1	2	<1
Copper	ppm	ASTM D5185m	>330	1	1	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Antimony	ppm	ASTM D5185m			0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	1	5	13	96
Barium	ppm	ASTM D5185m	1	0	0	0
Molybdenum	ppm	ASTM D5185m	60	47	52	8
Manganese	ppm	ASTM D5185m	1	0	<1	<1
Magnesium	ppm	ASTM D5185m	1010	913	837	96
Calcium	ppm	ASTM D5185m	1070	836	1343	2095
Phosphorus	ppm	ASTM D5185m	1150	696	1039	946
Zinc				090	1000	
_1110	ppm	ASTM D5185m	1270	987	1130	1109
Sulfur	ppm ppm	ASTM D5185m ASTM D5185m				1109 2895
-	ppm			987	1130	2895
Sulfur	ppm	ASTM D5185m	2060 limit/base	987 2305	1130 2644	2895
Sulfur CONTAMINAN	ppm TS	ASTM D5185m method	2060 limit/base	987 2305 current	1130 2644 history1	2895 history2
Sulfur CONTAMINANT Silicon	ppm TS ppm	ASTM D5185m method ASTM D5185m	2060 limit/base >25	987 2305 current	1130 2644 history1	2895 history2 7
Sulfur CONTAMINAN ^T Silicon Sodium	ppm TS ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	2060 limit/base >25	987 2305 current 9	1130 2644 history1 8 0	2895 history2 7 2 8
Sulfur CONTAMINAN ^T Silicon Sodium Potassium	ppm TS ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	2060 limit/base >25 >20	987 2305 current 9 1	1130 2644 history1 8 0	2895 history2 7 2 8
Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm TS ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method	2060 limit/base >25 >20 limit/base >3	987 2305 current 9 1 18 current	1130 2644 history1 8 0 1 history1	2895 history2 7 2 8 history2
Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot %	ppm TS ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844	2060 limit/base >25 >20 limit/base >3 >20	987 2305 current 9 1 18 current 0.2	1130 2644 history1 8 0 1 history1 0.2	2895 history2 7 2 8 history2 0.2
Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm Abs/cm Abs/.1mm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	2060 limit/base >25 >20 limit/base >3 >20	987 2305 current 9 1 18 current 0.2 9.9	1130 2644 history1 8 0 1 history1 0.2 9.7	2895 history2 7 2 8 history2 0.2 9.8 25.4
Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm Abs/cm Abs/.1mm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	2060 limit/base >25 >20 limit/base >3 >20 >3 >20 >30	987 2305 current 9 1 18 current 0.2 9.9 22.2	1130 2644 history1 8 0 1 history1 0.2 9.7 22.3	2895 history2 7 2 8 history2 0.2 9.8



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

I LOID I NOI I		method	III III DC	isc current	Thistory i	riistoryz
Visc @ 100°C	cSt	ASTM D445	15.5	13.1	13.5	14.3
GRAPHS						
Iron (ppm)				Lead (ppm)		
Severe				80 Severe		
0+				co		
0 - Abnormal		***************************************		40 Abnormal		
0				20		
May20/21	0ct9/21-		Nov12/23	May20/21	Oct9/21-	Nov12/23
			Nov			Nov
Aluminum (ppm)				Chromium (p	pm)	
0 Severe				40 Severe		
Abnormal				Abnormal		
0+ 0				10		
0				0		
May20/2	Oct9/21		Nov12/23	May20/2	0ct9/21.	Nov12/23
≥ Copper (ppm)			Z	≥ Silicon (ppm)		Z
Severe				80 Severe		
0+				60		
0				Abnormal		
0+				20		
07170	0ct9/21-		1/23	0/17/0	Oct9/21+-	1/23
May20/2`	Oct		Nov12/23	Мау20/2	00	Nov12/23 -
Viscosity @ 100°	С			Base Number	-	
8 Abnormal						
6 Base Abnormal				(9) 8.0 V (A) 8.0 (b) 6.0 (c) 6.0 (d) 8.0 (d)		
				4.0		
0				0.0		
// // // // // // // // // // // // //	Oct9/21-		lov12/23	lay20/21-	0ct9/21-	lov12/23 -
Jan	0		0	la)	0	No.



Laboratory Sample No. Lab Number

Unique Number : 10776859

: PCA0096392 : 06027068

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 06 Dec 2023 Received Diagnosed

: 08 Dec 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. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) **B & B HARVESTING**

2842 LADD RD MODESTO, CA US 95356 Contact: Service Manager

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