

OIL ANALYSIS REPORT



Machine Id PETERBILT 435

Component Diesel Engine

Fluid DIESEL ENGINE OIL SAE 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.

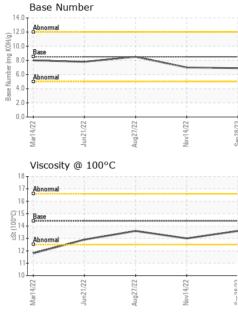
Fluid Condition

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

Sample NumberClient InfoPCA0082945PCA0069497PCA0069333Sample DateClient Info28 Sep 202314 Nov 202227 Aug 2022Machine AgemlsClient Info181394126568104548Oil AgemlsClient Info02201914804Oil ChangedClient InfoN/AChangedChangedSample StatusIINORMALNORMALNORMALCONTAMINATIONmethodlimit/basecurrenthistory1history2FuelWC Method>5<1.0<1.0<1.0WaterWC Method>0.2NEGNEGNEGGlycolWC Method>0.2NEGNEGNEGWEAR METALSmethodlimit/basecurrenthistory1history2IronppmASTM D5185m>100311715ChromiumppmASTM D5185m>2021<1NickelppmASTM D5185m>3000SilverppmASTM D5185m>201157LeadppmASTM D5185m>3302<1<12CopperppmASTM D5185m>152<1<10TinppmASTM D5185m>152<1<10ADDITIVESmethodIimit/basecurrenthistory1history2
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GlycolWC MethodNEGNEGNEGWEAR METALSmethodlimit/basecurrenthistory1history2IronppmASTM D5185m>100311715ChromiumppmASTM D5185m>2021<1NickelppmASTM D5185m>4<10<1TitaniumppmASTM D5185m>3000SilverppmASTM D5185m>3000AluminumppmASTM D5185m>201157LeadppmASTM D5185m>3302<1<1TinppmASTM D5185m>152<1<1VanadiumppmASTM D5185m>152<1<1VanadiumppmASTM D5185m<1000CadmiumppmASTM D5185m<1000
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 31 17 15 Chromium ppm ASTM D5185m >20 2 1 <1 Nickel ppm ASTM D5185m >20 2 1 <1 Nickel ppm ASTM D5185m >4 <1 0 <1 Titanium ppm ASTM D5185m >4 <1 0 0 Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >20 11 5 7 Lead ppm ASTM D5185m >40 4 <1 2 Copper ppm ASTM D5185m >330 2 <1 <1 Tin ppm ASTM D5185m >15 2 <1 <1 Vanadium ppm ASTM D5185m <1 0 0
Iron ppm ASTM D5185m >100 31 17 15 Chromium ppm ASTM D5185m >20 2 1 <1
Chromium ppm ASTM D5185m >20 2 1 <1
Nickel ppm ASTM D5185m >4 <1
Titanium ppm ASTM D5185m <1
Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >20 11 5 7 Lead ppm ASTM D5185m >40 4 <1
Aluminum ppm ASTM D5185m >20 11 5 7 Lead ppm ASTM D5185m >40 4 <1
Lead ppm ASTM D5185m >40 4 <1
Copper ppm ASTM D5185m >330 2 <1
Tin ppm ASTM D5185m >15 2 <1
Vanadium ppm ASTM D5185m <1
Cadmium ppm ASTM D5185m <1 0 0
ADDITIVES method limit/base current history1 history2
Boron ppm ASTM D5185m 250 19 3 2
Barium ppm ASTM D5185m 10 2 0 0
Molybdenum ppm ASTM D5185m 100 104 61 58
Manganese ppm ASTM D5185m 1 <1
Magnesium ppm ASTM D5185m 450 1454 962 996
Calcium ppm ASTM D5185m 3000 1795 1097 1097
Phosphorus ppm ASTM D5185m 1150 1672 1024 1035
Zinc ppm ASTM D5185m 1350 1982 1258 1286
Sulfur ppm ASTM D5185m 4250 5128 3527 3221
CONTAMINANTS method limit/base current history1 history2
Silicon ppm ASTM D5185m >25 9 7 10
Sodium ppm ASTM D5185m >158 6 2 2
Potassium ppm ASTM D5185m >20 23 11 17
INFRA-RED method limit/base current history1 history2
Soot % *ASTM D7844 >3 0.5 0.5 0.4
Nitration Abs/cm *ASTM D7624 >20 9.4 9.6 9.2
Sulfation Abs/.1mm *ASTM D7415 >30 22.7 22.3 22.7
FLUID DEGRADATION method limit/base current history1 history2
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.5 18.5 18.5



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		
Nov14/22 Sep28/23	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML		
Nov	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		
	Visc @ 100°C	cSt	ASTM D445	14.4	13.6	13.0	13.6		
	GRAPHS								
	Ferrous Alloys								
cc.sc.	30 - iron			1					
۲/4/22 Nov	25 - nickel		/						
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	copper								
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	Viscosity @ 100°C				Base Number				
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	20014 314 313 Abnormal			er (mg	0		<u> </u>		
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	12			ase 4.	0				
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	Mar14/22 Jun21/22	Aug27/22	Nov14/22	Sep28/23	Mar14/22 Jun21/22	Aug27/22	Nov14/22 Sep28/23		
	: WearCheck USA - 50 : PCA0082945 : 06128555	n Ave., Cary, NC 27513 ved : 25 Mar 2024 d : 27 Mar 2024			LEFEBV 10895	LEFEBVRE AND SONS 10895 171ST AVE NW ELK RIVER, MN			
Unique Number		Diagn	nosed : 28 Mar 2024 - Don Baldridge			Contact	US 55330		



Unique N Test Package : FLEET Contact: JAY LEFEBVRE Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. jay.lefebvre@leftruck.com * - 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)

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