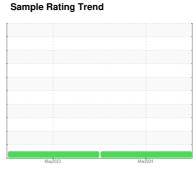


OIL ANALYSIS REPORT



NORMAL



PETERBILT 1

Component

Diesel Engine

CHEVRON DELO 400 XLE 10W30 (--- LTR)

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 condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION method limit/base current history1 history2							
Sample Number Client Info PC0046038 PC0046037 Client Info 20 Mar 2024 20 May 2023 Client Info 442 587 Client Info 442 587 Client Info 442 587 Client Info Changed Change	OAMBLE INFO	DMATION					
Sample Date	SAMPLE INFO	RMATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 13650 11747	•						
Oil Age hrs Client Info 442 587 Oil Changed Client Info Changed Changed Sample Status NORMAL NORMAL CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0						,	
Oil Changed Client Info NORMAL		hrs	Client Info		13650		
Sample Status	-	hrs	Client Info				
CONTAMINATION	Oil Changed		Client Info				
Fuel WC Method S5	Sample Status				NORMAL	NORMAL	
Water WC Method >0.2 NEG NEG WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM D5185(m) >100 6 7 Chromium ppm ASTM D5185(m) >20 0 0 Nickel ppm ASTM D5185(m) >4 0 <1 Titanium ppm ASTM D5185(m) 3 0 0 <1 Aluminum ppm ASTM D5185(m) >20 1 2 Lead ppm ASTM D5185(m) >20 1 2 Copper ppm ASTM D5185(m) >40 0 0 Vanadium ppm ASTM D5185(m) >15 0 0 Vandium ppm ASTM D5185(m) 0 0 Cadmium </td <td>CONTAMINA</td> <td>TION</td> <td>method</td> <td>limit/base</td> <th>current</th> <td>history1</td> <td>history2</td>	CONTAMINA	TION	method	limit/base	current	history1	history2
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >100 6 7	Fuel		WC Method	>5	<1.0	<1.0	
Iron	Water		WC Method	>0.2	NEG	NEG	
Chromium	WEAR META	LS	method	limit/base	current	history1	history2
Nickel ppm ASTM D5185(m) >4 0 <1 Titanium ppm ASTM D5185(m) 0 <1	Iron	ppm	ASTM D5185(m)	>100	6	7	
Titanium	Chromium		ASTM D5185(m)	>20	0	0	
Titanium ppm ASTM D5185(m) 0 <1 Silver ppm ASTM D5185(m) >3 0 0 Aluminum ppm ASTM D5185(m) >20 1 2 Lead ppm ASTM D5185(m) >40 0 0 Copper ppm ASTM D5185(m) >330 <1	Nickel	ppm	ASTM D5185(m)	>4	0	<1	
Silver	Titanium		ASTM D5185(m)		0	<1	
Aluminum ppm ASTM D5185(m) >20 1 2	Silver		, ,	>3	0	0	
Lead ppm ASTM D5185(m) >40 0 0	Aluminum			>20	1		
Copper ppm ASTM D5185(m) >330 <1 <1 Tin ppm ASTM D5185(m) >15 0 0 Antimony ppm ASTM D5185(m) 0 0 Vanadium ppm ASTM D5185(m) 0 0 Beryllium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 34 39 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 0 0 Maprasium ppm ASTM D5185(m) </td <td></td> <td></td> <td>(/</td> <td></td> <th></th> <td></td> <td></td>			(/				
Tin ppm ASTM D5185(m) >15 0 0 Antimony ppm ASTM D5185(m) 0 0 Vanadium ppm ASTM D5185(m) 0 0 Beryllium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 0 0 ADJTUTIVES method limit/base current history1 Barium ppm ASTM D5185(m) 716 </td <td></td> <td></td> <td></td> <td></td> <th>-</th> <td></td> <td></td>					-		
Antimony ppm ASTM D5185(m) 0 0 Vanadium ppm ASTM D5185(m) 0 0 Beryllium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 0 0 Barium ppm ASTM D5185(m) 0 0 Molybdenum ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 0 -1 Magnesium ppm ASTM D5185(m) 716 723 Calcium ppm ASTM D5185(m) 1309 1441 Phosphorus ppm ASTM D5185(m) 748 786 Zinc ppm ASTM D5185(m) 2365 2569 <	• •		1 /				
Vanadium ppm ASTM D5185(m) 0 0 Beryllium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 0 0 Barium ppm ASTM D5185(m) 0 0 Molybdenum ppm ASTM D5185(m) 0 <1 1 Manganese ppm ASTM D5185(m) 716 723 Galcium ppm ASTM D5185(m) 1309 1441 Phosphorus ppm ASTM D5185(m) 654 763 Zinc ppm ASTM D5185(m) 2365 2569 Sulfur ppm ASTM D5185(m) 2365 2569 Lithium ppm ASTM D5185(m) >25				>10			
Beryllium	•		\ /		_		
Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 34 39 Barium ppm ASTM D5185(m) 0 0 Molybdenum ppm ASTM D5185(m) <1			. ,				
ADDITIVES	•		(/		-		
Boron ppm ASTM D5185(m) 0 0 0 0 0 0	ADDITIVES		method	limit/base	current	history1	history2
Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) <1		nnm	ASTM D5185(m)		34	39	
Molybdenum ppm ASTM D5185(m) <1 1 Manganese ppm ASTM D5185(m) 0 <1 Magnesium ppm ASTM D5185(m) 716 723 Calcium ppm ASTM D5185(m) 1309 1441 Phosphorus ppm ASTM D5185(m) 654 763 Zinc ppm ASTM D5185(m) 748 786 Sulfur ppm ASTM D5185(m) 2365 2569 Lithium ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >25 3 5 Sodium ppm ASTM D5185(m) >20 7 8 Glycol % ASTM D7922* 0.0 0.0 INFRA-RED method limit/base			. ,				
Manganese ppm ASTM D5185(m) 0 <1 Magnesium ppm ASTM D5185(m) 716 723 Calcium ppm ASTM D5185(m) 1309 1441 Phosphorus ppm ASTM D5185(m) 654 763 Zinc ppm ASTM D5185(m) 748 786 Sulfur ppm ASTM D5185(m) 2365 2569 Lithium ppm ASTM D5185(m) <1			, ,		-		
Magnesium ppm ASTM D5185(m) 716 723 Calcium ppm ASTM D5185(m) 1309 1441 Phosphorus ppm ASTM D5185(m) 654 763 Zinc ppm ASTM D5185(m) 748 786 Sulfur ppm ASTM D5185(m) 2365 2569 Lithium ppm ASTM D5185(m) <1	•		. ,				
Calcium ppm ASTM D5185(m) 1309 1441 Phosphorus ppm ASTM D5185(m) 654 763 Zinc ppm ASTM D5185(m) 748 786 Sulfur ppm ASTM D5185(m) 2365 2569 Lithium ppm ASTM D5185(m) <1	-				_		
Phosphorus ppm ASTM D5185(m) 654 763 Zinc ppm ASTM D5185(m) 748 786 Sulfur ppm ASTM D5185(m) 2365 2569 Lithium ppm ASTM D5185(m) <1	-		. ,		-		
Zinc ppm ASTM D5185(m) 748 786 Sulfur ppm ASTM D5185(m) 2365 2569 Lithium ppm ASTM D5185(m) <1			, ,				
Sulfur ppm ASTM D5185(m) 2365 2569 Lithium ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >25 3 5 Sodium ppm ASTM D5185(m) 38 3 Potassium ppm ASTM D5185(m) >20 7 8 Glycol % ASTM D7922* 0.0 0.0 INFRA-RED method limit/base current history1 history2 Soot % % ASTM D7844* >3 0 0 Nitration Abs/cm ASTM D7624* >20 9.3 9.3	•		, ,				
Lithium ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >25 3 5 Sodium ppm ASTM D5185(m) 38 3 Potassium ppm ASTM D5185(m) >20 7 8 Glycol % ASTM D7922* 0.0 0.0 INFRA-RED method limit/base current history1 history2 Soot % % ASTM D7844* >3 0 0 Nitration Abs/cm ASTM D7624* >20 9.3 9.3	-		, ,		_		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >25 3 5 Sodium ppm ASTM D5185(m) 38 3 Potassium ppm ASTM D5185(m) >20 7 8 Glycol % ASTM D7922* 0.0 0.0 INFRA-RED method limit/base current history1 history2 Soot % % ASTM D7844* >3 0 0 Nitration Abs/cm ASTM D7624* >20 9.3 9.3			. ,				
Silicon ppm ASTM D5185(m) >25 3 5 Sodium ppm ASTM D5185(m) 38 3 Potassium ppm ASTM D5185(m) >20 7 8 Glycol % ASTM D7922* 0.0 0.0 INFRA-RED method limit/base current history1 history2 Soot % % ASTM D7844* >3 0 0 Nitration Abs/cm ASTM D7624* >20 9.3 9.3				limit/base			
Sodium ppm ASTM D5185(m) 38 3 Potassium ppm ASTM D5185(m) >20 7 8 Glycol % ASTM D7922* 0.0 0.0 INFRA-RED method limit/base current history1 history2 Soot % % ASTM D7844* >3 0 0 Nitration Abs/cm ASTM D7624* >20 9.3 9.3							
Potassium ppm ASTM D5185(m) >20 7 8 Glycol % ASTM D7922* 0.0 0.0 INFRA-RED method limit/base current history1 history2 Soot % % ASTM D7844* >3 0 0 Nitration Abs/cm ASTM D7624* >20 9.3 9.3			. ,	720			
Glycol % ASTM D7922* 0.0 0.0 INFRA-RED method limit/base current history1 history2 Soot % % ASTM D7844* >3 0 0 Nitration Abs/cm ASTM D7624* >20 9.3 9.3			(/	>20			
INFRA-RED method limit/base current history1 history2 Soot % % ASTM D7844* >3 0 0 Nitration Abs/cm ASTM D7624* >20 9.3 9.3			(/	>20			
Soot % % ASTM D7844* >3 0 0 Nitration Abs/cm ASTM D7624* >20 9.3 9.3				limit/base		history1	
Nitration Abs/cm ASTM D7624* >20 9.3 9.3		%					
	Sulfation	Abs/.1mm	ASTM D7024 ASTM D7415*	>30	19.9	21.2	



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited

Laboratory Sample No. Lab Number

: PC0046038

: 02624147

Unique Number : 5749266

Diagnosed Test Package: MOB 1 (Additional Tests: Glycol, KV40, VI) To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Received

Tested

: 25 Mar 2024

: 25 Mar 2024

: 25 Mar 2024 - Kevin Marson

HORTON LIVESTOCK

BOX 1208 MAPLE CREEK, SK **CA S0N 1N0**

Contact: Service Manager JASON_HOFER@YAHOO.COM

T: (306)671-7638

F: