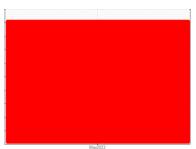


# **PROBLEM SUMMARY**

Sample Rating Trend



GLYCOL



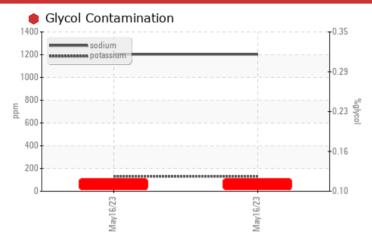
# PETERBILT 957-1788

Component

**Diesel Engine** 

MOBIL DELVAC 1300 SUPER15W40 (18 QTS)

# COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

PROBLEMATIC <sup>3</sup>	TEST RE	ESULTS			
Sample Status				SEVERE	 
Molybdenum	ppm	ASTM D5185m	0	<u> </u>	 
Magnesium	ppm	ASTM D5185m	0	<b>421</b>	 
Sodium	ppm	ASTM D5185m		<b>1203</b>	 
Potassium	ppm	ASTM D5185m	>20	<u> </u>	 
Glycol	%	*ASTM D2982		0.12	 

Customer Id: PAC7004 Sample No.: RPL0009497 Lab Number: 05867216 Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED A	CTIONS			
Action	Status	Date	Done By	Description
Resample	MISSED	Jul 03 2023	?	We recommend an early resample to monitor this condition.
Check Fluid Source	MISSED	Jul 03 2023	?	Confirm the source of the lubricant being utilized for top-up/fill.
Check Glycol Access	MISSED	Jul 03 2023	?	We advise that you check for the source of the coolant leak.

# HISTORICAL DIAGNOSIS



# **OIL ANALYSIS REPORT**

Sample Rating Trend



GLYCOL



Machine Id

# **PETERBILT 957-1788**

Component

**Diesel Engine** 

MOBIL DELVAC 1300 SUPER15W40 (18 QTS)

## DIAGNOSIS

## Recommendation

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

## Wear

Metal levels are typical for a components first oil change.

#### Contamination

Test for glycol is positive. There is a high concentration of glycol present in the oil.

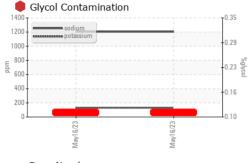
## Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

S)				May2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		RPL0009497		
Sample Date		Client Info		16 May 2023		
Machine Age	mls	Client Info		4114		
Oil Age	mls	Client Info		4114		
Oil Changed		Client Info		Changed		
Sample Status				SEVERE		
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	56		
Chromium	ppm	ASTM D5185m	>20	2		
Nickel	ppm	ASTM D5185m	>4	0		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	8		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	42		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
				_		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current	history1	history2
	ppm					
Boron		ASTM D5185m	0	19		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	19 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	19 0 ▲ 271		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	19 0 ▲ 271 8		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	19 0 271 8 421		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	19 0 ▲ 271 8 ▲ 421 1185		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	19 0 ▲ 271 8 ▲ 421 1185 611		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	19 0 \$\triangle 271 8 \$\triangle 421 1185 611 768	   	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	19 0 271 8 421 1185 611 768 2607		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0	19 0  271 8  421 1185 611 768 2607 current	     history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0	19 0 271 8 421 1185 611 768 2607 current	     history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base >25	19 0 ▲ 271 8 ▲ 421 1185 611 768 2607 current 27 ▲ 1203		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base >25	19 0 ▲ 271 8 ▲ 421 1185 611 768 2607 current 27 ▲ 1203 ▲ 131		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base >25 >20	19 0 ▲ 271 8 ▲ 421 1185 611 768 2607  current 27 ▲ 1203 ▲ 131 ● 0.12	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D2982 *Method	0 0 0 0 0 limit/base >25 >20	19 0 ▲ 271 8 ▲ 421 1185 611 768 2607 current 27 ▲ 1203 ▲ 131 ● 0.12 current		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D2982 *Method *ASTM D7844	0 0 0 0 0 limit/base >25 >20	19 0  271 8  421 1185 611 768 2607 current 27  1203 131 0.12 current 0.3	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D7624	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20	19 0  271 8  421 1185 611 768 2607  current 27  1203  131  0.12  current 0.3 11.0	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20 >30	19 0 ▲ 271 8 ▲ 421 1185 611 768 2607	history1 history1	history2 history2



# **OIL ANALYSIS REPORT**



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG		
Free Water	scalar	*Visual		NEG		
ELUID DDODEDT	150		11 11 11		1111	111
FILIID PROPERT	11-5	method	limit/haca	Current	hietory1	hietory2

13.8

Base Number
12.0
(0) 10.0 Base (10) 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0
0.8 X
e 6.0
4.0 4.0
2.0 -
0.0
May1 6,723
W
Viscosity @ 100°C
174
Abnormal
© 15 - Base 7 - 14 - Base 8 - 15 - 16 - 16 - 16 - 16 - 16 - 16 - 16
9

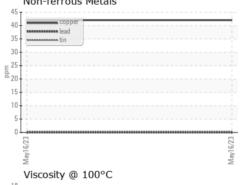
	iron chromiu				
*****	nickel	ım			
ļ					
-					
1					
23			 	 	
May16/23					0

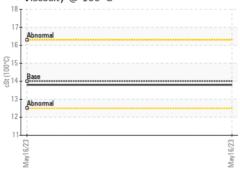
cSt

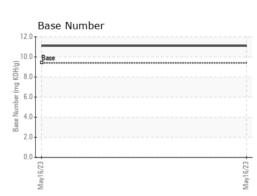
ASTM D445 14

Visc @ 100°C

**GRAPHS** 









12

Laboratory Sample No. Lab Number **Unique Number** 

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

: RPL0009497 : 05867216 : 10507000

Received Diagnosed

: 07 Jun 2023 : 14 Jun 2023

Diagnostician : Wes Davis

Test Package : FLEET ( Additional Tests: Glycol ) 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)

RTL PACLEASE - 7004 - Austin

1205 Smith Road Austin, TX US 78721

Contact: David Johnson JohnsonD@RushEnterprises.com

T: (512)401-7063