

# **PROBLEM SUMMARY**

Sample Rating Trend

DIRT

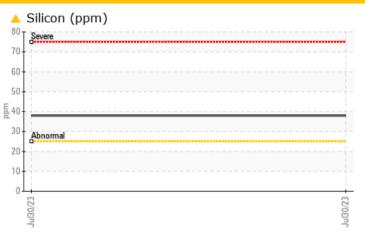


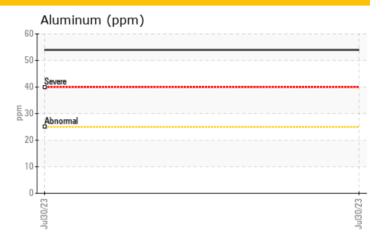
# PETERBILT 2402

Component **Diesel Engine** 

**DIESEL ENGINE OIL SAE 5W30 (44 QTS)** 

#### COMPONENT CONDITION SUMMARY





#### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

# PROBLEMATIC TEST RESULTS Sample Status ABNORMAL -- -- Silicon ppm ASTM D5185m >25 A 38 -- --

Customer Id: MABEDE Sample No.: WC0836276 Lab Number: 05930216 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS								
Action	Status	Date	Done By	Description				
Change Fluid			?	Oil and filter change at the time of sampling has been noted.				
Change Filter			?	Oil and filter change at the time of sampling has been noted.				

# HISTORICAL DIAGNOSIS



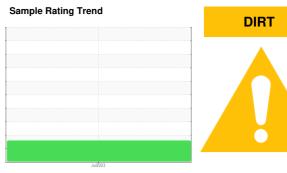
# **OIL ANALYSIS REPORT**

**PETERBILT 2402** 

Component

**Diesel Engine** 

**DIESEL ENGINE OIL SAE 5W30 (44 QTS)** 



#### **DIAGNOSIS**

#### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Elemental level of silicon (Si) above normal indicating ingress of seal material.

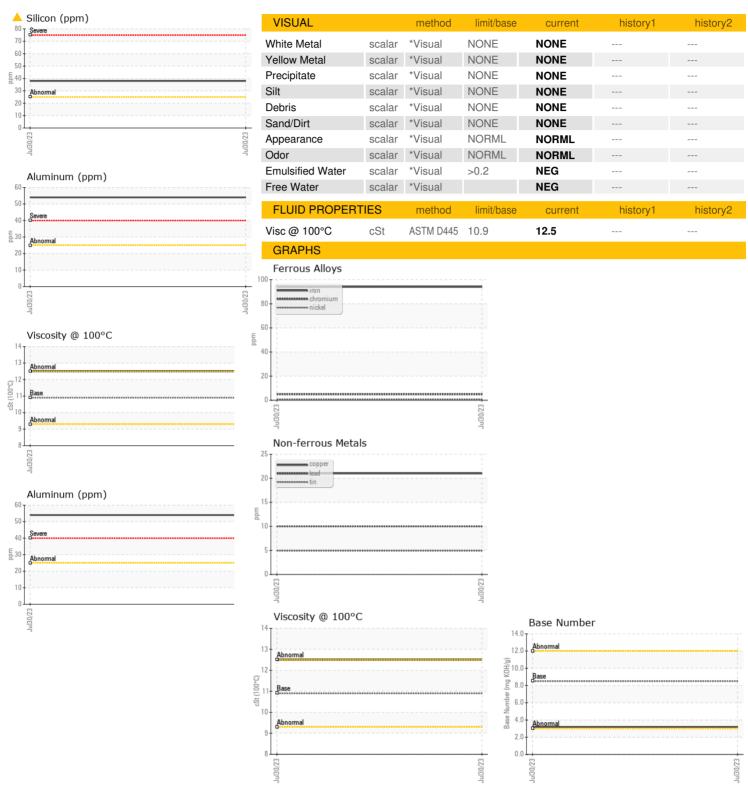
#### **Fluid Condition**

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

		L		Jul2023		
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0836276		
Sample Date		Client Info		30 Jul 2023		
Machine Age	mls	Client Info		102465		
Oil Age	mls	Client Info		50000		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
CONTAMINATION	l	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	94		
Chromium	ppm	ASTM D5185m	>20	5		
Nickel	ppm	ASTM D5185m	>2	<1		
Titanium	ppm	ASTM D5185m	>2	<1		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>25	54		
Lead	ppm	ASTM D5185m	>40	10		
Copper	ppm	ASTM D5185m	>330	21		
Tin	ppm	ASTM D5185m	>15	5		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	18		
Barium	ppm	ASTM D5185m	10	0		
Molybdenum	ppm	ASTM D5185m	100	63		
Manganese	ppm	ASTM D5185m		6		
Magnesium	ppm	ASTM D5185m	450	530		
Calcium	ppm	ASTM D5185m	3000	1757		
Phosphorus	ppm	ASTM D5185m	1150	927		
Zinc	ppm	ASTM D5185m	1350	1247		
Sulfur	ppm	ASTM D5185m	4250	2908		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	▲ 38		
Sodium	ppm	ASTM D5185m		7		
Potassium	ppm	ASTM D5185m	>20	156		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.6		
Nitration	Abs/cm	*ASTM D7624	>20	13.8		
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.2		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	30.9		
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	3.2		



### **OIL ANALYSIS REPORT**







Laboratory Sample No. Lab Number Unique Number

: WC0836276 : 05930216 : 10615487 Test Package : FLEET

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 21 Aug 2023 Diagnosed : 23 Aug 2023 Diagnostician

: Jonathan Hester

MABE TRUCKING PO BOX 1081 EDEN, NC

US 27289 Contact: MAINTENANCE

maintenancemanager@mabetrucking.com

Contact/Location: MAINTENANCE ? - MABEDE

\* - 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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