

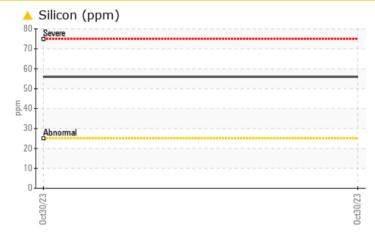
## Area FLEET Machine Id 2227084. N643758 Component

DIAGNOSTICS

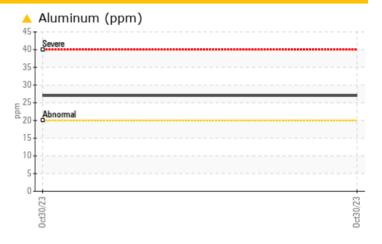
Bottom Diesel Engine Fluid NOT GIVEN (--- GAL)

OIL

# COMPONENT CONDITION SUMMARY



# Sample Rating Trend



# RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS								
Sample Status				ABNORMAL				
Aluminum	ppm	ASTM D5185m	>20	<u> </u>				
Silicon	ppm	ASTM D5185m	>25	<b>6</b>				

# Customer Id: PERDILSC Sample No.: PCA0108160 Lab Number: 06001438 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 <u>customerservice@wearcheck.com</u>

RECOMMENDE	D ACTIONS			
Action	Status	Date	Done By	Description
Check Dirt Access			?	We advise that you check the air filter, air induction system, and any areas where dirt may enter the component.

# HISTORICAL DIAGNOSIS



# **OIL ANALYSIS REPORT**



Bottom Diesel Engine Fluid NOT GIVEN (--- GAL)

# DIAGNOSIS

# Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

# 🔺 Wear

All component wear rates are normal.

# Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

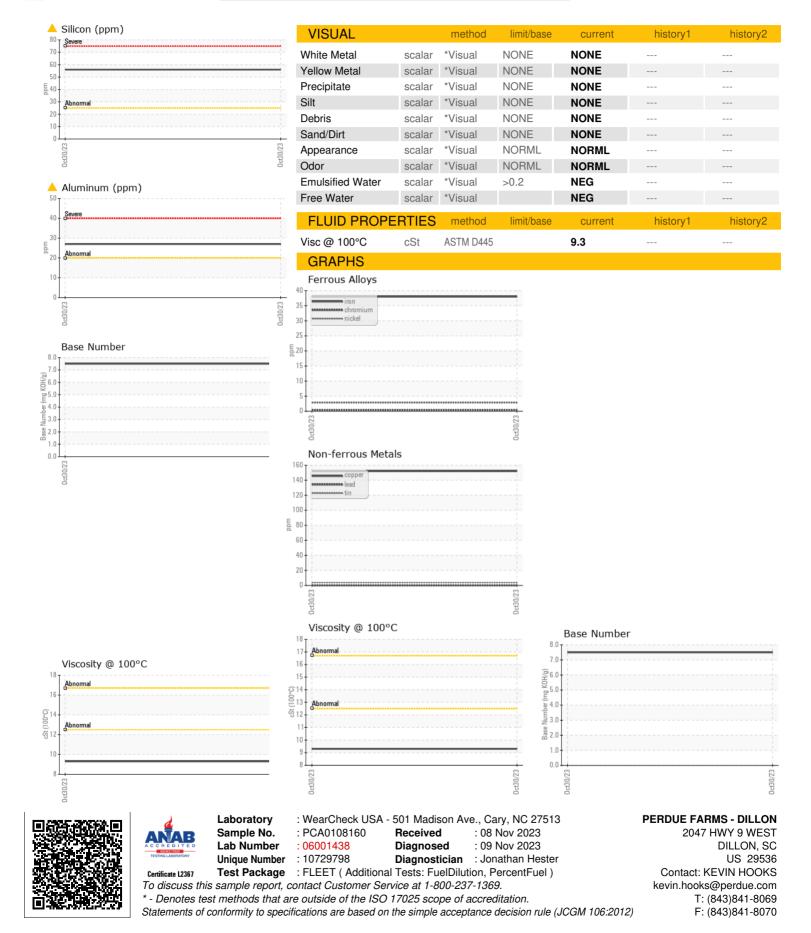
### Fluid Condition

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

		-				
				0ct2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0108160		
Sample Date		Client Info		30 Oct 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0 N/A		
Oil Changed		Client Info				
Sample Status						
CONTAMINAT	ION	method	limit/base	current	history1	history2
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	38		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	3		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	18		
Aluminum	ppm	ASTM D5185m	>20	<u> </u>		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	152		
Tin	ppm	ASTM D5185m	>15	4		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		187		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		117		
Manganese	ppm	AOTH DEADE				
Magnesium		ASTM D5185m		3		
-	ppm	ASTM D5185m		3 637		
-	ppm	ASTM D5185m ASTM D5185m		-		
Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		637 1397 551		
Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		637 1397 551 777		
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		637 1397 551	  	
Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	637 1397 551 777		
Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	637 1397 551 777 2172 current ▲ 56	  	
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25	637 1397 551 777 2172 current ▲ 56 4	    history1	   history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ITS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >20	637 1397 551 777 2172 current ▲ 56 4 71	   history1  	   history2 
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ITS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25	637 1397 551 777 2172 current ▲ 56 4	   history1 	   history2 
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ITS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >20	637 1397 551 777 2172 current ▲ 56 4 71	   history1  	   history2 
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ITS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >20 >5	637 1397 551 777 2172 current ▲ 56 4 71 <1.0	   history1  	   history2  
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ITS ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 <b>method</b> *ASTM D7844	>25 >20 >5 limit/base	637 1397 551 777 2172 current ▲ 56 4 71 <1.0 current	   history1    history1	   history2    history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ITS ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524	>25 >20 >5 limit/base >3	637 1397 551 777 2172 <b>current</b> ▲ 56 4 71 <1.0 <b>current</b> 0.2	   history1   history1 history1	   history2    history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ITS ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 <b>method</b> *ASTM D7844	>25 >20 >5 limit/base >3 >20	637 1397 551 777 2172 current ▲ 56 4 71 <1.0 current 0.2 10.0	   history1    history1  history1	   history2   history2  history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI	ppm ppm ppm ppm ITS ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 ASTM D3524 *ASTM D7844 *ASTM D7842	>25 >20 >5 limit/base >3 >20 >30	637 1397 551 777 2172 <b>current</b> ▲ 56 4 71 <1.0 <b>current</b> 0.2 10.0 24.8	  history1     history1  history1	history2 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm % % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 Method *ASTM D7844 *ASTM D7624 *ASTM D7415	>25 >20 >5 limit/base >3 >20 >30 limit/base	637 1397 551 777 2172 current ▲ 56 4 71 <1.0 current 0.2 10.0 24.8 current	   history1    history1    history1	   history2   history2  history2  history2 

Sample Rating Trend

DIRT



OIL

DIAGNOSTICS

Submitted By: KEVIN HOOKS

Page 4 of 4