

## **OIL ANALYSIS REPORT**

### Area **No Info On Sample** [No Info On Sample] NOT GIVEN PCA0119077

Diesel Engine

{not provided} (--- GAL)

#### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

#### Wear

All component wear rates are normal.

#### Contamination

Fuel content negligible. 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. 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 Rating Trend



NORMAL

SAMPLE INFORM	ΛΑΤΙΟΝ	method				history2
Sample Number		Client Info		PCA0119077		
Sample Date		Client Info		23 Jun 2024		
Machine Age	mls	Client Info		0		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATI		method	limit/base	ourrent	history1	history?
			0.0	NEO	history	mstoryz
water		WC Wethod	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	62		
Chromium	ppm	ASTM D5185m	>20	7		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>20	66		
Lead	ppm	ASTM D5185m	>40	3		
Copper	ppm	ASTM D5185m	>330	299		
Tin	ppm	ASTM D5185m	>15	3		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
Cadmium ADDITIVES	ppm	ASTM D5185m method	limit/base	0 current	 history1	history2
Cadmium ADDITIVES Boron	ppm	ASTM D5185m method ASTM D5185m	limit/base	0 current 26	 history1	history2
Cadmium ADDITIVES Boron Barium	ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base	0 current 26 <1	 history1 	history2
Cadmium ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 26 <1 46	 history1  	 history2 
Cadmium ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 26 <1 46 5	 history1  	 history2  
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 26 <1 46 5 653	 history1   	 history2   
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 26 <1 46 5 653 1858	 history1   	 history2   
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 26 <1 46 5 653 1858 831	 history1     	 history2    
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 26 <1 46 5 653 1858 831 1043	 history1     	 history2     
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 26 <1 46 5 653 1858 831 1043 2424	 history1      	 history2      
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 26 <1 46 5 653 1858 831 1043 2424	 history1       	 history2      
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 26 <1 46 5 653 1858 831 1043 2424 current	history1	 history2        history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base limit/base >25	0 current 26 <1 46 5 653 1858 831 1043 2424 current 7	history1	 history2       history2 
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	limit/base limit/base >25	0 current 26 <1 46 5 653 1858 831 1043 2424 current 7 4	history1	 history2       history2  history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base limit/base >25 >20	0 current 26 <1 46 5 653 1858 831 1043 2424 current 7 4 168	history1	 history2       history2  history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base limit/base >25 >20 >5	0 current 26 <1 46 5 653 1858 831 1043 2424 current 7 4 168 0.0	history1	 history2       history2    
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base limit/base >25 >20 >5	0 current 26 <1 46 5 653 1858 831 1043 2424 current 7 4 168 0.0 current	history1	 history2      history2    history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base limit/base >25 >20 >5 limit/base >3	0 current 26 <1 46 5 653 1858 831 1043 2424 current 7 4 168 0.0 current 0.7	history1	 history2      history2    history2     history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m <b>method</b> ASTM D5185m ASTM D524	limit/base   	0 current 26 <1 46 5 653 1858 831 1043 2424 current 7 4 168 0.0 current 0.7 10.6	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185	limit/base   	0 current 26 <1 46 5 653 1858 831 1043 2424 current 7 4 168 0.0 current 0.7 10.6 23.5	history1	history2  history2 </th
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D7624	limit/base   	0 current 26 <1 46 5 653 1858 831 1043 2424 current 7 4 168 0.0 current 0.7 10.6 23.5 current	history1	 history2      history2   history2  history2  history2  history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD Ovidation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185	limit/base   	0 current 26 <1 46 5 653 1858 831 1043 2424 current 7 4 168 0.0 current 0.7 10.6 23.5 current 22.8	history1	 history2      history2    history2  history2   history2    history2



# **OIL ANALYSIS REPORT**



9.9 Base Number 8. (B/H03 5.0 (mg K0H/g) 4.0 ∃ 3.0

.eg 2.0

1.0

0.0

un73/74

lun23/24

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

>0.2

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

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: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Transervice - Shop 1361 - Berkeley-Windsor : 24 Jun 2024 4400 State Road 19 : 27 Jun 2024 Windsor, WI : 27 Jun 2024 - Jonathan Hester Diagnosed US 53598 Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel) Contact: Mike Hurda To discuss this sample report, contact Customer Service at 1-800-237-1369. mhurda@transervice.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (608)846-2726 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (608)846-0389

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