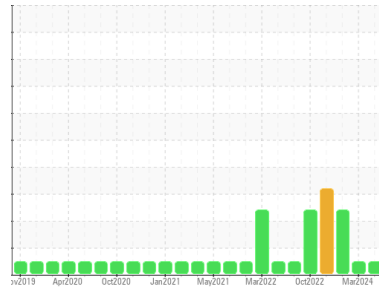


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**SENNEBOGEN 835 MH-76**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON HP 15W40 (--- LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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 INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PCA0113909</b>	PCA0113892	PCA0083692
Sample Date	Client Info	<b>11 Jun 2024</b>	14 Mar 2024	10 Feb 2023
Machine Age	hrs	<b>22308</b>	21270	17332
Oil Age	hrs	<b>500</b>	500	500
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed
Sample Status		<b>NORMAL</b>	NORMAL	SEVERE

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>36</b>	88	62
Chromium	ppm ASTM D5185m >20	<b>2</b>	6	4
Nickel	ppm ASTM D5185m >4	<b>0</b>	2	<1
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm ASTM D5185m >20	<b>3</b>	9	3
Lead	ppm ASTM D5185m >40	<b>0</b>	<1	1
Copper	ppm ASTM D5185m >330	<b>5</b>	10	2
Tin	ppm ASTM D5185m >15	<b>0</b>	1	<1
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>3</b>	7	3
Barium	ppm ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>60</b>	64	58
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	1	<1
Magnesium	ppm ASTM D5185m	<b>994</b>	993	863
Calcium	ppm ASTM D5185m	<b>1147</b>	1103	1043
Phosphorus	ppm ASTM D5185m	<b>1010</b>	1036	948
Zinc	ppm ASTM D5185m	<b>1270</b>	1312	1150
Sulfur	ppm ASTM D5185m	<b>3307</b>	3256	2857

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	8	5
Sodium	ppm ASTM D5185m	<b>5</b>	8	<1
Potassium	ppm ASTM D5185m >20	<b>2</b>	3	2

## INFRA-RED

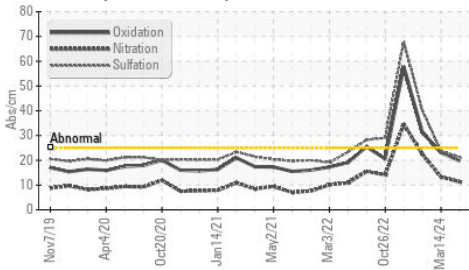
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.3</b>	0.6	▲ 7.2
Nitration	Abs/cm *ASTM D7624 >20	<b>11.3</b>	13.3	22.4
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>21.3</b>	23.7	40.2

## FLUID DEGRADATION

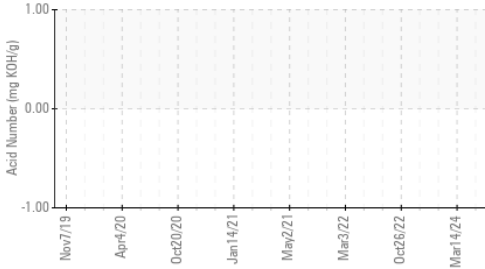
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>19.8</b>	23.1	31.3
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.03</b>	7.73	10.65

# OIL ANALYSIS REPORT

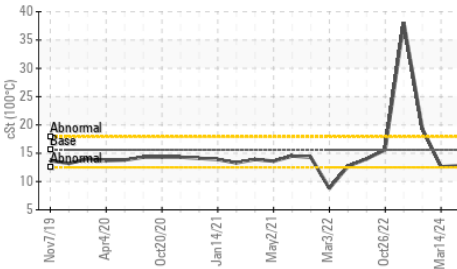
FT-IR (Direct Trend)



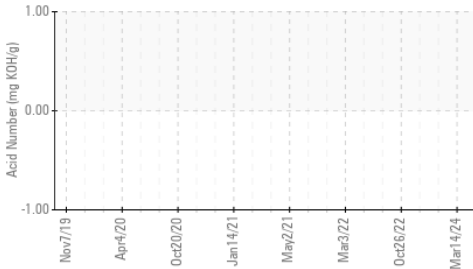
Acid Number



Viscosity @ 100°C



Acid Number

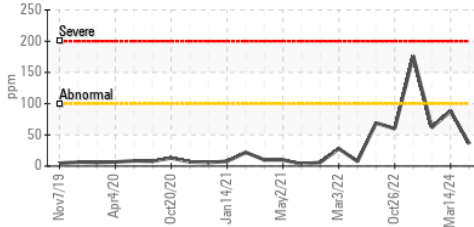


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

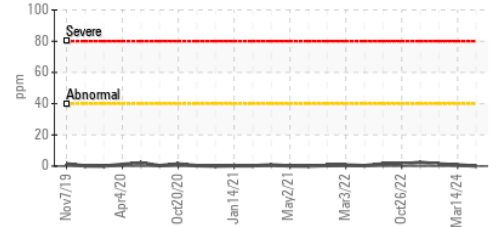
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.6	12.8	12.6 ▲ 19.3

## GRAPHS

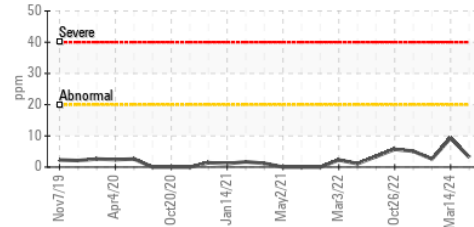
Iron (ppm)



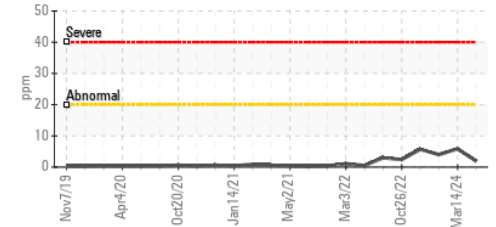
Lead (ppm)



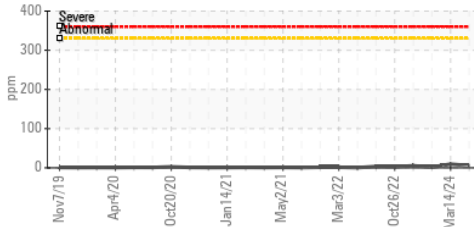
Aluminum (ppm)



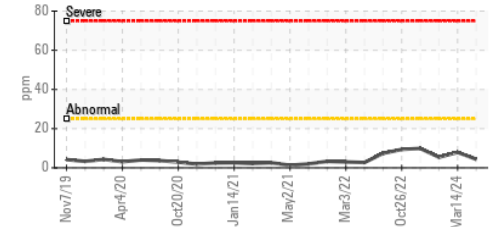
Chromium (ppm)



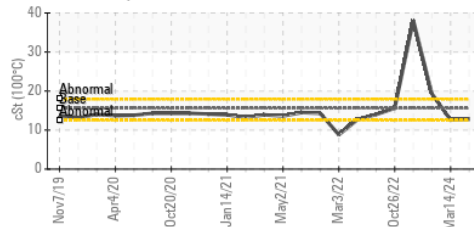
Copper (ppm)



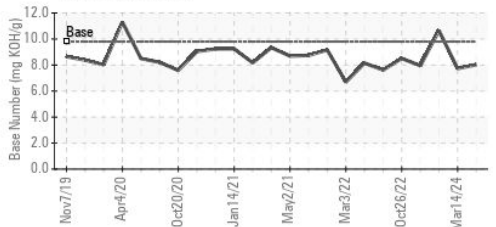
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : PCA0113909

Lab Number : 06214927

Unique Number : 11087791

Test Package : MOB 2 ( Additional Tests: TAN Man )

Received : 19 Jun 2024

Tested : 21 Jun 2024

Diagnosed : 21 Jun 2024 - Sean Felton

SCRAP METAL SERVICES (SMS Mill Services LLC)

250 WEST U.S. HWY 12

CHESTERTON, IN

US 46304

Contact: DOMINIC WHITE

dwhite@scrapmetalservices.com

T:

F:

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)