



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area

**AAAB IRAQ**

Machine Id

**2000-4251**

Component

**Genset**

Fluid

**VALVOLINE PREMIUM BLUE (380 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0860676</b>	WC0860671	WC0860780
Sample Date		Client Info		<b>06 Jun 2024</b>	16 May 2024	21 Apr 2024
Machine Age	hrs	Client Info		<b>22717</b>	22467	22170
Oil Age	hrs	Client Info		<b>250</b>	297	250
Filter Age	hrs	Client Info		<b>250</b>	297	250
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>&lt;1</b>	3	3
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>&lt;1</b>	4	2
Lead	ppm	ASTM D5185m	>17	<b>&lt;1</b>	2	1
Copper	ppm	ASTM D5185m	>70	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

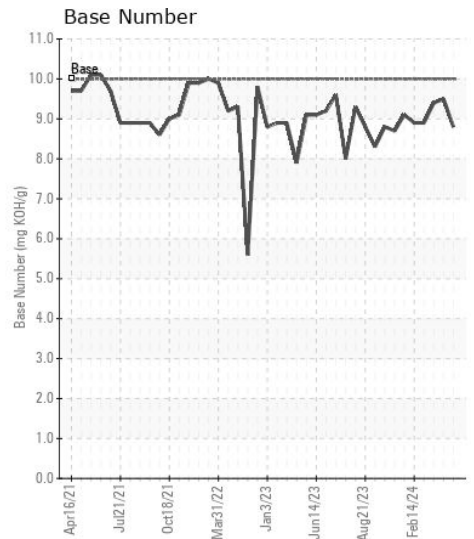
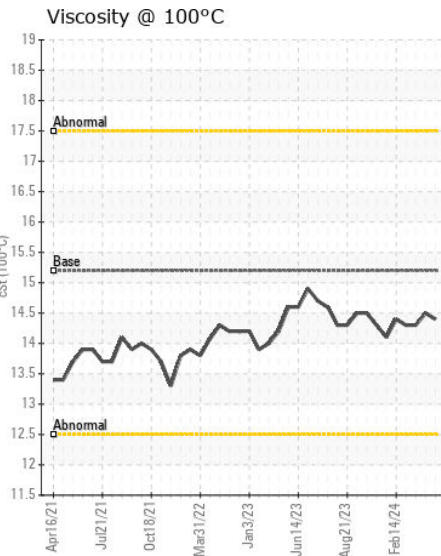
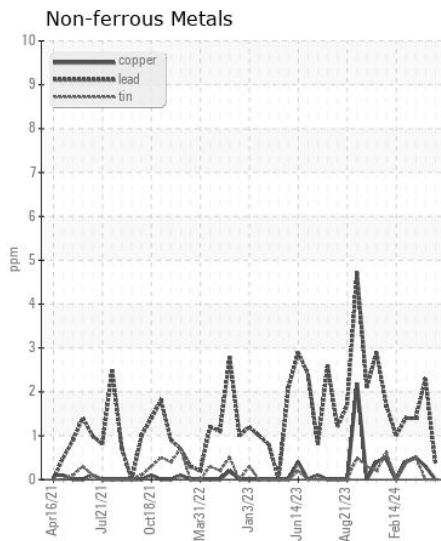
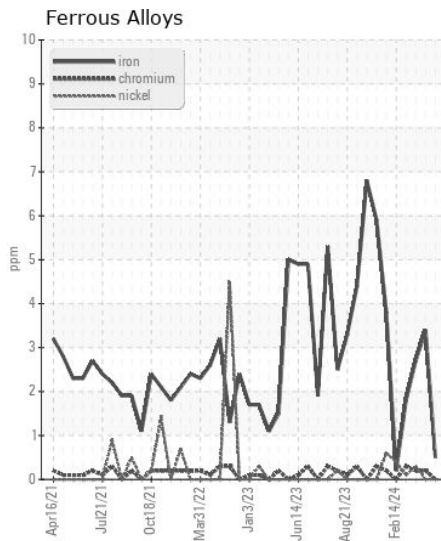
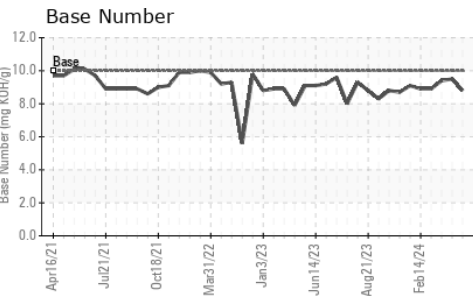
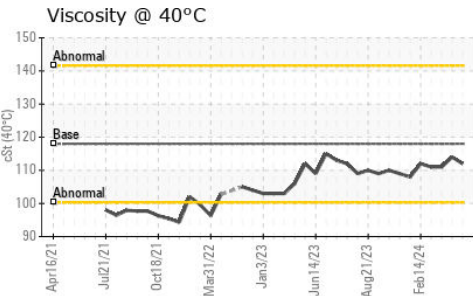
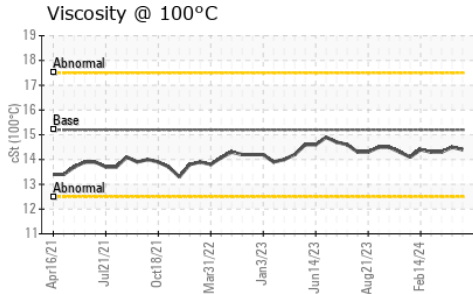
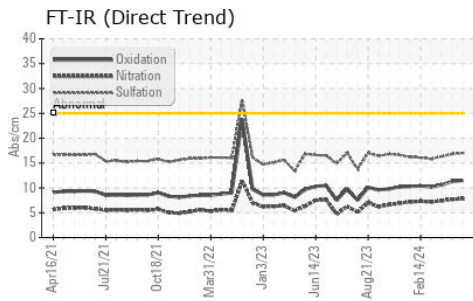
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	4	5
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	3
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.2</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	7.7	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.0</b>	16.8	16.3
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

## 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.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Boron	ppm	ASTM D5185m	2.9	<b>59</b>	70	71
Barium	ppm	ASTM D5185m	0.1	<b>0</b>	1	0
Molybdenum	ppm	ASTM D5185m	0.0	<b>33</b>	40	37
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	18	<b>19</b>	16	17
Calcium	ppm	ASTM D5185m	2936	<b>3670</b>	3777	3427
Phosphorus	ppm	ASTM D5185m	998	<b>975</b>	892	881
Zinc	ppm	ASTM D5185m	1095	<b>1135</b>	1091	1039
Sulfur	ppm	ASTM D5185m	5469	<b>4695</b>	4283	4605
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>11.5</b>	11.3	10.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.0	<b>8.8</b>	9.5	9.4
Visc @ 40°C	cSt	ASTM D445	118	<b>112</b>	114	111
Visc @ 100°C	cSt	ASTM D445	15.2	<b>14.4</b>	14.5	14.3
Viscosity Index (VI)	Scale	ASTM D2270	134	<b>130</b>	129	130



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0860676 **Received** : 10 Jul 2024  
**Lab Number** : 06232854 **Tested** : 11 Jul 2024  
**Unique Number** : 11116347 **Diagnosed** : 12 Jul 2024 - Sean Felton  
**Test Package** : FLEET ( Additional Tests: KV40, VI )

**CUMMINS - PRIME POWER & IPP STRATEGIC ACCOUNTS**  
 3850 N VICTORIA ST  
 SHOREVIEW, MN  
 US 55126  
 Contact: Harsha Padigae  
 hpadigae@louisberger.com  
 T: (964)780-7579134

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)

F : x: