



# OIL ANALYSIS REPORT

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

Area  
**AAAB IRAQ**

Machine Id  
**2000-4108**

Component  
**Genset**

Fluid  
**VALVOLINE PREMIUM BLUE (--- LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0860688</b>	WC0860681	WC0860664
Sample Date		Client Info		<b>21 Jun 2024</b>	03 Jun 2024	13 May 2024
Machine Age	hrs	Client Info		<b>11057</b>	10807	10545
Oil Age	hrs	Client Info		<b>250</b>	250	298
Filter Age	hrs	Client Info		<b>250</b>	250	298
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

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

## CONTAMINATION

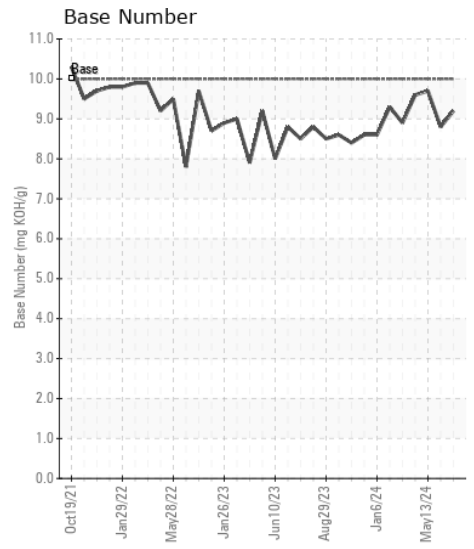
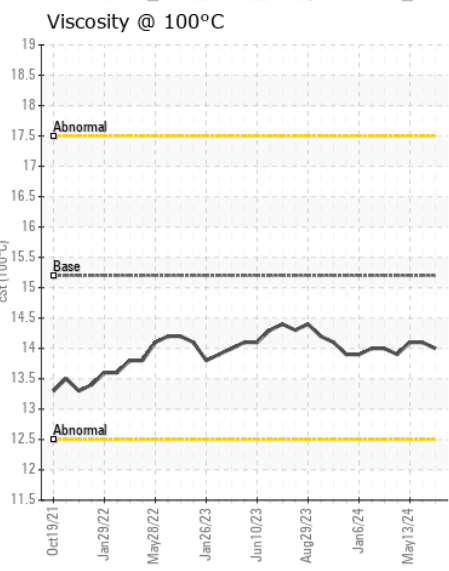
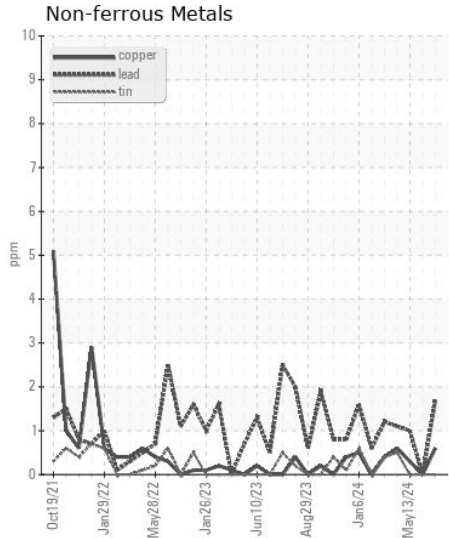
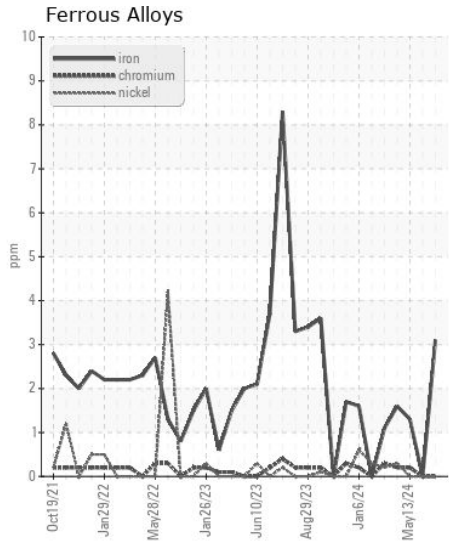
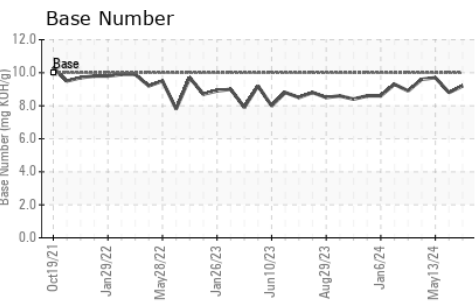
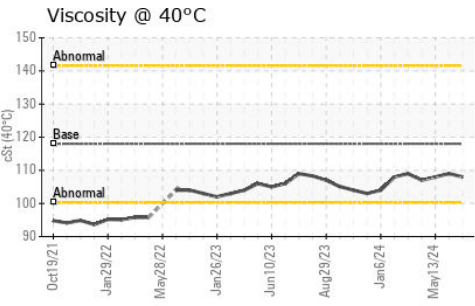
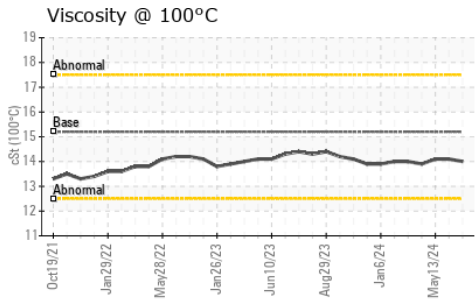
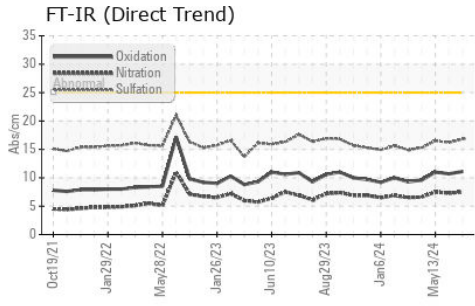
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	2	4
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	2
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>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.5</b>	7.3	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>16.8</b>	16.2	16.5
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>2</b>	0	0
Boron	ppm	ASTM D5185m	2.9	<b>66</b>	61	79
Barium	ppm	ASTM D5185m	0.1	<b>0</b>	0	1
Molybdenum	ppm	ASTM D5185m	0.0	<b>35</b>	32	40
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	18	<b>17</b>	18	17
Calcium	ppm	ASTM D5185m	2936	<b>3482</b>	3599	3830
Phosphorus	ppm	ASTM D5185m	998	<b>895</b>	953	935
Zinc	ppm	ASTM D5185m	1095	<b>1015</b>	1121	1124
Sulfur	ppm	ASTM D5185m	5469	<b>4313</b>	4707	4548
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>11.1</b>	10.7	11.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.0	<b>9.2</b>	8.8	9.7
Visc @ 40°C	cSt	ASTM D445	118	<b>108</b>	109	108
Visc @ 100°C	cSt	ASTM D445	15.2	<b>14.0</b>	14.1	14.1
Viscosity Index (VI)	Scale	ASTM D2270	134	<b>130</b>	130	131



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0860688 **Received** : 15 Jul 2024  
**Lab Number** : 06235329 **Tested** : 15 Jul 2024  
**Unique Number** : 11124163 **Diagnosed** : 15 Jul 2024 - Sean Felton  
**Test Package** : FLEET ( Additional Tests: KV40, VI )

**CUMMINS - PRIME POWER & IPP STRATEGIC ACCOUNTS**  
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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)