



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

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		WC0860781	WC0860737	WC0860730
Sample Date		Client Info		17 Apr 2024	15 Mar 2024	08 Feb 2024
Machine Age	hrs	Client Info		10247	9997	9747
Oil Age	hrs	Client Info		250	250	250
Filter Age	hrs	Client Info		250	250	250
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

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

CONTAMINATION

There is no indication of any contamination in the oil.

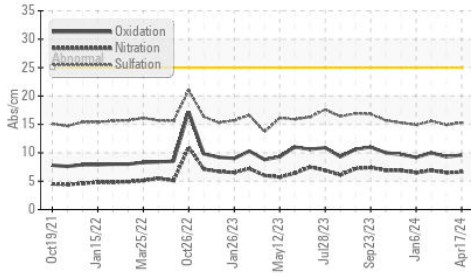
Silicon	ppm	ASTM D5185m	>25	4	4	3
Potassium	ppm	ASTM D5185m	>20	2	2	2
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.6	6.5	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.3	14.9	15.6
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

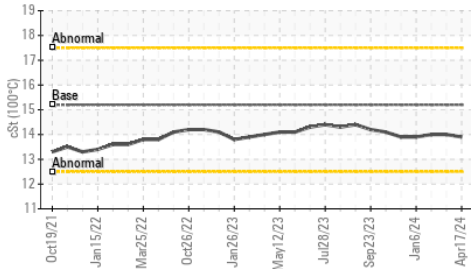
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	0	<1
Boron	ppm	ASTM D5185m	2.9	78	72	75
Barium	ppm	ASTM D5185m	0.1	0	1	0
Molybdenum	ppm	ASTM D5185m	0.0	37	36	35
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	18	17	16	18
Calcium	ppm	ASTM D5185m	2936	3342	3410	3383
Phosphorus	ppm	ASTM D5185m	998	828	926	908
Zinc	ppm	ASTM D5185m	1095	990	1006	1023
Sulfur	ppm	ASTM D5185m	5469	4330	4328	4588
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.6	9.3	10.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.0	9.6	8.9	9.3
Visc @ 40°C	cSt	ASTM D445	118	107	109	108
Visc @ 100°C	cSt	ASTM D445	15.2	13.9	14.0	14.0
Viscosity Index (VI)	Scale	ASTM D2270	134	130	129	130

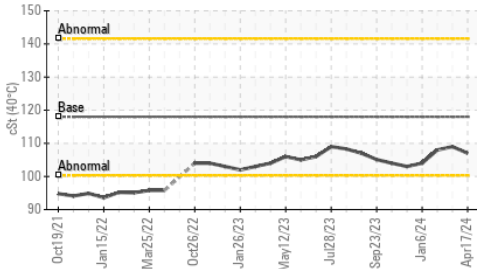
FT-IR (Direct Trend)



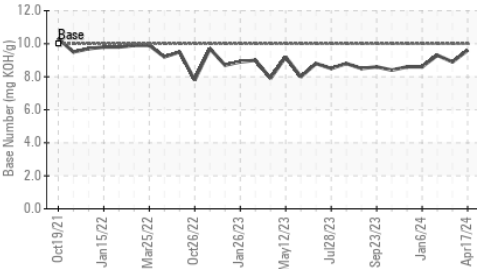
Viscosity @ 100°C



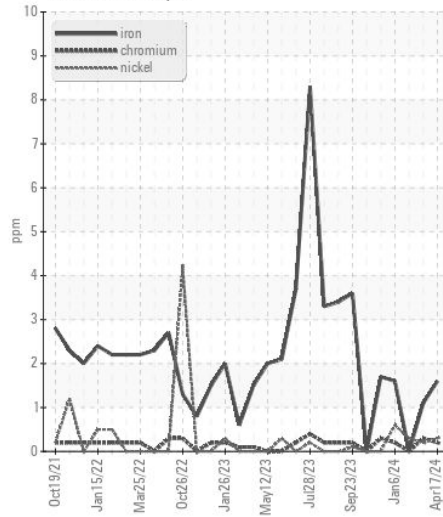
Viscosity @ 40°C



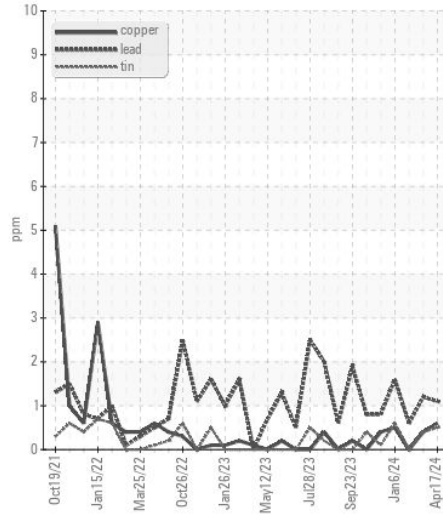
Base Number



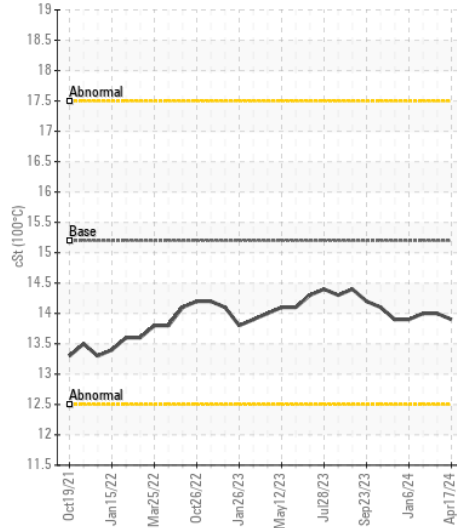
Ferrous Alloys



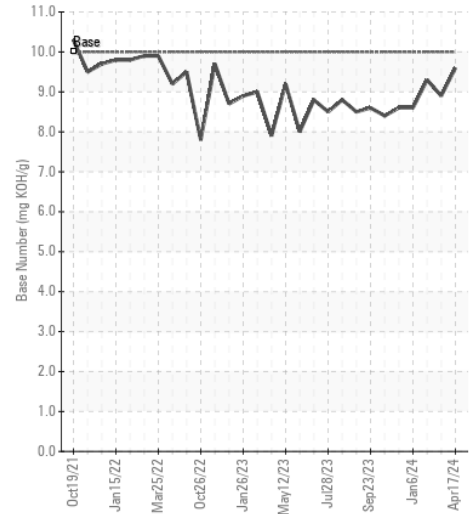
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0860781 **Received** : 13 May 2024
Lab Number : 06178112 **Tested** : 14 May 2024
Unique Number : 11029438 **Diagnosed** : 15 May 2024 - Sean Felton
Test Package : FLEET (Additional Tests: KV40, VI)

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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)