



PERFORMANCE  
UNDER  
PRESSURE

OIL ANALYSIS REPORT

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

Machine Id  
**EIMCO AERATOR 1 (S/N 23651-01-A)**

Component  
**Gearbox**

Fluid  
**GEAR OIL SAE 80W90 (7 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RP0034267</b>	RP0029531	RP0017344
Sample Date		Client Info		<b>31 Aug 2023</b>	21 Jul 2022	26 Jan 2022
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>47</b>	49	50
Chromium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	1	1
Lead	ppm	ASTM D5185m	>100	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>200	<b>4</b>	7	9
Tin	ppm	ASTM D5185m	>25	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

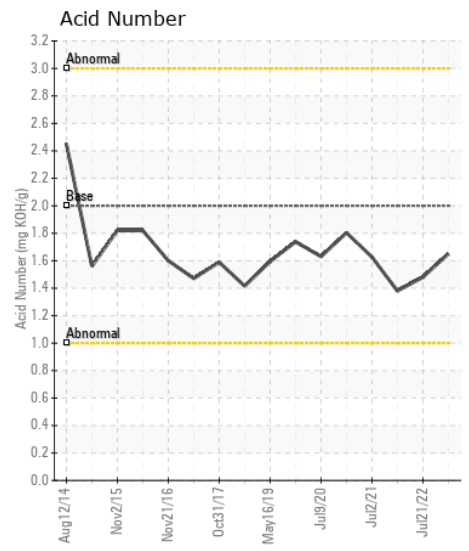
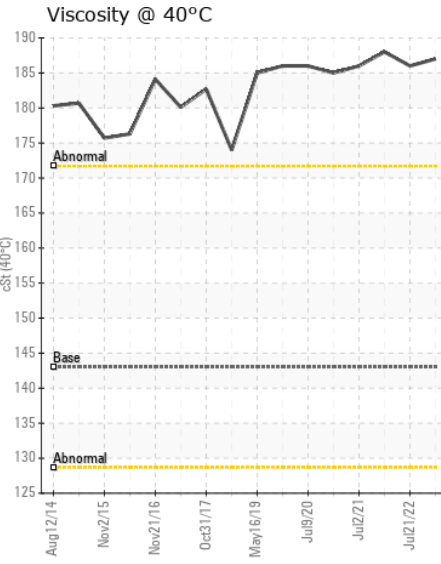
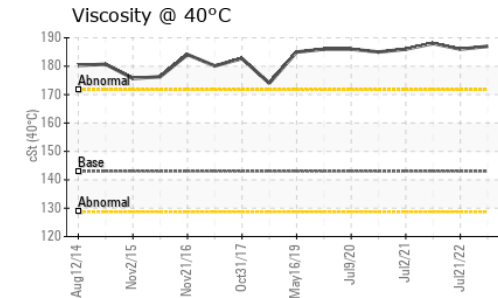
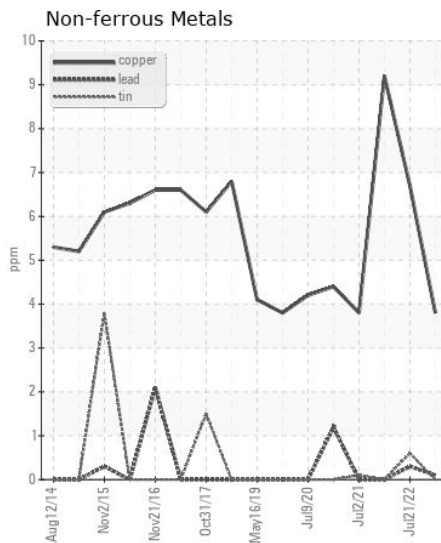
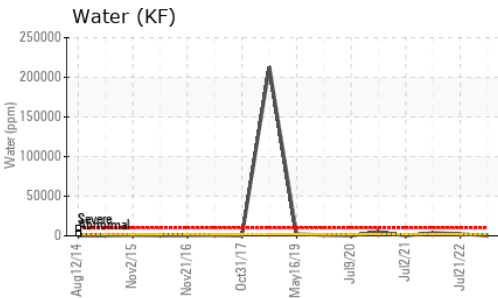
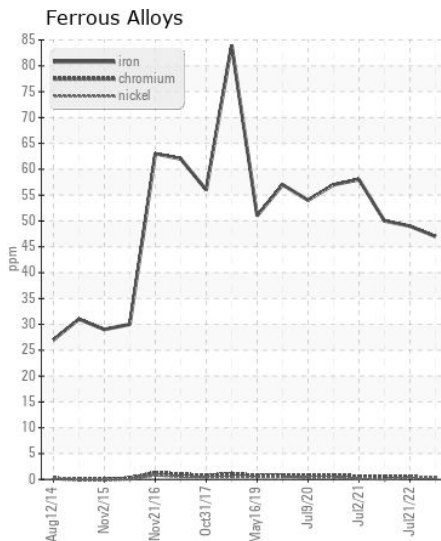
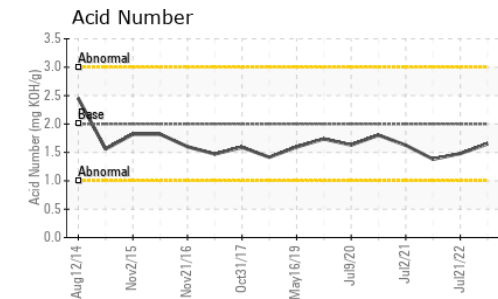
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>2</b>	3	2
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	0
Water	%	ASTM D6304	>0.2	<b>0.031</b>	▲ 0.233	▲ 0.380
ppm Water	ppm	ASTM D6304	>2000	<b>318.5</b>	▲ 2330	▲ 3800
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	LIGHT
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	>0.2	<b>NEG</b>	0.2%	0.2%

**FLUID CONDITION**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>170	<b>0</b>	1	0
Boron	ppm	ASTM D5185m	400	<b>0</b>	4	2
Barium	ppm	ASTM D5185m	200	<b>2</b>	0	<1
Molybdenum	ppm	ASTM D5185m	12	<b>&lt;1</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	12	<b>1</b>	<1	0
Calcium	ppm	ASTM D5185m	150	<b>1</b>	<1	2
Phosphorus	ppm	ASTM D5185m	1650	<b>686</b>	759	631
Zinc	ppm	ASTM D5185m	125	<b>46</b>	64	52
Acid Number (AN)	mg KOH/g	ASTM D8045	2.00	<b>1.65</b>	1.48	1.38
Visc @ 40°C	cSt	ASTM D445	143	<b>187</b>	186	188



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0034267  
**Lab Number** : 05940858  
**Unique Number** : 10631470  
**Test Package** : IND 2  
**Received** : 01 Sep 2023  
**Tested** : 06 Sep 2023  
**Diagnosed** : 06 Sep 2023 - Don Baldrige

**SUFFIELD WWTF**  
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Certificate L2367  
 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)