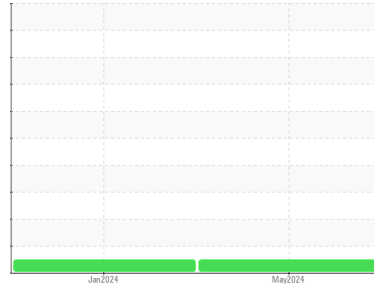




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

SULLUBE

Machine Id

SULLAIR 201705190044 - CHIEF ETHANOL

Component

Compressor

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		UCH06196789	UCS06083781	---
Sample Date	Client Info		09 May 2024	18 Jan 2024	---
Machine Age	hrs	Client Info	55221	52540	---
Oil Age	hrs	Client Info	7000	0	---
Oil Changed	Client Info		Not Chngd	N/A	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	2	<1	---
Chromium	ppm	ASTM D5185m >10	<1	0	---
Nickel	ppm	ASTM D5185m	0	0	---
Titanium	ppm	ASTM D5185m	<1	<1	---
Silver	ppm	ASTM D5185m	0	0	---
Aluminum	ppm	ASTM D5185m >25	2	1	---
Lead	ppm	ASTM D5185m >25	<1	<1	---
Copper	ppm	ASTM D5185m >50	<1	1	---
Tin	ppm	ASTM D5185m >15	<1	<1	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	<1	<1	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	---
Barium	ppm	ASTM D5185m 745	38	148	---
Molybdenum	ppm	ASTM D5185m 0.0	<1	<1	---
Manganese	ppm	ASTM D5185m	0	0	---
Magnesium	ppm	ASTM D5185m 0.0	0	1	---
Calcium	ppm	ASTM D5185m 1	<1	2	---
Phosphorus	ppm	ASTM D5185m 3	11	0	---
Zinc	ppm	ASTM D5185m 0.1	<1	9	---
Sulfur	ppm	ASTM D5185m 240	107	75	---

CONTAMINANTS

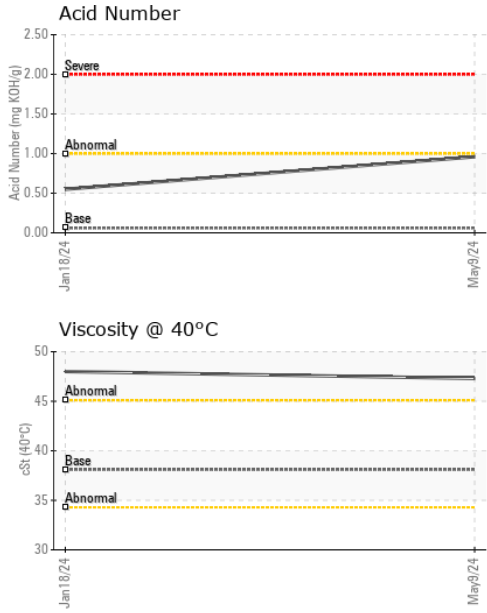
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	2	<1	---
Sodium	ppm	ASTM D5185m	52	73	---
Potassium	ppm	ASTM D5185m >20	4	4	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 .06	0.96	0.55	---



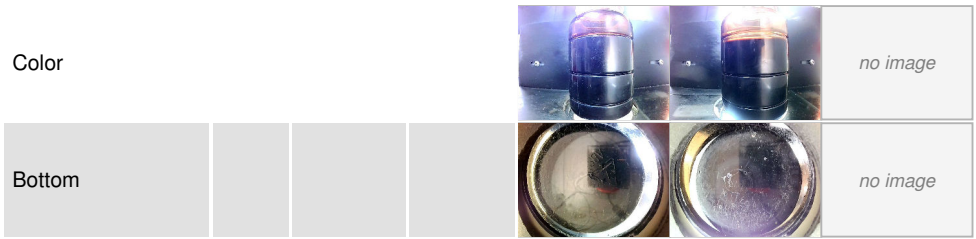
OIL ANALYSIS REPORT



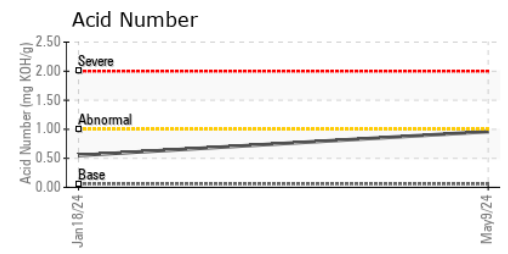
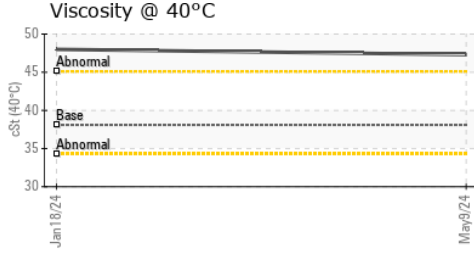
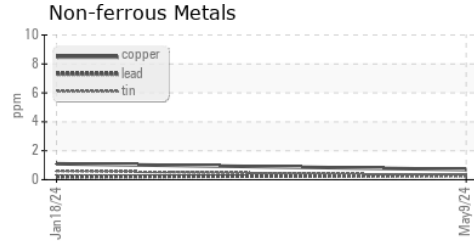
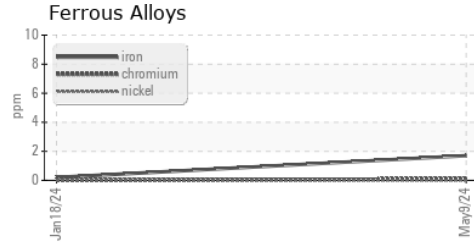
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	38.1	47.3	48.0	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : UCH06196789 **Received** : 31 May 2024
Lab Number : **06196789** **Tested** : 03 Jun 2024
Unique Number : 11058912 **Diagnosed** : 04 Jun 2024 - Don Baldrige
Test Package : IND 2

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 655 240TH STREET
 WATERLOO, NE
 US 68069
 Contact: CHASE SVOBODA
 chase.svoboda@rage-energy.com
 T: (402)614-9926
 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)