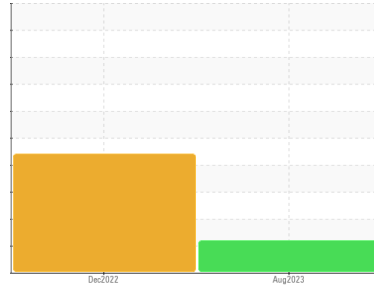




PROBLEM SUMMARY

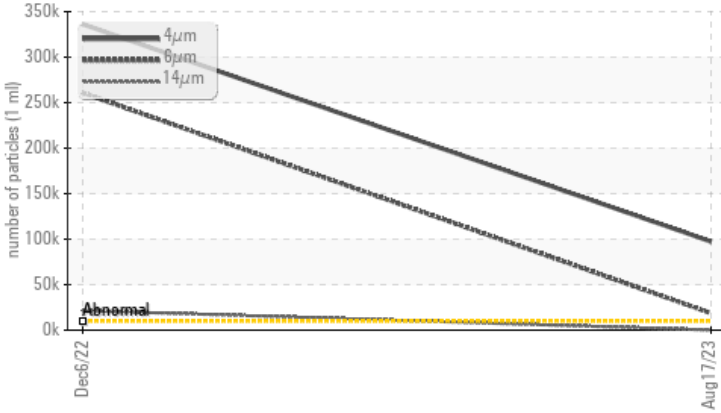
Area
MG COMPRESSOR ROOM [21423]
 Machine Id
FRICK 1024L03355736
 Component
Refrigeration Compressor
 Fluid
CHEVRON RANDO HD 32 (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	---
Particles >4µm	ASTM D7647	>10000	▲ 97363	▲ 336225	---
Particles >6µm	ASTM D7647	>2500	▲ 18606	▲ 260785	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 24/21/14	▲ 26/25/22	---

Customer Id: WASNOR_USP

Sample No.: USP237669

Lab Number: 05937285

Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:

Doug Bogart +1 (800)237-1369 x4016

dougb@wearcheckusa.com

To change component or sample information:

Customer Service +1 1-800-237-1369

customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

06 Dec 2022 Diag: Doug Bogart

WEAR



We recommend you service the filters on this component. Resample at the next service interval to monitor. The iron level is abnormal. There is a high amount of particulates present in the oil. The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

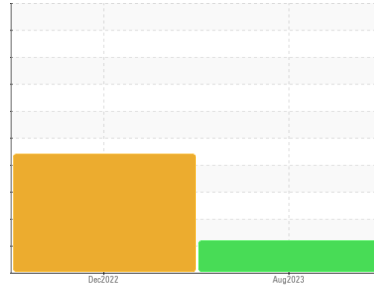
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
MG COMPRESSOR ROOM [21423]
 Machine Id
FRICK 1024L03355736
 Component
Refrigeration Compressor
 Fluid
CHEVRON RANDO HD 32 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present 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			USP237669	USP237671	---
Sample Date	Client Info			17 Aug 2023	06 Dec 2022	---
Machine Age	hrs	Client Info		0	4537	---
Oil Age	hrs	Client Info		7954	10000	---
Oil Changed	Client Info			N/A	Not Changd	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	6	▲ 97	---
Chromium	ppm	ASTM D5185m	>2	<1	<1	---
Nickel	ppm	ASTM D5185m		0	0	---
Titanium	ppm	ASTM D5185m		<1	1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>3	<1	<1	---
Lead	ppm	ASTM D5185m	>2	<1	0	---
Copper	ppm	ASTM D5185m	>8	<1	3	---
Tin	ppm	ASTM D5185m	>4	<1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
Cadmium	ppm	ASTM D5185m		<1	<1	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	6	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		<1	1	---
Magnesium	ppm	ASTM D5185m		0	<1	---
Calcium	ppm	ASTM D5185m		2	▲ 8	---
Phosphorus	ppm	ASTM D5185m		5	▲ 11	---
Zinc	ppm	ASTM D5185m		13	▲ 28	---
Sulfur	ppm	ASTM D5185m		91	93	---

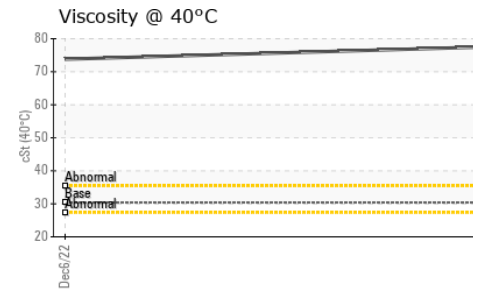
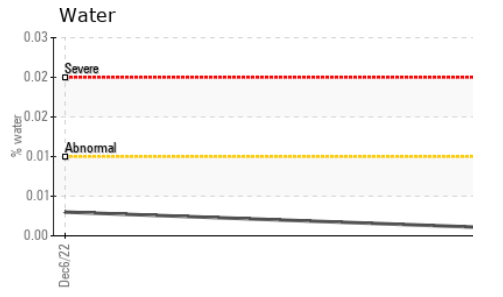
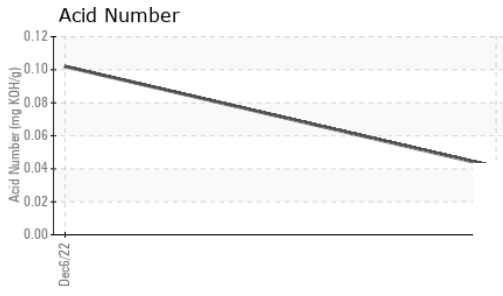
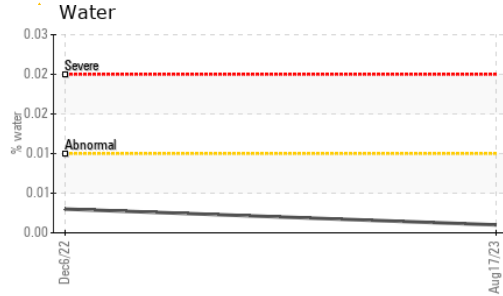
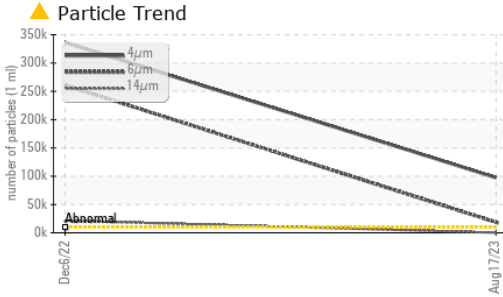
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	1	9	---
Sodium	ppm	ASTM D5185m		2	3	---
Potassium	ppm	ASTM D5185m	>20	2	<1	---
Water	%	ASTM D6304	>0.01	0.001	0.003	---
ppm Water	ppm	ASTM D6304	>100	4.2	31.6	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ 97363	▲ 336225	---
Particles >6µm		ASTM D7647	>2500	▲ 18606	▲ 260785	---
Particles >14µm		ASTM D7647	>320	89	▲ 21507	---
Particles >21µm		ASTM D7647	>80	10	▲ 703	---
Particles >38µm		ASTM D7647	>20	0	3	---
Particles >71µm		ASTM D7647	>4	0	0	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ 24/21/14	▲ 26/25/22	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974		0.041	0.102	---



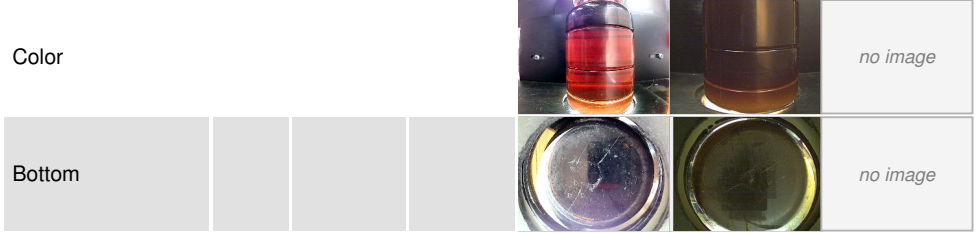
OIL ANALYSIS REPORT



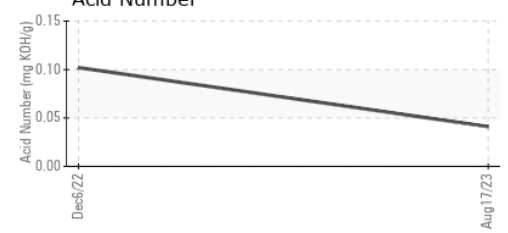
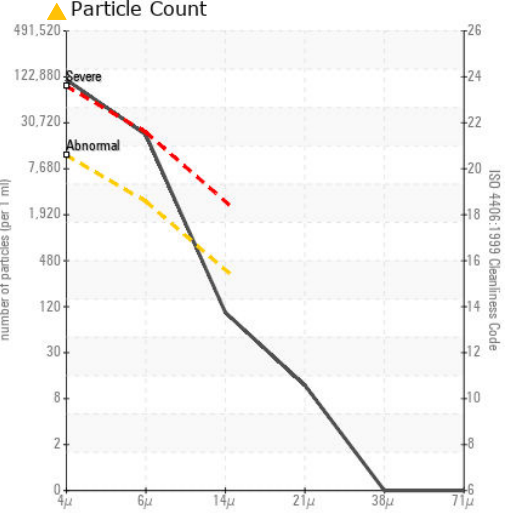
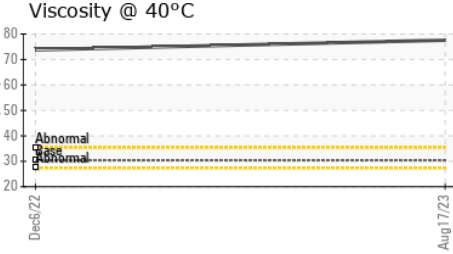
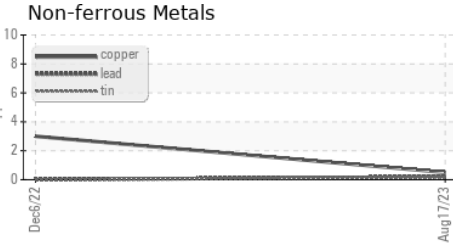
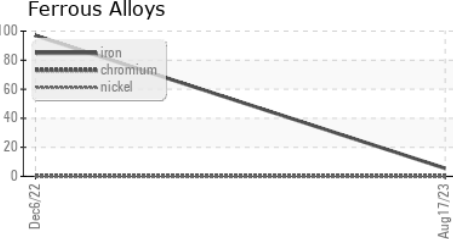
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	LIGHT	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.01	NEG	NEG	---
Free Water	scalar	*Visual		NEG	NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	30.4	77.6	▲ 73.8	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP237669 **Received** : 29 Aug 2023
Lab Number : 05937285 **Diagnosed** : 30 Aug 2023
Unique Number : 10622556 **Diagnostician** : Doug Bogart
Test Package : IND 2

MEADOW GOLD
 3756W 1820S
 SALT LAKE CITY, UT
 US 84106
 Contact: Service Manager

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)