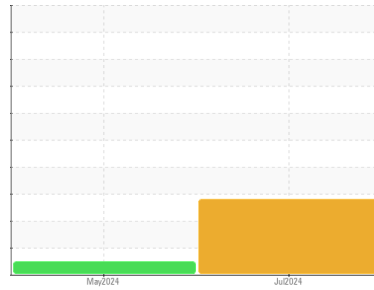




# OIL ANALYSIS REPORT

## Sample Rating Trend



WATER



Area  
**MISSION RANCHO**  
 Machine Id  
**MISSION RANCHO C2**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**FRICK COMPRESSOR OIL #13 (--- 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. There is a trace of moisture present in the oil.

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

### SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>USP0012283</b>	USP0011525	---
Sample Date	Client Info	<b>11 Jul 2024</b>	08 May 2024	---
Machine Age	hrs	Client Info	<b>0</b>	174374
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	---
Sample Status		<b>ABNORMAL</b>	NORMAL	---

### WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	<b>&lt;1</b>	---
Chromium	ppm	ASTM D5185m >2	<b>0</b>	---
Nickel	ppm	ASTM D5185m	<b>0</b>	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	---
Aluminum	ppm	ASTM D5185m >3	<b>&lt;1</b>	---
Lead	ppm	ASTM D5185m >2	<b>0</b>	---
Copper	ppm	ASTM D5185m >8	<b>0</b>	---
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---

### ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>1</b>	---
Barium	ppm	ASTM D5185m	<b>0</b>	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	---
Manganese	ppm	ASTM D5185m	<b>0</b>	---
Magnesium	ppm	ASTM D5185m	<b>0</b>	---
Calcium	ppm	ASTM D5185m	<b>0</b>	---
Phosphorus	ppm	ASTM D5185m	<b>0</b>	---
Zinc	ppm	ASTM D5185m	<b>0</b>	---
Sulfur	ppm	ASTM D5185m	<b>0</b>	---

### CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>14</b>	---
Sodium	ppm	ASTM D5185m	<b>0</b>	---
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	---
Water	%	ASTM D6304 >0.01	<b>▲ 0.039</b>	---
ppm Water	ppm	ASTM D6304 >100	<b>▲ 393</b>	---

### FLUID CLEANLINESS

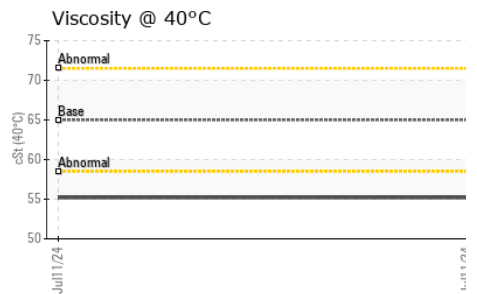
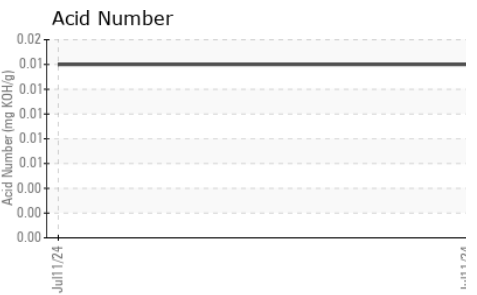
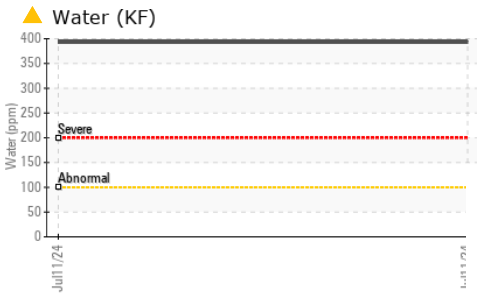
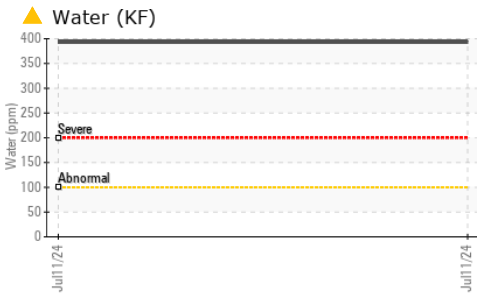
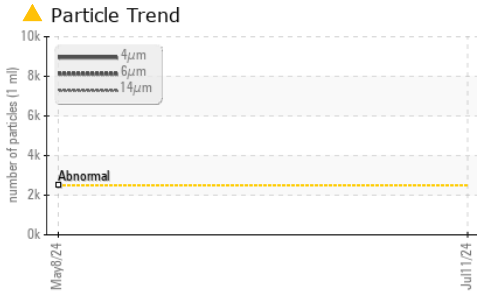
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >2500	<b>▲ 9016</b>	---	---
Particles >6µm	ASTM D7647 >320	<b>▲ 2058</b>	---	---
Particles >14µm	ASTM D7647 >80	<b>63</b>	---	---
Particles >21µm	ASTM D7647 >20	<b>7</b>	---	---
Particles >38µm	ASTM D7647 >4	<b>0</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c) >18/15/13	<b>▲ 20/18/13</b>	---	---

### FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	<b>0.014</b>	---



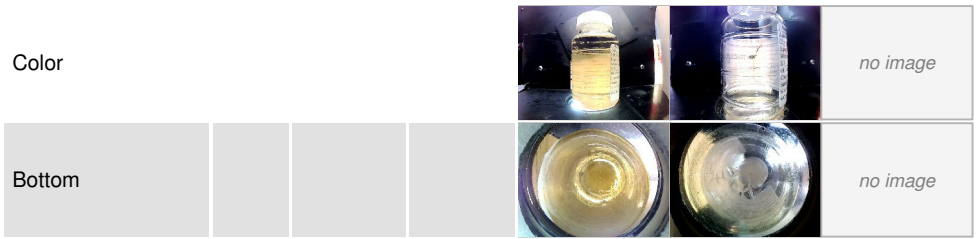
# OIL ANALYSIS REPORT



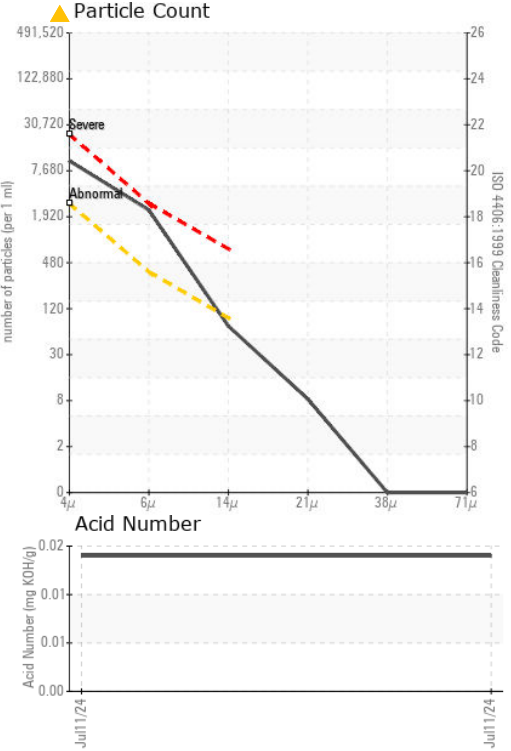
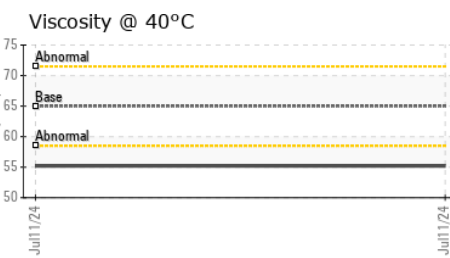
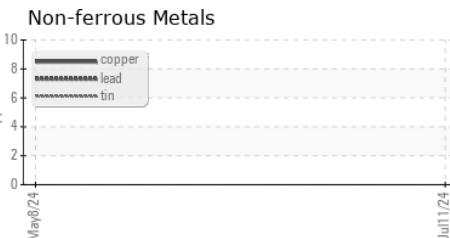
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65.0	55.2	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0012283  
**Lab Number** : 06234998  
**Unique Number** : 11123832  
**Test Package** : IND 2  
**Received** : 12 Jul 2024  
**Tested** : 16 Jul 2024  
**Diagnosed** : 16 Jul 2024 - Doug Bogart

**RACE ENGINEERING CORP**  
 12871 WESTERN AVE, SUITE E  
 GARDEN GROVE, CA  
 92841  
 Contact: TODD CARTER  
 ttrace@verizon.net  
 T: (714)895-3488  
 F: (714)895-5125

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)