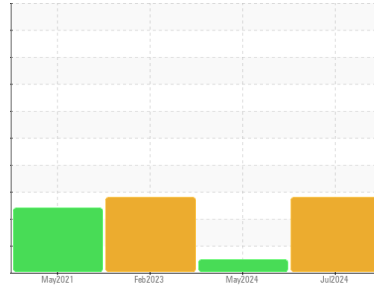




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area

MISSION RANCHO

Machine Id

MISSION RANCHO C3 (S/N TDSH233S2587E)

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 light concentration of water present in the oil.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	USP0012285	USP0011528	USP233713	
Sample Date	Client Info	11 Jul 2024	08 May 2024	08 Feb 2023	
Machine Age	hrs	Client Info	134107	33397	127708
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	Not Changd	
Sample Status		ABNORMAL	NORMAL	ABNORMAL	

WEAR METALS

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

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	---	0
Barium	ppm	ASTM D5185m	0	---	0
Molybdenum	ppm	ASTM D5185m	0	---	0
Manganese	ppm	ASTM D5185m	0	---	0
Magnesium	ppm	ASTM D5185m	0	---	<1
Calcium	ppm	ASTM D5185m	0	---	<1
Phosphorus	ppm	ASTM D5185m	0	---	0
Zinc	ppm	ASTM D5185m	0	---	0
Sulfur	ppm	ASTM D5185m	0	---	11

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<1	---	1
Sodium	ppm	ASTM D5185m	0	---	0
Potassium	ppm	ASTM D5185m >20	<1	---	<1
Water	%	ASTM D6304 >0.01	▲ 0.039	---	● 0.050
ppm Water	ppm	ASTM D6304 >100	▲ 393	---	● 508.2

FLUID CLEANLINESS

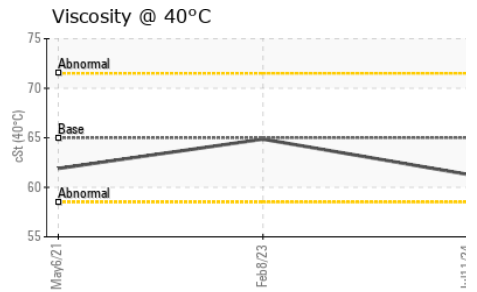
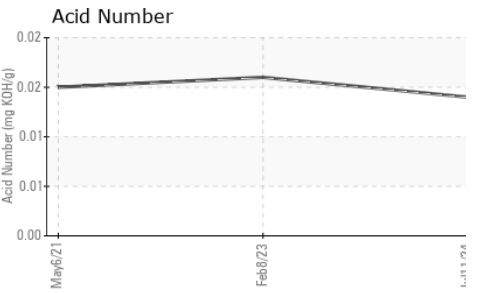
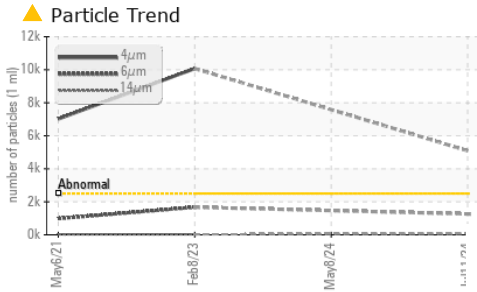
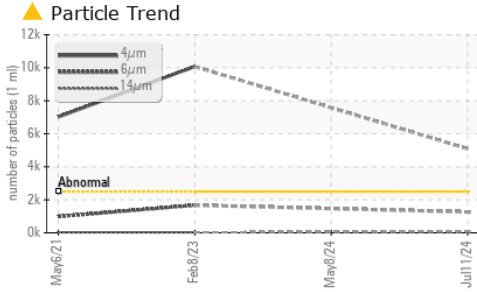
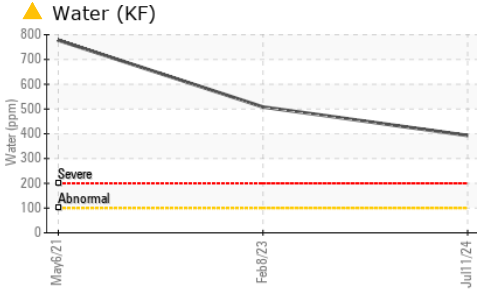
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >2500	▲ 5093	---	▲ 10073
Particles >6µm	ASTM D7647 >320	▲ 1263	---	▲ 1672
Particles >14µm	ASTM D7647 >80	64	---	29
Particles >21µm	ASTM D7647 >20	12	---	4
Particles >38µm	ASTM D7647 >4	0	---	0
Particles >71µm	ASTM D7647 >3	0	---	0
Oil Cleanliness	ISO 4406 (c) >18/15/13	▲ 20/17/13	---	▲ 21/18/12

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974	0.014	---	0.016



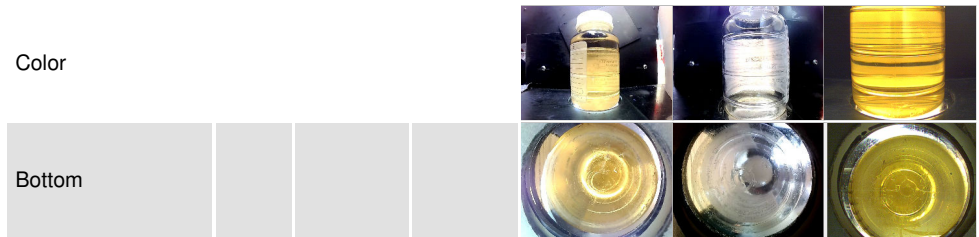
OIL ANALYSIS REPORT



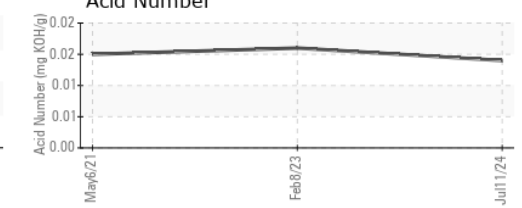
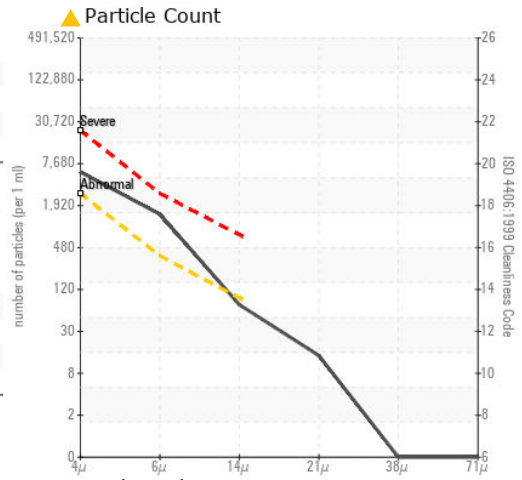
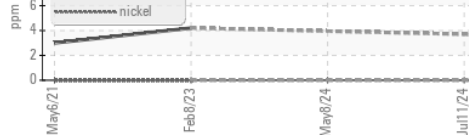
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	65.0	61.3	---

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. : USP0012285
Lab Number : 06235000
Unique Number : 11123834
Test Package : IND 2

Received : 12 Jul 2024
Tested : 15 Jul 2024
Diagnosed : 15 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)