



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**HC-1 - RALPHS RIVERSIDE (S/N S0337LFMPTOAA3)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**CHEVRON CAPELLA OIL WF 68 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>USP0007521</b>	USP250282	USP233714
Sample Date		Client Info		<b>20 Feb 2024</b>	05 Sep 2023	13 Feb 2023
Machine Age	hrs	Client Info		<b>45354</b>	44788	40873
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>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Not Changd	Not Changd
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>8	<b>2</b>	0	<1
Chromium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>8	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

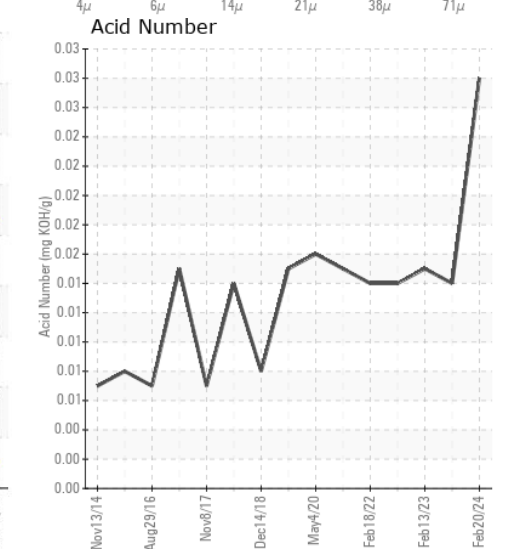
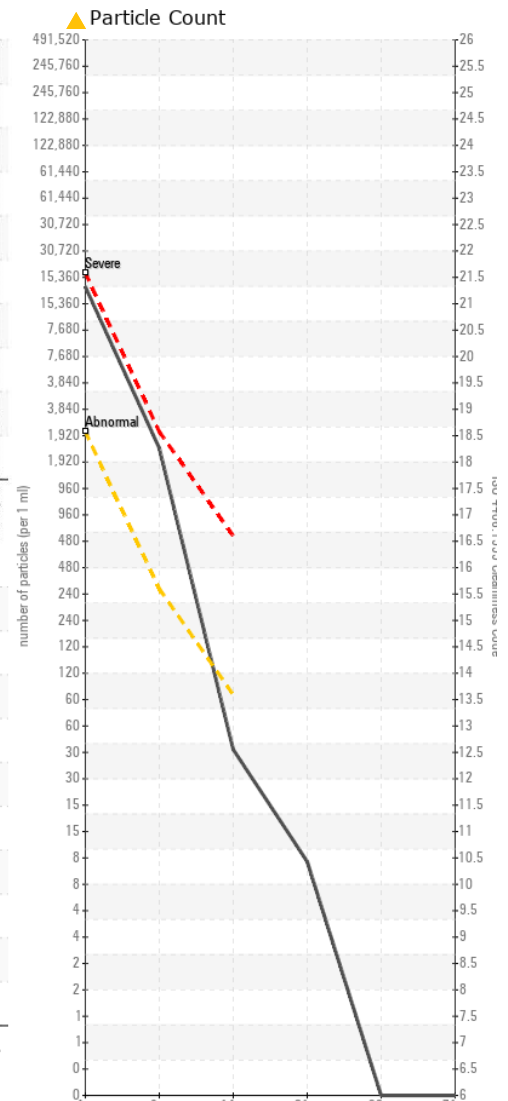
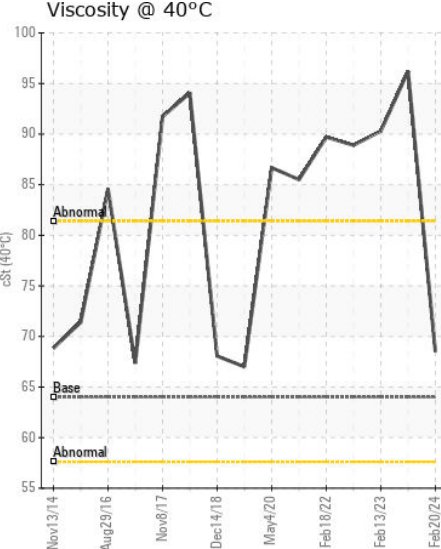
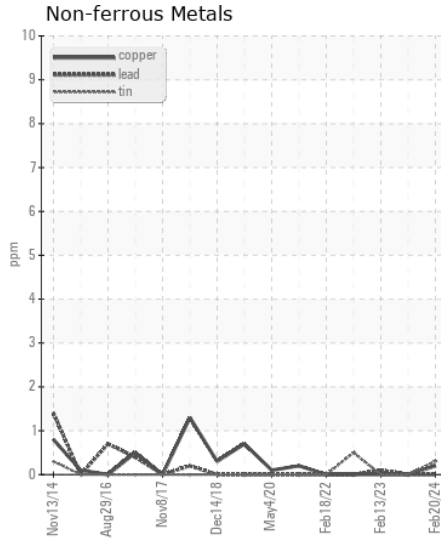
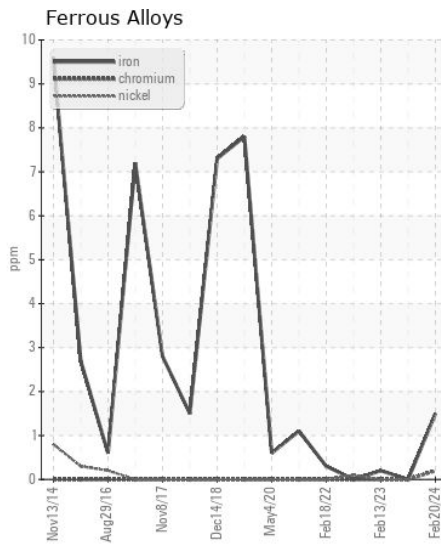
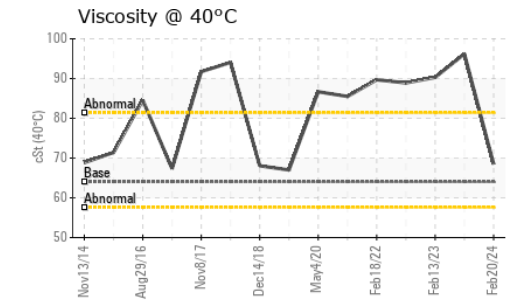
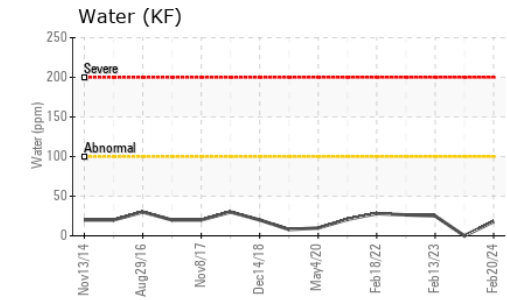
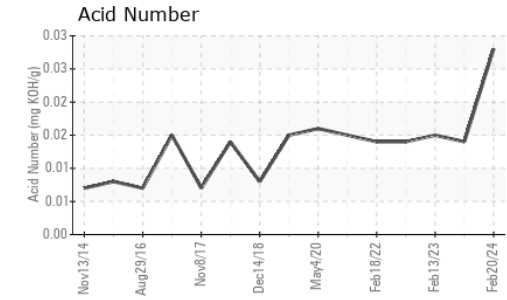
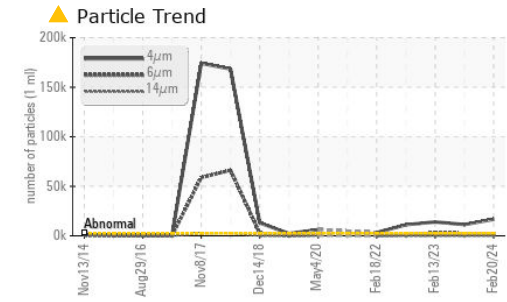
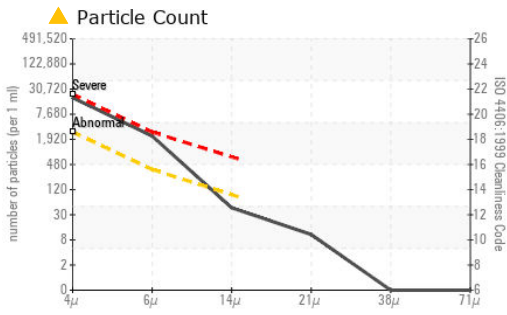
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	10	<1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Water	%	ASTM D6304	>0.01	<b>0.002</b>	0.001	0.003
ppm Water	ppm	ASTM D6304	>100	<b>18</b>	0.00	25.1
Particles >4µm		ASTM D7647	>2500	<b>▲ 16658</b>	▲ 11337	▲ 14034
Particles >6µm		ASTM D7647	>320	<b>▲ 2015</b>	▲ 2306	▲ 2645
Particles >14µm		ASTM D7647	>80	<b>39</b>	66	61
Particles >21µm		ASTM D7647	>20	<b>9</b>	9	10
Particles >38µm		ASTM D7647	>4	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>18/15/13	<b>▲ 21/18/12</b>	▲ 21/18/13	▲ 21/19/13
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
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	>0.01	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185m		<b>0</b>	0	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Calcium	ppm	ASTM D5185m		<b>&lt;1</b>	5	2
Phosphorus	ppm	ASTM D5185m		<b>1</b>	0	0
Zinc	ppm	ASTM D5185m		<b>3</b>	0	0
Sulfur	ppm	ASTM D5185m		<b>9</b>	223	176
Acid Number (AN)	mg KOH/g	ASTM D974		<b>0.028</b>	0.014	0.015
Visc @ 40°C	cSt	ASTM D445	64.0	<b>68.5</b>	▲ 96.2	▲ 90.3



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0007521 **Received** : 29 Feb 2024  
**Lab Number** : 06104364 **Tested** : 01 Mar 2024  
**Unique Number** : 10902594 **Diagnosed** : 01 Mar 2024 - Doug Bogart  
**Test Package** : IND 2

**RACE ENGINEERING CORP**  
 12871 WESTERN AVE, SUITE E  
 GARDEN GROVE, CA  
 US 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)