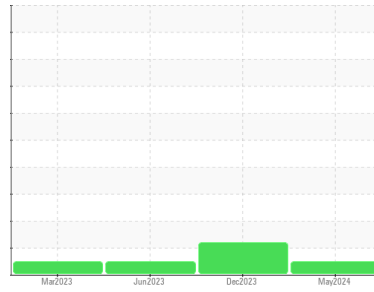




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
088-16 WC-40 (S/N 223233)
 Component
Hydraulic System
 Fluid
CHEVRON RANDO HD 46 (21 GAL)

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. The amount and size of particulates present in the system are acceptable.

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			PH0002487	PH0002265	PH0000581
Sample Date	Client Info			31 May 2024	18 Dec 2023	29 Jun 2023
Machine Age	hrs	Client Info		28777	26484	23962
Oil Age	hrs	Client Info		28777	26484	23962
Oil Changed	Client Info			Changed	Changed	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	0	<1
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	0	0
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	<1	1	2
Tin	ppm	ASTM D5185m	>20	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

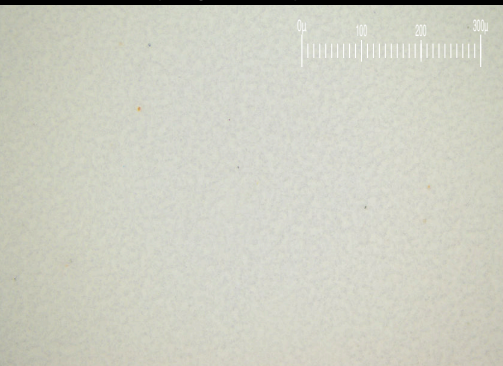
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		<1	0	0
Calcium	ppm	ASTM D5185m		40	19	37
Phosphorus	ppm	ASTM D5185m		327	276	308
Zinc	ppm	ASTM D5185m		386	329	370
Sulfur	ppm	ASTM D5185m		841	472	784

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	<1	2
Sodium	ppm	ASTM D5185m		12	14	10
Potassium	ppm	ASTM D5185m	>20	2	2	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	431	▲ 5554	1503	
Particles >6µm	ASTM D7647	>640	118	▲ 1373	224	
Particles >14µm	ASTM D7647	>160	14	95	6	
Particles >21µm	ASTM D7647	>40	3	27	1	
Particles >38µm	ASTM D7647	>10	0	1	0	
Particles >71µm	ASTM D7647	>3	0	0	0	
Oil Cleanliness	ISO 4406 (c)	>18/16/14	16/14/11	▲ 20/18/14	18/15/10	

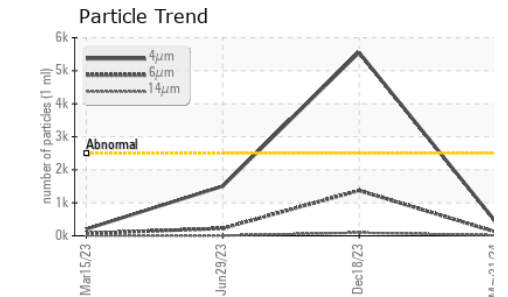
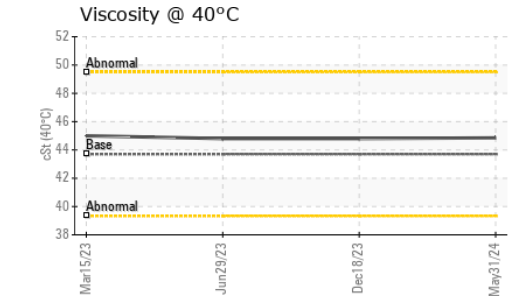
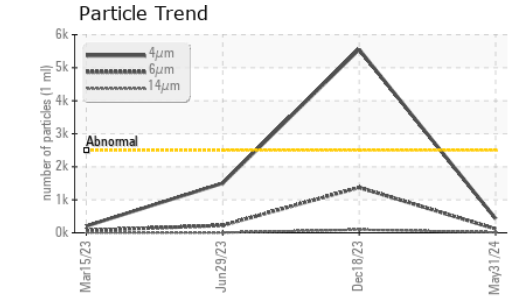
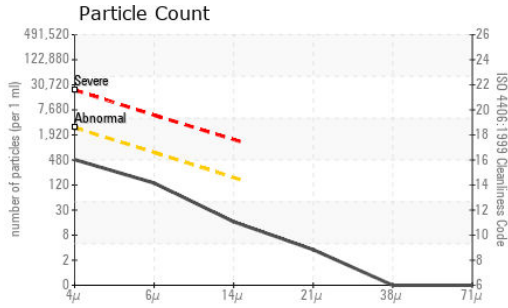
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.35	0.31	0.32

Particle Filter (Magn: 200 x)





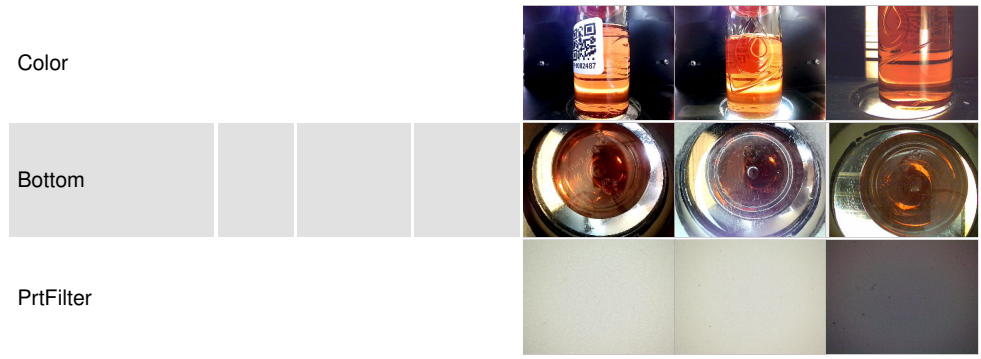
OIL ANALYSIS REPORT



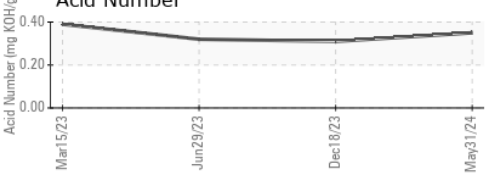
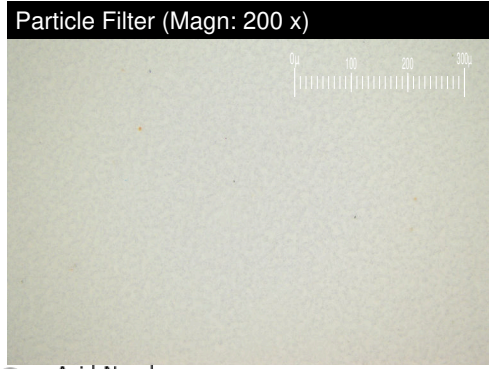
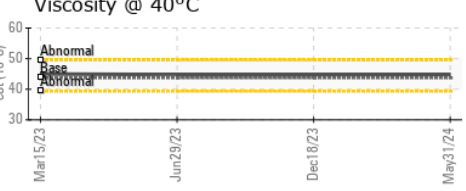
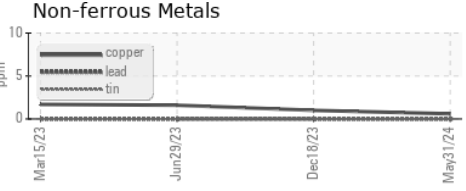
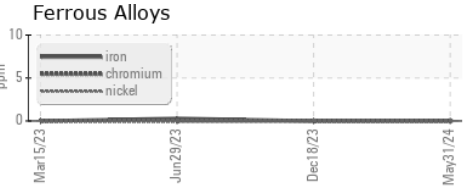
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	43.7	44.8	44.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PH0002487 **Received** : 10 Jun 2024
Lab Number : 06204570 **Tested** : 18 Jun 2024
Unique Number : 11072031 **Diagnosed** : 18 Jun 2024 - Jonathan Hester
Test Package : PLANT (Additional Tests: PrtFilter)

SMC LTD
 3250 BRICKWAY BLVD
 SANTA ROSA, CA
 US 95403
 Contact: SUSAN BENNETT
 susan.bennett@smcltd.com

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)