



OIL ANALYSIS REPORT

Sample Rating Trend

ISO

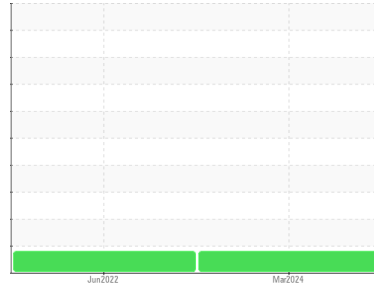


Area
[22111]

Machine Id
50-114

Component
Hydraulic System

Fluid
CONOCO PHILLIPS GUARDOL ECT 15W40 (--- GAL)



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate 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	WC0836093	WC0601663	---
Sample Date	Client Info	12 Mar 2024	17 Jun 2022	---
Machine Age	hrs	4173	3619	---
Oil Age	hrs	2173	619	---
Oil Changed	Client Info	Changed	Not Changd	---
Sample Status		ATTENTION	ABNORMAL	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	6	6	---
Chromium	ppm ASTM D5185m >10	0	<1	---
Nickel	ppm ASTM D5185m >10	<1	0	---
Titanium	ppm ASTM D5185m	0	<1	---
Silver	ppm ASTM D5185m	0	<1	---
Aluminum	ppm ASTM D5185m >10	<1	2	---
Lead	ppm ASTM D5185m >10	0	1	---
Copper	ppm ASTM D5185m >75	13	12	---
Tin	ppm ASTM D5185m >10	0	<1	---
Vanadium	ppm ASTM D5185m	<1	0	---
Cadmium	ppm ASTM D5185m	<1	0	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 85	141	207	---
Barium	ppm ASTM D5185m	<1	0	---
Molybdenum	ppm ASTM D5185m	29	42	---
Manganese	ppm ASTM D5185m	<1	<1	---
Magnesium	ppm ASTM D5185m 350	110	83	---
Calcium	ppm ASTM D5185m 1800	2052	2439	---
Phosphorus	ppm ASTM D5185m 1000	787	831	---
Zinc	ppm ASTM D5185m 1100	906	985	---
Sulfur	ppm ASTM D5185m 3500	4041	4524	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	8	10	---
Sodium	ppm ASTM D5185m	2	2	---
Potassium	ppm ASTM D5185m >20	<1	0	---

FLUID CLEANLINESS

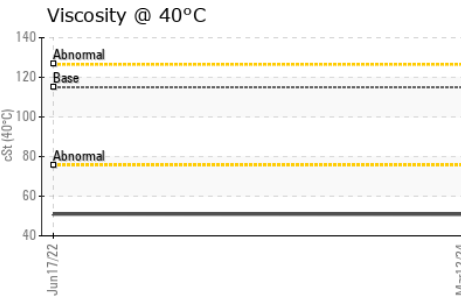
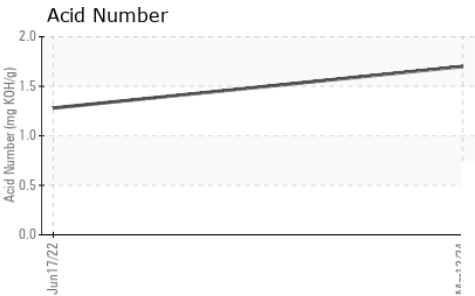
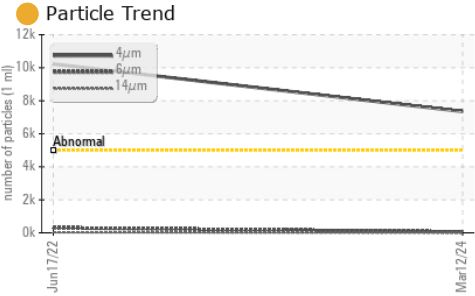
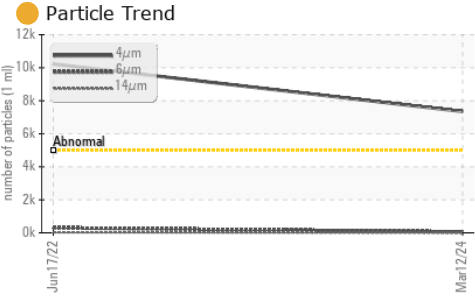
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	7350	10223	---
Particles >6µm	ASTM D7647 >1300	52	300	---
Particles >14µm	ASTM D7647 >160	5	33	---
Particles >21µm	ASTM D7647 >40	0	5	---
Particles >38µm	ASTM D7647 >10	0	1	---
Particles >71µm	ASTM D7647 >3	0	1	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	20/13/10	21/15/12	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	1.70	1.28	---



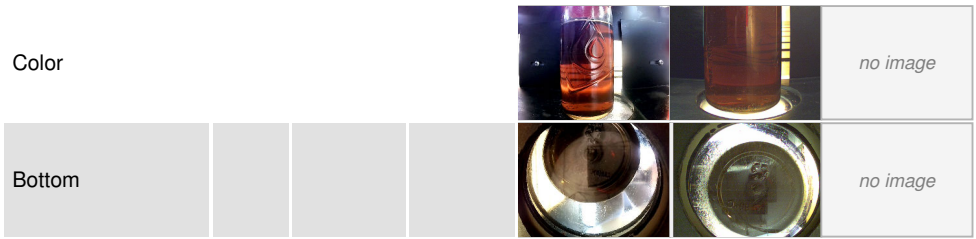
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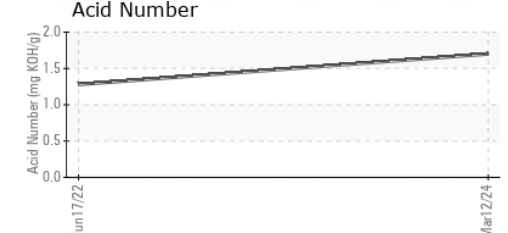
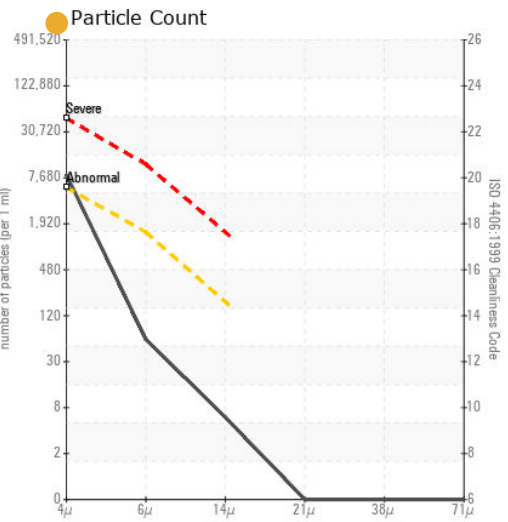
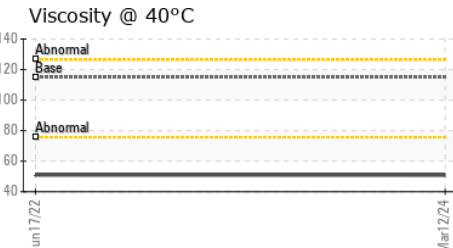
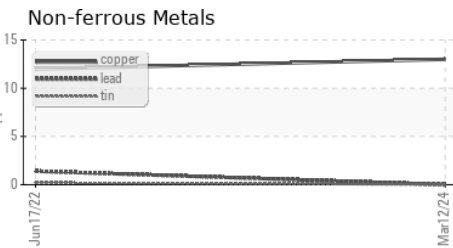
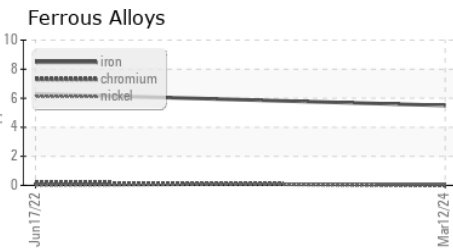
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	115	50.9	51.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0836093 **Received** : 01 Apr 2024
Lab Number : **06134818** **Tested** : 03 Apr 2024
Unique Number : 10954283 **Diagnosed** : 03 Apr 2024 - Don Baldrige
Test Package : CONST

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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)