



OIL ANALYSIS REPORT

Sample Rating Trend

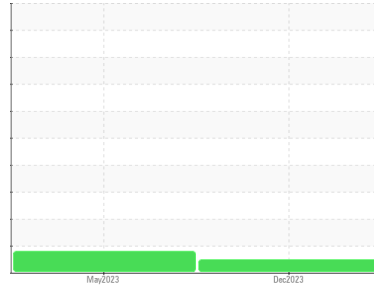
NORMAL



Area
[20492]
Machine Id
30-69

Component
Hydraulic System
Fluid

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



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is 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		WC0836228	WC0802428	---
Sample Date	Client Info		20 Dec 2023	31 May 2023	---
Machine Age	hrs	Client Info	3896	3634	---
Oil Age	hrs	Client Info	1896	3634	---
Oil Changed	Client Info		Changed	Not Changd	---
Sample Status			NORMAL	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	4	5	---
Chromium	ppm	ASTM D5185m >10	0	<1	---
Nickel	ppm	ASTM D5185m >10	0	0	---
Titanium	ppm	ASTM D5185m	0	<1	---
Silver	ppm	ASTM D5185m	0	0	---
Aluminum	ppm	ASTM D5185m >10	<1	4	---
Lead	ppm	ASTM D5185m >10	1	<1	---
Copper	ppm	ASTM D5185m >75	9	6	---
Tin	ppm	ASTM D5185m >10	0	0	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 85	108	111	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	13	10	---
Manganese	ppm	ASTM D5185m	0	<1	---
Magnesium	ppm	ASTM D5185m 350	559	629	---
Calcium	ppm	ASTM D5185m 1800	1647	1734	---
Phosphorus	ppm	ASTM D5185m 1000	1127	1095	---
Zinc	ppm	ASTM D5185m 1100	1109	1261	---
Sulfur	ppm	ASTM D5185m 3500	3881	5217	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	6	6	---
Sodium	ppm	ASTM D5185m	3	3	---
Potassium	ppm	ASTM D5185m >20	1	1	---

FLUID CLEANLINESS

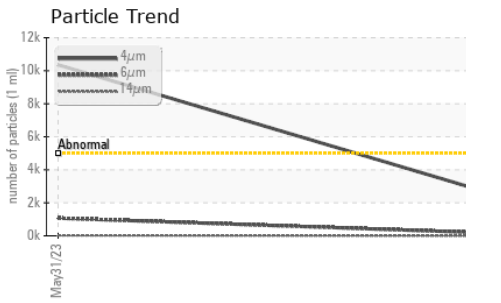
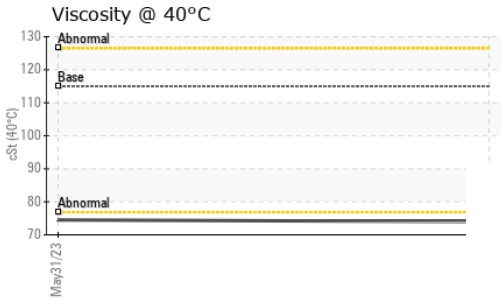
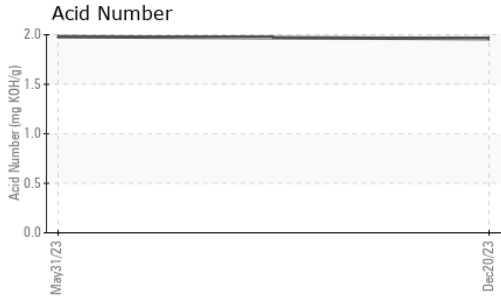
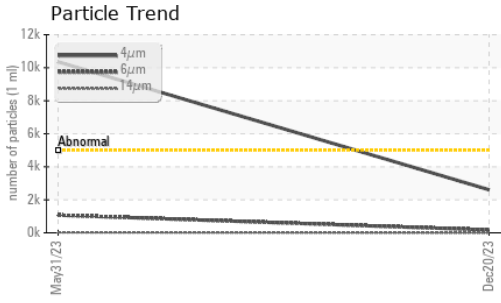
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	2608	▲ 10358	---
Particles >6µm	ASTM D7647	>1300	175	1072	---
Particles >14µm	ASTM D7647	>160	9	27	---
Particles >21µm	ASTM D7647	>40	3	7	---
Particles >38µm	ASTM D7647	>10	0	0	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	19/15/10	▲ 21/17/12	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.96	1.98	---



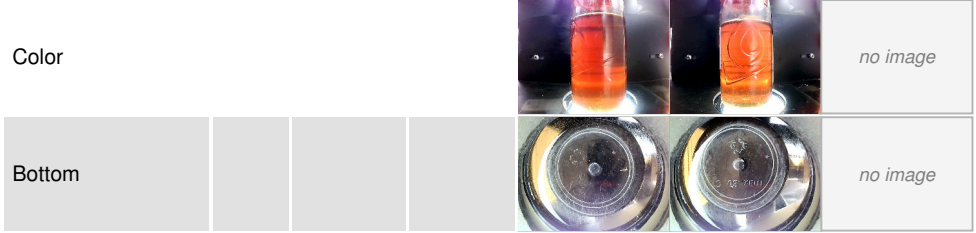
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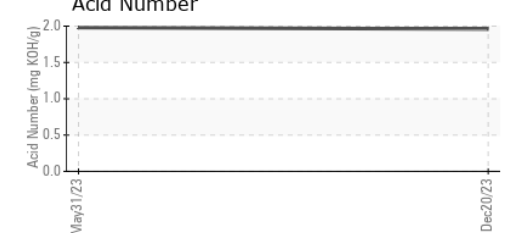
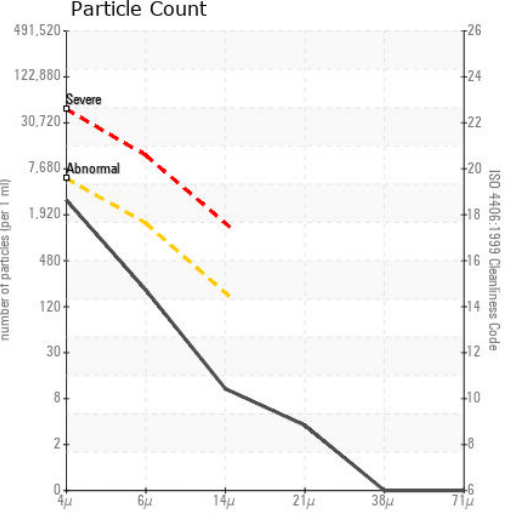
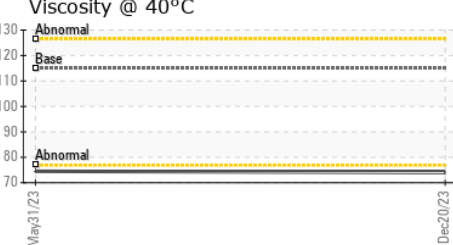
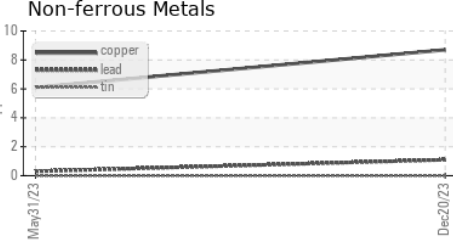
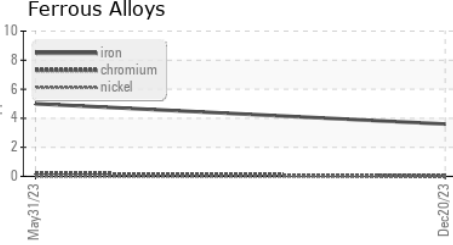
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	74.0	74.5	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0836228 **Received** : 09 Jan 2024
Lab Number : 06055867 **Diagnosed** : 10 Jan 2024
Unique Number : 10821816 **Diagnostician** : Wes Davis
Test Package : CONST

MANHATTAN ROAD AND BRIDGE
 5601 S 122ND E AVE
 TULSA, OK
 US 74146
 Contact: BEN CALDWELL
 kevin.marson@wearcheck.com
 T: (918)728-5749
 F:

Certificate L2367
 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)