

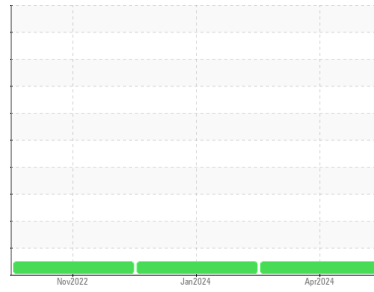


# OIL ANALYSIS REPORT



Area  
**[22705]**  
 Machine Id  
**30-96L**  
 Component  
**Hydraulic System**  
 Fluid  
**CONOCO PHILLIPS GUARDOL ECT 15W40 (--- GAL)**

### Sample Rating Trend



**NORMAL**



### 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		<b>WC0923381</b>	WC0836155	WC0754802
Sample Date	Client Info		<b>24 Apr 2024</b>	04 Jan 2024	10 Nov 2022
Machine Age	hrs	Client Info	<b>3118</b>	2842	1869
Oil Age	hrs	Client Info	<b>1118</b>	973	1869
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

### CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.075	<b>NEG</b>	NEG	NEG

### WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>23	<b>4</b>	3	6
Chromium	ppm	ASTM D5185m	>9	<b>1</b>	<1	2
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>1</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>3</b>	2	2
Lead	ppm	ASTM D5185m	>28	<b>&lt;1</b>	0	1
Copper	ppm	ASTM D5185m	>51	<b>6</b>	8	14
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	85	<b>85</b>	63	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>10</b>	15	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	350	<b>465</b>	309	3
Calcium	ppm	ASTM D5185m	1800	<b>1115</b>	1003	77
Phosphorus	ppm	ASTM D5185m	1000	<b>907</b>	932	582
Zinc	ppm	ASTM D5185m	1100	<b>1070</b>	972	872
Sulfur	ppm	ASTM D5185m	3500	<b>3401</b>	2706	1599

### CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>31	<b>8</b>	6	8
Sodium	ppm	ASTM D5185m	>21	<b>3</b>	2	0
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	3	5

### FLUID CLEANLINESS

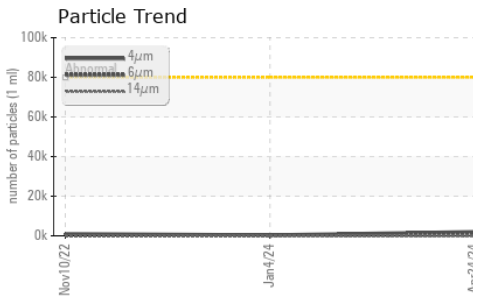
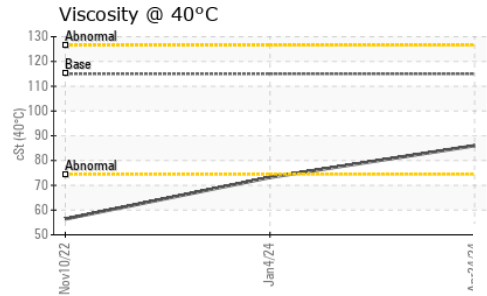
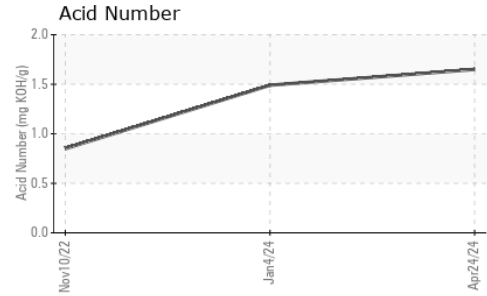
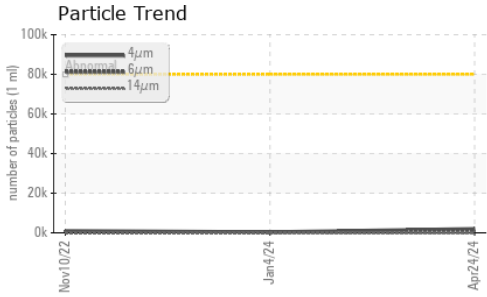
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>80000	<b>2072</b>	413	1080
Particles >6µm	ASTM D7647	>20000	<b>234</b>	118	80
Particles >14µm	ASTM D7647	>640	<b>11</b>	15	7
Particles >21µm	ASTM D7647	>160	<b>7</b>	4	3
Particles >38µm	ASTM D7647	>40	<b>5</b>	1	0
Particles >71µm	ASTM D7647	>10	<b>5</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>23/21/16	<b>18/15/11</b>	16/14/11	17/13/10

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>1.65</b>	1.49	0.85



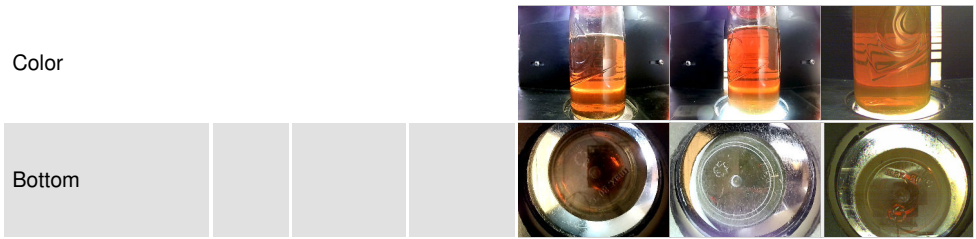
# OIL ANALYSIS REPORT



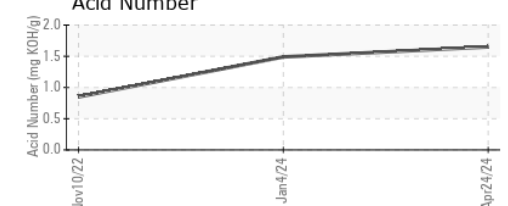
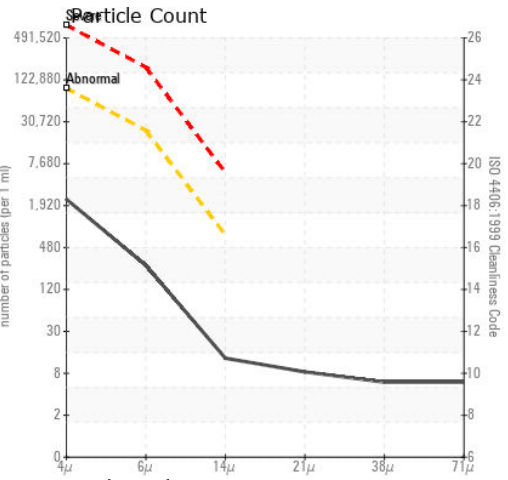
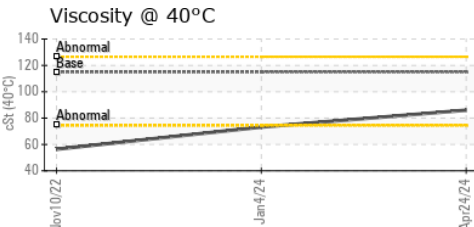
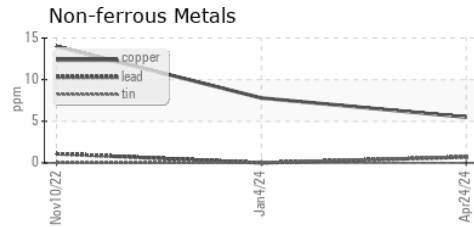
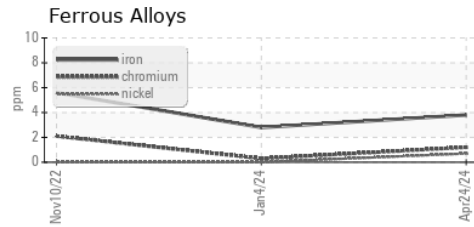
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 115	<b>86.0</b>	73.2	56.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0923381      **Received** : 17 May 2024  
**Lab Number** : **06183302**      **Tested** : 20 May 2024  
**Unique Number** : 11034628      **Diagnosed** : 20 May 2024 - 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

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)