

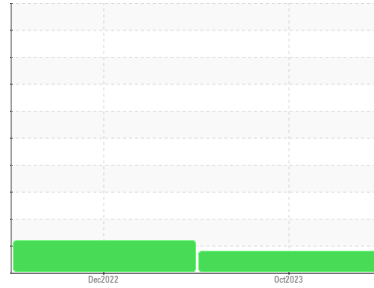


# PROBLEM SUMMARY



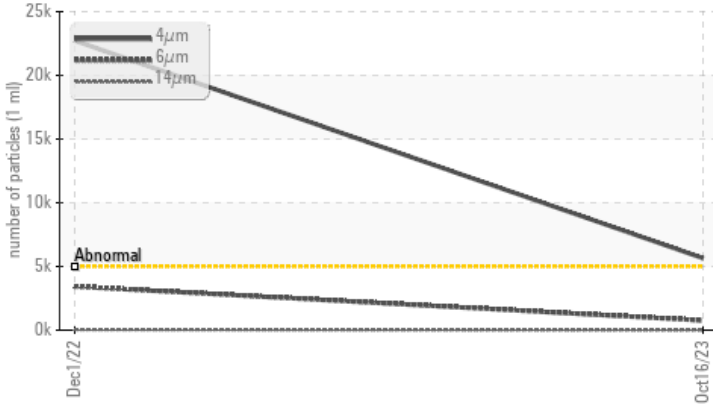
Area  
**[19813]**  
 Machine Id  
**52-158**  
 Component  
**Hydraulic System**  
 Fluid  
**ConocoPhillips power drive 10w (--- GAL)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. ( Customer Sample Comment: ConocoPhillips power drive 10w )

## PROBLEMATIC TEST RESULTS

Sample Status		ATTENTION	ABNORMAL	---
Particles >4µm	ASTM D7647 >5000	▲ 5649	▲ 22728	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 20/17/11	▲ 22/19/13	---

Customer Id: MANTUL  
 Sample No.: WC0818784  
 Lab Number: 06010160  
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 01 Dec 2022 Diag: Don Baldrige

ISO



No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report





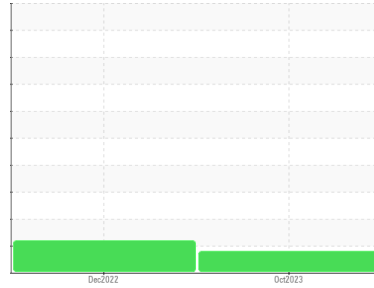
# OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area  
**[19813]**  
 Machine Id  
**52-158**  
 Component  
**Hydraulic System**  
 Fluid  
**ConocoPhillips power drive 10w (--- GAL)**



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. ( Customer Sample Comment: ConocoPhillips power drive 10w )

### 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		<b>WC0818784</b>	WC0709393	---
Sample Date	Client Info		<b>16 Oct 2023</b>	01 Dec 2022	---
Machine Age	hrs	Client Info	<b>1003</b>	532	---
Oil Age	hrs	Client Info	<b>1003</b>	532	---
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	---
Sample Status			<b>ATTENTION</b>	ABNORMAL	---

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>6</b>	12	---
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Lead	ppm	ASTM D5185m >10	<b>1</b>	2	---
Copper	ppm	ASTM D5185m >75	<b>7</b>	16	---
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>9</b>	0	---
Barium	ppm	ASTM D5185m	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	<b>2</b>	<1	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	<b>73</b>	10	---
Calcium	ppm	ASTM D5185m	<b>1728</b>	267	---
Phosphorus	ppm	ASTM D5185m	<b>815</b>	722	---
Zinc	ppm	ASTM D5185m	<b>993</b>	928	---
Sulfur	ppm	ASTM D5185m	<b>2798</b>	1622	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>4</b>	<1	---
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	2	---

## FLUID CLEANLINESS

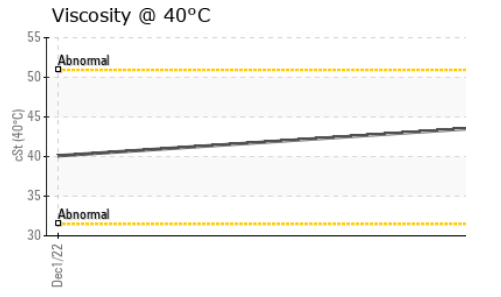
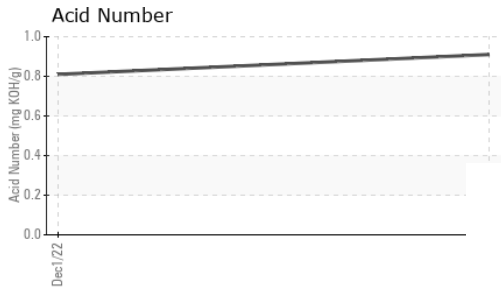
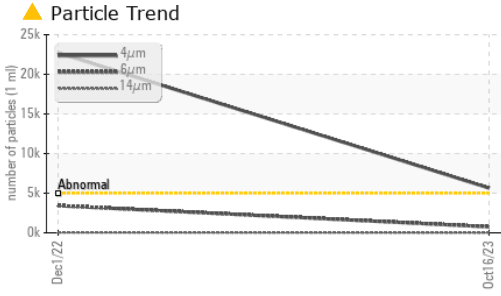
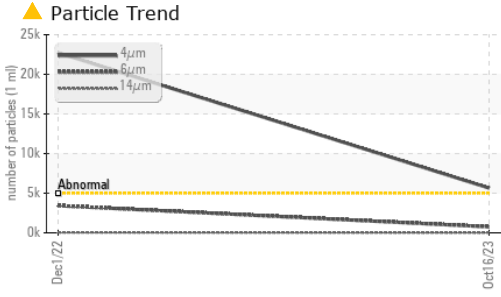
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 5649</b>	▲ 22728	---
Particles >6µm	ASTM D7647	>1300	<b>759</b>	▲ 3428	---
Particles >14µm	ASTM D7647	>160	<b>17</b>	45	---
Particles >21µm	ASTM D7647	>40	<b>4</b>	5	---
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 20/17/11</b>	▲ 22/19/13	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.91</b>	0.81	---



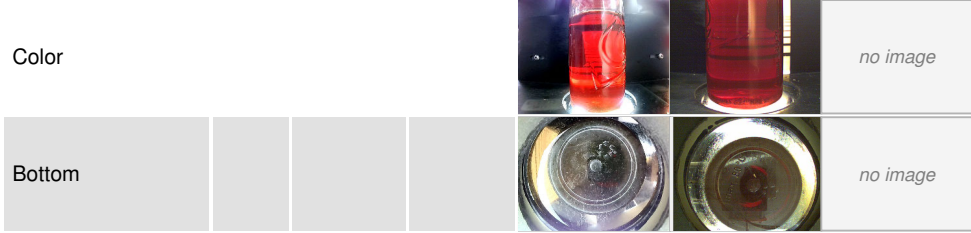
# OIL ANALYSIS REPORT



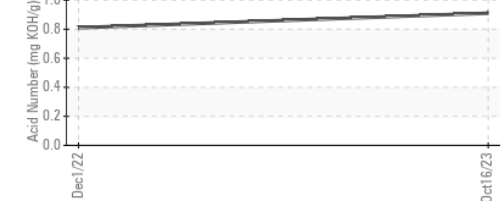
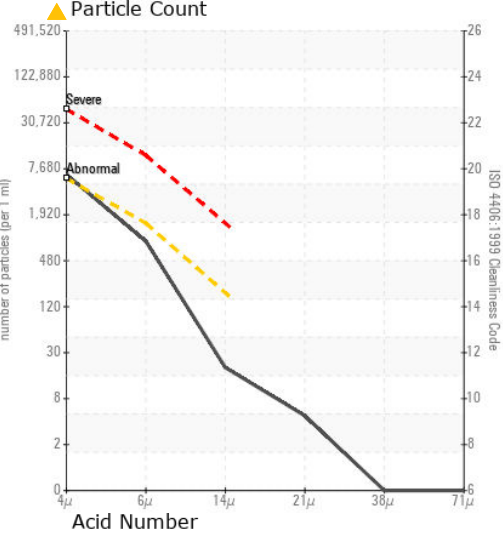
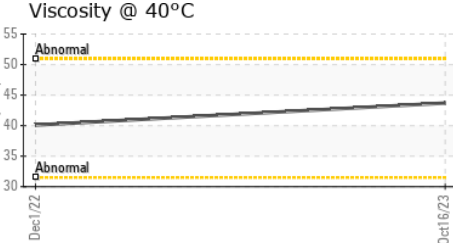
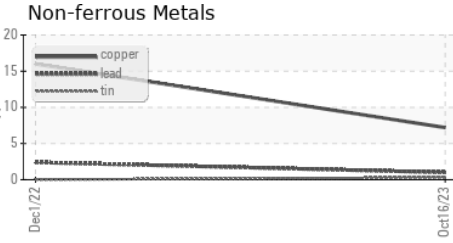
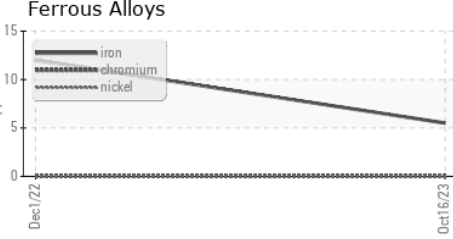
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	43.7	40.1	---

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



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0818784 **Received** : 16 Nov 2023  
**Lab Number** : 06010160 **Diagnosed** : 20 Nov 2023  
**Unique Number** : 10749304 **Diagnostician** : Don Baldrige  
**Test Package** : CONST ( Additional Tests: PrtCount )

**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:

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)