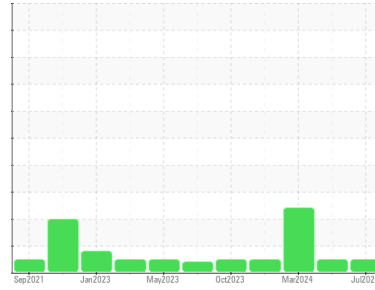




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
[KP01001278]

Machine Id  
**13046 CML 1**

Component  
**Hydraulic System**

Fluid  
**PHILLIPS 66 Powerflow NZ AW46 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### 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>WC0936197</b>	WC0891279	WC0891278
Sample Date	Client Info	<b>11 Jul 2024</b>	28 Mar 2024	28 Mar 2024
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	MARGINAL

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	2
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>20	<b>5</b>	4	5
Tin	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185m		<b>27</b>	33	45
Phosphorus	ppm	ASTM D5185m		<b>485</b>	494	549
Zinc	ppm	ASTM D5185m		<b>541</b>	599	635
Sulfur	ppm	ASTM D5185m		<b>1382</b>	885	1630

## CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>15	<b>1</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	1	0
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	1

## FLUID CLEANLINESS

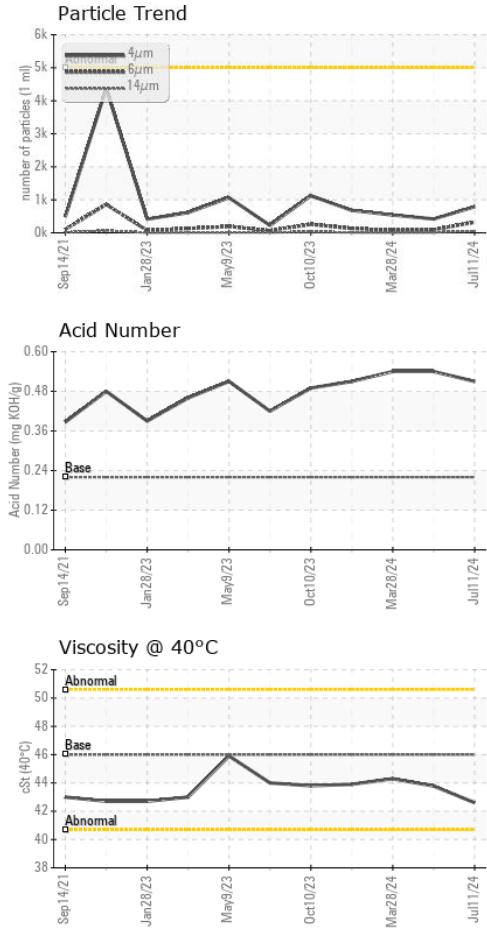
method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>5000	<b>789</b>	539	420
Particles >6µm	ASTM D7647	>1300	<b>321</b>	75	93
Particles >14µm	ASTM D7647	>160	<b>49</b>	8	10
Particles >21µm	ASTM D7647	>40	<b>16</b>	3	4
Particles >38µm	ASTM D7647	>10	<b>1</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>17/16/13</b>	16/13/10	16/14/10

## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.22	<b>0.51</b>	0.54	0.54



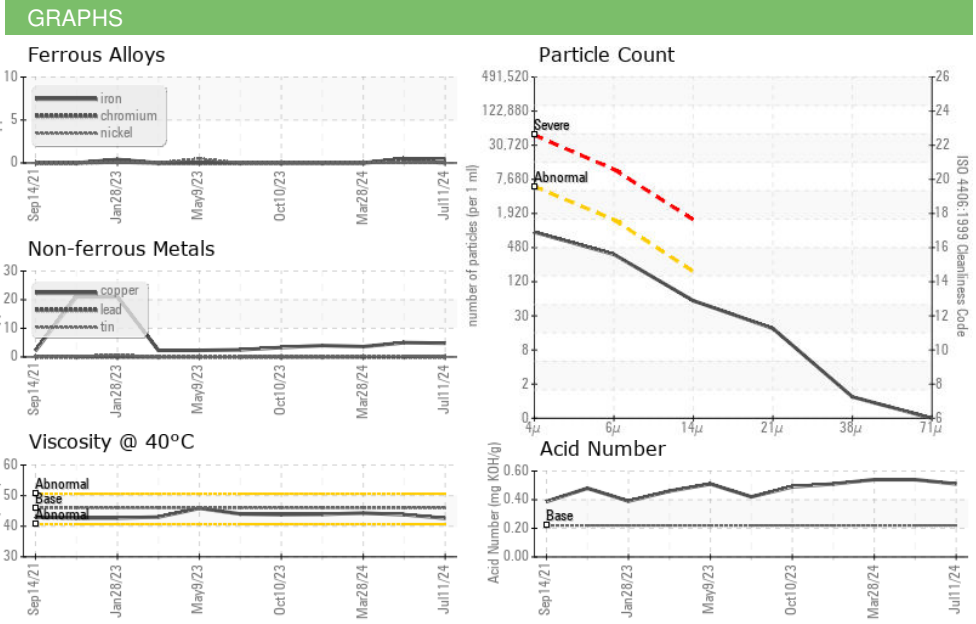
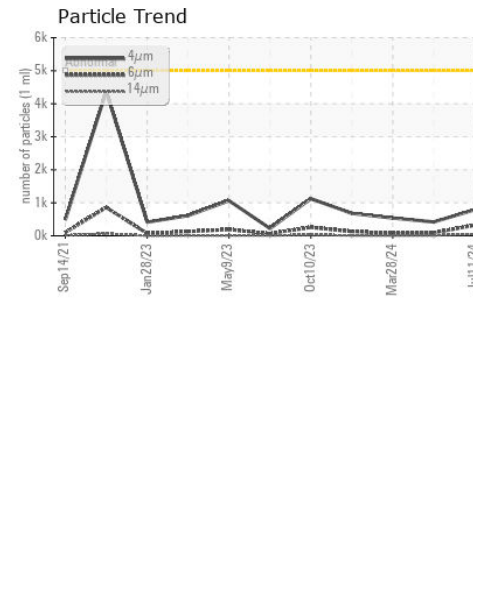
# OIL ANALYSIS REPORT



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 46	<b>42.6</b>	43.78	44.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
MPC			no image	no image	



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0936197  
**Lab Number** : 06239113  
**Unique Number** : 11127947  
**Test Package** : IND 2  
**Received** : 17 Jul 2024  
**Tested** : 18 Jul 2024  
**Diagnosed** : 18 Jul 2024 - Wes Davis

**BALDWIN FILTERS INC**  
 4400 HIGHWAY 30 EAST  
 KEARNEY, NE  
 US 68847-0724  
 Contact: JAY FAHRENBRUCH  
 jay.fahrenbruch@parker.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)