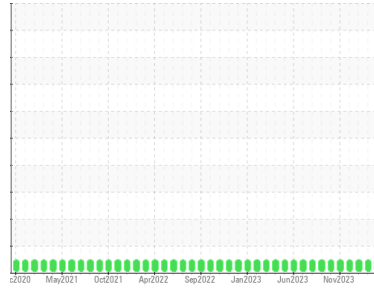




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**Ohio Valley**  
 Machine Id  
**[Ohio Valley] Oil - Port Reduction Gear**  
 Component  
**Port Reduction Gear**  
 Fluid  
**GEAR OIL SAE 85W140 (180 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: Dillinger )

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination 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>WC0845941</b>	WC0845994	WC0845949
Sample Date	Client Info		<b>16 Mar 2024</b>	16 Feb 2024	22 Jan 2024
Machine Age	hrs	Client Info	<b>25591</b>	25249	24920
Oil Age	hrs	Client Info	<b>3803</b>	3462	3147
Oil Changed	Client Info		<b>N/A</b>	Not Changd	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	<b>46</b>	27	26
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>7</b>	3	4
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >50	<b>4</b>	3	4
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 400	<b>392</b>	230	228
Barium	ppm	ASTM D5185m 200	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 12	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 12	<b>3</b>	10	7
Calcium	ppm	ASTM D5185m 150	<b>43</b>	39	29
Phosphorus	ppm	ASTM D5185m 1650	<b>1464</b>	980	908
Zinc	ppm	ASTM D5185m 125	<b>11</b>	12	10
Sulfur	ppm	ASTM D5185m 22500	<b>27637</b>	17534	17050

## CONTAMINANTS

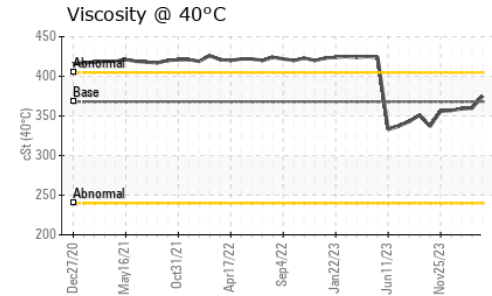
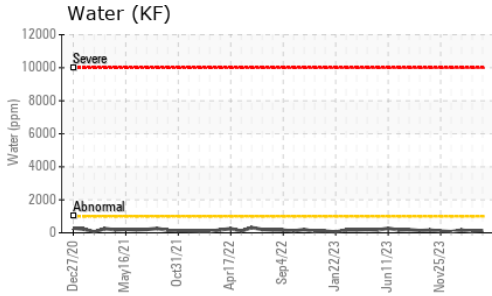
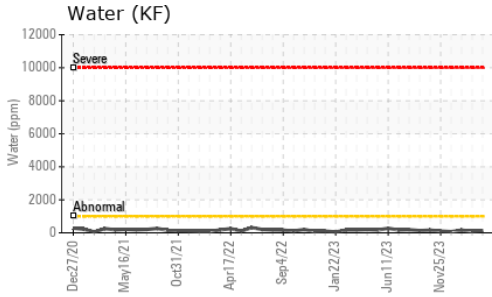
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>13</b>	4	5
Sodium	ppm	ASTM D5185m	<b>4</b>	2	3
Potassium	ppm	ASTM D5185m >20	<b>8</b>	3	5
Water	%	ASTM D6304 >0.1	<b>0.013</b>	0.008	0.016
ppm Water	ppm	ASTM D6304 >1000	<b>134</b>	82	165

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 2.00	<b>1.69</b>	1.58	1.90



# OIL ANALYSIS REPORT

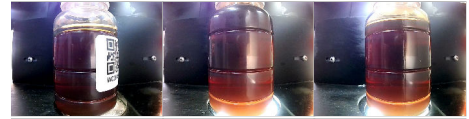


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	368	375	360

SAMPLE IMAGES	method	limit/base	current	history1	history2
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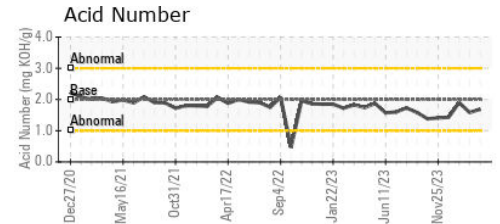
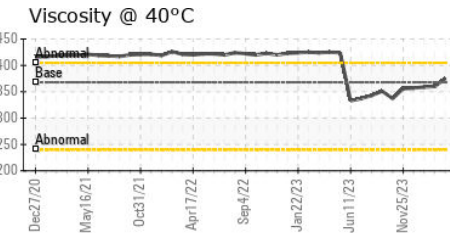
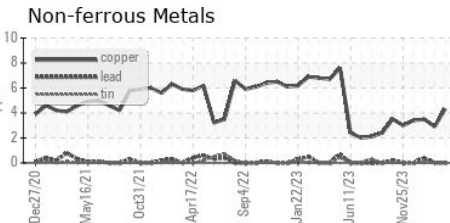
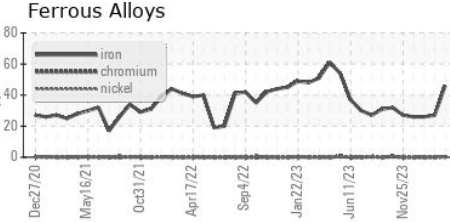
Color



Bottom



## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0845941 Received : 27 Mar 2024  
 Lab Number : 06130732 Tested : 28 Mar 2024  
 Unique Number : 10950197 Diagnosed : 30 Mar 2024 - Don Baldrige  
 Test Package : IND 2 ( Additional Tests: KF )

**MARATHON PETROLEUM CO.**  
 101 12TH ST  
 CATLETTSBURG, KY  
 US 41169

Contact: CORY GUMBERT  
 cagumbert@marathonpetroleum.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)

T: (606)585-3950

F: x: