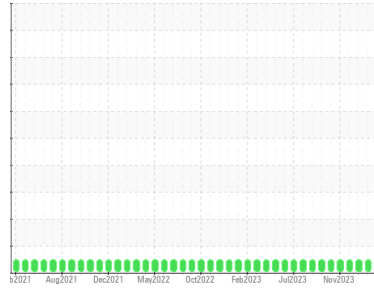




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**Martinsville**  
 Machine Id  
**[Martinsville] Oil - Port Reduction Gear**  
 Component  
**Port Reduction Gear**  
 Fluid  
**MOBIL DELVAC 1640 (28 GAL)**

## DIAGNOSIS

**Recommendation**  
 Resample at the next service interval to monitor. ( Customer Sample Comment: George willis )

**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>WC0805445</b>	WC0845813	WC0735527
Sample Date	Client Info		<b>18 Mar 2024</b>	15 Feb 2024	21 Jan 2024
Machine Age	hrs	Client Info	<b>23736</b>	23154	22613
Oil Age	hrs	Client Info	<b>11436</b>	9034	10311
Oil Changed	Client Info		<b>Not Chngd</b>	Filtered	Not Chngd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	<b>13</b>	10	10
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>1</b>	0	<1
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >50	<b>16</b>	17	15
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	<1
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	<b>12</b>	11	11
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>38</b>	34	36
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>517</b>	522	521
Calcium	ppm	ASTM D5185m	<b>1389</b>	1354	1338
Phosphorus	ppm	ASTM D5185m	<b>826</b>	802	836
Zinc	ppm	ASTM D5185m	<b>959</b>	862	961
Sulfur	ppm	ASTM D5185m	<b>3096</b>	3236	3101

## CONTAMINANTS

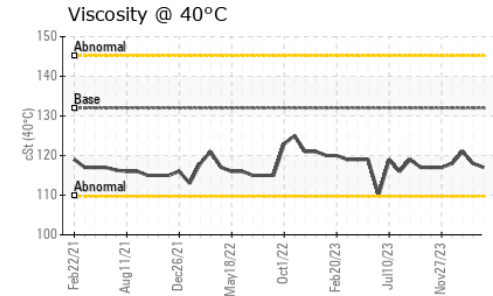
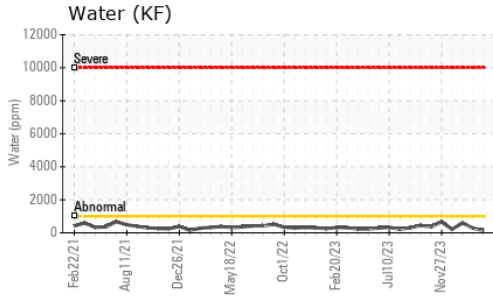
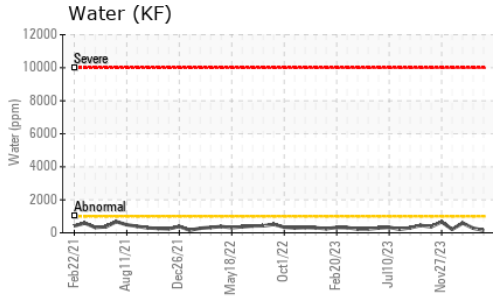
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>3</b>	1	3
Sodium	ppm	ASTM D5185m	<b>2</b>	2	2
Potassium	ppm	ASTM D5185m >20	<b>2</b>	0	1
Water	%	ASTM D6304 >0.1	<b>0.015</b>	0.028	0.059
ppm Water	ppm	ASTM D6304 >1000	<b>150</b>	281	592

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.86</b>	0.82	0.84



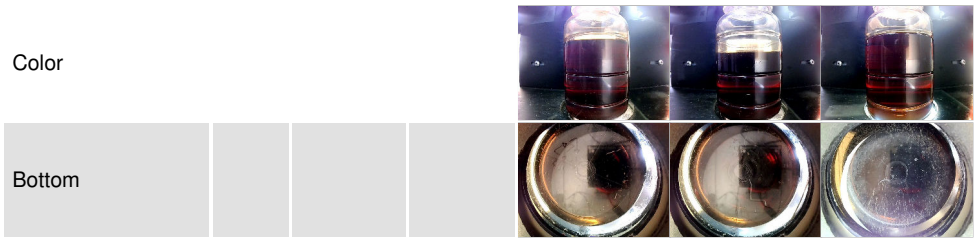
# OIL ANALYSIS REPORT



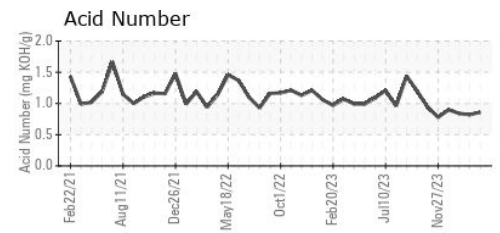
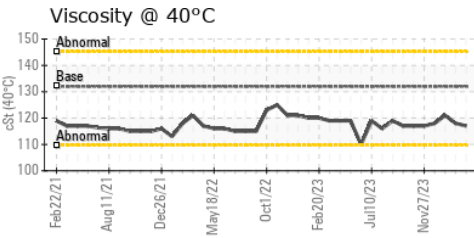
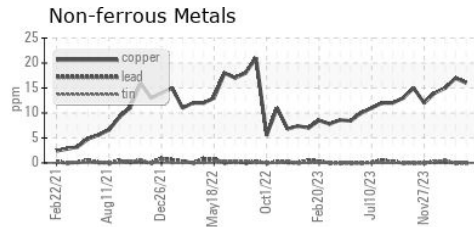
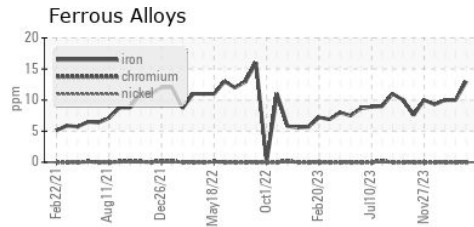
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	132	117	118

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0805445 **Received** : 27 Mar 2024  
**Lab Number** : **06130707** **Tested** : 28 Mar 2024  
**Unique Number** : 10950172 **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  
 T: (606)585-3950  
 F: x:

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)