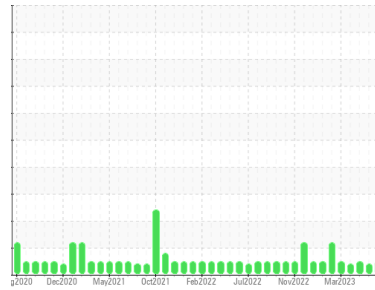




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Martinsville**  
 Machine Id  
**[Martinsville] Oil - Port Genset**  
 Component  
**Port Genset**  
 Fluid  
**MOBIL 15W40 (7 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0769179</b>	WC0719195	WC0683416
Sample Date	Client Info		<b>10 Jul 2023</b>	13 Jun 2023	15 May 2023
Machine Age	hrs	Client Info	<b>3795</b>	3488	3235
Oil Age	hrs	Client Info	<b>55</b>	258	0
Oil Changed	Client Info		<b>N/A</b>	Not Changd	Changed
Sample Status			<b>NORMAL</b>	ATTENTION	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<b>&lt;1.0</b>	0.5	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >25	<b>2</b>	5	2
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	1
Tin	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>85</b>	73	70
Barium	ppm	ASTM D5185m	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>68</b>	72	58
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>1264</b>	1440	1265
Calcium	ppm	ASTM D5185m	<b>1217</b>	1407	1110
Phosphorus	ppm	ASTM D5185m	<b>929</b>	1039	858
Zinc	ppm	ASTM D5185m	<b>1105</b>	1251	1076
Sulfur	ppm	ASTM D5185m	<b>3280</b>	4109	3550

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	3	5
Sodium	ppm	ASTM D5185m >118	<b>0</b>	2	<1
Potassium	ppm	ASTM D5185m >20	<b>1</b>	1	3

## INFRA-RED

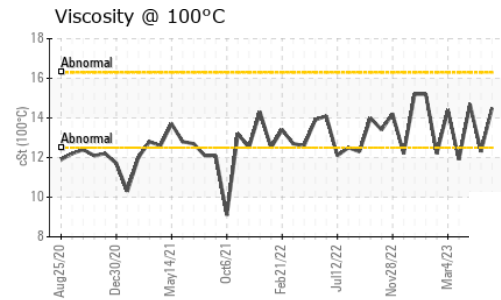
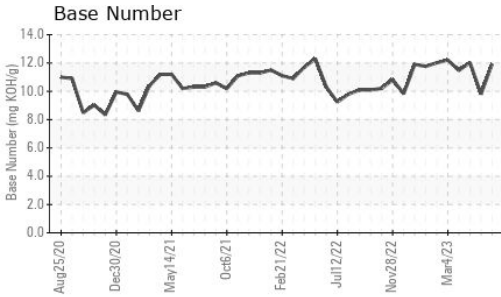
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.1</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>5.5</b>	7.0	5.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.2</b>	20.3	18.9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.2</b>	16.1	13.6
Base Number (BN)	mg KOH/g	ASTM D2896	<b>11.92</b>	9.80	12.03



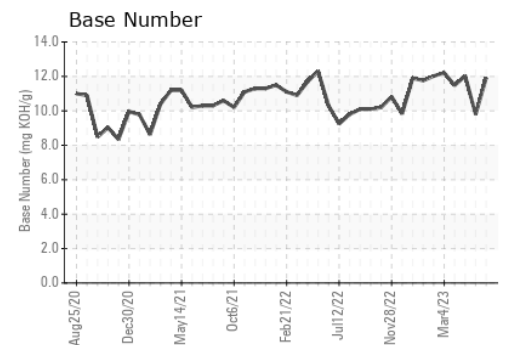
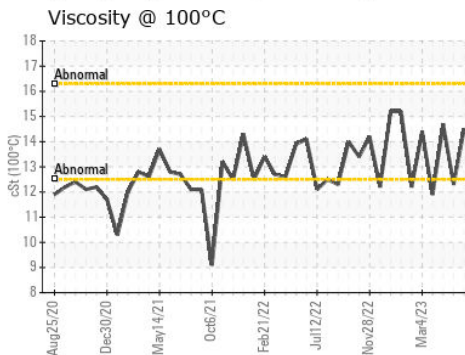
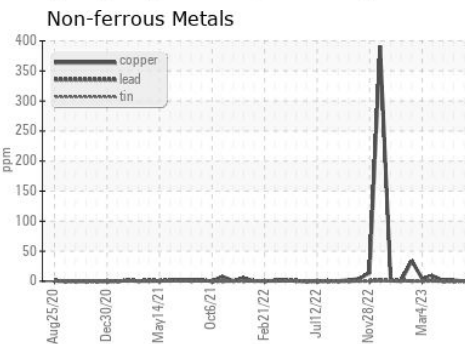
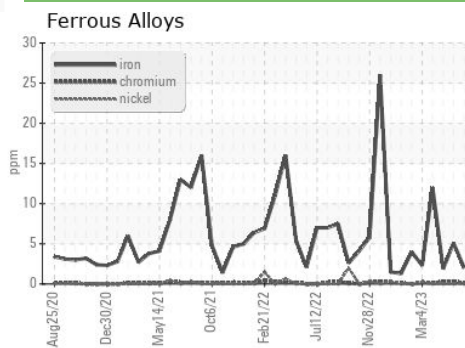
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
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 @ 100°C	cSt	ASTM D445	14.5	▲ 12.3	14.7

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0769179  
 Lab Number : 05904528  
 Unique Number : 10565884  
 Test Package : IND 2

Received : 21 Jul 2023  
 Diagnosed : 26 Jul 2023  
 Diagnostician : Don Baldrige

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

Contact: CORY GUMBERT  
 cagumbert@marathonpetroleum.com  
 T: (606)585-3950

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)

F: x: