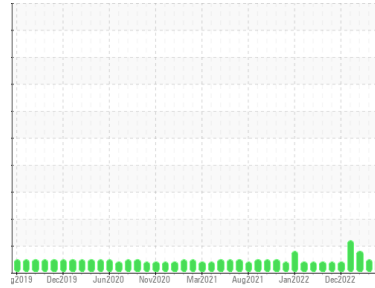




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Kentucky**  
 Machine Id  
**[Kentucky] Oil - Port Genset**  
 Component  
**Port Genset**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (35 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
 Please specify the brand, type, and viscosity of the oil on your next sample.

### 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>WC0769561</b>	WC0769526	WC0735508
Sample Date	Client Info		<b>11 Jul 2023</b>	09 Jun 2023	12 Apr 2023
Machine Age	hrs	Client Info	<b>16461</b>	15964	15583
Oil Age	hrs	Client Info	<b>333</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<b>&lt;1.0</b>	1.0	▲ 3.1
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >25	<b>4</b>	<1	3
Chromium	ppm	ASTM D5185m >5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m >20	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m >5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	<b>29</b>	42	37
Barium	ppm	ASTM D5185m 10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 100	<b>52</b>	47	46
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 450	<b>749</b>	751	758
Calcium	ppm	ASTM D5185m 3000	<b>1574</b>	1464	1286
Phosphorus	ppm	ASTM D5185m 1150	<b>1036</b>	1047	958
Zinc	ppm	ASTM D5185m 1350	<b>1290</b>	1302	1138
Sulfur	ppm	ASTM D5185m 4250	<b>3762</b>	3905	2758

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>3</b>	6	6
Sodium	ppm	ASTM D5185m >158	<b>2</b>	2	1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	3	<1

## INFRA-RED

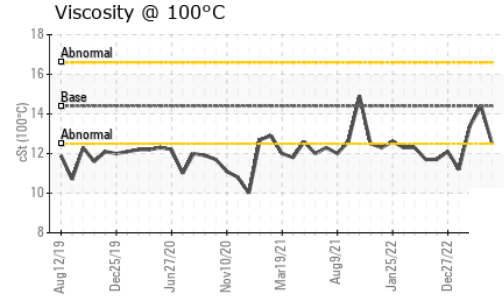
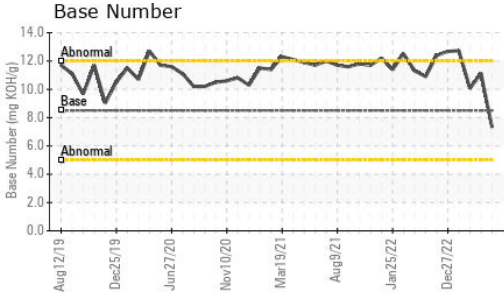
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.2</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.6</b>	5.6	5.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.7</b>	19.2	17.0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.7</b>	14.8	14.3
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	<b>7.31</b>	11.12	10.06



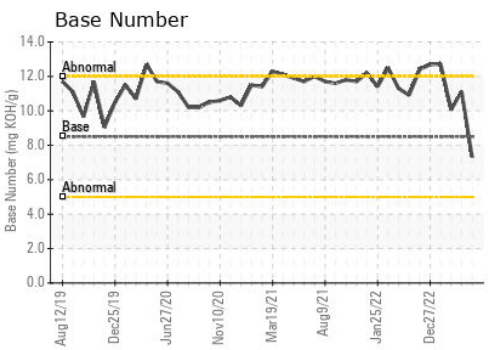
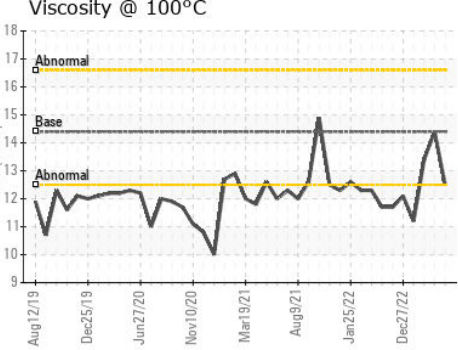
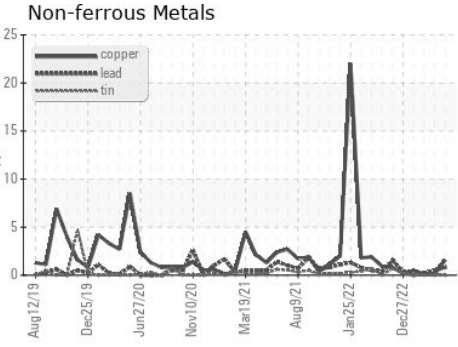
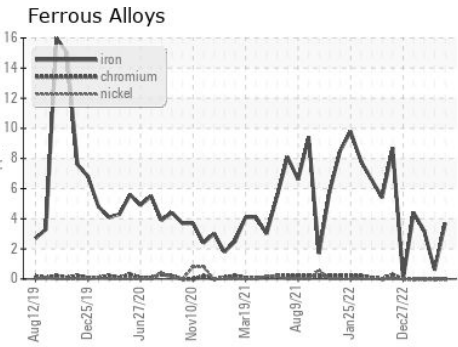
# OIL ANALYSIS REPORT



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	14.4	<b>12.5</b>	14.4	13.4

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0769561 **Received** : 17 Jul 2023  
**Lab Number** : **05900160** **Diagnosed** : 18 Jul 2023  
**Unique Number** : 10561516 **Diagnostician** : Wes Davis  
**Test Package** : IND 2

**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)