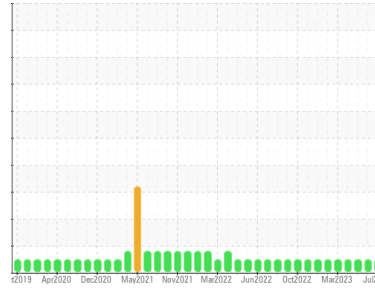




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Nashville**  
 Machine Id  
**[Nashville] Oil - Port Genset**  
 Component  
**Port Genset**  
 Fluid  
**MOBIL 15W40 (35 GAL)**

## DIAGNOSIS

### Recommendation

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

### 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>WC0683335</b>	WC0683261	WC0683259
Sample Date	Client Info		<b>10 Jul 2023</b>	13 Jun 2023	16 May 2023
Machine Age	hrs	Client Info	<b>8257</b>	8018	7719
Oil Age	hrs	Client Info	<b>1438</b>	1200	913
Oil Changed	Client Info		<b>Filtered</b>	N/A	Filtered
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>25	<b>26</b>	22	20
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>1</b>	<1	2
Lead	ppm	ASTM D5185m	>10	<b>2</b>	2	2
Copper	ppm	ASTM D5185m	>20	<b>2</b>	<1	2
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>90</b>	115	116
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>15</b>	15	15
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>147</b>	137	137
Calcium	ppm	ASTM D5185m		<b>2471</b>	2363	2344
Phosphorus	ppm	ASTM D5185m		<b>956</b>	968	906
Zinc	ppm	ASTM D5185m		<b>1305</b>	1271	1170
Sulfur	ppm	ASTM D5185m		<b>4081</b>	4129	3505

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>3</b>	3	3
Sodium	ppm	ASTM D5185m	>118	<b>2</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	9	7

## INFRA-RED

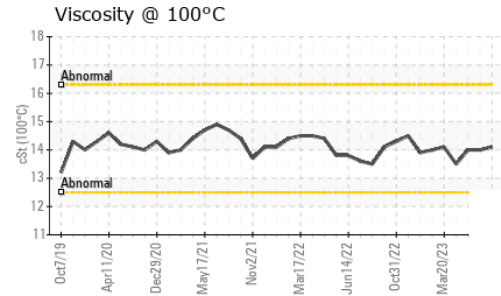
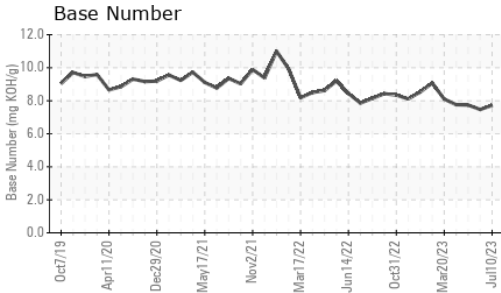
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		<b>0.5</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>13.5</b>	11.7	11.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.1</b>	24.7	24.7

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>28.0</b>	26.3	25.4
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.72</b>	7.47	7.74



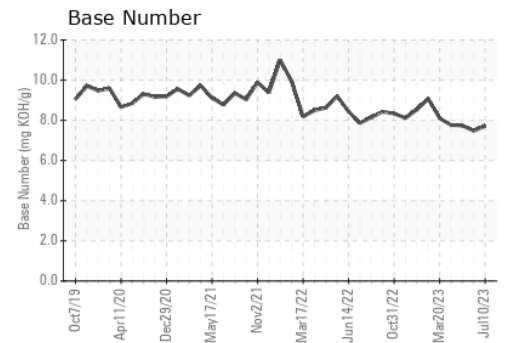
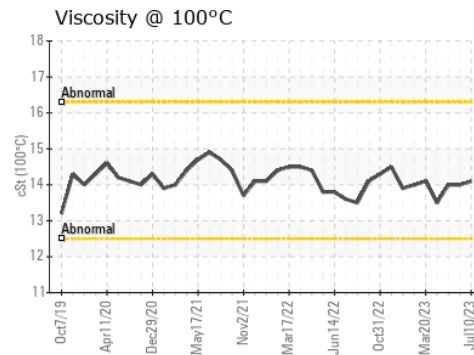
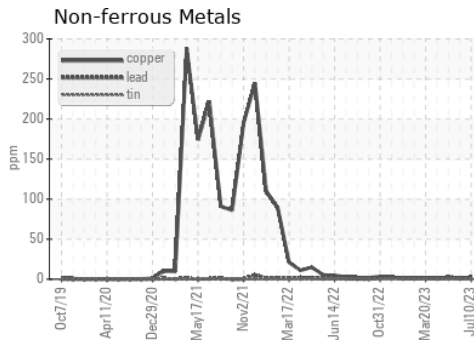
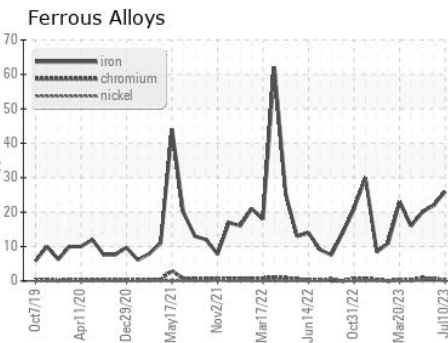
# OIL ANALYSIS REPORT



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 @ 100°C	cSt	ASTM D445	14.1	14.0	14.0

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0683335 Received : 17 Jul 2023  
 Lab Number : 05900177 Diagnosed : 20 Jul 2023  
 Unique Number : 10561533 Diagnostician : Jonathan Hester  
 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)