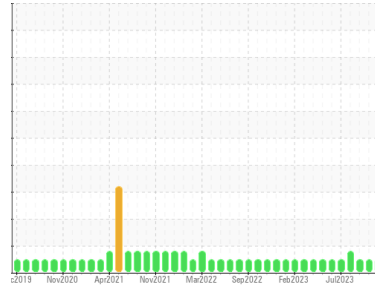




# OIL ANALYSIS REPORT

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.

### 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>WC0805248</b>	WC0805247	WC0769327
Sample Date	Client Info			<b>27 Nov 2023</b>	03 Oct 2023	05 Sep 2023
Machine Age	hrs	Client Info		<b>9454</b>	9016	8611
Oil Age	hrs	Client Info		<b>971</b>	534	129
Oil Changed	Client Info			<b>Not Chngd</b>	Not Chngd	Not Chngd
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	>50	<b>22</b>	16	9
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>1</b>	0	2
Lead	ppm	ASTM D5185m	>17	<b>2</b>	1	1
Copper	ppm	ASTM D5185m	>70	<b>2</b>	1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>57</b>	61	81
Barium	ppm	ASTM D5185m		<b>0</b>	<1	2
Molybdenum	ppm	ASTM D5185m		<b>34</b>	37	31
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>829</b>	713	680
Calcium	ppm	ASTM D5185m		<b>1675</b>	1656	1698
Phosphorus	ppm	ASTM D5185m		<b>962</b>	925	948
Zinc	ppm	ASTM D5185m		<b>1229</b>	1189	1153
Sulfur	ppm	ASTM D5185m		<b>2779</b>	3322	3449

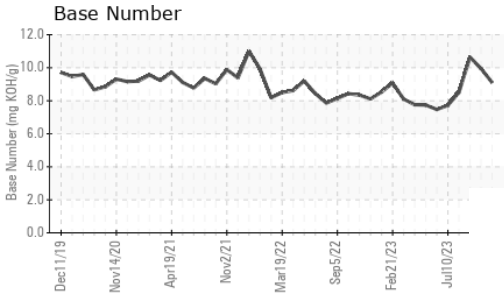
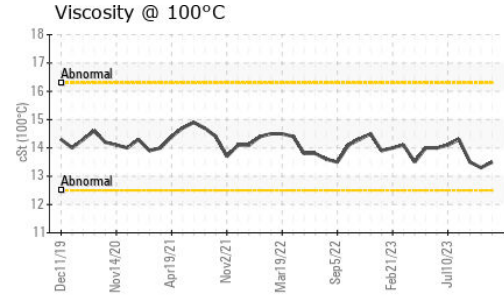
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	3	4
Sodium	ppm	ASTM D5185m	>118	<b>3</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	5	4
Water	%	ASTM D6304	>0.1	<b>NEG</b>	NEG	NEG

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		<b>0.4</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.4</b>	11.5	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.4</b>	22.1	20.4

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.7</b>	22.2	18.0
Base Number (BN)	mg KOH/g	ASTM D2896		<b>9.10</b>	9.95	10.64



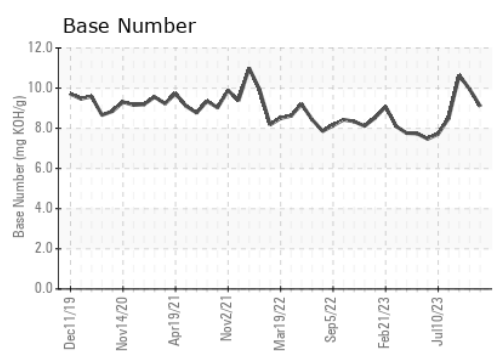
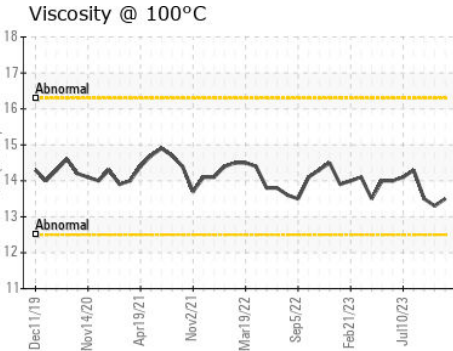
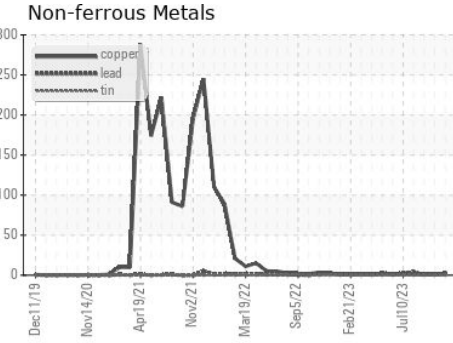
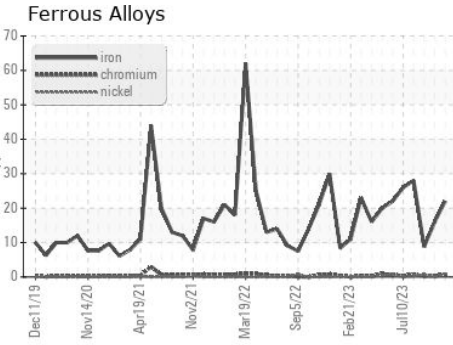
# OIL ANALYSIS REPORT



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	<b>13.5</b>	13.3	13.5

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0805248 **Received** : 06 Dec 2023  
**Lab Number** : **06026668** **Diagnosed** : 07 Dec 2023  
**Unique Number** : 10776459 **Diagnostician** : Sean Felton  
**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:

Certificate L2367  
 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)