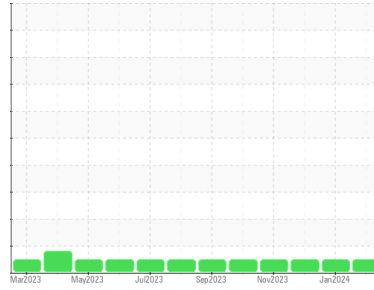




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Huntington**  
 Machine Id  
**[Huntington] Oil - Port Genset**  
 Component  
**Port Genset**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (5 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>WC0874747</b>	WC0859835	WC0845908
Sample Date	Client Info			<b>19 Mar 2024</b>	21 Jan 2024	23 Dec 2023
Machine Age	hrs	Client Info		<b>18341</b>	17915	17622
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>Not Changed</b>	Not Changed	N/A
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>56</b>	35	30
Chromium	ppm	ASTM D5185m	>4	<b>2</b>	1	1
Nickel	ppm	ASTM D5185m	>2	<b>1</b>	1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>12	<b>3</b>	2	1
Lead	ppm	ASTM D5185m	>17	<b>24</b>	19	16
Copper	ppm	ASTM D5185m	>70	<b>7</b>	7	14
Tin	ppm	ASTM D5185m	>15	<b>1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>21</b>	18	15
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	100	<b>102</b>	73	69
Manganese	ppm	ASTM D5185m		<b>1</b>	2	<1
Magnesium	ppm	ASTM D5185m	450	<b>2031</b>	1407	1378
Calcium	ppm	ASTM D5185m	3000	<b>1765</b>	1216	1208
Phosphorus	ppm	ASTM D5185m	1150	<b>1376</b>	964	950
Zinc	ppm	ASTM D5185m	1350	<b>1712</b>	1238	1176
Sulfur	ppm	ASTM D5185m	4250	<b>4614</b>	3033	3439

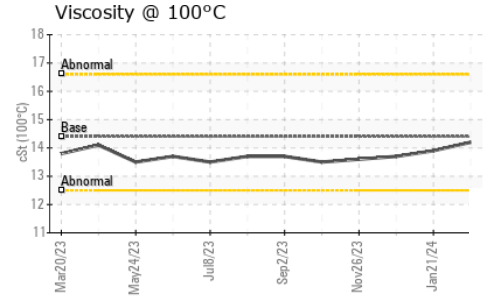
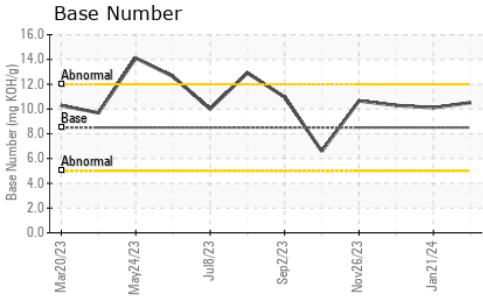
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>8</b>	4	4
Sodium	ppm	ASTM D5185m	>158	<b>8</b>	7	6
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	4	2
Water	%	ASTM D6304	>0.1	<b>NEG</b>	NEG	NEG

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		<b>0.9</b>	0.8	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.6</b>	11.4	11.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.0</b>	23.5	23.0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.9</b>	20.6	20.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>10.52</b>	10.10	10.29



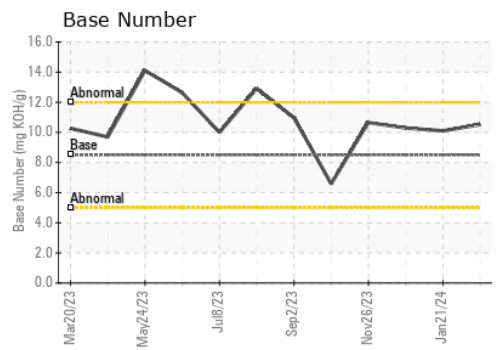
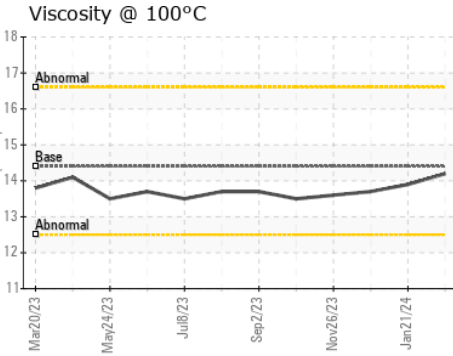
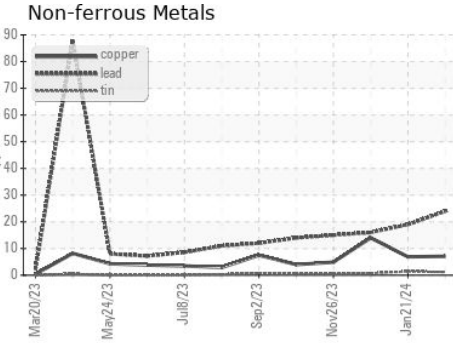
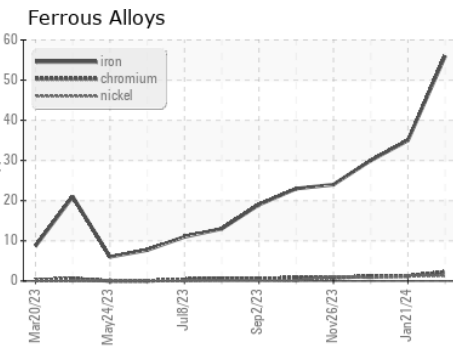
# OIL ANALYSIS REPORT



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	14.4	<b>14.2</b>	13.9	13.7

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0874747 **Received** : 27 Mar 2024  
**Lab Number** : **06130852** **Tested** : 01 Apr 2024  
**Unique Number** : 10950317 **Diagnosed** : 01 Apr 2024 - Jonathan Hester  
**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)