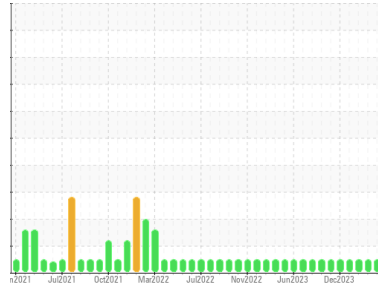




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

Speedway

Machine Id

[Speedway] Oil - Forward Genset

Component

Forward Genset

Fluid

MOBIL 15W40 (8 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (

Customer Sample Comment:

Top Up Amount: 1 GAL

Top Up Amount: 1 GAL)

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		WC0860108	WC0860040	WC0860046
Sample Date	Client Info		05 Apr 2024	20 Mar 2024	21 Feb 2024
Machine Age	hrs	Client Info	12095	11734	11585
Oil Age	hrs	Client Info	12018	11657	11508
Oil Changed	Client Info		Oil Added	Oil Added	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	29	24	31
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>12	2	2	1
Lead	ppm	ASTM D5185m	>17	0	0	0
Copper	ppm	ASTM D5185m	>70	0	0	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		8	10	8
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		69	68	68
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		1529	1506	1538
Calcium	ppm	ASTM D5185m		1180	1163	1241
Phosphorus	ppm	ASTM D5185m		1117	1106	1048
Zinc	ppm	ASTM D5185m		1383	1360	1332
Sulfur	ppm	ASTM D5185m		3767	3822	3280

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	6	6	6
Sodium	ppm	ASTM D5185m	>118	12	10	14
Potassium	ppm	ASTM D5185m	>20	<1	1	0
Water	%	ASTM D6304	>0.1	NEG	NEG	NEG

INFRA-RED

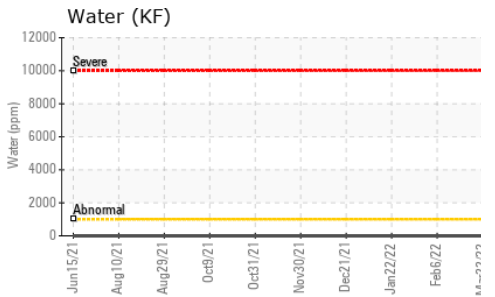
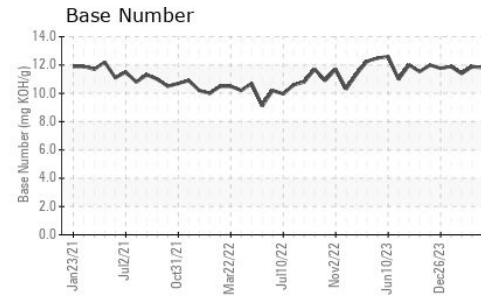
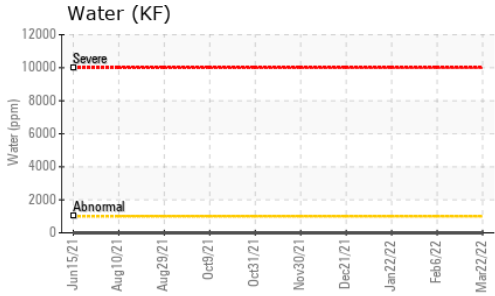
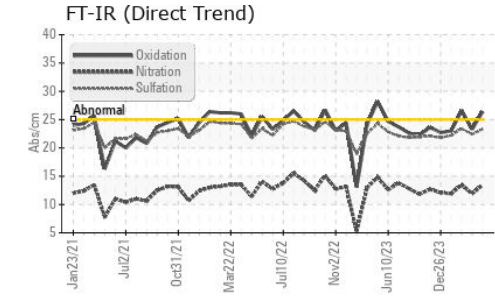
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	13.5	11.9	13.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.3	22.4	23.4

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	26.4	23.3	26.6
Base Number (BN)	mg KOH/g	ASTM D2896		11.81	11.88	11.39



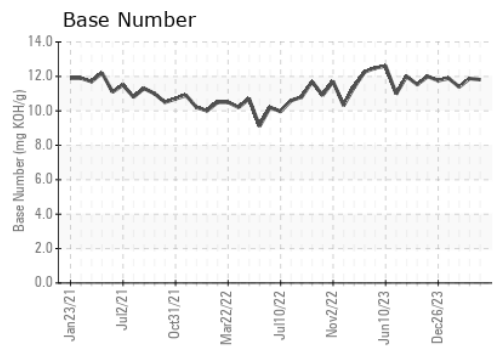
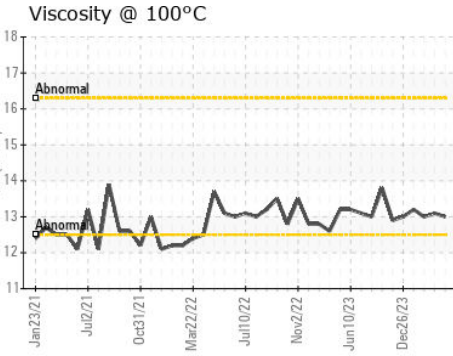
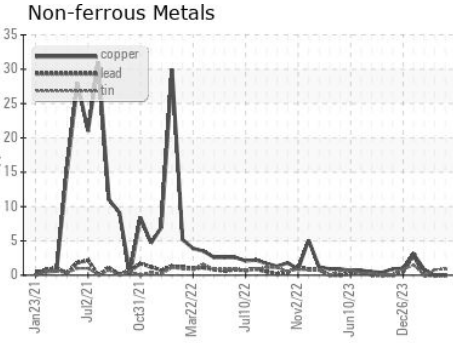
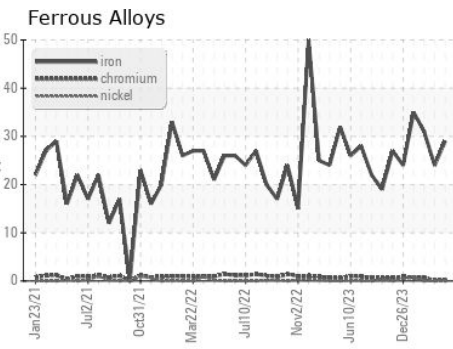
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	13.0	13.1	13.0

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0860108 **Received** : 23 Apr 2024
Lab Number : **06157889** **Tested** : 25 Apr 2024
Unique Number : 10993312 **Diagnosed** : 25 Apr 2024 - 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

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)

T: (606)585-3950

F: x: