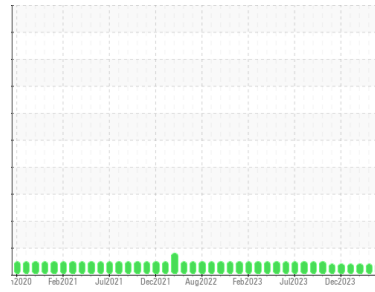




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area

Kentucky

Machine Id

[Kentucky] Oil - Port Reduction Gear

Component

Port Reduction Gear

Fluid

SAE 30W (26 GAL)

DIAGNOSIS

● Recommendation

No corrective action is recommended at this time. 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 oil viscosity is higher than normal. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0845807	WC0860056	WC0859846
Sample Date	Client Info		25 Apr 2024	16 Mar 2024	16 Feb 2024
Machine Age	hrs	Client Info	14450	13560	12942
Oil Age	hrs	Client Info	1161	271	1653
Oil Changed	Client Info		Not Chngd	Changed	N/A
Sample Status			ATTENTION	ATTENTION	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	4	4	4
Chromium	ppm	ASTM D5185m >10	<1	0	0
Nickel	ppm	ASTM D5185m >10	<1	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	2	0	0
Aluminum	ppm	ASTM D5185m >25	1	1	0
Lead	ppm	ASTM D5185m >100	<1	0	0
Copper	ppm	ASTM D5185m >50	4	1	4
Tin	ppm	ASTM D5185m >10	<1	0	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	56	63	54
Barium	ppm	ASTM D5185m	2	0	0
Molybdenum	ppm	ASTM D5185m	22	22	22
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m	330	344	343
Calcium	ppm	ASTM D5185m	681	673	676
Phosphorus	ppm	ASTM D5185m	780	873	819
Zinc	ppm	ASTM D5185m	539	580	564
Sulfur	ppm	ASTM D5185m	8833	10836	8892

CONTAMINANTS

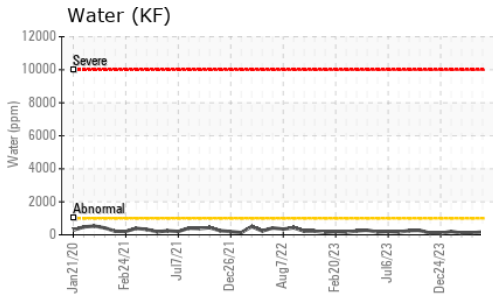
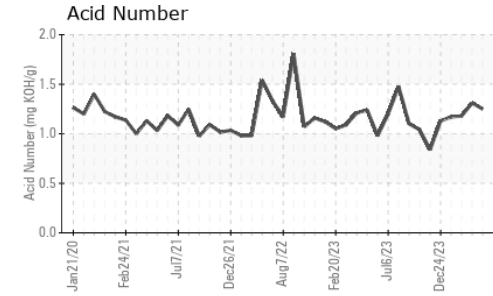
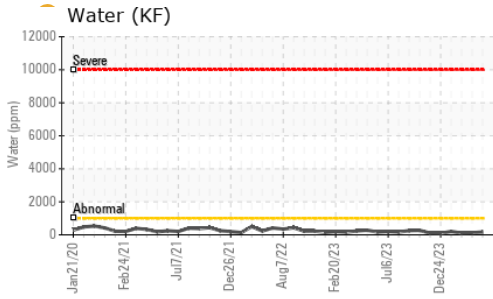
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	4	1	1
Sodium	ppm	ASTM D5185m	<1	<1	1
Potassium	ppm	ASTM D5185m >20	1	2	0
Water	%	ASTM D6304 >0.1	0.017	0.012	0.010
ppm Water	ppm	ASTM D6304 >1000	173	122	100

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.25	1.31	1.18



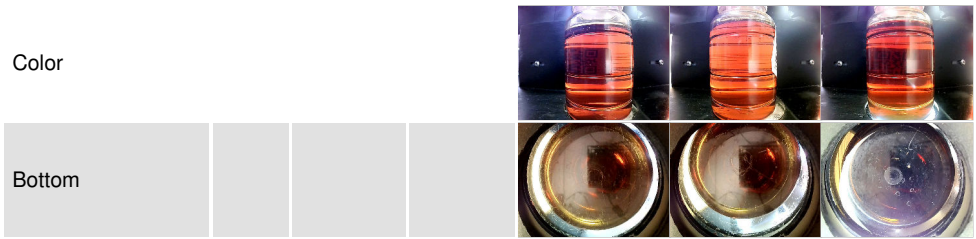
OIL ANALYSIS REPORT



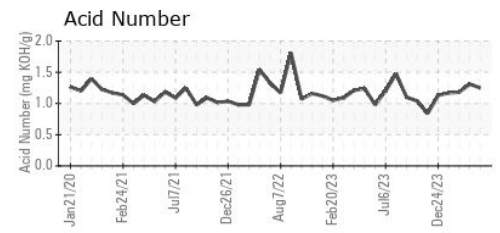
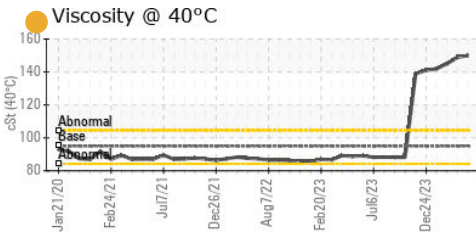
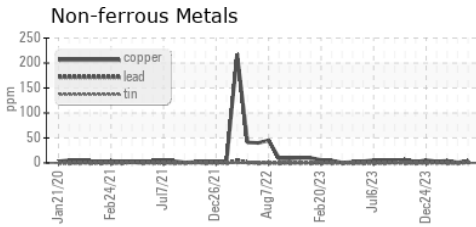
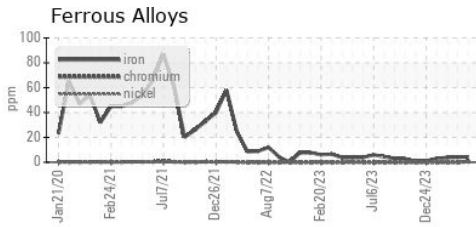
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 @ 40°C	cSt	ASTM D445	95.0 ● 150	● 149	● 145

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0845807 **Received** : 16 May 2024
Lab Number : 06181440 **Tested** : 17 May 2024
Unique Number : 11032766 **Diagnosed** : 20 May 2024 - Angela Borella
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)