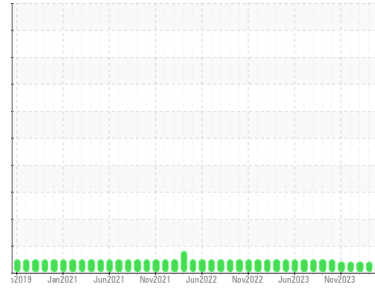




OIL ANALYSIS REPORT

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. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: Tyson Bias)

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		WC0860056	WC0859846	WC0845733
Sample Date	Client Info		16 Mar 2024	16 Feb 2024	20 Jan 2024
Machine Age	hrs	Client Info	13560	12942	12458
Oil Age	hrs	Client Info	271	1653	1168
Oil Changed	Client Info		Changed	N/A	Not Changd
Sample Status			ATTENTION	ATTENTION	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	4	4	3
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >10	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	1	0	<1
Lead	ppm	ASTM D5185m >100	0	0	<1
Copper	ppm	ASTM D5185m >50	1	4	3
Tin	ppm	ASTM D5185m >10	0	0	<1
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	63	54	53
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	22	22	24
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m	344	343	377
Calcium	ppm	ASTM D5185m	673	676	714
Phosphorus	ppm	ASTM D5185m	873	819	889
Zinc	ppm	ASTM D5185m	580	564	642
Sulfur	ppm	ASTM D5185m	10836	8892	9830

CONTAMINANTS

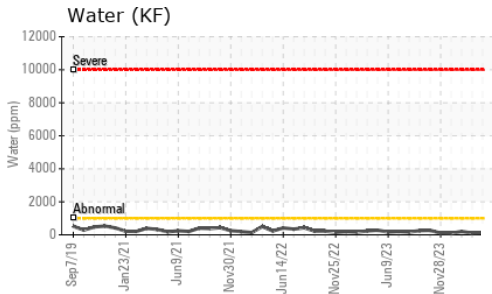
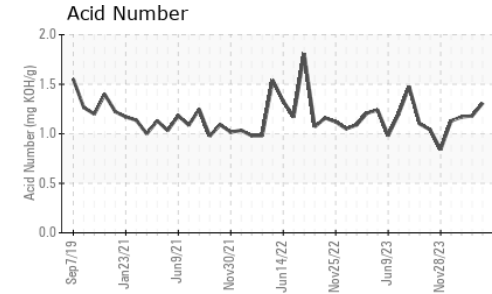
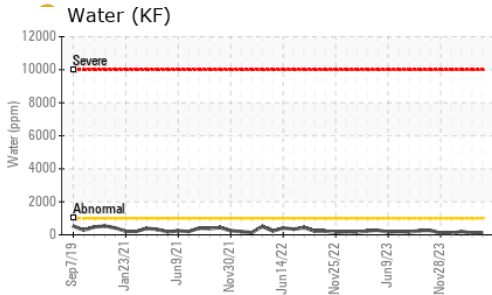
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	1	1	2
Sodium	ppm	ASTM D5185m	<1	1	<1
Potassium	ppm	ASTM D5185m >20	2	0	1
Water	%	ASTM D6304 >0.1	0.012	0.010	0.020
ppm Water	ppm	ASTM D6304 >1000	122	100	208

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.31	1.18	1.17



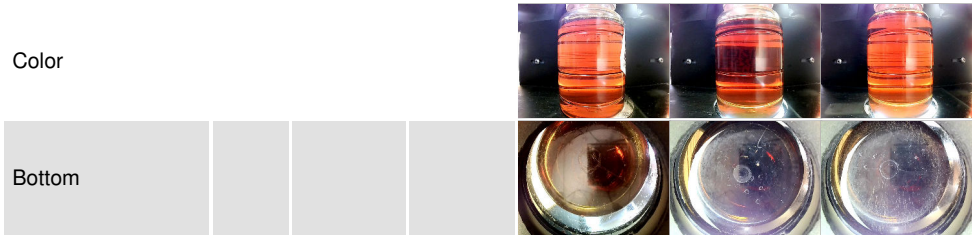
OIL ANALYSIS REPORT



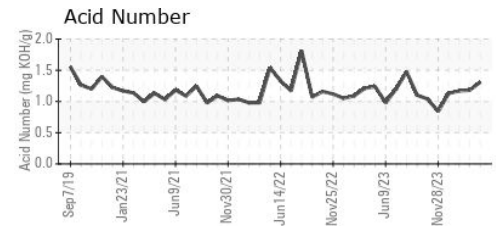
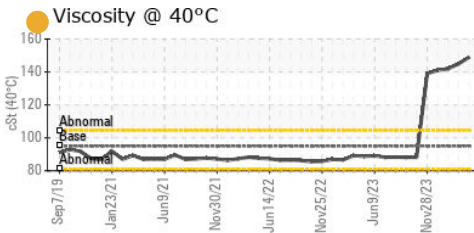
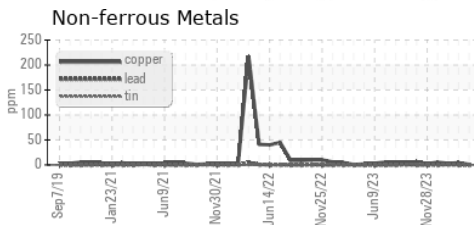
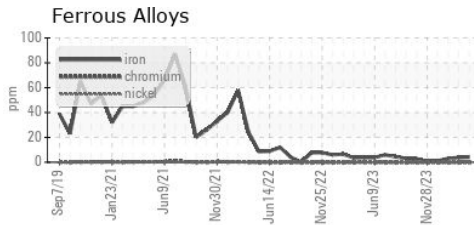
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 ● 149	● 145	● 142

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0860056 **Received** : 27 Mar 2024
Lab Number : 06130736 **Tested** : 28 Mar 2024
Unique Number : 10950201 **Diagnosed** : 30 Mar 2024 - Don Baldrige
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:

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)