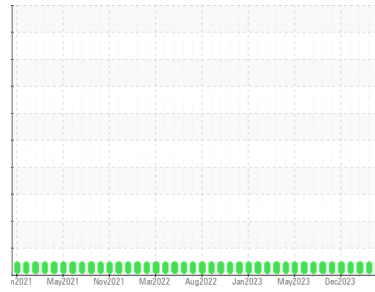




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

Louisville

Machine Id

[Louisville] Oil - Port Reduction Gear

Component

Port Reduction Gear

Fluid

SAE 30W (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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0874761	WC0804845	WC0859844
Sample Date	Client Info		28 Apr 2024	30 Jan 2024	29 Dec 2023
Machine Age	hrs	Client Info	950	24786	0
Oil Age	hrs	Client Info	950	9536	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	4	8	6
Chromium	ppm	ASTM D5185m >10	<1	0	0
Nickel	ppm	ASTM D5185m >10	0	0	0
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	0	0	<1
Lead	ppm	ASTM D5185m >100	0	0	<1
Copper	ppm	ASTM D5185m >50	8	4	4
Tin	ppm	ASTM D5185m >10	0	<1	<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	13	26	19
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	50	37	41
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m	776	602	672
Calcium	ppm	ASTM D5185m	868	723	782
Phosphorus	ppm	ASTM D5185m	861	779	844
Zinc	ppm	ASTM D5185m	951	760	876
Sulfur	ppm	ASTM D5185m	2903	4396	4046

CONTAMINANTS

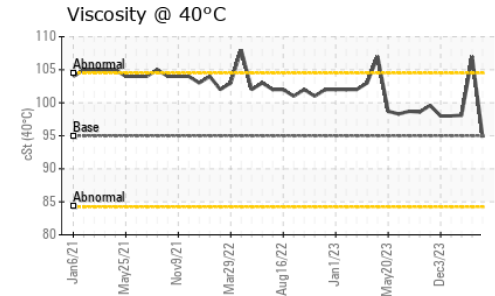
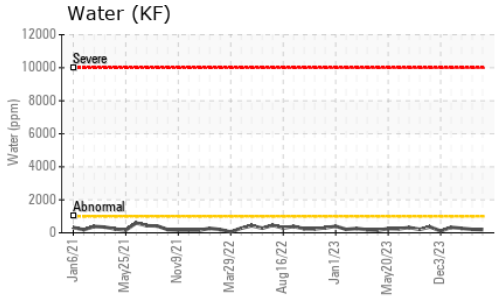
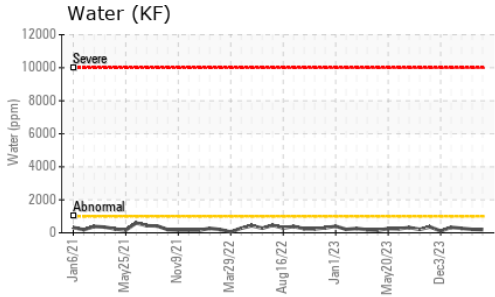
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	0	2	2
Sodium	ppm	ASTM D5185m	3	2	<1
Potassium	ppm	ASTM D5185m >20	0	0	<1
Water	%	ASTM D6304 >0.1	0.018	0.021	0.027
ppm Water	ppm	ASTM D6304 >1000	189	210	272

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.36	1.07	0.80



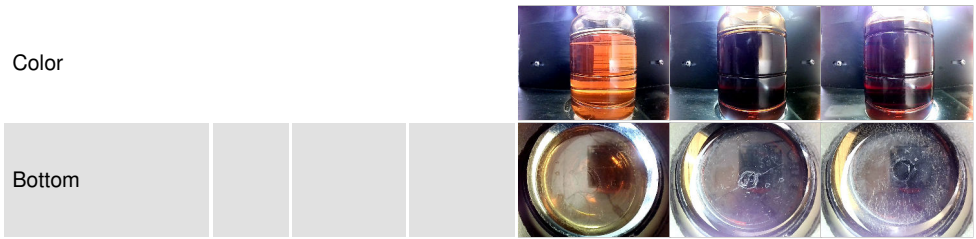
OIL ANALYSIS REPORT



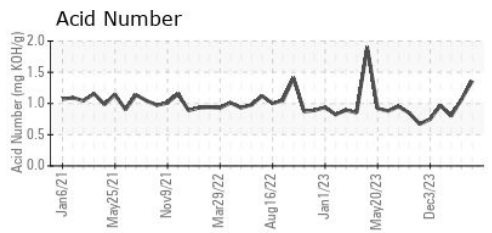
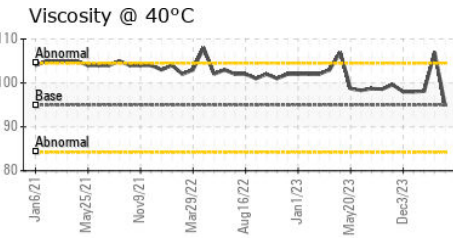
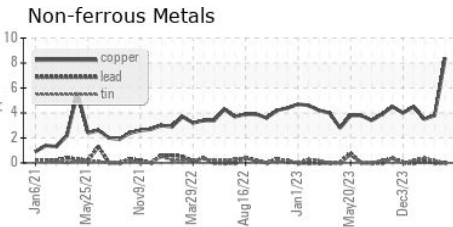
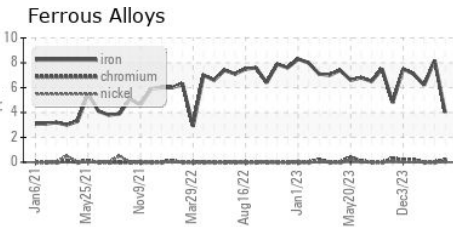
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	94.8	107	98.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0874761 **Received** : 16 May 2024
Lab Number : **06181437** **Tested** : 17 May 2024
Unique Number : 11032763 **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)