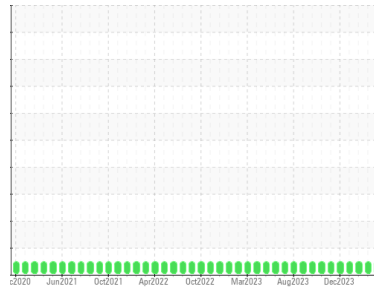




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

Tampa

Machine Id

[Tampa] Oil - Port Reduction Gear

Component

Port Reduction Gear

Fluid

MOBIL DELVAC 1640 (28 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The water content is negligible. 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		WC0805298	WC0805291	WC0805287
Sample Date	Client Info		11 Apr 2024	13 Mar 2024	14 Feb 2024
Machine Age	hrs	Client Info	23200	4157	22046
Oil Age	hrs	Client Info	3000	294	2266
Oil Changed	Client Info		Not Changed	Not Changed	Not Changed
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	6	8	7
Chromium	ppm	ASTM D5185m >10	<1	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	2	2	2
Lead	ppm	ASTM D5185m >100	0	0	0
Copper	ppm	ASTM D5185m >50	8	10	10
Tin	ppm	ASTM D5185m >10	<1	0	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	13	14	11
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	34	36	31
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m	184	184	159
Calcium	ppm	ASTM D5185m	2819	2921	2867
Phosphorus	ppm	ASTM D5185m	623	630	602
Zinc	ppm	ASTM D5185m	694	716	658
Sulfur	ppm	ASTM D5185m	7100	6453	5837

CONTAMINANTS

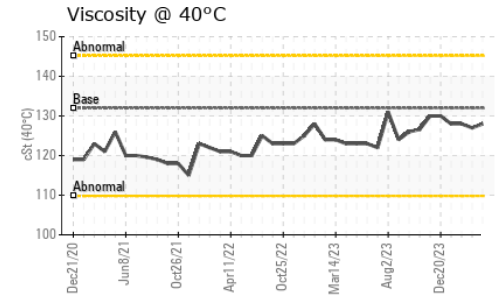
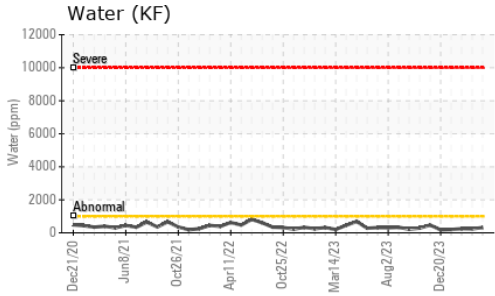
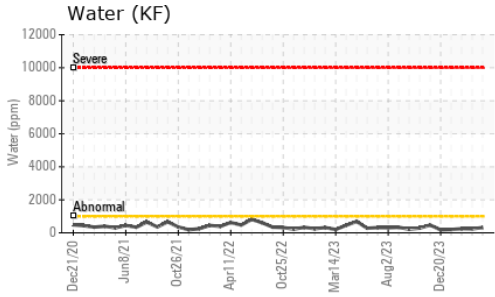
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	4	4	4
Sodium	ppm	ASTM D5185m	4	3	4
Potassium	ppm	ASTM D5185m >20	2	4	0
Water	%	ASTM D6304 >0.1	0.032	0.023	0.025
ppm Water	ppm	ASTM D6304 >1000	321	236	253

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.232	0.26	0.24



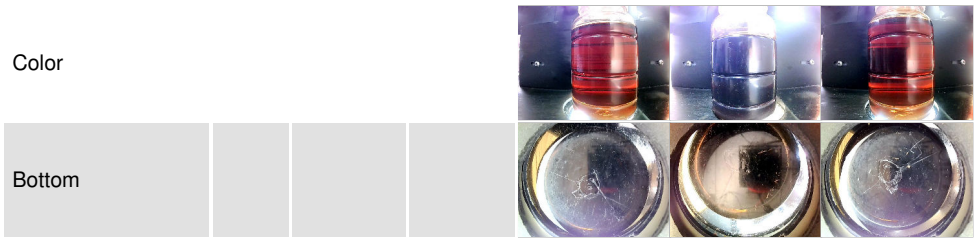
OIL ANALYSIS REPORT



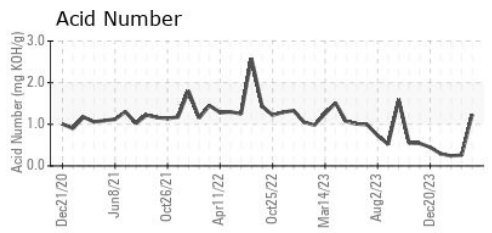
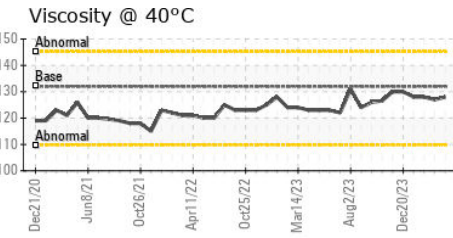
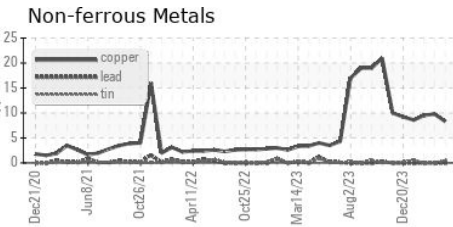
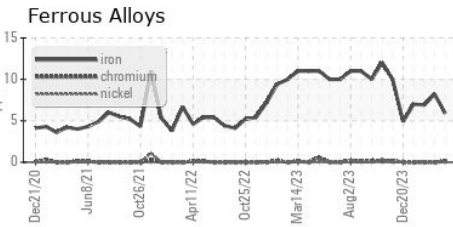
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	132	128	127

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0805298 **Received** : 23 Apr 2024
Lab Number : 06157759 **Tested** : 24 Apr 2024
Unique Number : 10993182 **Diagnosed** : 24 Apr 2024 - Wes Davis
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)